

Sufficient and Sustainable Livelihood via Community Economy: Case of Natural Farming Program in East Malaysia

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Abstract

Community economy is an alternative mean for sustainable livelihood emphasized under the Sustainable Livelihood Approach (SLA) and Sufficient Economy Approach (SEA). Both approaches support the participatory development strategies which concern on the empowerment of marginalized people through an efficient utilization of local resources. The purpose of this article is to analyze the outcomes of the community-based economic activity executed through the natural farming programme in selected rural areas of East Malaysia. Our finding indicates that most participants have gained positive economic and social outcomes from the programme. The programme provides economic benefits such as reduction of household food expenditures, productive usage of household idle resources, increase of household income and saving. In addition, the programme also contributes to social benefits such as provide fresh vegetables, promote closeness among family members, increase self-satisfaction and happiness, increase closeness among community members, healthier feeling and increase agricultural skills and knowledge. The mean of each item show consistent trend that ranges between 3.68 (lowest) to 4.34 (highest). Therefore, the community economy conducted through the natural farming programme has benefited the rural area people in line with the idea of SLA and SEA.

Keywords: community economy, sustainable, sufficient, livelihood, natural farming

1. Introduction

Top-down approach is the prominent development strategies embraced by most developing countries since the Second World War (Kelly et al. 2012). Such development approach led to overwhelming focus on modernity and economic process. As a result, most development process had been rested upon the neoclassical economics paradigm which promotes industrialization, capital accumulation and mobilization of manpower (Kelly et al. 2012). Despite the massive development results, such practices also produced inequitable economic growth and ignore the well-being of people in rural areas. Therefore, participatory development attempts to overcome the cruel impact of the previous top-down development approaches.

Community economy is an alternative mean to operationalized the participatory development approach (Kelly et al. 2012). The concept was designed to promote the well being of the marginalized group in particular society. It suggests that the community can maintain sufficient and sustainable livelihood if they can reduce dependencies on external forces. Therefore, community economy is parallel with the Sufficient Economy Approach (SEA) which is concerned on improving the poor group well-being. In addition, community economy is also in line with Sustainable Livelihood Approach (SLA) that aims sustainable livelihood for local people.

According to Md. Anowar et al. (2012) community economy refers to the use of local resources to meet the local communities' needs rather than satisfying the outside market. Therefore, small projects which can bring people's lives into their own control had been established and operated according to the market rules (Jancius 2006). The communities conduct their economic activities in a way that all of them would play the role of producers and consumers simultaneously, thus ensuring higher economic independency, community self-sufficiencies and

sustainable quality of life (Md. Anowar et al., 2012; Jancius, 2006; Kelly et al., 2012; Lapeyre, 2010).

There are many productive activities that can be used to operate community economy namely agriculture, fisheries, dairy farms, forestry, locally produced products and small-scale economic projects. For example, Hart (2011) implicitly showed that the agricultural based project has provided livelihood for poor farmers in the rural village of South Africa. Besides, a study by Suwankitti and Pongquan (2010) also found that the operation of an agro-based community economy development activity in Bhuttavimut supported the adoption of sufficient livelihood approach for local people. Therefore, agricultural activity is a suitable platform to operate the community economy among rural villagers.

Thus, a context-specific study is needed to validate the benefits of agro-based community economy project particularly in Malaysia. Therefore, this study attempt to explore the benefit of the community economy executed under natural farming programme in East Malaysia. The next section will briefly discuss the sufficient and sustainable livelihood concept which becomes the ultimate aim of the community economy based programme.

2. Literature Review

2.1 Sufficient and Sustainable Livelihood

Sustainable Livelihood Approach (SLA) is a fast growing development approach that is concerned with first and foremost on the people (Kollmair & St. Gamper 2002). Originated from Robert Chambers work in mid 1980s, SLA suggests that local actors should utilize their assets (for example human, natural, financial, social and physical stocks of capital available in the household) to do activities that foster independent livelihood outcomes for themselves. Livelihood refers to capabilities, assets (both material and social resources) and activities which become the means for human living (Chambers & Conway 1991). Figure 1 depicts Chambers and Conway (1991) livelihood components.

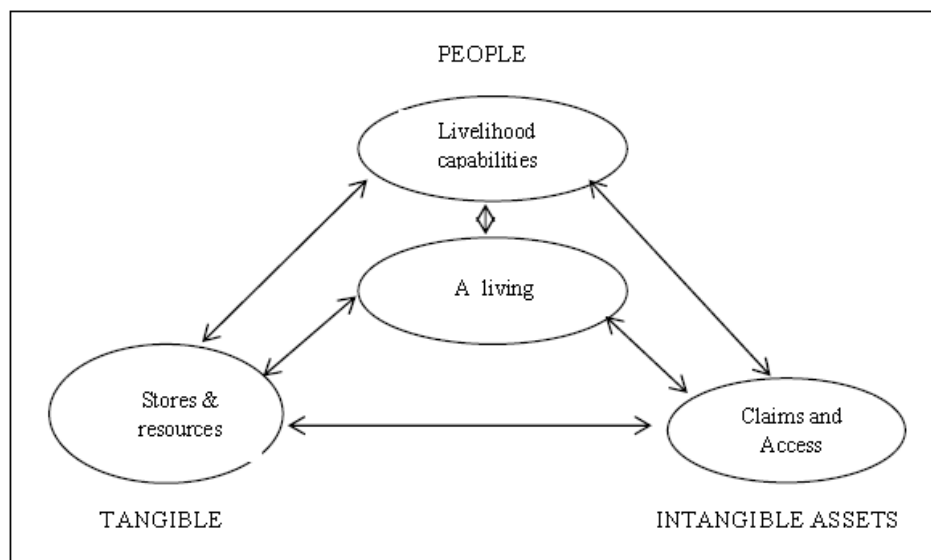


Figure 1. Chambers & Conway components and flows of livelihood

Source: Chambers and Conway (1991), pg. 7

Stores and resources refer to tangible assets owned by the household such as food stock, stores of value such as gold, jewellery, cash savings, land, livestock and trees. Claim is also recognized as a type of intangible assets which refer to demands and appeals that associate with some form of benefits/usage (for example loans and gifts) and it is often made during the times of stress and hardship. Meanwhile, access refers to opportunities to use particular resources, stores or services. As far as livelihood is concerned, the available tangible and intangible assets will be used to construct living by mixing some form of physical labour, skills, knowledge and creativity. The knowledge and skills may also differ across places and communities because they are internally acquired within particular households and inherited from the previous generations. A livelihood is considered as sustainable if it can (Chambers & Conway, 1991):

- 1) Cope and recover from stresses and shocks;

2) Maintain or enhance its capabilities and assets.

SLA is applicable to various investigation purposes (Kollmair & St. Gamper 2002). For example, Asyley (2000) and Lapeyre (2010) used SLA to analyze how a policy or a development programme can sustain people livelihood. They attempt to understand and explain how the particular community-based activity impacted the local residents. On the other side, SLA is also used as analytical tools for development priorities identification and to identify the potential beneficiaries or partners in practice (Kollmair & St. Gamper 2002). SLA is also used as a system to monitor and evaluate the impact of poverty elimination project (Kollmair & St. Gamper 2002).

Besides the SLA, there is also another participatory based development approach which widely used in Thailand. Socio-economic development in Thailand has been guided by the Sufficiency Economy Approach (SEA) (Kelly et al. 2012 and Suwankitti & Pongquan 2010). SEA emphasizes on the moderation between excessive capitalist and rural deprivation as well as promoting self-discipline consumptions. Sufficiency concept has promotes values that prevent local people and economy from being deprived by internal and external forces. Therefore, a relatively holistic well-being concept, community self-reliance and self-sufficiency are the salient features of SEA due to three underlying principles comprises of: moderation, reasonableness and self-immunity (Suwankitti & Pongquan 2010). Moderation refers to the middle way between needs and over-spending. The moderation principle contrast the idea of unlimited wants as human are assumed to be able to control their desires. Reasonableness refers to the awareness of justifications for the particular actions. It means that all actions must be thoroughly evaluated in order to bring out the best expected result. Self-immunity refers to ability to confront shocks and manage unpredictable changes. Therefore, adaptation of SEA would make the society independent and resilient to any global turmoil.

As far as community economy, SLA and SEA are concerned, those approaches attempt to establish means of living that are sufficient, resilient and sustainable. It also involved active local cooperative/collaborative efforts. Community economy is about utilizing local resources for the benefit of local people. SLA concerns on finding ways to strengthen local well being and survival capabilities through efficient management of the community household tangible and intangible assets. Sufficient economy approach (SEA) further elaborates on the mechanisms to accomplish sustainable livelihood through cultivation of self-discipline and moderate human consumptions. Therefore, a community economy project will become an effective participatory development approach when its operation is support with SLA and SEA (Figure 2). Besides, community economy also allows the attainment of SLA and SEA. Therefore the relationship is in two-way mode.

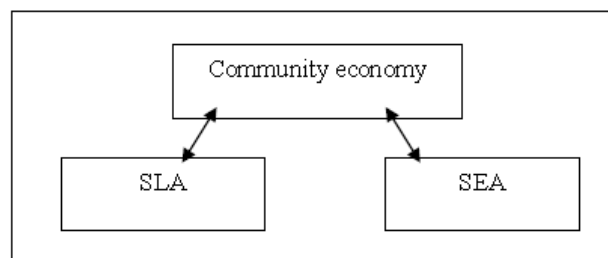


Figure 2. Community economy, SLA and SEA relationship

Based on Lapeyre (2010) and Md. Shafiqul (2012), the community economy activities found to have positive impact on local people. Md. Shafiqul (2012) defines impact as the change brought about by a certain action. Lapeyre (2010) had also identified four benefits of community economy conducted in Namibia which comprise of:

- 1) Increase the household income;
- 2) Provide a relatively stable livelihood;
- 3) Increase household financial and physical assets (capital); and
- 4) Maintain the local control over local resources.

Additionally, Skovdal et al. (2011) has identifies social benefit such as uniting the community members as well as mobilizing economic, political and social support to particular community. Therefore, the impact is broader and similar to Suwankitti and Pongquan (2010) findings regarding SEA impacts. Nevertheless, there is no absolute assurance that the community economy project will success and beneficial in all contexts (Crawford et

al. 2006). As a result, similar assessment is necessary to validate community economy benefits across various cultures and contexts.

3. Methodology

Self-administered questionnaires were distributed to 87 natural farming participants in Pulau Banggi Sabah and Batang Lupar Sarawak. Both locations are located in the East Malaysia. The benefit measurement consists of 14 items. All respondents had gave their response base on the 5 scales that ranged from (1) strongly disagree to (5) strongly agree. The Cronbach alpha for benefit measurement is 0.921.

4. Background of Natural Farming Project

The programme is a collaboration effort by three agencies comprises Ministry of Rural and Regional Development (KKLW), Felcra Berhad and Koperasi Belia Islam Berhad (KBI). KKLW and Felcra Berhad are government agencies which responsible for rural and land development; while KBI is a cooperative that supports Islamic economic activities. KBI received a grant from the government agency to run the community economic programme in few rural areas. KBI had chose food crisis as its community economic programme theme. The KBI natural farming project aimed to accomplish three food related objectives comprises of food security, food safety and food sovereignty.

The specific objective of the KBI natural-farming programme is two folds, namely to increase the household income as well as to reduce household food-expenditure. Throughout the programme, the selected villagers will develop edible garden around their house compound. They plant vegetables crops such as chillies, spinach, bittergord, cabbage, tapioca and others by using resources that available in their environment such as recycle plantation pot and self-composed natural fertilizer. From time to time KBI agricultural experts will visit the site and give advice on plantation technique. In addition a series of workshops were organized to teach villagers on plantation technique, self-produce natural fertilizers, sharing experience and problems pertaining to the plantation project.

5. Analysis and Discussion

Information on respondents' characteristics was presented in Table 1. Fourty-seven percent (47 %) of the respondents are male and 52 % are female. About 75 % of respondents are married, 21 % singles and 3.4 % are single parents. Most of the respondents aged between 41 to 60 years (54 %) and about 29 % aged between 21 to 40 years old. About 53 % of the respondents have experience in agricultural activities and 53 % also possess other permanent occupation.

Table 1. Respondents' characteristics

Sample characteristic N= 87	Frequency	Percentage (%)
Gender:		
Male	41	47
Female	46	53
Age:		
Less than 20 years	8	9
Between 21 to 40 years	25	29
Between 41 to 60 years	47	54
Above 60 years	7	8
Education:		
Illiterate	35	40
Primary school	23	26
Secondary school- SRP	11	13
Secondary school- SPM	15	17
STPM/Diploma	2	2.3
Degree & above	1	1.1
Marital status:		
Single	66	75
Married	18	21
Others	3	3.4

Other permanent occupation:

Yes	17	20
None	70	80

Have experience in agricultural activities:

Yes	46	53
No	41	47

Have close relatives who involve in agricultural activities:

Yes	46	53
None	41	47

Religion:

Muslim	80	
Christian	4	92
Free thinker	1	4.6
others	2	2.3

The descriptive result of project benefits is shown in Table 2. Item 1 through 6 is described as the economic benefits. Meanwhile, item 7 to 14 indicate the social benefits of the programme. The social benefits comprises of feel more happy and achieve higher self-satisfaction, satisfy basic needs, increase closeness among family and community members, access to healthier and fresh vegetables crops and increase one's agricultural knowledge and skills. Table 2 also indicates that natural farming economic benefits have comprise of the increase of household income, providing consistent income, allowing the villagers to make household saving and productive usage of household assets.

Table 2. Impact of natural farming project

No.	Items	N= 87	Percentage				
			Strongly disagree	Disagree	Quite agree	Agree	Strongly agree
1.	Increase household income.		3.4	9.1	26.1	25.0	35.2
2.	Consistent and stable monthly income.		2.3	1.1	40.2	27.6	28.7
3.	Save household monthly expenditures.		2.3	-	28.7	34.5	34.5
4.	Productive usage of household asset (land).		2.3	9.2	19.5	40.2	28.7
5.	Allow some personal saving.		3.4	12.6	25.3	25.3	33.3
6.	Provide employment for one self.		8.0	1.1	21.8	36.8	32.2
7.	Self-satisfaction and feeling happy.		1.1	-	13.8	44.8	40.2
8.	Satisfying basic need for the family.		1.1	1.1	28.7	27.6	41.4
9.	Gain recognition from society and relatives.		9.2	3.4	23.0	39.1	25.3
10.	Increase closeness and caring among family members.		1.1	1.1	16.1	35.6	46.0
11.	Healthy & fresh vegetables food crops.		-	3.4	17.2	20.7	58.6
12.	Increase closeness among villagers.		-	6.9	17.2	28.7	47.1
13.	Feel healthier.		1.1	-	12.6	58.6	27.6
14.	Increase agricultural knowledge and skills.		-	-	14.9	19.5	65.5

The average sales income generated from natural farming is RM146.10 with minimum and maximum value of RM0 and RM1,404 respectively (see Table 3). The average saving of household monthly expenditure is RM106.70 with minimum value of RM0 and maximum value of RM 540 (Table 3). The minimum amount of zero (0) is obtain due to some respondents who choose single purpose for their natural farming project, either to

be used entirely for household consumption or entirely sell to outside market. However, only one respondent sold all his garden outputs to market without any allocation for personal consumption. In most cases, the respondents have either – (1) use the entire output for personal consumptions; or (2) personal consumption plus selling the crops surplus for some extra income.

Table 3. Average of monthly additional income & household expenditure saving

	Additional income (RM)	Food expenditure saving (RM)
Mean	146.103	106.74
Median	50.00	50.00
Minimum	0.00	0.00
Maximum	1,404.00	504.00

The central tendency measures of the benefits are shown in Table 4. Mean and standard deviation are used to describe the central tendency of the benefits as the measurement is designed at the interval scale.

Table 4. Measure of central tendency

No	Items	N= 87	Mean	Standard deviation
1.	Increase household income.		3.8	1.129
2.	Consistent and stable monthly income.		3.79	0.954
3.	Save household monthly expenditures.		3.99	0.921
4.	Productive usage of household asset (land).		3.84	1.022
5.	Allow some personal saving.		3.72	1.158
6.	Provide employment for one self.		3.84	1.140
7.	Self-satisfaction and feeling happy.		4.23	0.773
8.	Satisfying basic need for the family.		4.07	0.925
9.	Gain recognition from society and relatives.		3.68	1.166
10.	Increase closeness and caring among family members.		4.24	0.849
11.	Healthy & fresh vegetables food crops.		4.34	0.887
12.	Increase closeness among villagers.		4.16	0.951
13.	Feel healthier.		4.11	0.706
14.	Increase agricultural knowledge and skills.		4.11	0.706

The measure of central tendency reiterates that most respondents have perceived the benefit positively. The lowest mean is 3.68 for item “gain recognition from society and relatives” (SD 1.166) and the highest mean is 4.34 for item “provide healthy and fresh vegetables food crops” (SD 0.887). However, based on the overall trend of the means, we found that a relatively higher mean values are obtained for social benefits (range between 3.68 to 4.34) compare to the economic benefits (ranged between 3.72 to 3.99). Therefore, it shows that community economy has led towards moderate living that places higher values on social well-being rather the accumulated material assets.

One Sample Kolmogorov-Smirnov test was conducted on the overall scores of the benefit measurement. It shows that the respondents are indifferent in their perceptions regarding benefits of the natural farming programme (Table 5).

Table 5. Kolmogorov-Smirnov result

Null hypothesis	Test	Significant	Decision
The distribution of socio-economic benefit of natural farming with mean 56.33 and standard deviation 9.48.	One-Sample Kolmogorov-Smirnov Test	0.149	Retain the null hypothesis.

Therefore, Table 4 and 5 confirms that the local residents had agreed that the community economy can improve their well being and livelihood capabilities.

On top of the benefit, we found that this farming project is affordable venture for poor villagers as they only used their own natural resources and able to be accessed by the villagers'. Table 6 reports that most respondents incurred only minimal cash investment between RM1- RM50 (35.6 %) and RM51- RM100 (11.5%) to start-up the project.

Table 6. Cash investment at project initiation

Cash investment at the starting of project	Frequency	Percentage (%)	Cumulative percentage (%)
Not answering	42	48.3	48.3
RM1-RM50	31	35.6	83.9
RM51-RM100	10	11.5	95.5
RM101-RM150	1	1.1	96.6
RM151-RM200	2	2.3	98.9
RM201-RM250	1	1.1	100

The underlying reason for such circumstances can be understood from our interview with the project manager of KBI:

"We want them to use natural resources available around them. We urged them to think creatively and make use of existing items that are affordable and available to them...in fact we keep on reminding (them to) minimize buying gardening material or equipments from outside. If possible don't buy anything... develop from whatever you have within your surroundings. This project should help the villagers to reduce daily expenditure not add new burden on them"

Overall, the analysis shows that natural farming is an affordable community economy model that can improve sustainable livelihood of villagers in rural area. Community economy is particularly suitable for human empowerment, especially for people who are lacking in formal education or without permanent occupations. It allows accomplishment of human well being through utilization of local available resources and community specific skills and knowledge. However as far as this study is concerned, external parties (such as KBI) have significant roles to restore the technical skills and knowledge among the villagers. The role is particularly important in order to enhance villagers' capabilities to self-run and coordinate their sustainable community economy programme. This is in line with Kelly et al. (2012) who stressed the importance of having a specific agencies or proper system that will develop the community level human resources so that local people are able to self initiate, plan, manage and monitor their community economy project. For example, in Thailand a system called Community Work Accreditation System (CWAS) had been designed to accommodate such role. Lapeyre (2010) also highlights same concern over the insufficient community managerial capacities to lead an effective and truly sustainable community based activities.

The benefits flow in terms of enhancing household income and social aspect such as health, knowledge and closeness among family members. Nevertheless, a relatively higher mean was found for social benefits compared to the economic benefits. Therefore, it shows that community economy promotes a moderate as well as self-and-local community reliance livelihood. Within the context of social benefit, the residents have agreed that the major impact of the programme is enabling them to get healthier fresh vegetables for their daily meals. They agree that chemical-free crops can be obtained from the venture and contributes to better health condition. In addition the participants feel that the project promote healthy life-style as it can be recognized as one of the physical exercise activity. Besides, the villagers can reduce their monthly household expenditures as they do not

have to purchase the crops from the market. The closeness among family and community members also increased as most of the tasks are done together. As suggested by Skovdal et al. (2011) that such community economy programme may lead towards better community integration and unity.

6. Conclusion

Natural farming is a community economy model which is affordable for the poor people. The benefits flow in terms of providing household income as well as reducing household expenditures on vegetable-food items. Furthermore, the benefit also flows in terms of better health condition arising from chemical free vegetable crops as well as physically active life style. As far as human value empowerment is concerned, the community economy which is conducted through plantation and agricultural based activity can become a suitable platform for improving the rurals' quality of life. Nevertheless, the villagers need external parties to restore some soft-capabilities to execute the programme effectively.

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