Community Empowerment and the Urban Poor's Community Agricultural Garden Development

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Abstract. This article entitled “Community Empowerment and the Urban Poor’s Community Agricultural Garden Development” is about how to empower the urban poor’s community of people under the bridge to develop a community agricultural garden. These people are the urban poor who have become community researchers and participated in the learning process to develop their own potential. They also give the community a push to start a public agricultural garden. This article aims at presenting the community empowerment process to enable the community to accomplish a goal of developing a public agricultural garden, which becomes a source of safe food production and a place where good relationships among people in the community can be formed during the period of 18 months. This research study revealed that community participation in social space construction and community empowerment resulted in many valuable and productive outcomes such as waste management, transformation of a waste land to a community agricultural garden, and formation of a group to create a community agricultural garden named “Baan Poonsup’s Organic Vegetable Garden.” Evidently, such activities and learning process resulted in increased knowledge and a sense of commitment to uphold the community’s mutual mission. The role of the community of people under the bridge is upgraded as they have gained dignity as community researchers. They can use their learning potential to apply for community development funding themselves. They will not have to wait for external assistance only. The goal of long-term development is that the community agricultural garden project is a tool to develop the community’s local economy leading to a saving group that can achieve a goal of purchasing residence land from the National Housing Authority. Moreover, this agricultural garden project is supported by various government and private agencies in the form of volunteers and networks both inside and outside the community. The push to empower various urban communities to create an agricultural garden has multidimensional benefits.

1. Introduction

Currently, Thai society moves fast and is complex. Violence and disharmony seem to be widespread. The government cannot solve the problems of power relations, social justice, and ecological balance.[1]. The community dynamic consisting of the community itself and external power is an option for self-reliance to solve the problems. Community Based Research (CBR) is a tool for empowering the community and reducing inequality resulting in the community’s dynamic and potential for further problem-solving.

The community agricultural garden named “Baan Poonsup’s Organic Vegetable Garden” is located at Poonsup Community, Saimai District, Bangkok. The urban poor who had been pushed out of their shelters under a railway bridge in Bangkok moved into this community in 2001. At present, there are
216 households. Most of them are garbage men collecting old stuff for sale. Some of them are uneducated. Their cost of living is high, and it is pretty difficult for them to live in a big city like Bangkok. Importantly, essential agricultural products are pretty expensive and are tainted by chemicals. Therefore, an agricultural garden done by community members themselves will have high food safety and reduce household expenses. Despite the problem of limited and expensive land, there is still a solution for the urban poor. The community members decided to rent the National Housing Authority’s land to build their houses with a 30-year lease agreement. Today, even after 16 years, the community members are still unable to have enough savings as required by the loan conditions to purchase land.

In 2015, Krirk University’s Research and Development Centre and faculties explored kinds of problems at the communities of the Saimai District. The leader of the Poonsup Community raised a problem of waste land existing in their community for more than 5 years. Krirk University’s Research and Development Centre and faculties proposed a research process for this problem solution. The goal is to apply activities conducted in an agricultural garden as a tool for people in community to revive relationships and to make a connection. They can participate in creating unity and dynamic in the community, solving problems and developing the community so that it becomes sustainable and strong. The community members’ participation can result in decreased social and economic inequality, increased food safety, good environment and education as well as security in the community’s residential area.

2. Review of Literature

This article analyzed the community empowerment process to solve the community problems which led to the community development. The researcher had studied and reviewed the related concepts. These concepts were community empowerment, social networking, and social inequality.

2.1 Community Empowerment Concept. Anan Kanjanaphan (2) described three concepts of the community empowerment, these were (1) the concept of institutional mechanism in which he explained that the community without the community empowerment, such community would be weakened. It was necessary to reform the institution democracy from the grassroots level to get the access for resources (social and knowledge capitals). In order to achieve the community empowerment, the academic researcher suggested conducting a community-based research, (2) the concept of space (knowledge) including social, cultural, and knowledge spaces. That is to say, the spaces were provided for community members to show their capabilities in order to initiate the community empowerment. The open spaces, therefore, enabled the community members to integrate or choose the knowledge to form the new set of knowledge in accordance with the situation which needed the specific space. Conducting the research would provide the ideas for what area they should start doing, and (3) Identity Concept – the community empowerment originated from its identity which led to their negotiation ability to empower their community. In conclusion, the community empowerment movement consisted of three concepts: institutional mechanism, space (knowledge), and identity.

2.2 Social Network Concept is another fundamental concept concerning the community empowerment. Since the community was unable to empower only by itself, it needed to have activities or processes connected to other individuals and organization in society. Richard Emerson stated that social networking concept adopted from the Exchange Theory and the extended concept of Georges C. Homans
with the assumption of social networks which consisted of individuals or actors related together according to the roles and duties of each other or relating pairs in everyday life. Sometimes their roles and duties followed the Exchange Theory. Not only each individual played the role according to the social expectation or followed the norms that passed on to them, but depended also on the perception or decision-making to exchange between each other, in terms of both physical and spiritual aspects. It is now recognized that the body of knowledge status of the social network concept has been implemented in the research on social network analysis; integrated exchange forming and the study of power and dependence within the networks [3].

2.3 Inequality Concept covers four areas, these are: the inequality of rights, opportunity, power, and dignity, which resulted from the rules, regulation and cultural practices much more than from legal practices. It is known that self-satisfaction of each individual is always regulated by socio-cultural conditions. Therefore, it is incorrect to refer to his/her income status only [4]. This research was conducted with the urban poor who were pushed out of their shelters under the railway bridge in Bangkok and were moved to rent the National Housing Authority’s land to build their houses with a 30-year lease agreement. They were the urban poor who wanted to reduce their social inequality. The community-based research (CBR) enabled them to have dignity in management, negotiation power, and resource accessibility. In this article, the writer used the inequality concept in human capability approach of Amartya Sen, a welfare economist and the recipient of Nobel Memorial Prize in Economic Sciences in 1998, who had developed the concept of Human Capabilities, which is sometimes called Human Development Approach. This approach explained both the poverty and the inequality in economic condition reduced the human capabilities and also observed that the economic and income growth are only the “mechanisms” lead to the goal, but not the goal itself. Therefore, Sen believed that “Freedom” should be the goal of human development. He mentioned that human beings should possess five types of Freedom: politics, economics, opportunities, pledge for transparency from the government sector, and protection of life and property safety. Besides, Sen revealed that when one encountered one aspect of inequality, he often confronted with other aspects of inequalities as well. Thus, Sen proposed that the goal of social development and the state policy should increase the alternatives for living and developing the way of living according to their decision by providing various types of freedom mentioned earlier, increasing the human capabilities in using their freedom and in achieving their goals [5].

2.4 Objectives
This article aims: (1) to present the community empowerment process to enable the community to accomplish a goal of developing a public agricultural garden; (2) to present the building process of learning resulting in the community’s mutual mission; (3) to present the building process of tools for the community’s basic economy development leading to inequality reduction.

3. Research Methodology
This research study was a Community-Based Research (CBR) applying Participatory Action Research (PAR). The main target group was people living in Baan Poonsap Community of 216 households. The second target groups were official agencies and other government and private agencies including voluntary organizations and individual volunteers. The research process was conducted by the main target group participating in the process. It meant that the main target group proposed the research problem, joined a group of researchers in the process of fact finding and problem solution, built tools, got involved in the process of experiment, analysis, conclusion and research dissemination. Tools and
the process of data collection as well as experiments were applied in the form of a small group meeting focusing on brain-storming, making an analysis, exchanging ideas/opinions so that the conclusion could be reached. For example, time line could be used for data collection on the community history, background of each period, interaction between community members from the beginning of community establishment until present time.

A cultural calendar could also tell about the community culture and peaceful co-existence. Culture and tradition could be used for building participation, and geo-social mapping could help academic researchers and community researchers learn about the community, which was a research site, in terms of its physical landscape and its contextual connection with area use.

Moreover, the community researchers also designed a questionnaire for opinions and suggestions concerning gardening styles and kinds of vegetables for planting in the agricultural garden to be in line with consumer needs in the community. There were 190 households out of 216 households that did not attend the meeting (a sample from calculating with a formula of Taro Yamane = 140 households). There were household representatives of three age groups—the children and adolescents, the working age group, and the elderly group—answering the questionnaires.

Another important tool was the community agricultural garden. It was a tool for food production and building relationship among people in the community. With regard to steps in the research process, the community researchers and the community members made a plan and did experiments to apply CBR in soil reclamation and reviving relationship among people in the community. However, a mechanism that empowered the community to help this research to meet its goals was networking both inside and outside the community. Since the community was unable to stand alone by itself, it needed to connect with external communities and society at large. It also required supporting factors in terms of knowledge, skills, materials, equipment and budget. In terms of data analysis, apart from the measures of central tendency based on mean, and percentage, a qualitative data analysis was also applied. After the community researchers’ data analysis was completed, the data analysis stage was arranged to give the community members and related public and private sectors opportunity for a joint analysis. As a result, the research outcome was the most accurate and complete before its final presentation. This was the final stage to share the research finding with the community. A dissemination of the research was done at different places.

Figure 1. Brain-Storming in the meeting and small group meeting
Figure 1: The meeting and the small group arrangement for the brain-storming of three age groups. The participation of the three age groups was taken place in each steps in the process for hearing their opinions, suggestions, and clarification which led to the operating stage.

In order to empower the community and to develop the urban poor’s community agricultural garden, the target group were the community members. In the beginning, there were four networking groups participating in empowering the community. These groups were: the academic researcher from Krick University; The Thailand Research Fund (TRF) which provided research fund, helped provide support for the learning process of the community-based research, and created mechanism to empower the community; the National Housing Authority (NHA) for land reclamation; Sai-Mai District Office as the official authorized public agency provided budget, equipment, and manpower to remove the waste out of the target space and prepared the space for agricultural garden within three months; and Office of the Non-formal and Informal Education, Sai-Mai District-coordinated in designing the agricultural garden. The role of the academic researchers helped building knowledge and skills in cultivating organic agricultural garden. For this reason, the community members were able to build their own agricultural garden, achieved their goal of soil rehabilitation for planting, and succeeded in reviving their relationship by participating in cultivating agricultural garden. This was done within the period of six months.

![Diagram of Networking Mechanism](image)

**Figure 2. Networking Mechanism**

Source: Pasrin Phannan, 2560. Example of the Social Networking Model according to the Theory of Strength of Weak Ties[6].

Figure 2 showed that in the beginning, there were four government agencies and one educational institute as a mechanisms leading to the building of networking to strengthening the community.
empowerment following the seven elements of networking. These elements were as follows: (1) mutual perspective (2) mutual vision (3) mutual benefits and interests (4) participatory network members (5) mutual strengthening process (6) mutual dependency, and (7) exchange relationship [7].

**Figure 3.** Community Empowerment by Networking

Figure 3 showed the community empowerment by networking. The activities included land reclamation, negotiation, barrier demolition, and removing waste out of the space, levelling the space for planting, and learning how to do organic agricultural garden.

**Figure 4.** Dissemination of findings to the community

Figure 4 showed that the dissemination of research findings to the community participated by the networks from the public and private agencies who supported the networking. The participants were informed about the research findings which were completed by the community empowerment.
4. The Results

The results showed that the community had the identity of people living under the bridge. These people were able to use the power of the poor in negotiating with the state agency to be relocated into the land under supervision of the National Housing Authority in 2544 under the name of the ‘Poonsap Community’ located in Sai-Mai District, Bangkok. Their action was considered the community empowerment and the use of human rights. It took them about eight years for the negotiation (2536–2543). At present, their way of living had been improved, however, they still had to pay rental fees to the National Housing Authority, and with the high cost of living in a big city like Bangkok, the community members had to work hard to make their ends meet. As a result, they started to separate themselves from other and did not have close relationship as they had been when they lived under the bridge. This, in fact, affected the participation process and the community empowerment. Thus, the academic researcher from Krirk University, in order to solve these problems had conducted the community-based research (CBR) process and acclaimed success. That is to say, the Poonsap community members achieved soil rehabilitation, enabled them to grow various kinds of plants and vegetable. Besides, they were able to expand agricultural garden space from 50 sq. wa. To 312.25 sq. wa; increase the number of mushroom nursery from one to four nurseries. Moreover, they were able to expand the size of fish pond from 15 sq. m. to 50 sq. m. In addition, three big pergolas for climbing and trailing plants and a number of small pergolas were built. At present, there were more than five activities taken place in this community garden. These activities were concerned with mushroom nurseries, growing vegetable, fish pond, agricultural product processing, community shop co-operative and a learning center, etc. There were more than fifty kinds of products from the agricultural garden and the number kept increasing from their learning and planting experiment. These included planting fruit trees and vegetable using various methods, such as planting lettuce, coriander, mint, Vietnamese coriander in the trays, clay pots and tires; growing lime in cement pots; planting watercress in the hanging pots; building large pergolas for planting yardlong beans, winged beans, gacs (Momordica cochinichensis (Lour.) Spring), angled loofah (Luffa acutangula (L.), Roxb., Luffa aegyptica Hill, snake gourd (Trichosanthes cucumerina L. var. Anguina (L.) Haines, passion fruit, bottle gourd (Legenaria Siceraria (Molina) Standl; and small pergolas for planting butterfly pea. Moreover, in the garden there were various kinds of fruit trees, such as banana, lime, Marian plum, star gooseberry, jack fruit, mango and maringa, etc. In addition, there were other activities extended from cultivating the agricultural garden, these activities were learning exchange, study tour, provision of space for voluntary activities, training and workshops on planting organic vegetable and product processing, such as sweet banana chips, crispy fried mushroom, mushroom curry paste, spicy minced mushroom salad, gac soap, butterfly pea juice, gac juice, and lime juice, etc. In conclusion, it was also found that the number of the community members who participated in the activities had been increasing consecutively. These people regularly attended the meeting and participating in doing activities. Besides, about 65% of the 190 households who had never participated in any activities from the beginning said that they themselves and the members in their families had a change of mind and pleased to participate in cultivating the agricultural garden.

As for the learning process, the community members were able to develop their capabilities to take care of their family and community, and be responsible to do their duties as the members of the community. Within one year of developing their community agricultural garden, they could reduce their family expenses and increase their income. It was also the beginning of the community occupation development by experimenting product processing. The community empowerment helped push forward another research project entitled ‘The Community Agricultural Garden Management of Baan Poonsap
Organic Vegetables with the Participation of Poonsap Community, Sai Mai District, Bangkok (in progress). Nevertheless, the community’s short and long range goals were to present the data received from the research to the concerning public agencies to register a community enterprise within 2563, when the top-up project ended. Then, within five years after that, the community planned to establish the community saving group to save enough money to purchase the plots of land from the National Housing Authority.

The activities in the agricultural garden mentioned earlier helped create networking both inside and outside the community. Besides, the community researchers had earned much knowledge and experiences to increase their capabilities, as a result, they helped empower their community and achieved their goals. In sum, the community empowerment could give response to the research objectives, visions of the participants in cultivating the agricultural garden, and invented the learning process that influenced the mutual mission. In conclusion, the agricultural garden served as the important tool in developing the groundwork of the community economy which helped reducing the inequality in many aspects as follows:

- Legal and Community Rights – enabled the community members to have access for knowledge, budgets from public and private sectors.
- Welfare - the community members focused on establishing the community enterprise top-up from the community agricultural garden for the access of state welfare.
- Education, including training and learning various skills encouraged many community members to return to study via non-formal and informal education.
- Values and human dignity – the community members were more self-reliance, abled to present their needs and opinions to the group, abled to use their knowledge to search for fund to develop themselves and their community, instead of waiting for the help from the public or private agencies.
- Culture - the community members could revive the culture of the country people who are generous and helpful to others. However, living in the big city like Bangkok, they became more individual and living on their own and spent much time working.
- Economy/income/resource accessibility - the products from the agricultural garden could be sufficiently consumed by the community members, they did not need to buy from outside. Therefore, these products helped reducing the family’s expenses. On the other hand, the community could earn extra income by selling the products.
- Others – these were the accessibilities for food safety. This agricultural garden was the organic farming. The products were safe for consuming. Besides, the garden also provided the accessibility of good environment with the increasing space of green areas. Thus, the agricultural garden was like the community lung, a relaxing place, a learning center, and a place for activities.
5. Discussion

The research findings showed the achievement of soil rehabilitation for growing community organic agricultural garden. The size of the agricultural garden was one rai. In the agricultural garden, the community members cultivated safety vegetable and fruit for the community members. As a result, it helped reduce their expenses, and increased their income. Besides, the community-based-research (CBR) process initiated the community participatory in presenting their ideas and put them into practice and received benefits in return. Learning and participating in working became the community mission linking to other development projects. The agricultural garden could become the tool for the development of fundamental community economy to establish the community saving system and to strengthen the community empowerment which enabled them to reduce the community inequality. Moreover, it was obvious that each community researcher played more than one role in empowering the community. The learning exchange of the community researchers (actor) encouraged the building relationship of different roles and duties which became social networking both in and outside the community. This was in accordance to Richard Emerson’s Social Network Concept of building the mechanism to empower the community by using the community-based-research (CBR) in using the agricultural garden as a tool to empower the community to reach short and long range goals.

The objectives of cultivating the agricultural garden in various place around the world were not much different. That is to say, to increase the opportunity for the urban people to have access to safety food, since at present the threat of chemical pesticide residue in vegetable was widely concerned. However, the new trend of growing organic vegetable in one’s own plot of land, for example Baan Phak Khun Ta and Suan Chao Chai Phak private vegetable gardens were owned and supported by their family. Therefore, it was unnecessary to have networks. On the other hand, the urban poor cultivating the agricultural garden, focused on reducing their expenses in the small space of waste land, these people needed to work together as group to cultivate agricultural garden in the public waste land available. The same as the case of Poonsap Community, they organized and worked together as group working in the public space to get access for quality safety food, reducing their expenses, and increasing their extra income. The difference was the goal of cultivating Poonsap Community agricultural garden was to use the opportunities of working and participating in cultivating the agricultural garden to strengthen the community member relationship, unity and community empowerment. Which corresponds to residents of Ngoingwa Estate on their attitudes towards sustainable urban agriculture land is The pursuit of food security, enhanced communal ties among others are the basic benefits of urban agriculture.

Living in the big city where the cost of living was very high, the community members had to work very hard for themselves and their family. They did not have time to communicate with their neighbors. For this reason, the community-based research (CBR) helped unite and empower the community by building the knowledge space and the space for community members to show their ability, used their knowledge and skills in building the agricultural garden for safety food, created better environment and united the community members to participate in cultivating and doing activities in the community garden. In addition, they were also concentrated on their long range goals, these were to develop the community economy which would lead to the saving and the purchasing the residence land from the National Housing Authority and the capability to negotiate with the public sector and other organization. Thus, what the Poonsap community needed was the drive for community empowerment with the supports from educational institutes, public and private agencies, voluntary organizations, and volunteers.
6. Conclusion and Suggestion

This community-based research (CBR) showed that the participation of the social space and the drive for community empowerment, for example, the drive for eliminating the waste out of the community, the transformation of the vacant space into the community agricultural garden, the community members gathering into a group to build “Organic Vegetable of Baan Poonsap” community agricultural garden, originating mutual community mission for knowledge, learning, raising the role of the community members who used to be people living under the bridge to the community researchers to be able to use their learning capabilities in acquiring the community development funded by themselves. Besides, participating the community-based research (CBR) gave them access for education. In addition, in terms of the long range goal, the community agricultural garden became the mechanism for developing the fundamental economy of the community which led to the group saving for their purchasing the residence land from the National Housing Authority. In doing so, they received supports from public and private agencies, voluntary organizations, volunteers and networks both in and outside the community to empower the community agricultural garden which was beneficial to various group of urban people in various dimension.

Figure 5. The Community Empowerment

Figure 5 showed that the community empowerment originating from various networks that supported and pushed forward the community. These supports included: the public policy that encouraged the increasing of urban agriculture; the academic services from various educational institutes to mobilize the knowledge to the community; including the social networks and voluntary organizations and individual volunteers to help empower the community to use the resources for the maximum benefits in order to create activities that resulted in the products, the output, the outcome, and the reduction of social inequalities. Those results mentioned earlier should be extended to other communities for overall social empowerment which would be beneficial to the country in terms of food security, economics, environment, dignity, and reducing inequality for the urban poor.
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Acknowledgement

This project Funded by research funds from The Thailand Research Fund (TRF) 2018-2019