■論 文

Evaluating collaboration projects between university and community by social capital: A case study of Satoyama project and Gardening project at Ritsumeikan University

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Abstract: This paper aimed to evaluate the collaboration projects between Ritsumeikan University Osaka Ibaraki Campus (OIC) and local community. The collaboration projects considered in this research are Satoyama project and Gardening project, both of which are about making green areas, resulted from participation by citizens, university students and professor/staff of OIC. This research collected data by interview. After getting basic information, we evaluated these projects by social capital concept. Which social capital is divided into five dimensions including Group and Networks, Collective Action and Cooperation, Information and Communication, Trust and Solidarity, and Social Cohesion and Inclusion. Each dimension could identify questions to be measurement indices to evaluate the projects. After evaluation, we suggested ways to improve based on social capital for supporting better performances.

From evaluation, we concluded that both of project have relations with every dimension of social capital. Although Satoyama project have relations with every dimension, this project still has some weak points because the less number of members and this project does not let non-members join the activity with members. Moreover, the activities of this project is not various. Therefore, suggestions for this project is increasing events for promoting the project, making participation in the project more easily, improving activities to get more interesting from participants, and increasing the number of seminars to for opportunities of discussion among members. On the contrary, however, Gardening project has relation with each dimension as well, weak points of this project is that some members not participating in activities, lack of specialists and having problem about relations of members because of time availability and gender. Thus suggestions for this project is improving activities to be more interesting which comes true with the number of meetings or seminars to provide the member with more knowledge and increase connections among members.

Keywords: Social Capital, University-Community Collaboration, Ritsumeikan University

I. Introduction

University is the third place, where people congregate other than work or home and establish feelings of a sense of place. University is easy to access for everyone so university should be the place to incur collaboration, because collaboration is the process to work together to realize or achieve something successfully. Making collaborations effective and efficient could be achieved with social capital. It is the concept about groups in which people collaborate to contribute to common goods, share ideas, exchange knowledge for make recognition in groups. And it is a power to drive the groups to have ability to solve problems and to achieve good performances.

Ritsumeikan University Osaka Ibaraki campus (OIC) has collaborated with local community in many projects. Among others, we considered projects related with open space management in OIC. The first project is "Satoyama Project." It is a project to make a woodland in OIC because woodland is disappearing by the expansion of *Shinmeishin* Expressway. Citizens tried to reproduce the woodland. Another project is

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"Gardening Project." It contributes to the green plan of OIC which is to make harmony with the university area and the surroundings by collaboration between citizens and university students and professors.

From these collaboration projects of OIC and community, it could promote social capital from interactions and cooperation in activities. It is something about to share knowledge, values, innovation and understandings in our society that enables individuals and groups to trust each other and work together. Thus, this research focuses on social capital that are divided into dimensions, that is, Groups and Network, Trust, Collective Action and Cooperation, Information and Communication and Social Cohesion (adapted from World Bank [2000]).

II. Social Capital

II. 1 Definition of social capital

Previous studies define social capital in many ways discussed below. Narayan (1997) defined social capital as rules, norms, obligations, reciprocity and trust embedded in social relations, social structure and society's institutional arrangement which enable members to achieve their individual and community objectives. Similarly, WHO (1998) defined that social capital represents the degree of social cohesion in communities. It refers to the processes between people that establish networks, norms and social trust, and facilitate coordination and cooperation for mutual benefit. And World Bank (2000) defined social capital is the institution, relationships, and norms that shape the quality and quantity of a society's social interactions. Robert Putnam (2011) has defined social capital is networks together with shared norms, values, knowledge, understandings and related human resources that facilitate cooperation within or among groups.

From the discussion above, social capital can be defined simply as norms and networks that are shared values of civil society. It reveals in a group in which people collaborate to contribute to the common goods through sharing ideas, exchange knowledge and experience for making recognition among the group. And it is a power to drive the groups to have ability to solve problems and to achieve good performances.

II. 2 Social capital measurement indices

Social capital is divided into two distinct forms, structural and cognitive (NESDB, 2008). Structural social capital facilitates collective action, decision-making, information sharing, and through established roles. Cognitive social capital refers to shared norms, trust, attitudes, values, and beliefs. As such it is a more subjective and intangible concept. However, two forms of social capital are characterized by five dimensions represented in the following. (Table. 1).

Forms of Social Capital	Dimensions of Social Capital	Social Capital Measurement Indices	Questions			
Structural Social Capital	Groups and Networks	The number of organization	-How many organizations in the project?			
		The number of member	-How many members in the project?			
	Collective Action and Cooperation	The number of activity	-How many activities in the project? -What kind of activities in the project? -How often the activities/events are held in the project?			
		Participation of members in activities	How often the participants join the activities?Is there some investing from participants in supporting activities in the project?			
Cognitive Social Capital	Information and Communication	Channels of information distribution	-How many channel of information distribution of the project?			
	Communication	Channel to communication among members	-Is there some channels that members use to contact each other?			
		Promoting the project by various channels	-Is there promotion of information of the project?			
	Trust and Solidarity	Relationship among member	-How is the relations among the member			
		Support from members	-Is there any support/donation from member			
	Social Cohesion and Inclusion	Division of responsibility	-How to divide the responsibility in the project?			
		Rules or Regulations	-What kind of responsibilities in the project? -Does the project has any rules or regulations?			

Table 1. Social Capital Measurement Indices

Source: Authors

(a) Groups and Networks

This dimension is the common one and addresses the extent of an individual's engagement in different forms of social organizations. Social capital is based on the integration of people in social groups because groups and networks enable the sharing of information. This causes a reduction in opportunistic behavior and promote joint activities. It can be measured by the density of the members and the number of organizations.

(b) Collective Action and Cooperation

This dimension explores the ability of individuals to work with others in their communities via joint projects and the possibility of investing their cooperation. It is measured by scope of activities, kinds of activities, evaluation of willingness to participate in activities.

(c) Information and Communication

Accessibility to information and communications as a tool to help people in groups to be able to resolve its own problems. It is measured by the number of information sources and the media used to communicate and the relationship of the information sources.

(d) Trust and Solidarity

This dimension is an important component of social capital. This is abstract and difficult to measure. Its measurements focuses on trust, and relationship of member. It is measured by trust among members and the relationships within groups.

(e) Social Cohesion and Inclusion

Communities are distinguished by the inclusion of many cleavages that can lead to struggle. Thus, social capital contributes to the cause of social interaction. It is related to solve conflicts of difference and how to build/structure to facilitate reduction of conflict and violence. It is measured by support from members, divisions of responsibility of members, rules and regulations.

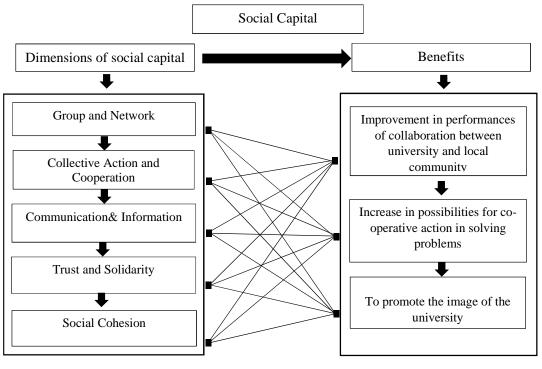
II. 3. How social capital contribute to universities

When a university collaborates with local community as a group or network, they cooperate to do something in a project or activity together as a collective action. In operation they share information to plan or discuss as communication. Communication is an important factor to build trust among members and trust among the members results in cohesion. This is a process of social capital as a benefit of university.

From the process of social capital, it could better performance of projects and activities with network, cooperation, communication, trust and cohesion. Moreover, when the project has good performance, it supports the ability to solve problems. Finally, if they have good the performances and the ability to solve problems, it leads to good images of university. It is also a to promote characters of university (Figure 1).

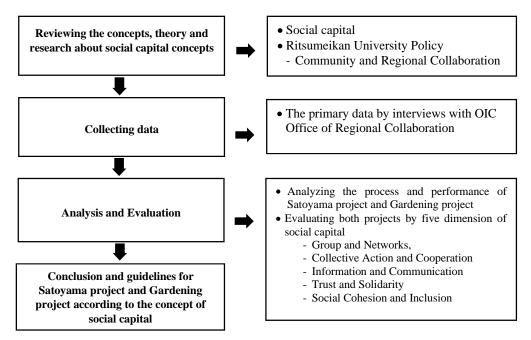
III. Methods and Framework of Research

This research begins by reviewing the concepts, theory and research related concepts, including social capital concept, etc. As well as policy and development program that related to Ritsuimekan University. To provide a framework and ideas on how to collect data and study the primary data by interview the staff from OIC Office of Regional Collaboration to analyze and evaluate the processing and performance of Satoyama and Gardening project with the concept of social capital (Figure 2).



Source: Authors

Figure 1. How social capital contribute to universities



Source: Authors

Figure 2. Research Design

IV. The Research and Discussion

This research collected the data by interview the staff from OIC Office of Regional Collaboration on December, 2016 and February, 2017. Which it is the data about base information and structure of Satoyama project and Gardening project that will be evaluated by social capital concept as above.

IV.1 Satoyama Project

Sodateru (Nursing) Satoyama Project (satoyama means the border zone or area between mountain foothills and arable flat land [Wikipedia 2007]) is a project to make knowledge to be ways for using and managing natural resources sustainably that benefit current and future generations. This project collaborates between citizen, students, and professor and staff of OIC, and Satoyama Support Net Ibaraki. They made a woodland in OIC (Figure 3) and members collected species from satoyama in the northern part of Ibaraki City (Figure 4) because woodland is disappearing by the expansion construction of Shinmeishin Expressway. Thus the community people tried to reproduce the woodland (Figure 5). This project could make the relationships between human and natural, human and human, local community and university.

Recently they have many activities to collaborate. They have divided the responsibilities for each member. However, some members do not participate, perhaps, because the contents of the activities are not that interesting for them. The members who know well about planting or satoyama as professionals will guide and educate to the members who do not know about planting. They shared knowledge and ideas together.



Source: Satoyama support net (n.d.)

Figure 3. Satoyama Area



Source: Satoyama support net (n.d.)

Figure 4. Collection of Some Nursery Stocks from the Satoyama Area in Ibaraki



Source: Satoyama support net (n.d.)

Figure 5. Collaboration with Community at OIC Satoyama Area

In addition, they have exchange meetings. where they discuss problems and share information among members. They use email to communicate among members and have various media channels to promote the activities of the project to the public.

This project collects the plants only in Ibaraki city and brings to OIC as satoyama in OIC is reproduction of satoyama in Ibaraki City. They not only move trees from Satoyama area in the north of Ibaraki City but they regenerate satoyama in OIC so that residents can remember satoyama of Ibaraki city

and also motivate them to go real satoyama for maintenance or just feel nature. Actually the south of Ibaraki City is an urban area, and therefore, even they live in urban areas, they can feel satoyama nearer and remember it.

IV.2 Gardening Project

The name is "OIC gardening Club: Trefle." This project is a part of green plan of OIC to create a green campus to make harmony with university areas and the surroundings. It was organized in July, 2014 before OIC was opened in April, 2015.

Nowadays, this project has five gardening areas at OIC. It is a collaboration project among citizens, university student and university staff. This project has two types of participants. The first is core members who are the leader and managerial member. And the second is general members. This project has many activities such as meetings, seminars and tours (Figure 7 and Figure 8). The participants have divided responsibilities, decided according to questionnaires distributed by OIC Office of



Source: Ritsumeikan University (n.d.)

Figure 6. Gardening

Regional Collaboration as the secretariat to ask the members about which gardening areas they want to take care. Basically, members' opinions are respected, but if participants did not answer the questionnaire, their gardening areas are determined based on the balance of the number of members in gardening areas. The members can get some knowledge from and consult about gardening with professionals. In addition, the secretariat sends information to the members by Email and/or Fax. As some members are elder and do not have an email, they get information from the secretariat by telephone or post. This project promotes the activities by various ways.

The degree of participation of the members, depends on gardens. In some garden members have close relationships but in others gardens the relationships are still not close. The connections between the leader and members are close, because they work together and meet often. But general members meet each other only once a month in activities. So meeting frequency is important. And gender is also important as female participants have more relationships among them. While among male members of between female and male members, they do not exchange and contact. Almost all participants are over sixty years old. They retired already so this project could be a kind of "sense of their life" who have much free time.



Source: Authors

Figure 7. Gardening Course



Source: Ritsumeikan University (n.d.)

Figure 8. Gardening Tour

IV.3 Evaluation of Satoyama Project and Gardening Project by Social Capital

From the interviews with the OIC Office of Regional Collaboration on December 2016 and February 2017 at Ritsumeikan University, we could collect data on Satoyama project and Gardening project. The information was divided following each dimension of social capital and evaluated by comparing both projects. After evaluate the information found that Satoyama has weak point more that Gardening project is the less number of member, the activity is not various type, Promoting the project is not various and division of responsibility is not clear. These results are summarized in the Table 2.

IV.4 Suggestion

From the information that we got by the interviews, we could suggest some ways to improve both projects based on social capital for increasing the performance and each components of both project including to encourage collaboration between the university and community and in every sector. As results, we found that the importance to improve both projects is to improve the activities to be more interesting and easy to gain attachment for getting more participant as depicted in Table 3.

V. Conclusions

V.1 Summary

This study evaluated Satoyama project and Gardening project by social capital, both of which are collaboration projects between the university and local community. By evaluation, we found that Satoyama project and Gardening project have every dimension of social capital.

Satoyama project resulted from collaboration between citizens, the university and Satoyama Support Net Ibaraki, who became a group and network to work together. They collaborate for the activities which is related with collective action and cooperation dimension, but in this dimension, Satoyama project has participants of small numbers and also this project does not let non-members join the activity with members. In addition, the activities of this project are not various. So our suggestion is to to promote the project, by making participation in the project more easily and improving the activities to make more interesting and easy to attain attachment from participants. Communication and sharing knowledge among members is related with communication and information dimension of social capital. And our suggestion on this point to this project is to increase the number of seminars for more opportunities of discussion and exchange ideas among member. Having communication and exchange ideas could promote their trust in each other. And then it could promote inclusion among the group. This is related with Trust, Solidarity and Social Cohesion, and Inclusion dimension.

Gardening Project has relations with each dimension of social capital. This project contains collaborations between citizens, students and professors and staff of OIC, all of who became groups and network to work together. They collaborate and join many activities together, which is related with collective action and cooperation dimension. Nonetheless, this project still need more specialists. So our suggestion is to improve the activities by making more interesting and easy to attain attachment from participants. These could be achieved by increasing the number of meetings or seminars to let the members get more knowledge when they have collaborations. Communication and sharing knowledge among members is related with communication and information dimension. Having communication makes them trust in each other. Nevertheless, this project also has problems about relations of member, stemming from frequency of meetings and genders. Our suggestion on this point is to increase the connection among members by holding activities or events more often and making some appointments as relax activities that it is not related with the project for example dinning, picnic, etc. And when their relationships get close, it leads to inclusion in and between groups. These are related with Trust, Solidarity and Social Cohesion, Inclusion dimension.

Both projects show that collaboration between the university and community is important because the university as the third place should be the place that everyone can come and conduct activities or work together to make value of the society. In addition, building relationships of mutual trust can be attained. Moreover, collaboration projects are related with PBL (Problem Based Learning), because they can learn from real problems and work together to solve the problems. Therefore, it is a sustainable way to increase potential in bettering performance of solving problems of the society.

V.2 Limitation of the study

Although this research has reached its aims, there are some limitations. First of all, the research has conducted in the short period, 9 weeks. We could have interviews and join their activities to understand situations, however, it was not enough to conduct questionnaire surveys. Secondly, about evaluating in Trust and Solidarity dimensions it is quite difficult because trust is more intangible and subjective. The projects have started just about two years ago so evaluation of trust among members is too early to be measured. Moreover, this research could not collect data from questionnaire surveys by which we can ask questions to each members' opinions.

		Evaluation	The number of Satoyama project's member is less than Gardening project because Satoyama project is difficult to join and	also the project has cooperation with Satoyama center. On the contrary, Gardening project is managed by community people so it is	easy to join. Types of members in Gardening project are divided into two but Satoyama project has only 1 type of members.	To summarize, Satoyama project is pretty good in group and network dimension but should increase the number of member to make more collaboration. Gardening project is quite good because this		This dimension can infer that Gardening project has various	activities more that Satoyama project. And the number of members in Gardening project in each activity have more than that of Satovama	project. Moreover, Gardening project allow general people (non-	members) to join activities and interact with the members. However,	Satoyama project is hold the activities more frequently than Gardening project.	To summarize, Satoyama project is almost good because they	hold the activities frequently but should increase creative activities to make more participation from non-members. Gardening project is	quite good because this project has various activities which is	interesting and attracting member to participate in.							
oficer fucers informations		Gardening Project	180 people	Citizen Student	Professor and staff of OIC	2 types of participantCore Member (To take care general members)General member		Taking care gardening	 Every month 40-50 neonle ioin 	Gardening Seminar	• Hold 3 times a year	 50-100 people (80% of them are members while non-members can join) 	General Assembly	 Every year in March Only core members ioin discussing policy and 	plan for the next year	Gardening Tour	Once every year So month (around 00% of mortioinants are	members while non-members can join)	Exchange meeting	Once every 2 months	 30 participants join and another people can join. 	Booth to promote project in Ibaraki Ritsumeikan	Festival • Every year in May
Tue		Satoyama Project	70-80 people	Citizen Student	 Professor and staff of OIC Satoyama Support Net Ibaraki 	1 type of participant	-	Planting trees	 Twice a month 10-20 people ioin 		Taking care trees and improving	soil quality • Hold every Wednesday	Sometimes 1-2 people and other	times 3-4 people join.		Exchange meeting	Held every third Wednesday 11 months ion		Satoyama Seminar	• Twice a year	 20-30 people join 	Bond member Meeting	• Once a month
	Istiq		Number of member	How many organization		Type of participant						What Kind of	activity		• How many		each activity						
Ъ	lsio		Groups and Networks					Collective Action and Cooperation															

Table 2 Evaluation and Comparison between Satoyama Project and Gardening Project

le 2 Evaluation and Comparison between Satoyama Project and Gardening Project (Cont.)	Information from interview	Gardening Project	Il• EmailGardening project have a lot of channel to communicate among members more than Satoyama project and also Gardening project have members more than Satoyama project and also Gardening project have many ways to promote the project more than Satoyama project. In addition, before the start of the Gardening project, they held the forums many times and make a gardening model to promote more	page of OIC • Homepage of OIC ook • Twitter ontication between • Poster aunication between • Communication between members ers • Holding the forum for 6 time joined by 472 people in total • Gardening Model	f the members are f members so• Connections between leaders and professionals f members soTo summarize, trust and solidarity dimension about relationships among members of both project can infer that Satoyama relationships among members of both project can infer that Satoyama project is pretty good in this dimension of social capital because most of members is not such frequent to meet.• General members meet only once a month so it is not such frequent to meet.• General members of poth project can infer that Satoyama project is pretty good in this dimension of social capital because most of members is strong. On the other hand, Gardening project is almost good because there are problems of relationships in frequency to meet and gender: they meet infrequently and relationships between male and gender: they meet infrequently and relationships between male female, and mele – male are not close.	I do what They divide the participants for taking care each y check area by distributing questionnaires to the members toyama and And in each gardening area has 3-4 leaders to take ers who care.	oject is based on Some member want to contribute but the project from the members and based on volunteerism. About supporting the eers so they will not does not accept it. So, they manage by themselves. Project, the members of both project supported the project by fulfilling ticipant to donate the members sharing the norms.	They prohibit to take care individually. They have to work together.
Table 2 Evaluation and Compa	Information	Satoyama Project	 Email Email Sharing information Fax among member by Gettin meeting Sharir 	 Homepage of OIC Hometer Facebook Twitter Board Poster Poster Communication between Holding members Garde Garde 	Most of the members are bond of members so relations of participants is strong. • Gener is not su • About member male and ideas an	The member will do what They diverse and they can do. They check area by a some areas of Satoyama and And in e ask some members who care. know well about Satoyama or areas for tour.	ased on sy will not o donate	should come Ibaraki City and
	Dimension of Social Capital Measurement Indices			Informatio Communic to the public	Trust and Solidarity members	Dividing responsibilities	Support from members	Social Rules or Regulations of project

Table 2 Evaluation and Comparison between Satoyama Project and Gardening Project (Cont.)

Satoyama Project	Gardening Project
 To increase promotion of the project by various ways: Giving opportunities to nonmembers to join the activities and work with the member Holding interesting activities to the participants Increasing channels of social media to promote by Instagram, twitter, applications of mobile phone, etc. Distributing application form at the city hall To make participation in the project more easily: Increasing ways to register both direct and indirect Diffusing application form in social media To improve activities more interesting to get more participation from university students and community Holding a tours as field trips Adapting ways to educate members by play game Holding some activities as competition for example whose tree have grown up best can get award and crating the name of flowers by themselves, etc. Making a video for presentation in seminar, not only text 	 To improve activities more interesting and easy to gain attachment from members for increasing the number of participats from university students Adapting ways to educate members by entertainment for example playing games, making a video for presentation in seminars not only text Holding some activities as competition for example whose flowers have grown up or beautiful best car get award, crating the name of flowers by themselves, etc. To increase connection among members Holding some appointments as relax activities that it is not related with the project for example dinning, picnic etc. To increase the number of seminars to make members get more knowledge, ther this project equipped with more specialists who can improve the quality of gardens

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[References]

- Ahmed, N. Nabil and Eldayem, G.E.A. "Influence of mixed land-use on realizing the social capital," Housing and Building National Research Center (HBRC) Journal, Architecture, Egypt: Helwan University, 11, 2013, pp. 285–298.
- Aleksiev, A. and Penov, I, *The role of social capital for sustainable use of the fragmented land in Bulgaria*, Agricultural University of Plovdiv Bulgaria: Plovdiv, 2016.
- *Collaboration efforts with local people Community creation project.* [Cited 2017 Jan 5], Retrieved from http:// www.ritsumei.ac.jp/rs/r2020/campus/oic/community/local.html/ Office of the National Economic and Social Development Board (NESDB), "Social capital and social human development", in *the growth of the quality and sustainability workshop*, 2008.
- Jintana Amonsanguansin, "Social capital with collaboration of local community in management of natural Resources", Journal of environmental, 1, 2005, pp. 104-134.
- Kata, P., The study on social capital and the role of social capital in social movement: case study of healthy civil society in one village in North-Eastern Region of Thailand (Thesis (M.A. (Population and Social Research)), Institute for Population and Social Research, Mahidol University: Nakhonpathom, 2004.
- Office of Regional Collaboration Ritsumeikan University, *Policy for Community and Regional Collaboration*. [Cited 2017 Jan 5], Retrieved from http://en.ritsumei.ac.jp/community_ service/region/*Ritsuimekan University*. [Cited 2017 Feb 26], Retrieved from http:// www. ritsumei.ac.jp/rs/r2020/campus/oic/community/local.html/
- Satoyama Project. [Cited 2017 Jan 5], Retrieved from http://www.facebook.com/sodateru.satoyama/
- Satoyama support net. [Cited 2017 Feb 22], Retrieved from http://www.facebook.com/sodateru.satoyama/
- Wikipedia, 2007, [homepage on the Internet], Satoyama. [Cited 2017 Feb 10] Retrieved from https://en.wikipedia.org/wiki/Satoyama.

社会関係資本の観点からの大学・地域コミュニティ協働プロジェクトの評価 ~立命館大学における里山プロジェクトおよびガーデニングプロジェクトを 事例として~

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【要旨】本研究は立命館大学大阪いばらきキャンパスで実施される大学・地域コミュニティ協働プロジェクトを 社会関係資本の視点から評価することを目的としている。本研究では、キャンパス緑化の一環である里山プロジ ェクトとガーデニングプロジェクトを対象とし、社会関係資本をGroup and Networks, Collective Action and Cooperation, Information and Communication, Trust and Solidarity, Social Cohesion and Inclusionの5 つの側面から捉え直し、各プロジェクトの現状を明らかにした。大学の地域連携室への聞き取り調査より情報を 収集し、評価した結果、里山プロジェクトについては社会関係資本の側面と関わる活動を実施していたが、参加 者が少なく、活動の種類も多くないことが問題として提起された。これらの課題から、プロジェクトを促進する ための活動を頻繁に実施し、活動への参加を容易にするとともに、興味深く愛着を持てるような活動にすること が重要であることが指摘できた。また、参加者間での議論や意見交換の機会を拡大するためにセミナーの開催数 を増やすことも提案した。一方、ガーデニングプロジェクトにおいても社会関係資本の側面と関わる活動を実施 していることとともに、参加しない登録者がいること、専門家が不足していること、そして参加者間の関係醸成 に活動頻度と性別という壁があることを把握した。これより、知識の獲得や参加者間のつながりを醸成すること を目指した会議やセミナーを通じて、興味深く愛着を持てるような活動を提案できた。

キーワード:社会関係資本、大学・地域コミュニティ協働、立命館大学