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Household wellbeing disparity: Study in villages around conservation forest areas, the Kerinci Seblat national park in the District of Lebong

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Household wellbeing issue is a very complex notion with many dimensions. This research used Chayat, et al (2007) nested shape of poverty model to measure household wellbeing status monitored in 3 aspects, namely, subjective, core, and context wellbeing. The second objective was to estimate welfare distribution among households. Twenty villages located around Kerinci Seblat National Park (TNKS) were determined purposively and surveyed. Twenty households from each selected village were selected using systematic random sampling method, so the total respondents were 400 households. The GINI index method was applied to ascertain household wellbeing disparities. There is no theoritical and mathematical background and explanation to use GINI index as an indicator of household wellbeing disparity or inequality in this research, with exception that the GINI index is conceptualized and understood as an indicator of inequality. The research found that the majority of households in research area felt wealthy, happy and prosperous. In terms of core wellbeing, the respondents could relatively meet their household basic needs, including health, material wealth, and education or knowledge. They also felt wealthy in terms of context wellbeing even though political, economic and natural environment spheres had less contribution to households wellbeing. Generally, subjetive wellbeing among villages appeared less diverse or had low inequality; however, if viewed from core, context as well as agregate wellbeing, the disparity of wellbeing was more obvious.

Keywords: Household wellbeing, disparity, inequality, GINI index.

INTRODUCTION

Lebong regency located in western part of Bukit Barisan Mountain is one of the new expanded regencies in Bengkulu Province based on Indonesian Republic Act no. 39/2003. Administratively, Lebong Regency is bordered in the north by Jambi Province, in the south by Rejang Lebong regency, in the east by Jambi and South Sumatra Province and in the west by North Bengkulu Regency.

Topographically, Lebong is located at 100 – more than 1000 m above sea level in which 45 % of its area is located at more than 500 above sea level. Based on land use, more than 60% of its area is forest in which more than 97% is conservation forest (Kerinci Sebelat National Park (Taman Nasional Kerinci Sebelat = TNKS). Realizing its area condition, local government has declared Lebong Regency (District) as a "*conservation regency*". For this policy, the central government of Indonesia through The Ministry of Environment gave an award to Lebong Government in 2007 as a local

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government that has concern for forest conservation. As conservation region, Lebong government encounters many problems related to economic development for its community. Forty two of 77 rural areas in Lebong are bordered with TNKS. It implies that most economic activities of rural community are forest dependent.

An economic development intended to alleviate poverty and halt environmental degradation in fragile, agriculturally marginal areas should be an environmentally sustainable and socially acceptable means of intensifying the use of renewable natural resources, including forests. Otherwise, it will result in environmental degradation, increased rural poverty, and continued displacement of the rural poor to urban margins and expanding agricultural frontiers (see Pichón, et al., 1999). In addition, development policies are normally formulated and implemented to solve a certain problem. Rural development policies, for example, are generally designed and aimed at diversifying economic bases beyond agricultural sector, maintaining or even increasing employment rates, and keeping poverty rates and unemployment rates at a level not worse than those in urban areas. For that reasons, a large amount of public funds are used to support farmers and their households. However, the problem is how far economic development bring wellbeing for households.

Households' wellbeing not only has economic dimension but also non-economic dimensions: good health and education, enabling environment, and others that contribute to individuals' overall well-being. These elements are difficult to quantify and to aggregate, but their importance indicates that it maybe worthwhile for those who determine the priorities of economic policy to evaluate and track them. Finally, the ultimate goal of humans appears to be happiness (or life satisfaction). Although happiness is inherently difficult to measure, surveys provide valuable insights on the levels and determinants of individuals' overall satisfaction with life. One approach for measuring household wellbeing is proposed by Cahyat, et al. (2007). They developed quantitative tool for measuring and monitoring poverty as well as wellbeing at the household level, to provide some answers to the questions that need practical tool and a comprehensive poverty concept as well as a model based on quantifiable indicators. For that reasons, a comprehensive study of socio – economic households at regional or local area focusing on measuring household wellbeing will give complete information on how well an economic development has an impact on poverty alleviation. This paper has two goals. The first objective is to measure wellbeing at household level by applying and adopting approach suggested by Cahyat, et al. (2007). The second objective is to estimate welfare distribution among household by using conventional inequality index - the GINI.

Measuring Household Wellbeing: Review Of Literature

Every government and policy maker always wants to improve their resident wellbeing status. Even though it is an ambiguous concept, wellbeing is generally viewed as a description of the state of people's life situation (McGillivray 2007), and is also known as good quality of life which includes material wellbeing and social wellbeing (Narayan *et al.* 2000). In other words, household wellbeing is harmonious condition in which households are able to fulfil their family members' physical and social needs without experiencing serious constraints.

Establishing an indicator of household wellbeing as well as its measurement method is not an easy task because the household wellbeing issue is very complex, and multidimensional. Wellbeing is a complex notion with many different dimensions. Therefore, integration approaches to various disciplines and empirical cases are necessary. In the literature, household welfare in general can be divided into two dimensions, the objective and subjective wellbeing. An objective approach is based on quantitative data of examined aspects so that the indicator is usually a figure. In this approach, household wellbeing refers to a household's command over goods and services produced in the economy. Traditional measures attempt to capture this concept using measures of income or consumption expenditures. In other words, this approach measures the welfare of an individual, household or community group on the basis of certain indicators such as size or economic, social and other measures. Some examples of objective welfare indicators measured by expenditures (World Bank 2004) and in Indonesian cases, the minimum amount of calories converted into the amount of rice consumption (Sayogja 1977). At the global level, the $1/day (purchasing power parity =PPP) measure developed and updated regularly by the World Bank is the one that is consistently used to monitor the size and trends in global poverty (UNDP 2006). Such measures fail to adequately take into account all the benefits imparted by government expenditures, such as education and infrastructure, health, self-suficiency, and the benefits of asset ownership.

On the other hand, subjective wellbeing is developed based on the assumption that each household has its own perception of what the welfare is, meaning that every household can have a specific feeling of "wealth". In other words, the approach of subjective wellbeing is measured from the level of happiness and satisfaction felt by households themselves and not by others. It is generally agreed that subjective wellbeing (SWB) can be measured through questions of satisfaction directed to people's feelings about themselves. Subjective measures of wellbeing capture people's feelings or real experience in a direct way, assessing wellbeing through

ordinal measures (McGillivray and Clarke, 2006).

Measuring wellbeing can not be separated from measuring poverty. Even Gönner et al. (2007) used the term poverty and welfare exchangeably. One reason, they noted, is that poverty and well-being are intertwined and essentially the same problem looked from the opposite sides. Therefore, they define poverty as household conditions that are less prosperous and wellbeing as a lack of poverty. Thus, following the suggestion of Gönner et al. (2007), poverty can be caused by a lack of income, or non-fulfilment of basic needs, such as health, education or housing. But poverty is also very subjective and may be caused by feelings of deficiency, vulnerability, isolation, shame, pain, or other unpleasant feelings. This also means, as suggested by Sumner (2006) that instead of relying on a single dimension, wellbeing measurements should encompass broader dimensions such as social and environmental aspects, and human rights. McGillivray (2007) added that the concept of wellbeing being multidimensional, encompassing all aspects of human life, is now widely accepted.

In order to capture all these notions and attributes of poverty, Cahyat, et al. (2007) conceptualized their poverty model in a nested shape. This model consists of three main dimensions, namely, subjective wellbeing (SWB), core aspect of poverty, contextual enabling environment. In the center, SWB comprises the World Bank's 'Voice of the Poor' including bodily wellbeing, social wellbeing, having self-respect, or feeling safe and secure and varies with moods and circumstances. Subjective wellbeing measures self reported happiness and life satisfaction. Surrounding SWB is the core aspects of poverty, that is, basic needs. Basic needs are similar to Human Development Index (HDI) of UNDP. HDI involves food, health, housing and education, as well as general individual ('basic') capabilities to escape from poverty, such as skills and physical condition. Finally, the outer layer is the context aspects divided into four spheres, namely, natural, economic, social and political spheres. A complete explanation of model can be found in Cahyat, *et al.* (2007), and Gönner *et al.* (2007). This model has been tested by Hough (2007) in Kutai Barat, Moeliono (2007) in Malinou, and Gönner *et al.* (2007) in Kutai Barat.

RESEARCH METHOD

Research location was determined purposively. The first stage was identifying villages located close and bordered with forest, particularly protected forest and conservation forest, the Kerinci Seblat National Park (Taman Nasional Kerinci Seblat = TNKS) in Lebong Regency. Data from sub – districts mentioned that there are 52 villages bordered with forest. In the second stage, 20 of 52 villages were selected randomly and with priority to villages that are close enough to TNKS. Then, twenty households from each selected village were selected systematically as respondents, so the total of respondents were 400 households.

Wellbeing was measured at household level. Household wellbeing status was estimated by following closely the method developed by Cahyat *et al.* (2007) in their manual entitled *Assessing Household Poverty and Wellbeing: A Manual with Examples from Kutai Barat, Indonesia*. This manual was developed to monitor poverty and wellbeing level for districts in West Kutai, East Kalimantan Province. Adaptation and adjustment of this manual to local condition have been made. In this research as suggested by Cahyat et al., poverty concept was measured locally and assumed as a multidimensional model. This model consists of three nested layers, namely subjective wellbeing (SWB) as the center, core and context. SWB is enclosed by core wellbeing. Core wellbeing comprises a basic need involving material and non-material, namely, health, wealth and knowledge aspects. A context is a livelihood environment that influence core wellbeing. This environment consists of sectoral environment (such as natural environment, economic, social and political spheres) and inter-sectoral environment (such as Infrastructure and government service). So, it can be concluded that these nine aspects of poverty covering basic need, individual assets and capabilities and the enabling environment, according to Cahyat et al. (2007), help households to escape poverty by ensuring sustainability, providing opportunities and minimizing vulnerability.

Data were collected by interviewing respondents guided by questionnaires. This questionnaire consisted of 59 variables to measure the level of poverty and household welfare. Fifty-nine variables represented: data from the village/location (2 variables), household data (9 variables), aspects of health and nutrition (3 variables), aspects of material welfare (3 variables), aspects of knowledge (4 variables), aspects of natural resources (4 variables), the economy (4 variables), social (4 variables), infrastructure and services (18 variables). A complete questionnaire can be obtained from the manual. All indicators used in this research were based on scoring system. Poor or critical conditions were given 1 point, intermediate conditions 2 points, and prosperous or good conditions 3 points.

Household wellbeing distributions in research areas were measured using GINI Index. Usually, GINI index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. The GINI coefficient is usually defined mathematically based on the Lorenz curve, which plots the proportion of the total income of the population

against cumulative number of recipients. The line at 45 degrees represents perfect equality of incomes. The GINI index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a GINI index of 0 represents perfect equality, while an index of 100 implies perfect inequality. GINI Index can be calculated as follows:

$$G_1 = 1 - \sum_{k=1}^{n} (X_k - X_{k-1})(Y_k + Y_{k+1})$$

Where X_k is the cumulated proportion of the population variable, for k = 0,...,n, Y_k is the cumulated proportion of the income variable, and Y_k should be indexed in non-decreasing order ($Y_k > Y_{k-1}$).

Procedure in determining the size discrepancy used approaches proposed by Arsyad (1999) and Todaro (2000), as follows: (a) Inequality ishighif the value of the GINI coefficient from 0.50 to 0.70, (b) Inequality is medium if the value of the GINI coefficient from 0.36 to 0.49, and (c) Inequality is low if the value of the GINI coefficient from 0.20 to 0.35. The value of GINI ratio lays between 0, indicating a perfect equality, and 1 meaning a perfect inequality in income distribution.

RESULTS AND DISCUSSION

Household Characteristics

Household characteristics are natures and features owned by households that may affect their activities and interaction with their environment. Household characteristics observed in this study were age, gender, religion, ethnicity, length of residence, principal occupation and family size. Many studies conclude that age is an important factor affecting the farmers' activity. Age will affect a person in the absorption and adoption of technological innovation, achievement or success of the business as well as in the decision makings. The research conducted by Sukiyono and Sriyoto (2010), for example, found that the age of farmers had a real and positive effect on the level of technical efficiency achieved by rice farmers in two different land typologies. Generally, research shows that farmers who are still in the productive age are those who succeed in farming. Productive age, according to Mubyarto (1991), is the age between 15 and 64 years. Heads of households in the research area had an average age of 44.48 years with a range of 20 years up to 87 years. So, the heads of households living around protected forests in Lebong were in the productive age. Only 3, 75% of heads of households were over the age of 64 years.

The majority of households living around protected forests, i.e. 97.5%, are people from the indigenous ethnic of Lebong District, the Rejang ethnic group. This finding is reasonable because this district is the original area of Rejang ethnic. Some literatures explained that formerly Rejang ethnic was scattered in small groups and lived nomadically across Lebong area. They lived from forest and river products. At that time, Rejang ethnic lived as nomadic tribes and relied on the available natural resources. It seems that a large dependence on natural resources still continues today. It can be seen from studies showing that agriculture in the broad sense remains a household main livelihood around protected forests. Other ethnic groups who live around the protected forest areas are Batak, Oki Agung, Serawai, Minangkabau, Sundanese and Javanese, which accounts for no more than 2.5%.

The average household domicile was 35.83 years. These findings suggest that the protected forest community has lived longer in these villages. The length of household living also informs that the environment can provide income for households, especially those related to agriculture and the utilization of forest products.

Number of family members is often associated with the number of labors availability and household needs. The more the family members are, the more the number of labors available in the household. So a large-size, households will easily manage their farming. However, family members can also be a burden to many households, especially to meet the needs of domestic consumption both food and non – food consumptions. Therefore, a large number of members is often considered as a motivation for the head of household to always increase revenue. The results showed that family size was relatively small, that is 3 people. This means that on average each household consists only of husband, wife and a child. The small number of family members is believed to be caused by fragmention of families due to marriage. This conclusion is based on the length of stay in the study area which was long enough. Family fragmentation will lead to the fragmentation of land owned by the main household. Household fragmentations also causes increasing land requirements, both for the home (residential) and for farm land. The need for land for farming may cause protected forests encroachment. However, this view needs to be studied deeper.

Household Wellbeing Status

In terms of subjective wellbeing, research found that majority (54%) of households in the research area felt happy and prosperous. Only 6.75% of the households felt unhappy and not prosperous. The average index of subjective well-beingis was relatively large, i.e.,75.21 of a maximum of 100, indicating that the level of household wellbeing was large enough (Table 1).

Table 1. Household Distribution based on Wellbeing Index.

No	Wellbeing Environment	% households			Average Index
		Critical	Intermediate	Good	
1	*Subjective Wellbeing*	6.75	38.50	54.75	75.21
2	*Core Wellbeing*	1.75	37.50	60.75	71.31
	a. Health	0.75	16.00	83.25	90.29
	b. Wealth	17.75	20.75	61.50	67.96
	c. Knowledge	5.60	90.20	4.20	54.13
3	*Enable Environment (Contexts)*	0.50	65.75	33.75	62.77
	a. Natural sphere	24.75	47.00	28.25	57.46
	b. Economic sphere	13.50	48.75	37.75	57.03
	c. Social sphere	1.00	46.75	52.25	79.00
	d. Political sphere	49.25	42.25	8.50	43.46
	e. Infrastructure and Service	0.25	14.75	85.00	78.67
4	*Aggregate Wellbeing (Coreand Contexts)*	0.50	45.75	54.00	67.04

Sources: primary data (analysed, 2012)

Table 2. Households Distribution Based on Subjective Wellbeing Condition, 2012.

No	Condition	% Households		
		Feltprosperous	Feltpoverty	Felt happy
1	Critical	5.50	10.00	2.50
2	Intermediate	46.20	46.20	65.00
3	Good	48.20	43.80	32.50

Sources: primary data analysed (2012).

When viewed from its elements, as presented in Table 2, the majority of households felt prosperous, not poor and happy. These findings are reasonable if it is associated with living time span in this area. As discussed in household characteristics, they have lived in their village more than 35 years. With this length of time span, it implies that they interact with their neighbours, know each other, mutually respect and acknowledge their existence. They will encourage them to help each other if there are any difficulties or domestic problems. Furthermore, they do not feel poor because of relative homogeneity of household income sources among them. The majority of the farmers have cultivated their own farmland so that economic conditions among them are quite similar. Relatively no different sources of household income were also shown by the diversity index of household incomes which ranged from 1.06 to 2.05. This index informed that the source of household income in the study area consisted of 1 – 2 types. If traced in detailed, their main source is estate and food crops supported by raising chickens, fish, or cows. When they were asked about their feeling of happiness, the majority of households experienced moderate happiness; only 2.5 % households felt unhappy. This finding is acceptable because typical rural communities usually do not want to show their happiness exaggeratedly. They always express their happiness in such a usual manner -

reasonably happy.   It should be noted, as Cahyat et al. (2007) said, that happiness is a feeling that is extremely general and is influenced by all aspects of life. Happiness might be temporary, perhaps influenced by passing occurrences.

The average score of core wellbeing score was 71.31 out of a maximum of 100 informing that households in the study area were prosperous. This finding also indicates that household basic needs, including health, material wealth, and education or knowledge can be met or have already been provided relatively. A survey found that 60% households felt that they had enough material wealth. This finding is not surprising if judged from the condition of their homes, motorcycle ownership or other transportation equipment, and a refrigerator or disc. The data obtained in the field showed that most households had an appropriate housing condition, motor cycle and home furnishings that can be considered as luxury items, such as refrigerators and or television. It should be noted that material wealth depends on financial income. In most villages, however, income sources were still limited resulting in 40% of households feling poor. This can be exaggerated by weak infrastructure and poor access to markets.

The research also found that the health sphere in this research area showed relatively positive score. This positive score is related to the composition of the index: a

combined score based on fulfilment of staple food, health service and clean water access. The research found that more than 80% households also felt easy to access clean water, and health services. Also, they never experienced difficulties in fulfiling staple food for their family. The availability of health facilities (health centres) at the district level and supporting health centers as well as neighbourhood health center (Posyandu) at village level have led to higher levels of health wellbeing. Availability of health infrastructure has cauesed easier access to health care. In addition, the ease of access to clean water also contributes to high health index. Results in the field showed that 95% of households were very easy to get access to clean water in which water is not always from the Local Government Drinking Water Company (*Perusahaan Daerah Air Minum =PDAM*). Most households obtain water from wells and other water sources around their house.

Regarding to knowledge indicator, the average household welfare was low. Only 4% of households felt they were truly wealthy. This finding is quite rational. The main reason is that the average education level of household heads was also low; mostly only had primary education (see household characteristics). The research also found that more than 90% of households had no skills other than the skills obtained from formal schooling. That is, more than 90% of households did not have the expertise, as a driver, a masseur, a carpenter, which can be used as a source of revenue. With these conditions, then it is no surprising that the knowledge in this household category is mediocre.

As explained before, the household wellbeing should be supported by enabling environment called contexts. In terms of context, households in research area felt wealthy as indicated by the value of supporting environment score of 62.77. This index, according to Cahyat, et al. (2007) and Gönner et al. (2007), can be classified as well-off because its lower borderline is 61.81. Among the supporting environments, political environment had the lowest index, i.e., 43.46. The lower index of political environment indicates that households lack the right empowerment and freedom. Right of households toward natural resources is very limited in which 60% of households said that they had difficulties to access natural resources, especially related to forest and its products. This finding is normal because their surrounding environment is conservation forest (TNKS) which is forbidden to access or limited to access. Household access to information was relatively good. This finding is reasonable because even though they live in relatively remote areas but they easily access information either by radio or television with a satellite disc. Furthermore, household participation in public decision-making was categorized as low. This finding is similar to Gönner et al. (2007) findings in which isolated

or remote communities in Kutai were relatively less involved in decision-making. Likely, they feel the need to set up their own problems without much support from outside. The supporting environmental conditions that had a relatively small index was the economic environment, with an index of 57.03. This score is relatively low, even it still classified as prosperous according Cahyat, et al. (2007), mainly due to limited sources of revenue that can be easily accessed by the household. Field data showed that 48.8%of households had only one or two types of income sources. Nevertheless, they felt that their earned income was a stable income. This is reasonable because their main income comes from both coffee and rubber plantations which are relatively independent of the harvest season.

In the context of the social environment, the results showed that the social environment strongly supported the achievement of household welfare. This was reflected in 99% of households declaring well and fair. These findings are very reasonable as seen from the length of the staying in the village (more than 35 years), so that the mutual cooperation and mutual trust among households is very strong. With the majority of households coming from the same tribe, the Rejang, the social conflict is likely intermittent.

Other environmental conditions were sufficient to support the achievement of household welfare, i.e., Infrastructure and government services. Availability of education, health, roads and bridges, communications, and markets were getting better in this area and would accelerate the achievement of household welfare. Almost all of the facilities and services provided were pretty good except for the agricultural extensions to households that seemed to be rarely conducted.

The natural environment seemed to be less able to support the economic life of the household. It is characterized by the low score of the natural environment, which was 57, although it is still in good category by Gönner *et al.* (2007). The natural environment had the third smallest index after the political and economic environment. The low score of the natural environment was also characterized by the low contribution of the forest sector's revenue to total revenue, which was only about 13%. This contribution is lower than the results of a survey conducted by Sukiyono, *et al.* (2007), which amounted to 26%. Visual observation also deteced the degradation of the forest is as characterized by the growing number of illegal logging for estate farms. It is also supported by the growing scarcity of households seeing-typical forest animals nearby. Most of the households said that they had very rarely come across-typical forest animals around him, such as deer and gibbons. This rare animal sighting was presumably due to the degradation of forest environmental conditions. Twenty three percent of households in the study area

Table 3. Household Wellbeing Inequality based on GINI Index approach.

N o	Sub-district	Village	SUBJECTIVE		CORE		CONTEXT		AGREGATE	
			Index	Categories	Index	Categories	Index	Categories	Index	Categories
1	Bingin Kuning	Karang Dapo Atas	0.04	Low	0.39	Medium	0.34	Low	0.58	High
2		Karang Dapo Bawah	0.21	Low	0.53	High	0.63	High	0.63	High
3		Pelabuhan Talang Leak	0.13	Low	0.46	Medium	0.51	High	0.55	High
4		Talang Leak I	0.13	Low	0.69	High	0.73	High	0.74	High
5	Embong Uram	Air Kopras	0.17	Low	0.40	Medium	0.69	High	0.60	High
6		Kota Baru	0.46	Medium	0.01	Low	0.67	High	0.60	High
7		Talang Sakti	0.54	High	0.10	Low	0.49	Medium	0.32	Low
8		Tambang Sawah	0.62	High	0.60	High	0.64	High	0.72	High
9		Ujung Tanjung II	0.54	High	0.57	High	0.52	High	0.58	High
10	Lebong Atas	Atas Tebing	0.08	Low	0.38	Medium	0.39	Medium	0.43	Medium
11		Danau	0.21	Low	0.38	Medium	0.73	High	0.61	High
12		Kota Baru	0.42	Medium	0.36	Medium	0.59	High	0.52	High
13		Pelabi	0.75	High	0.01	Low	0.46	Medium	0.24	Low
14	Pinang Pelapis	Ketenong I	0.25	Low	0.22	Low	0.27	Low	0.00	Low
15		Ketenong II	0.17	Low	0.44	Medium	0.65	High	0.66	High
16		Seblat Ulu	0.63	High	0.46	Medium	0.71	High	0.69	High
17	Rimbo Pengadang	Air Dingin	0.67	High	0.21	Low	0.75	High	0.55	High
18		Talang Ratu	0.21	Low	0.17	Low	0.70	High	0.48	Medium
19	Topos	Talang Baru	0.26	Low	0.17	Low	0.55	High	0.19	Low
20		Talang Donok	0.42	Medium	0.53	High	0.58	High	0.63	High

Sources: primary data analysed (2012).

stated that the environmental conditions was in critical condition. However, they had not found problem toget good quality ofdrinking water.

Households Wellbeing Disparity

This section investigates the disparity among households based on subjective, core, and context as well as aggregate wellbeing. Disparity household wellbeing was measured using GINI index approach usually used to measure income disparity such as done by Adnyana and Suhaeti (2003) who measured the distribution of income and household expenditure based on region and agro – ecosystems in Javaand Bali Indonesia, Cao and Akira (2008) in Vietnam and Oyekale et al. (2006) in Nigeria. It should be noted that there is no theoritical and mathematical background that can be used to explain the application of GINI index as an indicator of households disparity or inequality in this research, with exception that the GINI index is conceptualized and understood as an indicator of inequality. Result of GINI index calculation based on wellbeing indicators were presented in Table 3.
In terms of subjective wellbeing, of the 20 villages surveyed, 30% villages had high disparity, with index values ranging between 0.54 – 0.75. These villages were Talang Sakti, Ujung Tanjung II, Tambang Sawah, Seblat Ulu, Air Dingin, and Pelabi. High disparity of subjective wellbeing indicates that not all households have similar

perception regarding their voice of welfare. This finding is reasonable due to limited accessible income sources and high inequality distribution of income sources in this area (Sukiyono et al., 2012). The limited and inequality distribution of income sources will reflect in household feeling of poverty as one aspect of subjective wellbeing. This research also discovered that 55% villages had low inequality distribution of subjective wellbeing as indicated by their GINI Index being less than 0.35. From these findings, a conclusion can be drawn that generaly, the households in villages under survey felt wealthy subjectively. These findings are not surprising because more than 90% households felt prosperous, as previously discussed. Togetherness among households in their village which is reflected in their daily interaction as well as mutual respect and acknowledgement, is likely affecting and flourishing their feeling of happiness and prosperity and preventing them feeling poor. As noted by Cahyat, et al. (2007) that subjective wellbeings are the feelings of an individual, such as feelings of prosperity, happiness, being respected, being acknowledged, being poor, or similar feelings. These feelings are extremely general and are influenced by all aspects of life.

At core wellbeing, the number of villages with medium and less disparity - indicated by GINI index less than 0.35 – were 75 % of total villages. This finding indicated that there were relatively no wellbeing differences among

households with respect to fulfilling their basic needs. This also revealed that the ease in fulfilling basic needs involving health, wealth, and education or knowledge was felt by the majority of households in the research areas. In other words, households had similar views regarding the accessibility of health centers and services that have been enjoyed by them. Also, they could esily get clean drinking water and had never experienced food shortage.. However, they simply relied on one or two (single??) income sources and did not have any skill that can be used to get another job. These constraints have limited asset ownerships which in turn diminished the core wellbeing index. The villages' divergences in economic or wealthy and education sphere among households have resulted in high inequality in terms of core wellbeing. Generally, compared to subjective wellbeing disparity, the number of villages showing core wellbeing inequality were many, i.e., 25% of total villages compared to 10% those of subjective wellbeing. Futhermore, excessive inequality occured in most villages surveyed in Lebong District in terms of context wellbeing. Only few villages showed equivalence in terms of wellbeing, i.e., Ketenong I and Karang Dapo Atas villages. Differences of GINI index among villages are likely due to the differences in distance from villages to economic activities' centers, main roads, and other facilities. Another factor seemingly contributed to high inequality in terms of context wellbeing is natural spheres that apparently begins to degrade in many places largely converted to estate farmlands.

When core and context wellbeings were combined, the disparity of household wellbeing were more obvious. Most villages in research areas had high wellbeing disparity, with exception of Ketenong I, Talang Baru, Pelabi, and Talang Sakti. High disparity of aggregate wellbeing was mainly contributed by high disparity in context wellbeing. This high inequality could be an incidence of acute and cronic provery. As noted by Gönner et al. (2007), the differentiation of acute poverty becomes most visible when analyzing core aspects, while chronic poverty is reflected in the context. From these findings, it can be concluded that subjective wellbeing is likely beyond the meterial worlds. It means that even though households have difficulties in fulfilling their basic needs and their enabling environments do not support them completely; they still feel well-off. Rural communities tend to value their happiness and prosperity higher than material wealth. Security, trustworthiness, closeness with their fellow villagers will create prosperity for every household.

CONCLUSION AND POLICY IMPLICATIONS

This paper has sketched out household wellbeing subjectively, core and context wellbeing as well as aggregate wellbeing based on a nested shape – household wellbeing and poverty monitoring framework

as suggested by Cahyat, et al. (2007). This research has found that households in research areas felt well-off subjectively. This personal feelings came about after comparing his or her living standard with other fellow villagers. Villagers felt wealthy, not poor and happy because they had interacted with their neighbours for more than 35 years, so they had known each other, had mutual respect and acknowledged their existence. They encouraged helping each other if there were any difficulties or domestic problems. Their long living together indicated that they felt safe and secure staying with their fellow villagers. All of these contributed to wellbeing. Results of disparity analysis of subjective wellbeing also showed that there was low inequality among households in most villages. This implies that maintaining this equality is important by protecting them from emerging feelings of deprivation, vulnerability, exclusion, shame, pain, and other forms of ill-being among households. Flourishing togetherness, *gotong royong* (working collectively), preventing social conflicts and providing access to fulfilling their basic needs are among other policy that can be implemented.

This research has found that average score of core wellbeing was relatively high, indicating that household needs, involving material and non – material needs were reasonably fulfilled within the last 12 months. This finding is also supported by the high percentage of households feeling prosperous. As Cahyat, et al. (2007) stated that core wellbeing covers basic material and non-material needs, including nutrition and health, knowledge and material wealth.

Fulfilling food need was not a real problem for rural communites because they grew food crops subsistently in their backyard or farmland. This differs with other two aspects of core wellbeing, education or knowledge and material wealth. Distribution of households based on knowledge and material wealth was relatively diverse. That is the reason when analysing its inequality, many villages experienced disparity even though they were not the majority villages. Core wellbeing disparity in some villages could be caused by the remoteness of villages and low diversity of income sources as well as economies. Low economic and income diversity can trigger income inequality, which in turn will affect material wealth. Inequality of core wellbeing could be a confirmation of acute poverty prevalence. For that reason, it is significant to improve core wellbeing since improvement of wellbeing will improve subjective wellbeing. Empowering rural communities focusing on economic empowerment is a sound policy for improving core wellbeing. Economic empowerment will lead to increase income opportunities and provide more income sources.

Analysing context wellbeing has found that household wellbeing was high as indicated by the supporting

environment score of 62.77. Compared to core wellbeing, households felt wealthy. This was also revealed by GINI index that indicated household context wellbeing inequality in majority of villages. Improving economic and political opportunities through decentralization supported by high – quality social spheres could not be enjoyed by every households. This was also exaggerated by natural spheres that began to degrade. In facts, context wellbeing will support the achievement of core wellbeing, which in turn will lead to improvement of subjective wellbeing. It is reasonable to continue improving household capacity and capability to exploit opportunities offered. Economic and social engineering of rural communities in order to improve their capacity and capability are sound strategies. Providing and increasing access to micro credit will increase rural households capability to finance their agribusiness. This effort will be enhanced by strengthening existing rural institution.

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