## **RESIDENTS' EVALUATION AND CONTINUITY IN THE CASE** OF SHIKISHIMA OPEN GARDEN IN MAEBASHI CITY

\*Shinya Tsukada<sup>1</sup>, Kazuya Tsukada<sup>2</sup> and Tetsuo Morita<sup>3</sup>

<sup>1</sup> Maebashi City Office; <sup>2</sup> Seikei University; <sup>3</sup> Maebashi Institute of Technology

\*Corresponding Author, Received: 10 June 2019, Revised: 12 Oct. 2019, Accepted: 10 Feb. 2020

**ABSTRACT:** Living while feeling various green effects is considered an effective tool to adapt to the situation of declining population and the aging population or to live an environmentally friendly life. To realize this, it is necessary to have a green zone management policy through cooperation between the administration and residents. Particularly, open gardens (\* OG) as one of the private greening areas are expected to have great effects on the viewpoint of town planning. In the task of OG, "trigger and form of activity", "increase participants" and "increase awareness" are soft issues in sustainability. We thought that these could greatly influence the citizen's future activities. Therefore, we focused on this research. Therefore, to solve the above three major problems, this research grasped "situation of efforts by administrators and OG organizers in the case of OG of Maebashi City" and "perception of neighborhood residents' OG activities". The purpose of this research was to obtain basic knowledge for improvement of "issues for the sustainability". As a conclusion, "Shikishima OG" was not a limited activity of merely a favorite group, but more than half of the residents were recognized in the area around Shikishima Park. In addition, 80% of those inhabitants regarded positively as "Shikishima OG contributes to local community development". Furthermore, we could grasp that "improvement of the landscape of the district" was the most expected by these inhabitants in terms of "community development".

Keywords: Open Garden, Actual Situation, Actual Evolution, Continuity

### 1. INTRODUCTION

In today's Japan, Japan's financial resources are constrained by the declining population, the aging of the population, and the increase in infrastructure stocks. Under these conditions, to promote environment-friendly living environment improvement and regional development, urban planning that fully demonstrates the various benefits of green and open space is required.

To carry out city planning that fully demonstrates the diverse benefits of greenery and open spaces, it is important that the government and residents work together to make greening activities in accordance with the characteristics of the area and the needs of the residents.

Japan's greening policy can be broadly divided into two. The first is greening of public facilities, which is led by the government. The second is greening of private land, which the residents take the lead.

As one of the private land reforestations, open garden is expected to have great effect based on the point of town development. The open garden (hereinafter referred to as OG) is an activity to open private garden into public. The purpose of this activity is to make citizens enjoy the garden of an individual. This is a greening activity developed in Japan at the late 1990s.

The pleasure of showing the owner's garden to

the visitor and the pleasure of the visitor watching the owner's garden can be expected to have the effect of fostering exchanges and communities via flowers.

### 2. VIEWPOINTS

### 2.1 Previous Research

Research on OG in Japan was accumulated as the activities of OG in Japan were developed [1].

For example, a study of features and problems in Obuse Town, Nagano Prefecture, conducted by Nonaka [2]. The study conducted by Hirata focused on the impact of the open garden on the regional economy [3]. Another study conducted by Hirata aims to support activities to OG in Hyogo Prefecture [4]. These are researches on the cause of OG introduction in Japan, and the effect and significance of activities. After that, with the spread of the activities of OG in Japan, the study conducted by Nonaka "Focus on the behavior of the viewer at the time of the green event [5]. Sanbuichi, Yuzawa and Kumano study on the consciousness structure of owners [6]. Iwasa and Kamihogi study on the activity of OG and the change in the Member's consideration and Action in sanda city, Hyogo pref [7]. Park and Nonaka study of the relationship between OG activity organizations and supporting organizations and the impact [8]. And, Park and Nonaka study of the continuity on actual situation of QG activity from opportunity and period [9]. Another study conducted by Hirata aims to make clear the relationship the aspect of present activities and problems of OG [10]. These researches on the visitor's behavior and the actual activity concerning OG was conducted.

#### 2.2 Viewpoints of This Research

As a study of OG today, a study [6] was conducted focusing on the actual condition and continuity of the open garden activities conducted by Park. In this study, 73 OGs in Japan were classified into three groups of 9 years or more, 5 years or more and less than 9 years, and 5 years or less. Because of the research, it is necessary to secure the parking lot on the hard side for the continuity of the activity of OG. In terms of software, it has been suggested that it is important to increase activity awareness, form of activity, increasing human resources to conduct activities, and to increase awareness of OG. As mentioned above, although the research about OG has shown the subject in the activity actual condition and continuity of OG, there are few researches, which examined these subjects more deeply. In addition, "triggers and forms of activities," "increase the number of participants," and "increase awareness", which are the software issues in OG's continuity of activities, are particularly important for promoting future activities. However, conventional research focusing on this has not been seen.

In this study, the above three major issues are summarized as "The issues of OG activity continuity". Then, for the open garden in Maebashi City, we conducted a questionnaire survey 1) on the status of efforts by administrative personnel, and 2) 0on the awareness of OG activities by nearby residents. In addition, it was considered as the originality of research to obtain basic knowledge for the improvement of "problem to OG continuity".

### 3. SHIKISHIMA OPEN GARDEN

In this study, OG (hereinafter referred to as Shikishima OG), which has been continuously addressed for 10 years at Shikishima area in Maebashi City, Gunma Prefecture, is used as an example.



Fig. 1 Location map of Shikishima OG



Fig. 2 Shikishima OG Festival

Firstly, in order to investigate the actual conditions and characteristics of "Shikishima OG", the actual situation was grasped by interviews with the administrative staff who were continuously involved in the work of open garden.

Fig.1 shows the location of the open garden being tackled in Maebashi City. The open garden that has been held continuously for 10 years in the central area of Maebashi City is "Shikishima OG." The "Shikishima OG" began when the National Urban Greening Gumma Fair was held in March 2008 in Gunma Prefecture.

Shikishima Park is selected as the main site of the afforestation fair, and the open garden that residents of the adjacent Shikishima area have been working on is the "Shikishima OG Festival" (Fig. 2).

## **3.1 Before the National Urban Greening Gumma Fair**

In 2005, Maebashi City planned an open garden

to promote the development of flowers and greenery with the participation of residents in conjunction with the holding of the urban greening fair. First, in Maebashi City, a lecture was given by a lecturer by Katsue Suma (113 participants) to promote the project. Next, the gardening course and the flowerbed of the Shikishima Town Park were implemented as an approach for the practice of OG.

Shikishima Town Park is a familiar block park in Shikishima Town. The administration (Maebashi government office) offered the block park of the district as a place of the flowerbed making practice, and there was a desire to want to plan the improvement of the facility environment.OG.

Those who wish to participate had a desire to promote their activities to the district residents widely by utilizing the local block park. The interests of both the administration and OG participants agreed.

Gardening course was established in 1971 and was held in greening enlightenment business of "committee to make town green" with citizen activity organization with history.

By holding "seeding class" and "cutting tree class", the opportunity to discover flower lovers was established. The first open gardening workshop was held in April 2007 at the "Fukaya Flower Festa" site (18 participants). In June of the same year, an open garden gardening class and a planting class for Jade Garden were held (19 participants).

By the time the greening fair was held in 2008 (about 1 year), OG practice classes were held 15 times and open garden gardening classes were held 3 times. Technology training and human resource development for the implementation of the open garden were carried out roughly once or twice a month. This training resulted in the participation of approximately 20 fixed flower lovers.

## 3.2 National Greening Gumma Fair Conducted-After

In the first "Shikishima OG Festival" in conjunction with the holding of "National Urban Greening Gumma Fair " on March 29-30, 2008, "Shikishima Park Flower Friends" with 18 participants are organized and the members' private garden is It was released.

The "Shikishima OG Festival" has been continued every year during the implementation period of the Rose Garden Festival at Shikishima Park after the greening fair (Fig. 3).

In 2019, the 10th "Shikishima Open Garden Festival" was held. Nineteen proud gardens were opened during the two days of the Rose Garden Festival.



Fig. 3 Implementation status (Shikishima OG Festival)

Τ.	verginuornuou i	(testuent)	
	Area	within 2.5 km	
		Around Shikishima town	
	Target	Kawahara town	
		Aramaki town	
		Kamikoide town	
		Shikishima town	
		Midorigaoka town	
		Iwagami town	
	Duration	2016.8.18~2016.8.31	
	Method	Method Posting	
	Distribution	1,800	
	Sample	472	

Table 1 Questionnaire Survey (Neighborhood Resident)

As for the administrator, the lecture for citizens promoted citizen enlightenment for OG business is the reason that the activity of "Shikishima OG" continued for 10 years continued. Flower lovers gathered from interest to gardening course and maintenance of flower bed of Shikishimacho Park.

In addition, flower lover activities such as open garden inspection training and the implementation of open garden practice classes led to OG.

Furthermore, the findings obtained through regular inspection training were used for OG practice. It was evaluated that the continuous approach by such PDCA cycle was the starting point. For the "Shikishima OG" approach, inspection training sessions and technical training increased the number of activities and participants.

In addition, it was evaluated that the use of the block district park familiar to the district residents as a place of OG practice was effective in raising the awareness of the residents.

# 4. CITIZEN EVALUATION OF OPEN GARDEN ACTIVITY

Table 2 Respondent Attributes of the Neighborhood Resident Questionnaire

Sex	Men:56.1%		
Sex	Women:41.9%		
	N.A.:1.9%		
	N.A.1.770		
Age	19 under:0.2%		
	20~29:2.8%		
	30~39:6.6%		
	40~49:12.1%		
	50~59:17.2%		
	60~69:25.8%		
	70 more:34.3%		
	N.A.:1.3%		
Employment	Company employee and		
	Public employee 28.0%		
	Company-owner: 7.4%		
	engage in agriculture: 0.0%		
	housekeeper: 14.4%		
	Student: .6%		
	Part-time: 7.2%		
	No-employment: 34.7%		
	Other: 6.1%		
	N.A. : 1.5%		
composition of	Single-person household:16.5%		
a family	One generation household:35.8%		
	Two generation household:36.4%		
	Three generation household:6.6%		
	Other: 3.4%		
	N.A.:1.3%		
Habitation	Single-family house: 85.2%		
mannanon	Cluster housing: 13.1%		
	Other: 0.4%		
	N.A.: 1.3%		
	N.A., 1.370		

Residence year	0~9: 20.8%
	9~19: 17.8%
	20~29: 12.9%
	30~39: 15.9%
	40~49: 14.8%
	50~59: 8.1%
	60~69: 3.4%
	70~79: 3.0%
	80~89: 1.1%
	N.A: 2.3%

Table	3	Results	of	Neighborhood	Resident		
Questionnaire Survey							

Q1: Do you know the Open Garden activities around Shikishima Park?				
They knew the activity	262(55.5%)			
They did not know	210(44.5%)			
	(No questions to			
	follow)			
Q2: Do you have visited Shikishima Open Garden activities, have you ever seen it?				
visited	87(33.2%)			
Seen it	154(58.8%)			
N.A.	21(8.0%)			
Q3: What changes do you think the area around Shikishima Park will be due to Shikishima Open Garden activities?				
I think that the landscape of	137			
the district improves I think that the greenery and	124			
flowers of the district will	124			
increase				
I think that the greenery and	84			
attachment of the area will				
increase				
I think that the community	64			
activity will be active				
I think that nothing changes	35			
in particular				
Do you think that Open Garden activities contribute to				
community development in the community?				
I think	206(78.6%)			
I do not think	50(19.1%)			
N.A.	6(2.3%)			

### 4.1 Neighborhood Resident Questionnaire

The questionnaire survey shown in Table 1 was conducted in order to investigate the residents' evaluation of the activities of "Shikishima OG", which has been working on OG continuously for 10 years.

The survey area was 6 towns around Shikishima Park where open gardens are being conducted (within 2.5 km around Shikishima town).

The land use of 6 cities is in the urbanized area in the Maebashi urban planning area, and the use area of the residential area from the first-class lowrise residential area occupies over 80% of the area.

In addition, around Shikishima Park is designated as scenic area. Table 2 summarizes the personal attributes of respondents. According to the table, although there is no significant difference in gender, by age 50 or more accounted for 77.3%. In terms of occupation, "no-employment (34.7%)" was the most frequent, followed by "company employee and public employee (28.0%)." In the family structure, the total of "one generation household" and "two generation household" accounted for 72.2% of the whole. The residence type was "single-family house (85.2%)".

### 4.2 Results of Neighborhood Resident Questionnaire Survey

Firstly, 33.2% of the respondents answered that they "visited" when I asked the question "Do you have visited Shikishima OG, have you ever seen it?". Next, I asked them to answer the question "What changes do you think the area around Shikishima Park will be due to Shikishima OG activities?"

As a result of the answer, "I think that the landscape of the district improves (137)" was the most frequent. The fact that the neighborhood residents most hoped for the improvement of the landscape of the district by the open garden activity was realized. Then "I think that the greenery and flowers of the district will increase (124)", "I think that the greenery and attachment of the area will increase (84)", and "I think that the community activity will be active (64).

In addition, when asked about "Do you think that open garden activities contribute to community development in the community", 78.6% of the respondents answered, "I think".

From the above, "Shikishima OG" was not just a limited activity of a lover's group, but activity was recognized by more than half of the residents in the area around Shikishima Park. And about 80% of the people who recognized it were positively regarded as "contributing activities to community development in the community".In addition, in "the

town development of area", expectation was most raised for "the scenery of district improves".

From this result, the recognition of the activities of the nearby residents and the expectation for the community development were one of the factors that "Shikishima OG" could be continued.

### 5. CONCLUSION

In this research, we examined three aspects of open garden "motive for activity", "increase participants" and "increase awareness" as a problem of activity continuity, taking "Shikishima OG" as an example. Park's previous research [6] suggests that open garden activities tend to be continued toward activities starting with "a gathering of flower lovers" rather than "recommendation of administration.".

The results obtained in the present study can be summarized as follows:

- (1) "Shikishima OG" originated from the recommendation from the administration (Maebashi City Hall). I. I made an opportunity of activity centering on training of training courses and practical skills. After that, they voluntarily recruited participants of flower lovers' gatherings. II. The area block park familiar to the district residents was used as a place of practice. As a result of the above, the awareness of the residents was raised, and as a result, OG activities could be continued.
- (2) "Shikishima OG" was recognized by more than 50% of the respondents in the results of the questionnaire survey on the neighbors. In addition, more than 80% of the recognized residents were rated as "contributing to the area", and it was possible to know "the situation what they most expected these activities to create a local landscape".
- (3) The Shikishima OG, which has continued for 10 years, is considered to have received favorable evaluations from nearby residents as a result of working on activities characterized by the issue of activity and the issue of increasing the number of participants, which are the issues of activity continuity.

We will quantitatively verify the basic findings obtained in this research on the subject of activity continuity. I think that it is necessary to do a concrete study to solve the problem of activity inheritance.

#### 6. REFERENCES

[1] Katsutoshi.Nonaka, Potential and Development of Garden City., Journal of The Japanese Institute of Landscape Architecture, International Edition 1, 2000, pp.17-20.

- [2] Katsutoshi.Nonaka, The Characteristics and Problem of 'Open Gardens' in Obuse Town, Nagano Pref., journal of the Japanese Institute of Landscape Architecture, Vol.65, No.5, 2002, pp. 805-810.
- [3] Fujio.Hirata, Toshimitsu.Tachibana, Akira.Mochizuki, The Study about the Estimation of Economic Effect to the Local Area by the Activity to Open the Private Gardens to the Public in Japan, journal of the Japanese Institute of Landscape Architecture , Vol.66, No.5, 2003, pp. 779-782.
- [4] Fujio.Hirata, Study on How to Support Activities to Open Private Gardens to Public by Local Government: From the Analysis of the Needs of Paticipants in Hyogo Prefecture., Environmental information science, Papers on Environmental Information Science, Vol.18, 2004, pp.89-94.
- [5] Katsutoshi.Nonaka, A Study on the Significance of 'Open Garden' in a Greenery Event, journal of the Japanese Institute of Landscape Architecture 69, No.5, 2006, pp.789-794.
- [6] Jun.Sanbuichi, Akira.Yuzawa, Minoru.Kumano, An Examination about

Structure of Consciousness of Open Gardener, Journal of the Japanese Institute of Landscape Architecture 70, No.5, 2007, pp.391-396.

- [7] Hanae.Iwasa, Akiharu.Kamihogi, The Study of the Activity of 'Open Gardens' and the Change in the Member's Consideration and Action in Sanda City, Hyogo Pref., Journal of the Japanese Institute of Landscape Architecture 70, No.5, 2007, pp. 657-662.
- [8] Hyeeun.Park, Katsutoshi.Nonaka, A Study of the Relationship between "Open garden" Activity Organizations and Supporting Organizations and the Impact, Papers on City Planning 44(3), 2009, pp.691-696.
- [9] Hyeeun.Park, Katsutoshi.Nonaka, A Study of the continuity on Actual Situation of 'Open Garden' Activity from opportunity and period: , Journal of Architecture, Vol.75, No.648, 2010, pp.427-435.
- [10] Fujio.H, A Study on the Relationship between the Aspect of Present Activities and Problems of 'Open Garden' Activities which have become Diverse in These Years, Paper on Environmental Information Science, Vol.37, 2010, pp.37-41.

Copyright © Int. J. of GEOMATE. All rights reserved, including the making of copies unless permission is obtained from the copyright proprietors.