

A Participatory Perspective on Sustainable Home-yard Food Garden (KRPL) Program: Case Study of Lumbung Mataraman in Yogyakarta Special Region

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Abstract. Sustainable farming became more notorious after global idea of Sustainable Development Goals (SDGs) was introduced in 2015. In national Indonesian level, the idea was well interpreted well in one of the national programs named Sustainable Home-yard Food Garden (KRPL). KRPL program was designed to enormously sustaining productive land in household level. Furthermore, this idea was translated in local level throughout Indonesia based on the locality and spatial character. In Yogyakarta Special District, sustainable farming for limited land was constructed in Food Security Body with Lumbung Mataraman (LM) Program. This research aims to evaluate the effect of the LM program in social aspect with participatory perspective. It also to know what obstacle faced and that effort can succeed it. Method used in this research was including in-depth interview, Focus Group Discussion and intensive observation in 5 farmers group. The research was organized in different location of 4 districts and municipal. The result can be reported as three main aspects related to human resource and proper government program. The conclusion are: (a) the innovation in selecting farmer groups as beneficiary has solved the problem, but it should be supported by legal regulation made by government, (b) the preparedness of human resource and farmers group is important, in which the group should have the more effective activity and not merely project oriented group, and (c) the more sustained program is needed to measure the feasibility and viability of the program in a longer period.

1. Introduction

The research is aimed to measure the program in poverty alleviation effort based on the households increasing income in Sustainable Homeyard Food Garden (KRPL) program. The study is also triggered by the previous researches held before. A number of researches are considered ineffective, but the last few years mostly researches reported the more promising impact of KRPL.

Some ineffective similar program of agricultural practices. Those programs result were reported less successful by recently research reports (Haryanto et al, 2014; Hermawan et al, 2014; Imansuri, 2016; Saptana et. al. 2013). Later, the KRPL program was recently reported as efficient in term of sustainability and family expenses (Purwantini et.al., 2012; Putri, 2015) with high level of participatory (Ratna Putri, 2016) and was considered promising in many aspects (Saptana, et. Al., 2013)

The program of Sustainable Homeyard Food Garden Sustainable was in national Indonesian level. The idea was interpreted well in national program called KRPL program that was designed to enormously sustaining land in household level. It is then interpreted in certain different way in local provincial and district level. The program is expected to answer the global idea of Sustainable

Development Goals (SDGs). Furthermore, this idea was translated in local level based on the local and spatial character. In Yogyakarta Special District, this sustainable farming for limited land was constructed in Food Security Body with Lumbung Mataraman (LM) Program. The LM farming program is emphasized in innovative of human resource and local commodities. LM program was initiated in 4 districts and 1 municipal of Yogyakarta Special Region. The beneficiaries of the program are mostly members of Women Farmers Group (KWT) in both rural and urban area. In average one KWT consists of 25 to 30 members in 2017.

That program is planned as follows: (1) The program was held 3 multi-years each with 3 levels of program. The first year will be the preparation stage, the second year is the development stage, and the third year as progress stage. The final year should be the stepping stone when the KWTs are considered ready for the level of food security. The idea of food sovereignty is the condition in providing food by people including in households basis. (2) Every program costs 30 million Rp namely 20 million for depmplot and 10 millions for seeds. The commodities were adjusted to the local and (3) The article will analyse and evaluate on how the program was actually organized. The analysis will provide an assesment of every KWT progress. The assesment will be the valuable insight for the next stage of the (multi0years) activity and the very further program.

A set of recent reserches were conducted in different region in Indonesia. Purwantini (2012) also stated that The welfare of participating and non - participating households in Pacitan Regency is still less than that at provincial and national levels. KRPL Program success will be determined by the identification of potential resources at home yards, capacity building of farmers as homeward managers, home ward specific technologies, and institutional management to optimize home yards. The policy implications to support sustainability of KRPL program are: (1) program planning and socialization, (2) guiding and motivating the target groups, (3) post harvest training to support food diversification, (4) monitoring and evaluation of the program, (5) importance of the supporting such as KBD (foundation seed field), program packages, and farmers markets, and (6) promotion and advocacy.

Purwantini et al, 2012 reported KRPL Program emphasizes that national food security has to start from household level. Her research was aimed to analyze the impacts of the KRPL Program on household food expenditure patterns, food consumption patterns, consumption levels, adequacy of household energy, and protein and expected diet pattern (PPH). The analysis result shows that the impact of KRPL is able to reduce spending on food consumption and to increase consumption of energy, protein and PPH. However, the share of food consumption expenditure of participating households on average is still relatively large (61.8 %) compared to aggregate data of East Java (52.2%) and Indonesia (51.4%) in 2010, and is slightly lower than the average expenditure of non - participating households (62.9%).

Meanwhile Saptana et al (2013) has reported that Food security issues deal with critical problem, namely food demand grows faster than that of production. To achieve food self-sufficiency and food security, the Ministry of Agriculture Indonesia through Indonesian Agency for Agricultural Research and Development develops the Model of Sustainable Food Houses Region (M-KRPL) and its replication, namely the Sustainable Food Houses Region (KRPL). The concept of M-KRPL and KRPL programs needs to be refined primarily due to program design, implementation period, implementing organizations, introduced technologies, and strengthened local institutions. Implementation of M-KRPL and KRPL should be carried out through excellent social process and stages of growth, i.e. growing, developing, maturation, and self-reliance.

Another research was conducted by Putri (2016) Indonesia is a developing country which have enough resources to make sure of food endurance of its people. In contrast, there are many people of Indonesia which its food need have not fulfilled yet. The Pola Pangan Harapan (PPH) target that not fulfilled in 2015, that is 95 points, affecting the Percepatan Penganekaragaman Konsumsi Pangan (P2KP) program. For the example is in Sidoarjo Regency. Because of that reason, the following program of Percepatan Penganekaragaman Konsumsi Pangan (P2KP) should be Kawasan Rumah Pangan Lestari (KRPL) program. People of Seban is one of the village which are expected to do that program. People participation is needed for succesfullness of a program. Based on

those reason, how people participation in Kawasan Rumah Pangan Lestari (KRPL) program in Seban Village, Tarik Subdistrict, Sidoarjo Regency, East Java needs to be described.

Concept of sustainability was noted by research of food local wisdom within community of Bupolo in Pulau Buru Maluku. This can be concluded that the concept of sustainability and local wisdom are implemented *beyond* technology (Pattinama, 2009). In many countries the concept of sustainability is developed widely and way progressive and turns more and beyond of the old fashioned tradition. It is important to elaborate the concept of local wisdom in term of sustainability for it is the idea in which local wisdom is needed to be kept in the sake of the benefit of the resource use to be sustained. It was proven that sustainability is the main problem in Indonesia. One of research has confirmed that agriculture system not yet approved the and meet the technical requirement of sustainable agriculture system. The cultivation was made by soil management, monoculture system without pergiliran variety, and using prominent amount of chemical fertilization and pesticides (Praptono, B. 2010).

The KRPL and LM are expected to empower the community and to end up all the hunger form. The term of empowerment was considered as one of solution in providing livelihood to the poor people and encouraging them to increase the family income. In the very end this is expected to alleviate poverty. In the study of empowerment in Program Pemberdayaan Masyarakat di Indonesia (Hadi, 2006) ¹ has concluded that in fact, unfortunately the program was merely routine and even considered as a government lip-service program. The previous evaluation of the similar program of KRPL stated that the most case is the program stacked (*mangkrak* – Ind) and stopped in between for its same reason on less innovative program and insufficient or unskill human resources of beneficiary.

This statement is compared to the result of other program. The research on farmer group of rice cultivation reported that the role of group is very prominent. Motivation is fully needed in following the activity among the group members. The higher motivation will provide more effective performance in organizing government aid (Matanari, dkk. 2010). Of course it is not fair to consider that all programs are the same “*mangkrak*” as what is stated by public. A research by Hadi (2006) reconfirmed that few serious steps need to be taken to deal with the obstacles: first, less effective team work mechanism. Second, the use of collective barns is less than optimal so that the facility use is considered poor, and third, not sufficient advocacy and advisory against the farmers group members.

2. KRPL and Lumbung Mataraman

The main focus on this research is the sustainability in the local wisdom context. In his study Graham (1991) launched the concept of question whether this world is not the global as what most people expected, but it seems like the phenomena of global imaginary in the economy context it is found that the government that used to protect us from world economy tend to push us to face it our own way (Graham in Local Wisdom, 1991).

For this very reason, the Graham statement remind us to the fact that people have to help themselves. And in agriculture aspect, it turns to the facts that people and nation have to provide their own food in sake of dignity. For this reason also, it is fully agreed that one of the important aspects of the problem is about the community participation. So, it is clear that in effort to explain about sustainability the theory of *participatory* is considered important as the basic.

This study will be restrained in participatory of community program held by local government. The focus of research is KRPL. The result of research is expected to be the solution in developing the same program in the future. In Indonesia, RPL was initially introduced in 1951 as a measure to prevent erosion and land degradation. The government used the measure to encourage the public to plant trees to fulfill this goal (Nawir et al., 2008). However, in 1996, the RPL purpose shifted to efficient utilization of home-yards, which would provide alternative land for food production and help meet household food needs. Furthermore, KRPL was launched in the early 2010s

¹Yayasan Agribisnis/Pusat Pengembangan Masyarakat Agrikarya (PPMA)

to improve food intake through diversification in varieties of consumed food and nutrition by those engaging in the KRPL program. It was also an attempt to empower female household members. During the 2011–2015 period, the KRPL program was implemented in 12,000 communities in 33 states in Indonesia (Food Security Agency, 2013).

The KRPL program is carried out by groups of women with mentoring by extension workers. At any given site, KRPL implementation entails (1) meeting food needs and diversifying food and nutrient intake at the household level, (2) conservation of crops, (3) management of nurseries, and (4) improving welfare by increasing income. Furthermore, a participatory approach is adopted by attempts to establish a clear decision-making process within the group, improve access to information beyond technical advice and services from the government, strengthen inter/intra-group cooperation, enhance harmony within local communities, and nurture leadership among participants. To support KRPL, the government helps establish nurseries with a view to providing crop seedlings to be grown through KRPL activities. The existence of a nursery overcomes difficulties posed in growing seeds and increases family income through sales of seeds to these nurseries. To improve the quality of human resources, especially for female members of households, the government conducts training activities regarding crop production with plastic container pots, nursery management, composting household waste, and utilization of herbs as pesticides. Those activities are also financed by KRPL participants and NGOs in addition to central and local governments.

The emphasis of analysis is in the point of community *participatory*. The farmers' participation is the main aspect in identifying resource potency. The similar research in Philippines has reported in how human resources determined the effective use of natural resource (Participatory, 1997). Meanwhile in many different developing countries including Indonesia, it is commonly reported that communal participatory is never been easy to imply (Jackson and Kassam, 1998).

Other research was organized with fund from World Bank reported in La Paz, Bolivia and Guayaquil, Ecuador. This study explained the evaluation method that was considered new and yet controversial. Most of project run by international NGO reported the similar problem in the lack of communication between the beneficiaries and the project managers. The recent evaluation method was proposed by Jackson and Kassam by giving a particular training to the beneficiary to become the co-researcher against their own activity. Later the researcher would provide the report from these beneficiary in a more semi-formal report. This is what is called by participatory observation. The method is considered as “make no sense and tiring”. In the end, this new method is highly appreciated by the donors and was proven to be an effective way to report the progress.

3. Research Method

The research is conducted with survey and direct observation method, mainly data taken from primary observation data, interview and FGD. Triangulation of the data are compiled from 5 KWT in 5 locations. The study area is Yogyakarta located in central Java. Lies next to Central Java Province Yogyakarta Special regency has four districts and one municipal: Bantul, Kulon Progo, Gunung Kidul Sleman and Kota Yogyakarta. The population of Yogyakarta is 3.734.955 people (Badan Pusat Statistik, 2016) and covers a land area of about 1.485 square kilometers. The major agricultural commodity is rice. The number of KRPL activities in Yogyakarta has continuously increased since 2012. The KRPL program were carried out mostly in four districts since 2012. To obtain the participatory data we use data from KWT in 5 areas. Total number of KRPL participants in Yogyakarta is estimated in LM Program 2017 and 2018 is 450 women. This study covers 5 initiative KRPL in Yogyakarta.

Primary and secondary data is obtained from the FGD from the group. The analysis method of *participatory* emphasized the justification and *closure among the society* (Stirling, 2006: 95). The method is mostly used in the research of land utility. The approach of method is combined with indicators used in Fraser (2006). Fraser Method is a developed method made by Prescott Allen (2001) that emphasizing in the role of well being assessment. This measures the community participatory to analyze the forestry management policy in Canada (Fraser, 2006: 117).

The main three steps in identifying indicators. Basically there are 3 steps adopted from Fraser method namely (1) knowledge and culture, in which the local culture is used and applied, (2) community, the participatory and local formal institutional support and (3) equity, involving women in the process of economy and production activity.

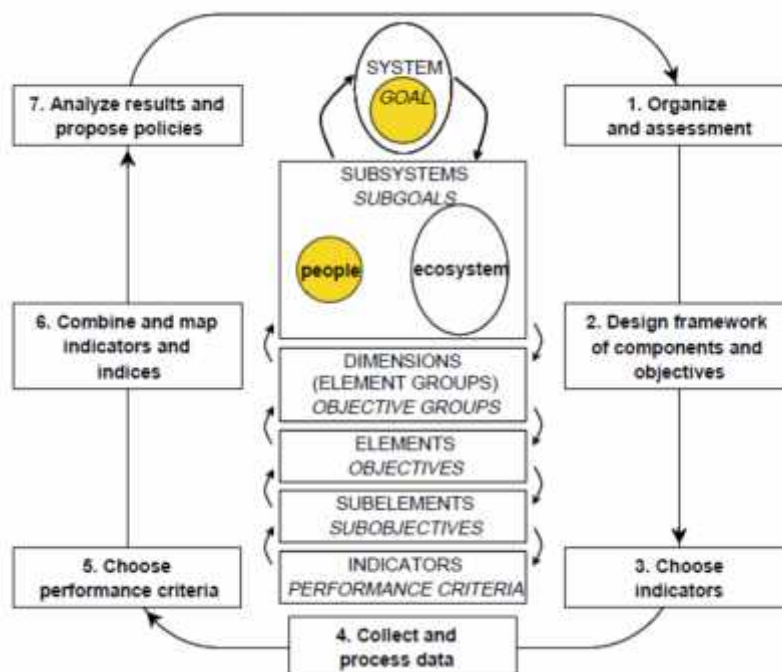


Figure 1. Modified analysis community participatory bottom-up and top down (Fraser, 2006 in Riawanti, 2017)

4. KRPL and Lumbung Mataraman

We mainly reported that almost all participants plant similar vegetables and livestock. Many interviewees pointed out that the main result of shows the succeed of LM program that lies in three main factors mainly (1) the innovation in selecting farmer groups as beneficiary has solved the problem, but it should be supported by legal regulation made by government, (2) the preparedness of human resource and farmers group, in which the group should have the more effective activity and not merely project oriented group, and (3) the more sustained program is needed measure the feasibility and viability of the program in a longer period.

In Yogyakarta Province, agriculture is part of the local culture since decades. One of important program by local govt was organized under *Dana Keistimewaan*. The activity on apricultural aspect by Dais is expected to be the answer of food sovereignty issue. Technically teh LM will be the program to answer two problems on food namely (a) revising consumption pattern or *Pola Pangan Harapan (PPH)* and supporting base of production through home yard optimalization. The focus of indicator will be on the term of *lestari* concept or *sustainable* as suggested in *Sustainable Development Goals (SDGs)*. KRPL was started earlier in a program that emphasizing *lestari* with the main indicator of program replication among the KWT members. Based on the KRPL evaluation the later local program Lumbung Mataraman was launched in 2017. The similar aspect is sustained and additional aspect is added. The term of “*lestari*” is later interpreted in a more local and innovated characters of the program with certain revised indicators.

Since the quality of human resource is very important, teh bottom up program is fully needed especially in selecting the KET. The quality of human resource in KWT is indicated mostly by the highly motivated members in farming activity and the *entrepreneurship* basic. The Lumbung

Mataraman provided the training to obtain the more motivated and skilfully human resources. During the training, a representative beneficiary is appointed to be the co-researcher to report their own activity. The progress of the KWT is reported by the representatives of the farmer group to be processed with assessment and scoring.

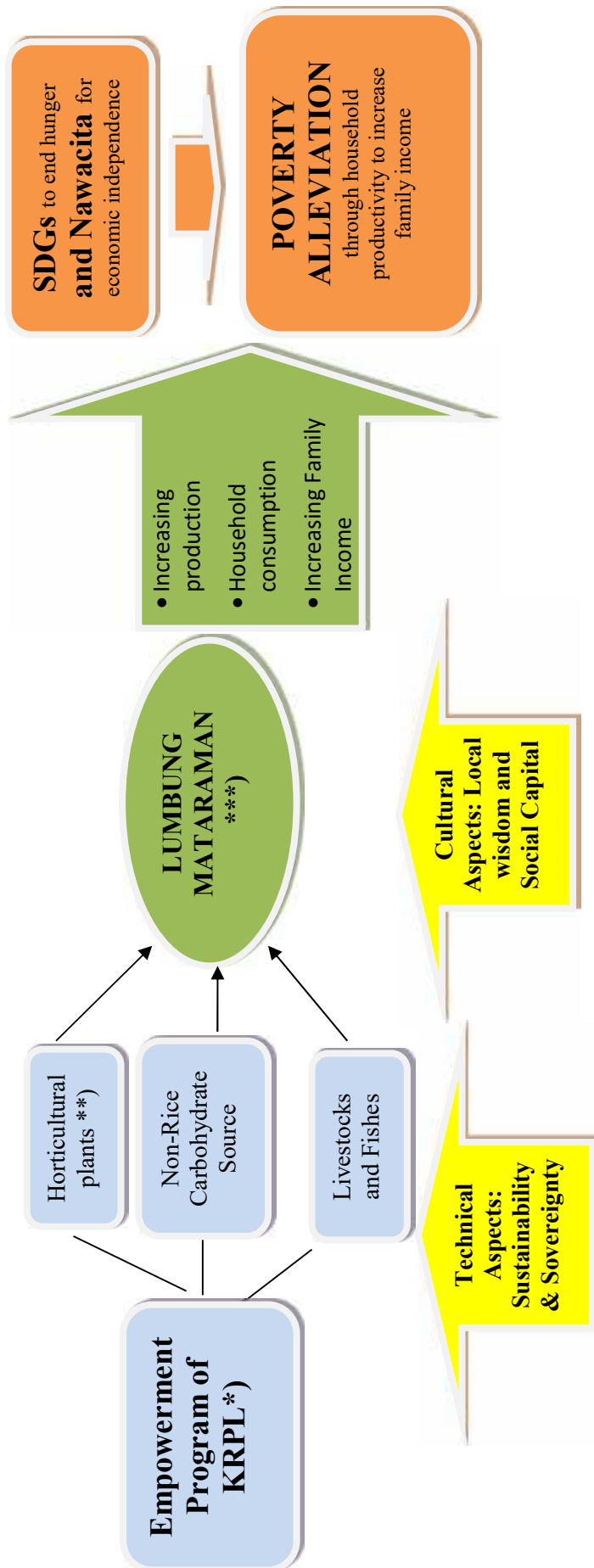


Figure 2. SCHEME OF THEORETICALLY FRAMEWORK
Sustainable Homeyard Food Garden (KRPL) Program with Local Wisdom and Cultural Aspects
in Yogyakarta Special Region

Note:

*) Sustainable Home yard Program in accommodating Nawacita and SDGs

**) B2SA = Beragam Bergizi Seimbang dan Aman (Various-Nutritious-Balanced-Safe) for a better Food Consumption Pattern

***) Local tagline of “grow what you eat and eat what you grow”

4.1. Community Participation in Backyard Optimalization

In the era of Jokowi governance, issues on food emerged as a main national agenda to accommodate the idea of SDGs. But the idea of sustainable agriculture is not a new thing. From many different programs since new order, agriculture sector may learn from different perspective. The comprehensive studies was organized in the paper of Tinjauan Terhadap Berbagai Program Pemberdayaan Masyarakat di Indonesia (Hadi, 2006). Further more based on the report of those program in alleviating poverty and empowering community it is concluded some steps. The very similarity of those program provide the same recommendation to succeed a program as follows: (1) motivated and skillfull human resources, (2) innovative and applicable program, and (3) support from government.

According to Saptana (2013) M-KRPL replication should take account the technology use as well as community empowerment. M-KRPL and KRPL is promising in terms of technical, economic and institutional aspects. Important policy implications are: (a) taking accounts the technical aspect and social-economic characteristics of the targeted groups, (b) program period must be at least three years along with the growth stages; (c) the main M-KRPL and KRPL implementing organizations are the Assessment Institute for Agricultural Technology (AIATs) and Regional governments, respectively; (d) the technology introduced consists of nursery, farm practice, post harvest, and processing; and (e) managerial and capital development.

The method in analyzing KRPL by Fraser (2006) is modified to measure the role of farmers group. The performance of group dynamics is determined by the following aspects namely (a) organizational strength and local community in general, (b) motivation and basic knowledge of the beneficiaries (KWTs members), and (c) social capital character of local community based on participatory of the group member.

The main obstacle in organizing KRPL is the various character of individual group of KRPL in term of human resource advantage and character of group/institution. The similar problem is minimal number of members that really apply the backyard optimalization. This may be explained by the dependency in imported food and agricultural commodities. Producing own food seems laborious and costly for group members. In general the social node plays an important role in as notorious aspect of the group dynamic. In technical aspect, the optimalization of productive homestead depends on the advisory by the extension agents. An efficient group work only last in a group with innovative and progressive institution.

Table 1. Indicators in Measuring the Group Participatory Level*)

INDICATORS	No	Variables of participatory
Human Resources	1	Capability of the Woman Farmers Group (KWT) members and management.
	2	Formal and informal technical/basic knowledge (training, extension, field training, etc)
	3	Experience of farming practice & local wisdom (traditional knowledge on agri-season, traditional seedling, etc.)
Group Capacity (Institutional)	4	Number of active KWT members and villagers support.
	5	Activity on agricultural practices inside or outside of the KWT.
	6	Non technical KWT activity (routine meeting, social gathering, money-lending activity, etc)
Sustainability Indicators	7	Distribution on seed of crops/ livestock/ fishery
	8	Seed (ready to plant) rotation and regeneration
	9	Community independency (tools and fund)
Community Support	10	Extension agents/ Technical Offices of Local Government
	11	Village government/ staffs
	12	Community/ group in village level

*) adapted from *Farming System Participatory Indicators* Kites by Lightfoot C, et. al., 1999

4.2. Sustainability in Lumbung Mataraman

Local KRPL program in Yogyakarta known as Lumbung Mataraman is an effort to obtain the achievement of Food Independence of Yogyakarta people. Since longer period, a circle people in Yogyakarta have traditionally implemented the local agricultural action in order to fulfill their own need. The wise saying is also well known as a tagline “*nandur opo sing dipangan lan mangan opo sing ditandur*” (grow what you eat and eat what you grow).

This is mainly to provide the local food need through the optimization of household food providing (BKPP, 2016). The homestead land is considered one of multi-purposed area in providing food for household so that the same program was initiated by The Ministry of Agriculture since then (Kementan, 2012). The evaluation shows that the most of KRPL stay until the 2nd or 3rd year after launched. The empowerment did not simply find its goal.

One concern in Lumbung Mataraman is the sustainability of the agriculture practices. The main character of the practice is organic. Most of the places in Java Island Indonesia seemed to have the same practices as reported by Praptono (2010) in term of sustainable agriculture systems and practices. The character of the cultivations were: mechanization in soil management, monoculture system, not applied variety rotation (pergiliran varietas) and the use of chemical fertilizers and pesticides.

The method of in Lumbung Mataraman with “*bongkar masalah*” is accomplished firstly to revise this very important agriculture practices. This method has been applied by numerous of local NGO and government program to prepare the required agricultural human resources (Joglo Tani, 2015). The assessment is expected to identify the main problem occurred in the KWT and local community surrounding. Furthermore the problem will directly affect the most of practices in the KWT namely status of land, age, education, experience, knowledge and extension.

The result of assessment will be adjusted in the individual technical training for the KWT. The training is applied differently in every KWT. As mentioned in the program, the sustainability practices should be able to accommodate the need of today's community need for a negative impact of non-sustained practices. It is explained by Praptono (2010) a) environmental negative impact: pollution, bio-diversity decrease, lower soil quality, b) economic impact: decrease of farmer income, and c) social impact: lower health status, farmer insecurity as result of farmer dependency on external input.

Putri (2016) also reported that the research in describing people participation in Kawasan Rumah Pangan Lestari (KRPL) program in Seban Village, Tarik Subdistrict, Sidoarjo Regency, East Java has concluded the benefit for them. The result of the research shows that people participation is considered in **often or good** category. The highest percentage point is the third variable participation in benefit with 60,65% included in often category. It was also reconfirmed that the rest is participation in implementation with 50,23% which is included in **often** category, participation of decision making with 44,27% which included in **occasionally** category, and the last is participation in evaluation with 41,15% which is included in occasionally category. People need to improve their awareness as a form of participation. A good coordination of the people, Village Chief, and also Badan Ketahanan Pangan dan Pelaksana Penyuluhan (BKP3) is needed for the successfulness of a program Putri (2016).

The analysis method program of Lumbung Mataraman is mostly descriptive with method tools. The indicators of participatory in empowerment program (a) community character of KWT, (b) beneficiary motivation, and (c) institution aspect. This also reconfirms the previous hypothesis that the success of program is determined mainly by the community participatory. The result has shown in Table 2 in which we decide the main variables to measure the participation as follows; (a) team work mechanism in the KWT institution and (b) the use of optimizing backyard through the aid for the community benefit, (c) learning process of the KWT members and coordination among KWT, Local government and the consultant.

Sustainable Home-yard Food Garden and LM consists of several activities namely (1) the making of communal seed garden, The developing household garden pilot project, and (3) replication on optimizing homeyard use. The previous program on Sustainable Home-yard Food Garden was IDR 15.000. 000 for the KWT. Furthermore the Farming input aid will be given in 2018 (a) Horti and Cashcrops Seeds IDR 1.5 mill (b) Specific Plants IDR 3.6 mill (c) Poultry and Fishery IDR 2.7 mill, and (d) Farming Inputs IDR 11.6 mill with total amount of IDR 19,500,000

In general the mechanism of group work depends on the agroup leader as main motor in the organization. In this case, social capital is the keyword of the succeed of the program. The advocacy and internship from local goovernemn and Jiglo Tani also play the main rule in term of sustainability of work. So the main two keys in providing a good KWT performance and sustained program are participation and coordination. The assesment of “bongkar masalah” method shown the result as provided in the table 2.

Table 2. Result of *Focus Group Discussion* in Early Assesment in 5 KWT on Lumbung Mataraman Program 2017*)

No	KWT	Obstacles/Disadvantages	Advantages
1	KWT. SH Municipal (Score 65.13)	- Mechanism of communal work among the group was less efective. The group fully depends on the work of individual work of the group leader and secretatry. - The use of the homeyard and seed garden is considered less optimal for the lack of productive area. - The learning process goes well but there is no significant change that can be seen.	- Education level average of the human resources is higher than ither districts, desite the very limited number who joined the KWT. - Support from local government institution on agriculture program.
2	KWT. RL Bantul District (Score 70.83)	- Mechanism of communal work among the group is good enough. The group activity does not only depends on the work of individual work of the group management. - The use of homeyard in general is less optimal among the households in the village especially the KWT member. - The learning process canhe needs of KWT members in terms of individual and institutional.	- Social economy level of villagers are hugher than average in Yogyaarta Region. - Education level average of the human resources is not higher than other districts, but the enterpreneurship atmosphere is stronger among the KWT members. - Consistent and strong support from local government institution on any program
3	KWT. M Kulon Progo District	- Mechanism of communal work among the group was less efective. The group fully depends on the	- KWT management is well experienced about overnment projects and the

	(Score 65.61)	work of individual work of the group leader and secretatry. - The use of homeyard in general is less affective among the households in the village. - The learning process tends to go slowly for its only formality in term of KWT activity.	member is better informed. - Education level average of the human resources is consodered sufficient, but in the other hand KWT organize the program merely as project that profide fund. - Support from local government institution both for griculture and other program in general
4	KWT. L Gunung Kidul District (Score 85.22)	- Mechanism of communal work among the group is highly efective. The group leader can give the best practice to the members to replicate the same program of households. - The use of homeyard in general is quite good and optimal among the households in the village. - The learning process goes well and significant change that can be seen.	- Quality oh the human resources is proven by social capital of the local people. - Education level average of human resources is higher than ither districts, desite the very limited number who joined the KWT. - Support from local government institution on agriculture program but less support from village administrator.
5	KWT SBL Sleman District (Score 79.25)	- Mechanism of communal work among the group is good enough. - The use of homeyard in general is quite effect effective and well replicated among the households in the village. - - The learning process goes well enough. Some friction is found among the KWT members but still possible to handle.	- Education level average of the human resources is higher than other districts or municipal, despite the very limited number of educated persons who joined the KWT. - Strong and intensive support from local government institution on agriculture program

*) Initiative Research in May-July 2017

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In general the mechanism of group work depends on the group leader as main motor in the organization. In this case, social capital is the keyword of succeed of the program. The advocacy and internship from local government and Joglo Tani also play the main rule in term of sustainability of work. So the main two keys in providing a good KWT performance and sustained program are participation and coordination. The assessment method showed the result as provided in the table 2.

The analyze of participatory provides the individual scores of KWT as shown in Table 2. The highest score ore is gained from different 12 indicators but the score of 86 was obtained mainly from the variable of first indicator namely Human Resources (HR). Each variable of this HR indicator has reconfirmed the importance of participatory. The more precesely main difference of the KWT is the higher capability of the Woman Farmers Group (KWT) members and management.

By nature, people in KWT. SGK has formal and informal technical/basic knowledge (training, extension, field training, etc.). Furthermore the human resorce of the member may prove the experience of farming practice & local wisdom (traditional knowledge on agric-season, traditional seedling, etc.). Finally the sutainability is measured from numbers of active KWT members and villagers support. The innovation of LM is the highly-motivated. Interestingly the role of village government may draw different facct. The spect of Village government/ staffs and community group in village level. The different fact can be seen in othe KWT. Semi Nglambur of KRPL

4.3. Success Story of KWT. SEMI Nglambur

Another Women Farmer Group (KWT) that proven the program of KRPL was "Seruni Menoreh Indah". The KWT was established in June 2009 consists of 20 members of Nglambur Village women. The earlier activity of KWT was the communal work called *grumpungan* where farmers worked by turns to process a village field. The group work on maximize their home yard use soon after the assistance of Agriculture Extensions. In 2010 KWT. Semi was formally registered in government Agriculture Agent and registered with number 22/SDH – KWT/2010. Total group number was 20 women. The registered number is important so the KWT can receive aid from government.

The achievement in KWT has been taken for its strength in community participatory. KWT organization has a solid management: chief, vice chief, and secretary. Interestingly, KWT SEMI has some staffs with specific work description. Seedling Section –for example- has responsible in preparing media and seedling activity. Maintenance Section has to make sure that the plants are well distributed for the group members. Marketing Section works on post-harvesting process and marketing. The government aid was used for making of communal seed garden, developing household garden pilot project, and replication on optimalize home yard use. In the garden KWT Seruni also learn more to start small holder farming in horticulture, fisheries (catfish) and poultry (mostly local duck and native chickens). Replication was made in the members households to empower the women (KWT member) and increasing family income. The recent development is widespread into other commodities such as local plants namely local tubers, local Arabian chickens, and goose. This is an integrated activity through cash crops, poultry and food as family food resource.

In general, there are many benefits in implementing KRPL not only for the group members but also for the village community. People can provide source of food especially vegetables, poultry and fish for family daily need. Later on most of people have the healthier and less expensive food. Beside those benefit, it also can be seen that implementing KRPL also make better and more beautiful

scenery around the village. Furthermore, women village was more empowered through several productive activities in KWT. Most of group members also may learn about a better agriculture practices with more various and different commodities.

Sidoharjo village is situated in the slope of Menoreh and far away from market access. The nearest traditional market is Samigaluh, located sub-district capital is 6 km away from the village. They find it difficult to sell the product gained from KRPL program. The problem of food access puts Sidoharjo into category of vulnerable area (level 2) In 2016 KWT achieved assistance and aid of KRPL from central government. This program was part of government effort to alleviate vulnerable area so people can produce their own food. The increasing status of family nutrition will also increase the status of food security. After implementing the program of KRPL, the recent status of Desa Sidoharjo increased into level 4 in April 2018.

Within only 1 year KWT SEMI could develop the program KRPL among its group members. Besides providing food and increasing family nutrition status, KWT SEMI also gains additional income. After implementing KRPL, KWT can earn Rp 500.000,- per month. They also develop seed garden in order to replicate program to member households and to keep the program sustained. The successful program in KWT SEMI changes the status of village in term of food accessibility. This achievement also supports the local government program as stated in the tagline campaign of Food Sovereignty in Kulon Progo District: *"If we can plant why should we buy. If we can make why should we buy"*.

5. Conclusion and recommendation

The main conclusion of the research is expected to be the answer of the poverty alleviation effort based on the households increasing income in Sustainable Home yard Food Garden program. The result can be elaborated in the three main conclusion in term of participatory perspective: (a) LM program definitely depends on the innovation in selecting farmer groups as beneficiary has solved the problem, and it should be supported by legal regulation made by government, (b) the preparedness of human resource and farmers group is necessity, in which the group should have the more effective activity and not merely project oriented group, and (c) the more sustained program is needed to measure the feasibility and viability of the program in a longer period.

The study is also triggered by either the ineffective and the successful KRPL program and agricultural practices. Those successful programs have confirmed that participatory is the keyword in making the homeyard optimizing were well organized and sustained. This provides the recommendation as follows: (a) the orientation of the sustainable should have innovation and breakthrough and associated with the local condition and culture, and (b) program reformation is needed particularly in the oriented-impact of program. For this very reason, the most important part is the mechanism of beneficiary selection (*Calon Penerima Calon Lokasi -CPCL*).

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