

Consideration about Resident Participation Activities for Maintenance and Use Open Space with Community Development in Hachioji New Town

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ABSTRACT

Maintenance open spaces and community development in large scale housing development is one of the most important issues. We(UDC) established a resident participation activity for maintenance and use open space with community development in Hachioji New Town from 1997. The Purpose of this study is to establish resident participation activities for maintenance and use open space with community development in Hachioji New Town, and to clarify the characteristics and to consider about efficiency of the activity. We established Minamino Shizen-Juku as a methodology for maintenance and use open spaces at the same time Hachioji New Town was opened in 1997. The activity has continued by now in 2001. We conducted questionnaire survey to make sure efficiency and characteristics of the activity past three years. Minamino Shizen-Juku (nature friendly lessons) is a resident participation activity in Hachioji New Town. It was established in 1997 as soon as the new town was opened, this year is fifth since it was started. It has three objects. 1)Maintenance and use woody environment, 2)Community development, 3)Continuation and renewal native culture

And it has general course, three special courses and one extra course were established in the activity.

1) General course is an activity participated all of member. It's included farming experience in the native field and seasonal events. 2)Rice growing and woods maintenance course is rice growing and wild wood maintenance in the park as a series of annual farming activities. 3)Benefaction from farm course is started from planting spring vegetable at Mizukoshi(leader of Minamino Shizen-Juku)'s field. There is the number of participant limit because of the area of the field. 4)Watching nature course is watching seasonal wild flowers, trees, animals and plants to know about native nature. 5)Extra program is programmed to know about native history and tradition. It's planned including participant's ideas. Not member can participate in this course too.

Questionnaire survey is conducted every year to accept participants opinion for next year program since 1998. It indicates that entries don't want personal activities and devoted activities but they want to communicate with native environment and positive activity. Rice growing and woods maintenance course is generally evaluated the <experience>, benefaction from farm course is generally evaluated the <harvest> and watching nature course is evaluated the <know>.

Conclusions: 1)Communication with environment, native nature and neighborhood, is demanded in resident participation activities for maintenance open space. 2)The characteristics were picked up in each

activity, experience in rice growing and woods maintenance course, harvesting in benefaction from farm course and knowing in watching nature. These characteristics complementary each other course. (3)Resident participation activity is efficient for maintenance and use open space. It's important that element of community development is involved in the program.

Key Words : Open space, New town, Community development, Resident participation, Environment

I. BACKGROUND OF THIS STUDY

Maintenance open spaces and community development in large scale housing development is one of the most important issues. We (UDC) established a resident participation activity for maintenance and use open space with community development in Hachioji New Town from 1997. These are few examples that hardware and software planning at the same time in large scale housing developments.

II. PURPOSE OF THIS STUDY

Purpose of this study is to establish resident participation activities for maintenance and use open space with community development in Hachioji New Town, and to clarify the characteristics and to consider about efficiency of the activity.

III. METHOD OF THIS STUDY

Hachioji New Town is located in west side of Tokyo (about 40km), residential development in hilly area. (Table 1)

We established Minamino Shizen-Jyuku as a methodology for maintenance and use open spaces at the same time Hachioji New Town was opened in 1997. The activity has continued by now in 2001. We conducted questionnaire survey to made sure

Table 1. General information of Hachioji New Town

project name	Hachioji New Town	
location	Hchioji city, Tokyo	
development type	Housing Development	
development method	Land Readjustment method	
site area	394.3 ha	
land use planning	public	157.8ha
	facilities	93.9ha
	apartment houses	13.4ha
	houses	129.2ha
population	28,000	
number of houses	8,450	
term of project	1988-2012	
developer	Urban Development Corporation(UDC)	
planner	Urban Development Corporation(UDC)	

efficiency and characteristics of the activity past three years. After introducing Minamino Shizen-Juku, a consideration based on analysis of the questionnaire survey described about the activity.

IV. ESTABLISH "MINAMINO SHIZEN-JUKU"

Minamino Shizen-Juku (nature friendly lessons) is a resident participation activity in Hachioji New Town. It was established in 1997 as soon as the new town was opened, this year is fifth since it was started. It has three objects. General information of Minamino Shizen-Juku shows in Table 2

Table 2. General information about Minamino Shizen-juku in 2000

a: programs and activities

	Contents of activities		Additional expense materials		Schedule	How to apply	
	Insurance					Enter the courses	Participate the events
General course	Main activity at Tochiyao park, the main field of Shizen-juku	This is an activity participated all of member. It's included farming experience in the native field (rice planting, reaping and making rice cake) and seasonal events (collecting wild grass in spring, observing fireflies in summer).	¥ 500 per one person	collect expense for materials on the event day	follow under the schedule	entry by application form	accept on the each events
Special programs	Rice growing and woods maintenance course	Rice growing and wild wood maintenance in the park as a series of annual farming activities	free	free	follow under the schedule		
	Benefaction from farm course	This is started from planting spring vegetable at Mizukoshi's field. There is the number of participant limit because of the area of the field.	included annual expense	¥ 2,000 per one family for seeds and fertilizer	depend on the weather condition and participant's request	entry by each application forms	regularly, gather in the event fields
Extra program	Watching nature course	Watching seasonal wild flowers, trees, animals and plants to know about native nature		¥ 2,000 per one family for brochures	depend on the fields condition		accept on the each events
	There are individual activities to know native culture and history.	This is programmed to know about native history and tradition. It's planned including participant's ideas. Not member can participate in this course too.	collect expense on the each events if necessary		show on the bulletin board	apply by the participation form on the every events	

b: monthly schedule in 2000

	April	May	June	July	August	September	October	November	December	January, 2001	February
General activities	• 23, Sun. plowing the rice field		• 11, Sun. rice planting	• middle fireflies watching	• middle field works for children		• 22, Sun. rice reaping	• 19, Sun. acorns collection	• 17, Sun. harvest festival		
Rice growing and woods maintenance	• 23, Sun. plowing the rice field 1	• 21, Sun. plowing the rice field 2	• 11, Sun. rice planting	• 2, Sun. maintenance the rice field	• 6, Sun. scarecrow making	• 24, Sun. preparing rice reaping	• 22, Sun. rice reaping	• 19, Sun. threshing and polishing	• 17, Sun. harvest festival	• 21, Sun. cutting weeds in woods 1	• 18, Sun. cutting weeds in woods 2
Benefaction from farm	• spring vegetable	• summer vegetable (tomatoes, cucumbers, eggplants, etc.)				• winter vegetable (onions, white radishes, spinach, etc.)					
Observation the nature		• 13, Sat. observation the spring field		• 22, Sat. observation the summer field		• 9, Sat. observation the autumn field			• 3, Sun. observation the winter field		

1. Purpose of Minamino Shizen-Juku

- 1) Maintenance and use woody environment
Close to native nature with woods maintenance and other recreation in open spaces
- 2) Community development
Communicate between new residents and old one with native nature
- 3) Continuation and renewal native culture
Continue traditional culture and create original life style

2. Install Activity Courses

One general course, three special course and one extra course were established in the activity.

1) General course

This is an activity participated all of member. It's included farming experience in the native field (rice planting, reaping and making rice cake) and seasonal events (collecting wild grass in spring, observing fireflies in summer).

2) Rice growing and woods maintenance course

Rice growing and wild wood maintenance in the park as a series of annual farming activities (Figure 1)

3) Benefaction from farm course



Figure 1. Rice growing and woods maintenance course

This is started from planting spring vegetable at Mizukoshi(leader of Minamino Shizen-Juku)'s field. There is the number of participant limit because of the area of the field. (Figure 2)



Figure 2. Benefaction from farm course

4) Watching nature course

Watching seasonal wild flowers, trees, animals and plants to know about native nature (Figure 3)



Figure 3. Watching nature course

5) Extra program

This is programmed to know about native history and tradition. It's planned including participant's ideas. Not member can participate in this course too.

3. Object of Entry

The object is for residents in Hachioji New Town as a general, but if there are application, acceptable it. Entry is accepted every family.

4. Leaders of Courses

Leaders are native farmer living in the new town in rice growing and benefaction from farm course. Leaders in watching nature course hired persons familiar with native environment.

5. Communication with Elementary School

There are three rice field in Tochiyato park, two for Minamino Shizen-Juku and one for Minamino elementary school as an educational experience. They communicate each other.

6. Record and Publicity

Monthly "Shizen-Juku report" is published after the activity was finished. An exhibition is opened after the annual program has finished.

V. CHARACTERISTICS OF MINAMINO SHIZEN- JUKU

1. Method of Questionnaire Survey

Questionnaire survey is conducted every year to accept participants opinion for next year program since 1998. The subject of questionnaire is entered families in Minamino Shizen-juku every end of year after the all programs in the year. Contents of questionnaire are about satisfaction the activities in the year and request in next year's one. The form of questionnaire distributed the last activity in the year, collected later. Table 3 shows the number of

distribution, collection, and ratio of collection before three years.

Table 3. Number of distribution, collection, ratio

	1998	1999	2000
distribution	60	60	59
collection	40	23	30
ratio	66.7%	38.3%	50.8%

2. Participation

1) The number of entries

Figure 4 shows the number of entries the activity from 1998 to 2001. The total number of entries changes about 200 people and over 60 families. It indicates that the activity tends to stay.

number of participate	1998	1999	2000	2001
total	204(62)	189(61)	181(59)	210(69)

(family)

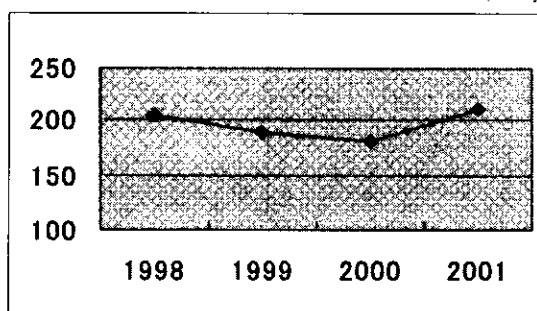


Figure 4. Total number of entries the activity

2) The number of entries in each courses

Figure 5 shows the number of entries in the special three courses from 1998 to 2001. The average of participants changes about 60% in rice growing and woods maintenance course. The average of participants changes about 50% in benefaction from farm course. It depends on there is the number of participant limit (about 20 families) in this course because of the area of the field. The number of participant in watching nature course decreased from 1998 (154 persons) to 2000 (66

course	1998	1999	2000	2001
rice growing and woods maintenance	49(15)	73(22)	67(20)	59(18)
benefaction from farm	60(21)	58(20)	38(18)	39(17)
watching nature	154(46)	131(39)	66(23)	101(32)

(family)

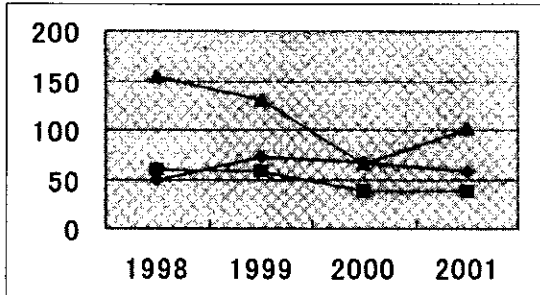


Figure 5. Number of entries in the three course
 Legend: ◆ : Rice growing and woods maintenance;
 ■ : benefaction from farm;
 ▲ : waching nature

persons) but increased again from 2000 to 2001 (101 persons). Now this course is the most popular course in these three courses.

3) The ratio of participation

Figure 6 shows the average in each year of the ratio of participant in these three courses from 1998 to 2000. The ratio in rice growing and woods maintenance course changes generally about 30%. The ratio of benefaction from farm course is the highest in three courses (about 50%). It depend on growing vegetables in short term, participants has to management frequently. The ratio of watching nature course was the lowest in these three courses in 1998. However the ratio increased every year, it reached 40% in 2000. It's growing up to stay.

We can see small fluctuation in the graph, however the activities tend to stay generally. Especially the number of entry in watching nature course is the most, the ratio of participants is growing up. It indicates that resident's interest in native nature is growing up.

course	1998	1999	2000
rice growing and woods maintenance	39%	28%	31%
benefaction from farm	48%	62%	52%
watching nature	25%	33%	40%

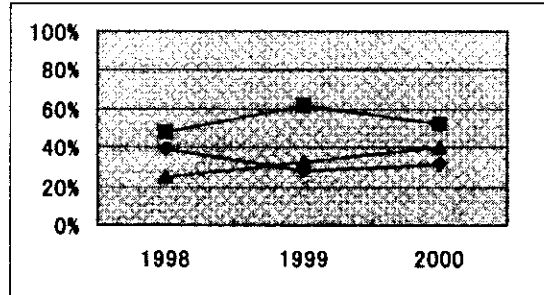


Figure 6. Ratio of participation
 Legend: ◆ : Rice growing and woods maintenance;
 ■ : benefaction from farm;
 ▲ : waching nature

3. Reasons of entry

Figure 7 and Figure 8 show the reason to entry Shizen-Juku activity (can answer more than one in questionnaire form). Figure 7 shows higher three reasons for participation, Figure 8 shows lower three reasons. The ranking of reasons has not changed in this three years, first is contact with nature, second is communicate with neighborhood, third is farming. Especially the reason, communicate with neighborhood is increasing every year. On the other hand the lowest one is voluntary activities, second is leisure, third is communicate with children. It indicates that entries don't want personal activities (leisure, communicate with children) and devoted activities (voluntary activities), but they want to communicate with native environment (contact with nature, communicate with neighborhood) and positive activity (farming). And it is efficient that an open space maintenance activity involve an element of community development.

Table 4. Classified words in matrix

	1998	1999	2000		
	<experience>	<experience>	<experience>	<know>	
	<harvest>	<harvest>	<harvest>	<know>	
Rice growing and woods maintenance course	<ul style="list-style-type: none"> rice planting(3) rice reaping(2) threshing and potting(3) process of rice growing(2) scaevrow making woods maintenance(2) charcoal making new year's decorations making 	<ul style="list-style-type: none"> weeding rice reaping(3) rice planting seedling new year's decorations making (2) 	<ul style="list-style-type: none"> seedling and plowing process of rice growing(2) rice cake making new year's decorations making experience firming 	<ul style="list-style-type: none"> harvest rice 	
point	16	8	6	0	
Benefaction from farm course	<ul style="list-style-type: none"> drying buckwheat and thresh 	<ul style="list-style-type: none"> experience from planting to harvest experience firming 	<ul style="list-style-type: none"> experience from planting to harvest 	<ul style="list-style-type: none"> eat fresh vegetable(2) eat vegetable grow myself 	
point	1	4	1	0	
watching nature course	<ul style="list-style-type: none"> bird watching nature protect activity in native area looking for insects raising trees watching and touching native plants 	<ul style="list-style-type: none"> watching fireflies getting close to native nature 	<ul style="list-style-type: none"> experience unknown close nature close to nature 	<ul style="list-style-type: none"> can tell about native nature(2) observation the nature in my own town interest in nature 	<ul style="list-style-type: none"> knew about wild animals, plants and my town tended to take interest in nature found out native nature and plants realized close nature know about native nature
point	5	2	2	3	
	1	2	1	3	
	9	2	1	3	
	10	2	2	5	

	1998	1999	2000
contact with nature	85.0%	76.0%	80.0%
communicate with neighborhood	37.5%	52.0%	63.3%
farmibing	40.0%	40.0%	46.7%

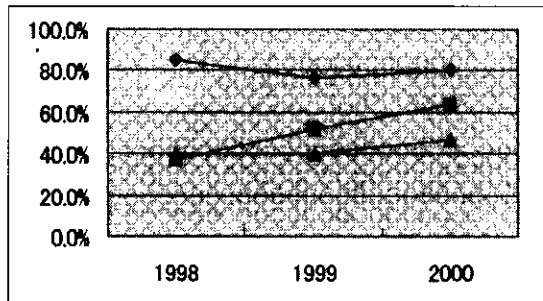


Figure 7. The reason to entry (higher three)
 Legend: ◆ : contact with nature:
 ■ : communicaten with neighborhood:
 ▲ : farming

	1998	1999	2000
voluntary activities		8.0%	3.3%
leisure	5.0%	24.0%	23.3%
communicate with children	22.5%	40.0%	30.0%

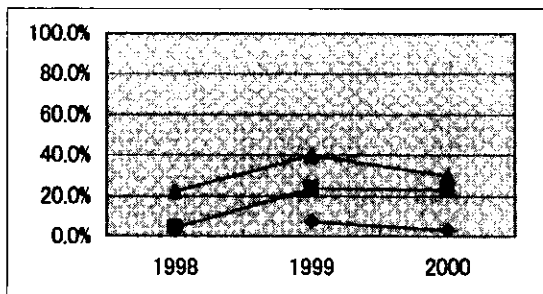


Figure 7. The reason to entry (higher three)
 Legend: ◆ : voluntary activities:
 ■ : leisure:
 ▲ : communicate with children

4. Characteristics of Activities

Next, I picked up the words indicated behavior in free opinions in the questionnaire form and classified the words in the matrix. (Table 4) The words were pick picked up only about three special courses because the contents in program are same

Table 5. Number of ataff member

rice growing and woods	3
maintenance benefaction from famr	1
watchork	9

between general course and special courses. The words were classified three categories, <experience>, <harvest> and <know>. The number of times picked up shows under the words as point, the highest point each category got screened in the table. Some same words were shows as () after the words in the table.

Rice growing and woods maintenance course is generally evaluated the <experience>, 16 points in 1998, 8 points in 1999, 6 points in 2000. The activity we try to difficult for us recently is evaluated.

Benefaction from farm course is generally evaluated the <harvest>, 9 points in 1998, 4 points in 1999, 3 points in 2000. The point they can get real vegetables was evaluated, because we can see some real names of vegetable in the table.

Watching nature course is evaluated the <know>, 10 points in 1998, 4 points in 1999, 5points in 2000. Fining out and knowing their native nature is evaluated.

This matrix indicates the characteristics of the each course. These characteristics complementary each other in the courses.

VI. CONSIDERATION

1. Birth of Staff Members

We recruited staff member firstly in 2001. The staff member doesn't only participate the activities but also participate program working as staff. The number shows Tab.5, 3 persons in rice growing and woods maintenance course, 1 person in benefaction of farm course, 9 persons in watching nature course.

The program has made by only UDC staff and hired consultants by now, birth of staff member indicates that Minamino Shizen-Juku is growing up from staying term to the next step, developing term.

2. Efficiency about Open Space Maintenance

Large scale open spaces maintenance is one of the most important theme in suburban housing development. It is efficient that resident participant activity like Minamino Shizen-Juku maintain open spaces. And more, it's important that elements of communication neighborhood and native nature are involved in the program. It's expected that this activity grows independent community, maintains native open space with pleasure.

VII. CONCLUSIONS

(1) Communication with environment, native

nature and neighborhood, is demanded in resident participation activities for maintenance open space.

(2) The characteristics were picked up in each activity, experience in rice growing and woods maintenance course, harvesting in benefaction from farm course and knowing in watching nature. These characteristics complementary each other course.

(3) Resident participation activity is efficient for maintenance and use open space. It's important that element of community development is involved in the program.

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