STRATEGY FOR STRENGTHENING THE SOCIAL CAPITAL OF THE WOMEN FARMERS IN HOME GARDEN UTILIZATION, BOGOR DISTRICT, INDONESIA

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ABSTRACT

Home garden has the potential to be a family food source. This paper aims to describe and analyze the performance of the Sustainable Reserve Food Garden Area (KRPL) program in Bogor Regency. Based on these results a strategy was formulated to strengthen the social capital of women farmers in the use of limited land in Bogor Regency. The survey method was used to obtain an overview of KRPL performance in the three villages implementing KRPL. Case studies are used to explore social capital, the role of facilitators, and administrative management in one KRPL which is considered to have better performance. KRPL performance shows that nurseries and demonstration plots are not well managed, while Sustainable Food Garden (RP L) are still managed independently by women farmers. Social capital (networks, beliefs, and norms/values) tends to be weak and needs to be strengthened, the companion’s role diminishes after two years of running activities, and administrative management is not orderly. An action program to avoid future failure of KRPL has been prepared.

Keywords: home garden, performance, social capital, women farmers, KRPL

INTRODUCTION

The development of food security faces main problem, which is the growth of food demand is faster than its production growth (Saptana et al 2013). One of the government policies in terms of food security is the Local Resource-based Movement of the Acceleration of Food Consumption Diversity (P2KP), where one of its implementations is through the Optimization of Home Garden Utilization activities through the concept of Sustainable Reserve Food Garden Area (KRPL).

KRPL is a concept of a resident housing environment that jointly cultivates their home garden intensively to be used as a sustainable food source by considering the potential aspects of the
region and the nutritional needs of local residents (Ministry of Agriculture, 2015). Purwantini et al (2012) stated that one of the important justifications of the KRPL Program is that national food security must start from food security at the family level.

Bogor Regency is one of the regencies implementing the KRPL program. The implementation of KRPL cannot be separated from the social conditions of the local community, so that the Bogor Regency Government involves an institution that has been formed in the community, which is the Group of Women Farmers (KWT) as the manager of KRPL.

The Ministry of Agriculture (2015) stated that the implementation of KRPL includes 3 stages, which are the stage of growth (first year), development (second year), and independent (third year). Past development experiences make people only think about the importance of physical and financial capital, and forget about social capital that is owned by the community (Ibrahim 2002). Ancok (2003) stated that the role of social capital is not less important than other economic infrastructure.

KRPL needs cooperation to manage an area so that it is sustainable and achieves the shared goal which is a household food security. Financial capital in the form of money, natural capital, physical capital, and human capital require need something that connects for the occurrence of collective action, which is social capital. According to Putnam (1993), social capital refers to features of social organizations, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefits. Well-maintained social values such as trust, social networking, norms are social forces. This social value is expected to be something that connects them all so that collective action in managing an area can occur and continue.

LITERATURE REVIEW

1. Social Capital

Social capital has been a topic of debate since the early 1990s. Fukuyama (2000) states that the use of the term social capital was first known by Lyda Judson Hanifan in 1916 to describe village community school centers. Social scientists distinguish the concept of social capital with the concept of cultural capital, human capital and of course financial capital, and physical capital (Ibrahim 2002). According to Putnam (1993), social capital refers to features of social organizations, such as networks, norms, and beliefs that facilitate action and cooperation for mutual benefits.

2. The Concept of Home Garden

The Minister of Agriculture Regulation Number 18/Permentan/HK.140/4/2015 concerning Technical Guidelines for the 2015 P2KP Movement defines the home garden as land around the house with clear ownership limits (land may be fenced and may not be fenced) and becomes a
place for growing various types of plants and places to maintain various types of livestock and fish. P2KP Technical Guidelines divide the home garden strata into three parts based on land area and utilization. Strata 1 is a home garden with an area of less than 100 m$^2$, or without a yard (only a house terrace). Strata 2 is a home garden with an area of 100-300 m$^2$. Strata 3 is a home garden with an area of more than 300 m$^2$.

3. **Sustainable Reserve Food Garden Area (KRPL)**

KRPL is a concept of a resident housing environment that cultivates their home garden intensively to be used as a sustainable food source by considering the potential aspects of the region and the nutritional needs of local residents (Ministry of Agriculture, 2015). Based on P2KP Technical Guidelines, KRPL is conducted in 3 stages, which are:

**Stage of Growth (First Year).** Women farmers get assistance with activities: 1) socialization of optimizing the use of the home garden; 2) making a demonstration plot of home garden as a field laboratory as well as an example home garden; 3) making group seed gardens; 4) member’s home garden development; and 5) counseling about diverse, nutritious, healthy and safe food.

**Development Stage (Second Year).** Mentoring consists of: 1) development of group demonstration plot; 2) development of group nurseries; 3) development of member’s home garden as a source of food and family nutrition; 4) demonstration of food supply and preparation of diverse, nutritious, healthy and safe food menus; and 5) process of KRPL results.

**Independent Stage (Third Year).** At this stage, activities are expected to continue and be well managed, the demonstration plots have developed, and members' home garden have developed in a sustainable manner.

**RESEARCH METHODOLOGY**

The research was directed to measure two important aspects. First, the performance of the KRPL program in three villages. Second, exploring social capital, the role of facilitators, and administrative management of the KRPL. All studies were conducted from May to July 2018.

KRPL performance was measured by survey methods in three villages in Bogor Regency; which were Cipayung Village, Mega Mendung SubDistrict, Benteng Village, Ciampea SubDistrict, and Lumpang Village, Parung Panjang SubDistrict. The three villages chosen were villages that took benefit from KRPL since 2015.

KRPL performance was measured from the aspect of area management (RPL, seed gardens, and demonstration plot). The research respondents were 36 women farmers who managed KRPL which included 12 people in Cipayung Village, 12 people in Benteng Village, and 12 people in Lumpang Village. The primary data were obtained through interview using structured questionnaire.
Social capital were women farmers who managed KRPL, role of companion, and administration of management; Data collection was only done in Cipayung Village which was considered to be a role model for other KRPL. Qualitative method was used for data collection. Data and information were obtained from six informants who were determined through purposive techniques. The selected informant was the Food Security Service of Bogor Regency Government, KRPL Companion in the Village Level, Chair of KRPL, KRPL women farmers, and non-managerial KRPL women farmers. Data for this aspect were explored through in-depth interview, participating observations, and field note. Secondary data were obtained from written documents that were relevant to the research.

Data analysis was distinguished based on the two approaches used. Quantitative data processing was conducted by grouping data, then presented in the form of frequency tables, graphs, and diagrams. The results of quantitative data that had been processed were then interpreted descriptively. Qualitative data were analyzed through three stages, which are data reduction, data presentation, and conclusion/verification. The strategy design method used in this research was SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) through the FGD process.

**RESPONDENTS’ CHARACTERISTICS**

Table 1 Presenting the characteristics of the respondents of the research.

<table>
<thead>
<tr>
<th>No</th>
<th>Respondents’ Characteristics</th>
<th>Total</th>
<th>Unit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Farming land tenure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 0 m²</td>
<td>26</td>
<td>person</td>
<td>72.22%</td>
</tr>
<tr>
<td></td>
<td>b) 1-1.000 m²</td>
<td>6</td>
<td>person</td>
<td>16.67%</td>
</tr>
<tr>
<td></td>
<td>c) 1.001⁻ 3.000 m²</td>
<td>3</td>
<td>person</td>
<td>8.33%</td>
</tr>
<tr>
<td></td>
<td>d) &gt;3.000m²</td>
<td>1</td>
<td>person</td>
<td>2.78%</td>
</tr>
<tr>
<td>2</td>
<td>Farming land tenure</td>
<td>26.63</td>
<td>m²</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a) Cipayung Village</td>
<td>16.14</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Benteng Village</td>
<td>17.93</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Lumpang Village</td>
<td>45.83</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Average land area for RPL</td>
<td>8.59</td>
<td>m²</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>a) Cipayung Village</td>
<td>5.14</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Benteng Village</td>
<td>5.29</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Lumpang Village</td>
<td>15.33</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Respondent Age Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 23-30 year old</td>
<td>2</td>
<td>person</td>
<td>5.56%</td>
</tr>
<tr>
<td></td>
<td>b) 31-38 year old</td>
<td>8</td>
<td>person</td>
<td>22.22%</td>
</tr>
</tbody>
</table>
KRPL PERFORMANCE

The three KRPLs in the 3 villages have been implemented since 2015. KRPL funding was given in stages, with the first year (growth stage) of Rp15.000.000 in 2015 and the second year (development phase) of Rp10.000.000 in 2016. Table 2 presents KRPL performance in the three villages in 2018.

Table 2: KRPL Performance in 2018

<table>
<thead>
<tr>
<th>No</th>
<th>Indicators</th>
<th>Village</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Village’s Seed Garden (KBD)</td>
<td>Cipayung</td>
<td>Benteng</td>
</tr>
<tr>
<td>1</td>
<td>The availability of KBD</td>
<td>Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>2</td>
<td>Still producing and distributing seed</td>
<td>Stop producing and distributing seed</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pilot Garden/Demonstration Plot</td>
<td>Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>3</td>
<td>The availability of demonstration plot</td>
<td>Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>4</td>
<td>The demonstration plot is</td>
<td>Only land clearing</td>
<td>-</td>
</tr>
</tbody>
</table>
still managed

**Sustainable Food House (RPL)**

5 Commodity Development Cultivated by Members

<table>
<thead>
<tr>
<th>Source of vitamin &amp; mineral</th>
<th>11</th>
<th>10</th>
<th>8</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicinal plants</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>Person</td>
</tr>
<tr>
<td>Source of carbohydrate</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>Person</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

6 Home garden results which can be picked in 1 month

<table>
<thead>
<tr>
<th>Times</th>
<th>0</th>
<th>1-6 times</th>
<th>&gt; 6 times</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>16.67</td>
<td>33.33</td>
<td>41.67</td>
<td>%</td>
</tr>
<tr>
<td>b)</td>
<td>83.33</td>
<td>66.67</td>
<td>50</td>
<td>%</td>
</tr>
<tr>
<td>c)</td>
<td>0.00</td>
<td>0.00</td>
<td>8.33</td>
<td>%</td>
</tr>
</tbody>
</table>

7 Total of RPL

<table>
<thead>
<tr>
<th>When it was built</th>
<th>15</th>
<th>15</th>
<th>22</th>
<th>Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>Household</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed, 2018

1. KBD

Land use change becoming a residential demonstration plot has caused Benteng Village to not have a seed garden. The other two villages, which are Cipayung and Lumpang Villages still have land and nursery plantations but has not functioned to produce and distribute seeds.

2. Pilot Garden/Demonstration Plot

Demonstration Plot in Cipayung Village was the activity that was still carried out only to land clearing. A slightly different condition occurs in Lumpang Village. The demonstration plot in this village was still managed. Management was not carried out jointly but individually. The demonstration plot does not yet function as a field laboratory for other women farmers.

3. RPL

**Type of Commodity.** Table 2 showed that the source of vitamins & minerals was the commodity most cultivated by women farmers. Farmers independently obtained seeds from the rest of the kitchen waste or issue personal funds to manage RPL. Seed gardens were not managed sustainably so that no seeds could be distributed.

**Pickable Home Garden Results.** Although without support from the seed garden, women farmers tended to still have plants in the home garden. Home garden results were generally used for self-consumption. The majority of women farmers were able to reap the result of the home garden 1-6 times in 1 month.
**Total of RPL.** Households participating in this program are decreasing. The reason was because there were members who moved to other places and were busy with their daily work.

4. **KRPL Performance Analysis**

The results of KRPL performance after three years of implemented activities indicated that the activities were not sustainable. Awareness to make food in the surrounding environment has not yet emerged. Women farmers managing KRPL have not yet realized the benefits and importance of KRPL. The KRPL program tended to have a declining performance trend.

**ANALYSIS OF SOCIAL CAPITAL OF WOMEN FARMERS**

1. **Social Capital of Women Farmers**

Social capital, companion roles, and administrative management were found in one KRPL which was considered to have slightly better performance, which is Cipayung Village, a role model to the other villages. The social capital that was explored consisted of social norms, values, and networks.

1.1 **Social Norms and Values**

In order to maintain the sustainability of KRPL, women farmers who managed KRPL were trying to make a collective agreement regarding the management of seed gardens and demonstration gardens. Some of the agreements include making a daily pick-up schedule to clean the seed garden, provision of seed distribution, and agreement on sales results.

1.2 **Trust**

Social assistance totaling Rp25,000,000 was not a small value for women farmers in Cipayung Village. Government assistance was provided in the form of money transferred directly to a joint account. Provisions made by the government were aid that was not received in the form of money, but in the form of materials and tools needed for the development of KRPL. This was not entirely understood by all women farmers who managed KRPL.

1.3 **Network**

The network of women farmers who managed KRPL tended to be associated with government agencies, especially with KRPL implementing institutions such as Technical Implementation Unit of Ciawi Agriculture and Bogor Regency Food Security Service.

2. **Companion Role**

The companion role began to decrease when entering the third year so that the management activities of KRPL also decreased. Women farmers were very dependent on their companion.
There was no local cadre as a community agency who was capable of carrying out all activities related to the management of KRPL.

3. Administration Management

KRPL cannot be separated from administrative management. This recording has not been carried out in an orderly manner so that it has not been able to describe all the activities that have been carried out. Management of KRPL administration tended to be carried out in the first year of running activities.

KRPL PROGRAM DESIGN

The results of the research indicated that the KRPL program in Bogor Regency has not been effective and sustainable. The KRPL program had technical and institutional dimensions, but in its implementation the technical dimension still tended to dominate. The KRPL program design still needed to be refined to achieve household food security. Some things that need to be considered related to the KRPL program design are as follows.

First, determining the location and institutional management of KRPL at the micro level needs to be precisely determined by understanding the socio-economic characteristics of the community. Sakidin (2012) stated that an understanding of social capital in a particular area will be very helpful in making the right policy. Second, the availability of land and the status of land ownership for seed garden and demonstration plot in the long term also need to be considered the choice of location. Third, Saptana et al (2013) stated that the most crucial thing that the M-KRPL/KRPL program can run well is the existence of a community leader as a community activist, who enjoys agricultural activities (hobbies) so that activities can be accelerated.

Fourth, efforts to improve human resource capacity in the knowledge and skills of managing KRPL are well done, but have not been balanced with institutional strengthening. The implementation of KRPL in the field seems to be focused on the technical dimension, but still weak in its institutional dimensions. Fifth, the stages of implementing the KRPL program must be done with a mature process. Saptana et al (2013) stated that the implementation of the development of the KRPL Model must be done through mature stages and social processes, and carried out in a period of multiyears.

SWOT ANALYSIS RESULTS

The SWOT analysis was conducted in KRPL in Cipayung Village, where the village was expected to be a role model for KRPL in other villages.

1. Internal Factors (Strength)

Internal factors (Strength): a) the existence of potential for a home garden even though the land is narrow; b) well-maintained tolerance among women farmers; c) the daily activities of women
farmers are more at home so that between the spare time it can be used to manage the plants; d) women farmers have a high interest in the processing of agricultural products; and e) supporting natural resource conditions.

2. **Internal Factors (Weakness)**

Internal factors (Weakness): a) low networks that tend only to government agencies; b) women farmers are still difficult to work independently in acting collectively; c) lack of trust that can make a cooperation; d) low HR capacity; e) the management of KRPL at the micro level is mostly not from agricultural households so farming motivation needs to be gained; f) busy activities of KRPL women farmers with the main task as housewives and having limited time to go to the garden; and g) there is no visible community agency as a community supporter to involve the active role of the community along with available local resources.

3. **External Factors (Opportunities)**

External Factors (Opportunities): a) opening opportunities to increase HR capacity; b) the existence of village level KRPL assistants who assist the management of KRPL; c) development of science and technology that makes it easier for women farmers to access information; d) the existence of policy support related to the use of land.

4. **External Factors (Threats)**

External Factors (Threats): a) program design is still weak in building community awareness to build food in the surrounding environment; b) times that can erode the sense of community of members and the tradition of mutual cooperation; c) pests and diseases, and erratic weather conditions; and d) weak institutional support at the micro level.

**STRATEGY FOR STRENGTHENING THE SOCIAL CAPITAL OF THE WOMEN FARMERS**

*First*, increase the competency of women farmers and strengthen the role of companion. *Second*, involve community leaders and encourage local cadres as movers. *Third*, facilitate local culture to strengthen shared values. *Fourth*, institutional support. Support from institutions can foster motivation for women farmers. Coordination, integration, and synergy between agencies are needed to realize household food security. *Fifth*, improve the KRPL program design. The program design must be continuously refined. Critical awareness of the community needs to be grown in building food in the area around the residence.

**CONCLUSION**

Based on the research results, the researchers can take the following conclusions.

1. KRPL performance shows a downward trend since the beginning of the program began.
2. The results of subsequent studies on social capital indicate that networks, trust, and norms/values tend to be weak and need to be strengthened.

3. The strategy of strengthening the social capital of women farmers in the use of limited land is conducted through: 1) increasing the competency of women farmers and strengthening the role of facilitators; 2) involving community leaders and encourage local cadres as mover; 3) facilitating local culture to strengthen shared values; 4) institutional support; and 5) improving program design.

REFERENCES


Ministry of Agriculture. 2016. Decree of the Minister of Agriculture of the Republic of Indonesia Number 12 / KPTS / KN.210 / K / 02/2016 concerning Technical Guidelines for the


