

Mobilizing Urban Folk Events for Design of Resilient Community —From Case on “*Jizo-bon*” in Central Kyoto—

Masahiro Maeda^a and Mitsuo Takada^b

^a Assist Prof., Graduate School of Engineering, Kyoto University, Japan; maeda@archi.kyoto-u.ac.jp

^b Prof., Graduate School of Engineering, Kyoto University, Japan

Abstract

Resilience, flexible robustness of a system, is recently getting important idea in the field of community design and management. In this paper, we regarded *Jizo-bon*, an urban folk event widely seen in central area of Kyoto, as a resource of resilient community. We picked up 93 *cho*, the basic unit of community, and conducted investigation on actual situations of management of *Jizo-bon* and *cho*. According to the questionnaire survey, more than 80% of all *cho* communities has hold *Jizo-bon* and its management style is flexible responding to characteristics of each community nevertheless community is weakening due to increasing population who has no involvement or interest on their community. Considering the situation, we developed model of social relationships among residents in terms from difference of involvement to *Jizo-bon* and *cho* community and we applied the model to the result of the questionnaire and field research. As a result, we revealed that *Jizo-bon* contributed to improving “diversity (variety of actors)” and “redundancy (multiplicity of channels)”, the fundamental conditions of resilience, in the communities.

Introduction

In contemporary society, our local life and society are surrounded by uncertain changes and various risks like depression, disasters and forced development. “Resilience” is defined as “ability of a system to maintain its fundamental characteristics and to correspond with uncertain external change” and often expressed to “flexible robustness” like branches of willow. Resilience has been discussed in the various study fields such as material science, psychiatry, biology and disaster management and recently applied to the field of “Machi-zukuri” (community management) in Japan in order to respond to succession and reorganization of local communities toward a sustainable society.

In the urban central area of Kyoto, there is the basic community unit called “*cho*”. “*Cho-kai*” has been organized by community members taking key roles in managing *cho*. However, *cho* and *cho-kai* have recently had various problems such as weakening interest of people in their community, aging and decrease of existing residents and “free rider” (people receiving benefit of *cho-kai* without carrying any load on it). Thus, *Cho* communities have been weakened and this has caused discontinuation of various events in each *cho* community.

Despite the weakening of community, “*Jizo-bon*” has been successful in numerous *cho* communities.

Jizo-bon is a traditional folk event widely seen in the Kansai district of Japan mainly on 24th August, the ceremonial day of *Jizo-bosatsu*, a god of Buddhism. *Jizo-bon* is composed by two fundamental events, 1) decorating and praying for *Jizo* statue and 2) children playing in front of *Jizo* statue. *Jizo-bon* has attracted multi-generational participants and succeeded by changing its aspects and characteristics corresponded to community demands which varies in each period. Therefore, we tried to examine the possibilities and key roles of *Jizo-bon* in terms of its contribution to improving community “resilience”.

This study regards *Jizo-bon* as a resource involving community design and management which has succeeded in spite of uncertain external changes. In this paper, we investigate the actual situation of *Jizo-bon* management which has not been clarified although it is facing transformation due to recent social vulnerability. Based on it, we examine how *Jizo-bon* contributes to improvement of “diversity” and “redundancy”, the fundamental conditions of a resilient community, its members and social relationships.

Applying the Concept of “Resilience” to Community Design and Management

This study defines “Resilience” as the “ability of a system to maintain its fundamental characteristics and to correspond with uncertain external change”.

In addition, we are considering resilience from two angles. The first is “preparing ability” (ability of systems which should have from usual time) and the second is “coping ability” (ability of systems which are needed in unusual times after occurrence of changes or disasters). In addition, the study selected diversity” and “redundancy” as conditions of resilience from the aspect of “preparing ability” as shown by earlier research. This framework can be applied to community design and management when we regard community as a system composed by various actors. In the context of community design and management, “diversity” is defined as the “variety of actors who participate to their community” and “redundancy” is as the “multiplicity of channels through which actors are involved with their community”

Modelling Social Relationships in Management of “Jizo-bon” and “cho”

Jizo-bon has been held by each cho community in the central urban area of Kyoto. The content of Jizo-bon not only varies over place but also over time in the same community. This study conducted investigations on 62 cho communities. The case of “A cho” is shown as an example of Jizo-bon (Fig.1). Jizo-bon is held by using various spaces in each cho community to conduct ceremonies and events. For example, “decoration of Jizo statue” and “juzu-mawashi” (people sit in a circle and rotate a big rosary reciting sutra in front of Jizo statue) are events which have a religious aspect. On the other hand, “fuku-biki”(lottery), “suika-wari” (split-the-watermelon game) and “dipping of lubber ball” are mainly for the fun of children.

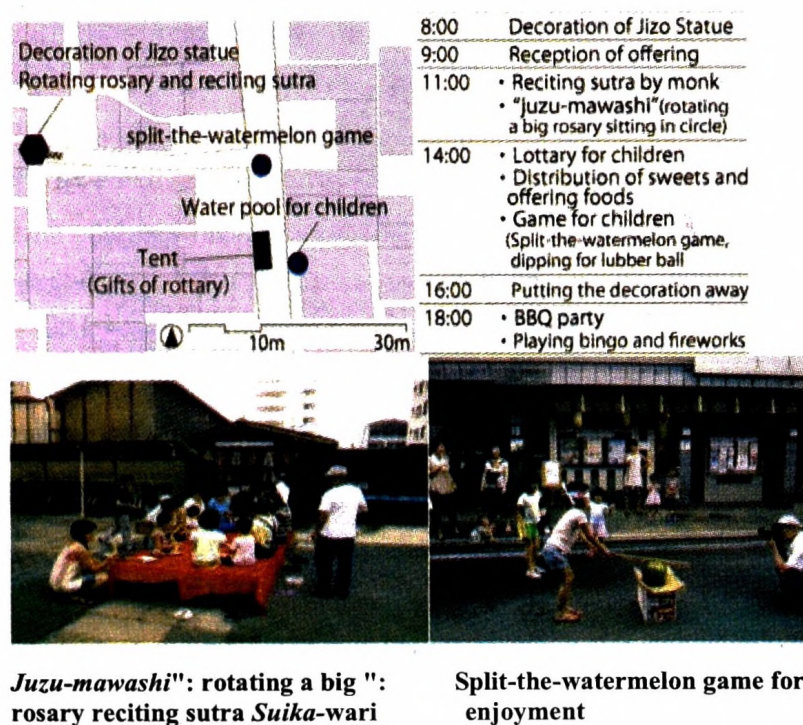


Fig.1. An example of Jizo-bon (A cho in area J)

Jizo-bon is usually conducted by “cho-kai” which is a people’s organization managing cho communities. This study categorizes residents of cho communities based on their involvement in cho-kai -Fig. 2(0). In addition, this study categorizes their involvement in cho-kai through jizo-bon by focusing on “participation in events” - Fig.2(1) and “playing roles in management” -Fig.2 (2). Based on a combination of these categories, “participation” and “management”, the way people involve in jizo-bon is categorized into 6 patterns - Fig. 2(3). These model are applied in the following analysis

(0) Classification of residents from their involvement to cho-kai	
● ...An officer of cho-kai on the year	○ ...Not charging in Management of cho-kai
◎ ...Charging in management of cho-kai	△ ...Not joining in cho-kai
(1)Participation to Jizo-bon on the day	(3)Patterns of Involvement (1+2)
●○ ^{※1} Participation	●○ ^{※1} No involvement
●○ No participation	●○ Only call for participation (No participation on the day)
▬ ...Range of participation	●○ Call for participation and cooperation for setting (but no participation on the day)
(2)Involvement to Management of Jizo-bon	
●↔○ ^{※1} Interactive involvement	●○ Participation without involvement on cho-kai
●→○ One-way involvement	●○ Participation with services from cho-kai
●○ No involvement	●○ Participation with interactive involvement (providing services each other)
※ 1 ... and △ have same patterns of involvement	

Fig.2. Patterns of involvement of residents of cho community in Jizo-bon

Diversity in the Community from Analysis of participants in Jizo-bon

Outline of Field Research

Three areas were selected for field research (Fig.3). All areas are located in the central area of Kyoto city. The percentage of apartment household among all residents is high in every area. The outline of the preliminary questionnaire is shown in Table 1. In the field research, we visited the places of Jizo-bon and archived simple questionnaire for participants about their age, sex, history of residence and house type etc. The preliminary questionnaire revealed that about 80% of 93 cho communities had a Jizo statue and managed their own Jizo in particular ways characteristics of their community. Further, over 80% of cho communities held Jizo-bon (Table 2). It also showed that the scale of Jizo-bon (number of residents called to participate in Jizo-bon) was flexible. The maximum was 135 persons and the minimum only 3 persons.



Fig.3. Location of the areas selected for survey in the central area of Kyoto city

Actual Condition of Participants to Jizo-bon

The preliminary questionnaire showed that households of individual houses basically tend to join the *cho-kai* and are called to participate in *Jizo-bon*. On the other hand, households of apartments tend neither to join *cho-kai* nor called. The segmentation of a *cho* community typically emerging, the relationship between individual households and apartment households is a serious

Table.1. Outline of the preliminary questionnaire

Target	Officers of <i>cho-kai</i> of all 93 <i>cho</i> in the 3 areas of field survey
Contents	Maintenance and Care of <i>Jizo</i> , Management of <i>Jizo-bon</i> and <i>Cho-kai</i>
Method	Distributing questionnaire sheets through the area managment organizations and collecting with mail.
Period	June in 2012
Results	Answers were collected from 81 <i>cho</i> (87.1%)

problem that cannot be overlooked. Therefore, we tried to understand the actual situations of *Jizo-bon* by focusing on apartment households that usually find it difficult to involve in communities.

Table.3 shows situation of participants on *Jizo-bon* from apartment households in *cho* communities which we could identify. Fig.4 shows involvement of residents on *Jizo-bon* by applying the model we developed earlier to actual situations shown in Table.3. In Fig.4, residents of the mark “○” and “◎” are not distinguished and both of them are expressed in the mark “○” because we do not deal with management of *cho-kai* at this time.

In several *cho* communities, the households of apartments are called to participate in *Jizo-bon* (J03, J05 and Y04 etc.) and they actually participate in it. However, it is noted that call and participation also tend to be closed to the households individually joining *cho-kai* (Pattern 3 in Fig.4). On the other hand, in other several *cho* communities, residents who are not called to participate (Δ) actually participate in *Jizo-bon* on

the day (Pattern 4 in Fig.4). Some of them participated in *Jizo-bon* for the first time. These results suggest that *Jizo-bon* is an important opportunity for residents to become involved in *cho* and *cho-kai*. Thus, it is safe to say that actors involved in *cho* communities are increasing through *Jizo-bon* and communities acquire the “diversity”, one of fundamental factors fostering resilience.

Area	Cho	Joining of apartment households on <i>cho-kai</i>	Number of participants from apartments	Total No. of Answers
T	T01	Joining (householdwise)	6	7
	T02	Joining (Buildingwise)	4	15
	T03	No Joining	1	18
	T04	Joining (Buildingwise)	0	12
	T05	No Joining	3	21
	T06	Joining (householdwise)	9 #1	34
	T07	No Joining	2	19
	T08	No Joining	0	4
	T09	—	—	9
	T10	No Joining	—	14
	T11	No Joining	2	14
	T12	Joining #2	2	24
	T13	Joining (Buildingwise)	0	24
	T14	No Joining	6	26
	T15	Joining #2	0	36
T16	No Joining	0	15	
T17	No Joining	2	12	
T18	Joining (Buildingwise)	1	17	
J	J01	Joining (Buildingwise)	0	6
	J02	No Joining	0	16
	J03	Joining (householdwise)	9 #1	38
	J04	Joining #2	2	27
	J05	Joining (householdwise)	9	22
	J06	No Joining	0	13
	J07	No Joining	0	10
	J08	Joining (Buildingwise)	0	19
	J09	Joining (householdwise)	3 #1	7
	J10	Joining #2	4	20
	J11	Joining (householdwise)	1 #1	15
J12	No Joining	0	19	
J13	Joining (Buildingwise)	0	19	
J14	No Joining	2	26	
J15	Joining (Buildingwise)	0	9	
J16	Joining (Buildingwise)	1	10	
Y	Y01	Joining (Buildingwise)	1	11
	Y02	Joining (householdwise)	2 #1	11
	Y03	No Joining	0	26
	Y04	Joining (householdwise)	11 #1	1
	Y05	Joining (householdwise)	4 #1	37
	Y06	Joining (householdwise)	5 #1	14
	Y07	Joining (Buildingwise)	0	32
	Y08	—	—	8
	Y09	Joining (Buildingwise)	4	16
	Y10	Joining (Buildingwise)	0	27
Y11	Joining (Buildingwise)	0	30	
Y12	—	2 #1	32	
Y13	—	—	25	
Y14	Joining (Buildingwise)	0	9	
Y15	Joining (householdwise)	5	10	

Table 3. Range of call for participation to *Jizo-bon* (focusing on apartment households)

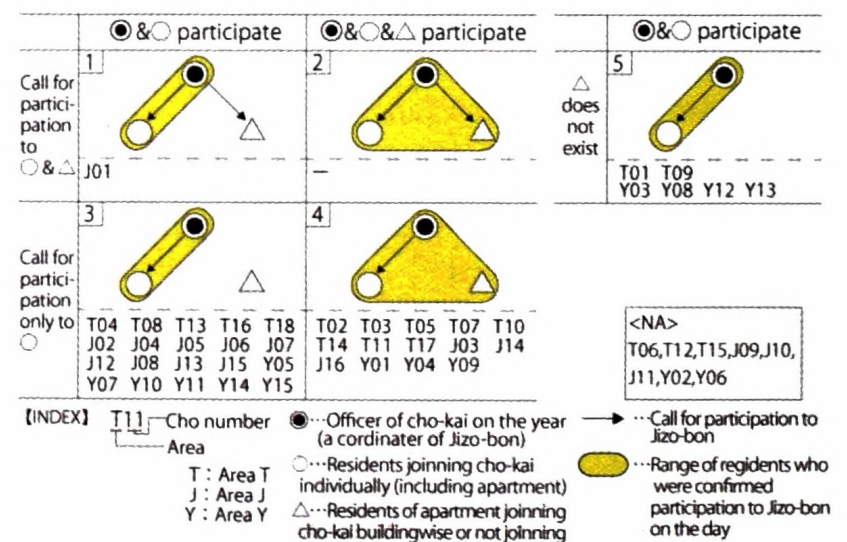


Fig. 4. Pattern of participation in *Jizo-bon*

Factors Facilitating Diversity of Participants

Table.4 shows events observed in *Jizo-bon* on the day. The event having religious aspect such as “decoration of *Jizo* statue” and “reciting sutra” are held in almost all of *cho* communities. In addition,

the events easy to join in for various generations such as “*fuku-biki*” (lottery) and “distribution of sweets and other food for an offering” and events mainly for fostering friendships among adults such as “playing game” and “meal meeting” are also hold in many *cho* communities. These events can be selected taking into account the character and situation of the *cho* community (age composition of residents, capacity of event management etc.). As a result, multiple events are combined in order to meet community demands and conducted considering the need to reduce of load on each member. The flexible characteristic is one of reasons why people can casually participate in *Jizo-bon*.

Contents of events	Area		T		J		Y		Total	
	Cho	%	Cho	%	Cho	%	Cho	%	Cho	%
Buddhism ceremony	Decorating Jizo statue	2	12.5	3	15.0	3	12.5	10	14.7	
	Rotating rosary, reciting sutra	15	62.5	11	55.0	14	58.3	40	58.8	
Distribution	Distribution of sweets	1	4.2	1	5.0	2	8.3	4	5.9	
	Distribution of lottery	15	62.5	8	40.0	11	45.8	34	50.0	
Playing	Lottery for children	15	62.5	8	40.0	11	45.8	34	50.0	
	Lottery for adult and elders	11	45.8	6	30.0	9	37.5	26	38.8	
Food & meeting	Children's play	12	50.0	8	40.0	9	37.5	29	42.6	
	Playing Game (Bingo, Quiz etc.)	12	50.0	7	35.0	12	50.0	31	45.6	
Other	Lunch meeting	6	25.0	4	20.0	7	29.2	17	25.0	
	Dinner meeting	8	33.3	3	15.0	2	8.3	13	19.1	
	Meeting for reviewing	9	37.5	10	50.0	6	25.0	25	36.8	
	Convivial meeting in Hotel	1	4.2	0	0.0	1	4.2	2	2.9	
Other	3	12.5	2	10.0	4	16.7	9	13.2		

A percentage in all cho : <20% : 20%<70% : 70%<

Table 4. Events conducted in *Jizo-bon* (n=68 multiple)

Table 5 shows the location of various events in *Jizo-bon*. From the preliminary questionnaire, it was found that private spaces such as inside the sites or rooms of individual houses are usually selected as location. Based on studies, it is observed that on the day of *Jizo-bon*, events are hold in the open spaces or places such as *Mise-no-ma* (shop space facing road) of *Kyo-machiya* (traditional wooden town house in Kyoto), car ports at ground level of individual houses, entrance halls of apartment houses, outdoor car park etc. Other places used are also public open space such as the main street or site of Buddhist temple or shrine. These open or public characteristics of places used in *Jizo-bon* events naturally enhance communication among residents and provides opportunities even for residents who are usually not so active in community activity to participate. For example, in J03 *cho* community, the whole space of the *cho* is used for *Jizo-bon*. Multi spaces such as street and buildings are arranged and decorated

Place	Area		T		J		Y		Total	
	Cho	%	Cho	%	Cho	%	Cho	%	Cho	%
Near to a shrine	4	16.7	3	15.0	3	12.5	10	14.7		
On street	2	8.3	2	10.0	3	12.5	7	10.3		
On narrow alley	0	0.0	1	5.0	1	8.3	2	2.9		
In site of private houses	12	50.0	9	45.0	5	20.8	26	38.2		
At room of private houses	4	16.7	12	60.0	5	20.8	21	30.9		
In site of apartment houses	1	4.2	0	0.0	1	4.2	2	2.9		
In site of other buildings	2	8.3	0	0.0	2	8.3	4	5.9		
In site of temples or shrine	3	12.5	3	15.0	2	8.3	8	11.8		
Others	2	8.3	0	0.0	1	4.2	3	4.4		

A percentage in all cho : <10% : 10%<30% : 30%<

Table 5. Places used in *Jizo bon* (n=68 multiple answer)

with items like lanterns and flags (Fig. 5). Decoration of *Jizo* statue is held at the *mise-no-ma* of *Kyo-machiya*. People set up temporary wooden balconies and tents in front of the *Kyo-machiya* or on the street and conduct “*juzu-mawashi*” and hold various other events. In Y14, *cho* community, community scale and the number of events in *Jizo-bon* is less than others because of a decrease in number of children and the aging of residents (Fig. 6). They use a car port in the ground floor of an individual house for “decoration of *Jizo*” and “*juzu-mawashi*”. Thus, *Jizo-bon* is basically able to be held with minimum space and minimum events (mainly, religious events).

People can improve attendance in *Jizo-bon* by arranging a number and variety of events and places. The “flexibility” is one of reasons *Jizo-bon* has succeeded for a long time because people can select appropriate style corresponded with each *cho* community’s situation and capacity.

Redundancy in the Community from Analysis of Management Actors of *Jizo-bon*

Outline of Field Research

We selected 2 *cho* communities (S *cho* and K *cho*) in the area “Y” which is one of research areas studied and archived the questionnaire survey for residents about their involvement to *Jizo-bon* and community management.

S *cho* has 75 residents and 45 households (including 14 households in an apartment house) and is mainly made up of individual houses with most of the residents having lived in the *cho* for a long time. Various events were held in *Jizo-bon* of 2013 and approximately 50 persons (including children of families and relations not living in S *cho*) participated in them.

K *cho* has 216 residents and 150 households (including 116 households in 4 apartment houses). Percentage of apartment households in K *cho* is relatively high. K *cho* also held various events in *Jizo-bon* and about 60 residents participated in it.

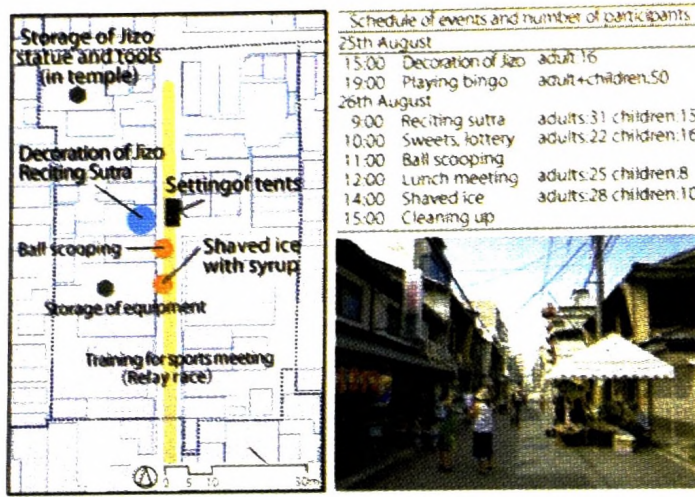


Fig. .5. Jizo-bon in J03 cho (Case of Jizo-bon well attended)

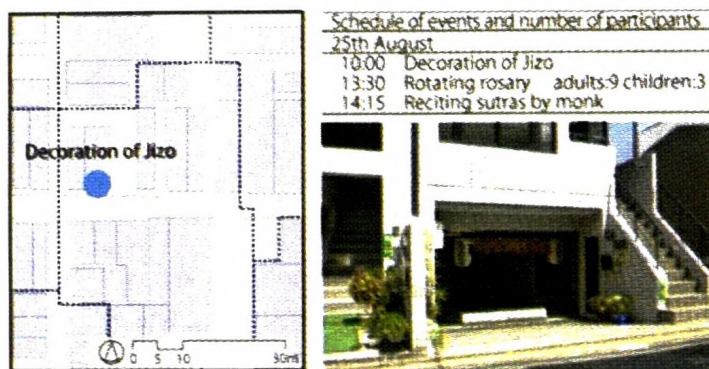


Fig. 6.. Jizo-bon in Y14 cho (Jizo-bon held in minimum)

Jizo-bon of both S cho and K cho were well attended judging from number of participants and variety of events. In K cho, some residents of an apartment individually joined in cho-kai and they usually cooperate in the activities of cho-kai. On the other hand, in both S cho and K cho, residents who can take charge of community management as officers is decreasing due to aging and change of population and people are afraid that the load of each resident is increasing.

Involvement of Residents in Management of Jizo-bon

In S cho, about 80% of households are involved in community management according to the results of the questionnaire. It was also found that not all households are necessarily deeply involved in community management. However, more than 80% of residents who answered the questionnaire have participated in Jizo-bon and a similar percentage have been in charge in management of Jizo-bon. S cho's residents have lived in the cho for a long time and they seem to have fostered community relationships while managing cho-kai and Jizo-bon by themselves.

In K cho, the percentage of residents who has been charge in cho-kai are less than S cho (32%,:8 persons of a total of 25). However, nearly 70% have been in charge as sub-group leader.

Involvement of K cho residents in community management is limited and nearly half have no relation. On the other hand, over 70% of residents who answered the questionnaire have participated in Jizo-bon. Of them, 17 residents have been in charge of Jizo-bon management and 18 have cooperated in Jizo-bon. These results suggest that residents have built relationships with cho community through Jizo-bon management.

Fig. 7 shows the involvement of residents in management of cho-kai and Jizo-bon using the model we developed earlier. Some residents are in charge of Jizo-bon management although they are not involved in cho-kai management (2 persons in S cho, 8 persons in K cho shown by mark "○"). It was also confirmed that some residents have relations with cho community although they do not individually join in cho-kai. This result shows that some residents actively relate to cho through Jizo-bon. It is remarkable that there is involvement of residents such as 1) those who moved into the cho recently, 2) single households and 3) residents with less relation with cho although they have lived in the cho for a long time. Relationships not only through general community management organizations such as cho-kai but also through Jizo-bon can let people who find it usually difficult to have relations with the community to be charge in community management. This means that Jizo-bon enriches channels for people getting involved in communities. As a result, Jizo-bon is contributing to reduction in "redundancy" in the community and the problem of "free rider" is solved to some extent.

Fig.7.. Patterns of involvement of answerers to Jizo-bon

Involvement on Jizo-bon		Residents joining in management of cho-kai (○)	Residents not joining in management of cho-kai (○)	Residents not joining in cho-kai (△)
Participation Management	Contents of involvement			
No participation on the day	No involvement			Scho: 2 persons Kcho: 9 persons
	One way	No participation on the day despite receiving call for participation	Scho: 0 persons Kcho: 0 persons	Scho: 0 persons Kcho: 0 persons
	Interactive	No participation but joining in management (ex. preparing)	Scho: 0 persons Kcho: 1 persons	Scho: 1 persons Kcho: 1 persons
Participation on the day	No involvement			Scho: 0 persons Kcho: 0 persons
	One way	Participating on the day and receiving service from cho-kai	Scho: 0 persons Kcho: 0 persons	Scho: 1 persons Kcho: 3 persons
	Interactive	Joining in management and receiving service from cho-kai	Scho: 8 persons Kcho: 13 persons	Scho: 2 persons Kcho: 8 persons

Factors Facilitating Redundancy of Involvement in Communities

As shown in Fig.8, reasons of participation in *Jizo-bon* varies from resident to resident. In *S cho*, 11-13 residents answered “praying for *Jizo*”, “praying to ancestors”, “friendship among residents,” “to carry out duties in *cho-kai*” and “to pray for children’s fun and safety”. In *K cho*, residents who answered “friendship among residents” were most numerous. “Praying for *Jizo*”, “to pray for children’s fun and safety” and “to sustain traditional events” were second numerous. The

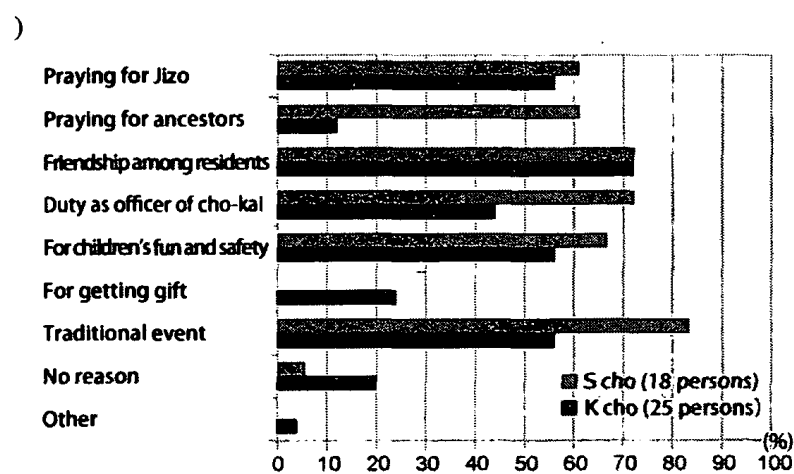


Fig.8. Reason to participate in *Jizo-bon* (multiple answers) results suggest that residents can participate in *Jizo-bon* for various reasons depending on each resident's interest and demands.

Conclusion -

This study revealed that *Jizo-bon* certainly has the possibility of improving resilience of local communities in terms of "diversity" (variety of actors who join in the community) and "redundancy" (multiplicity of channels through which actors are involved in their community). These are the two main conditions for preparing ability in resilient communities and show the key roles of *Jizo-bon* in "*Machi-zukuri*" (community management) at times of uncertainty. The fact that *Jizo-bon* has been sustained by people for a long time and is varied in its characteristics from not only place to place but also time to time expresses the flexibility of its management system and strong solidarity due to its religious aspects and traditionality. This study confirmed these basic characteristics of *Jizo-bon* and clarified transformation of *Jizo-bon* based on them through a study of *Jizo-bon* in the urban central area of Kyoto. Community resources like *Jizo-bon* have various aspects such as cultural, traditional, religious and social. They are unique resources fostered in urban historical areas over a long time and difficult to restore when it is lost even at once.

Thus, it is true that the resources should be preserved from external change such as social change, natural disasters and urban development. However, considering its characteristic flexibly changing itself corresponding to external change, it is essential that we conserve and regenerate *Jizo-bon* while mobilizing it for community design and management in the contemporary context. Mobilizing and fostering community resources considering historical value and context are crucial in community design and management.

Notes

1. S.B.Manyena, The concept of resilience revisited, *Disasters*, 2006 **30** (4), 433-450.,
2. Resilience Engineering: Concepts and Precepts (eds. E. Hollnagel, N. Leveson and D. D. Woods), 2006, CRC Press, USA.
3. A.Zolli and A.M.Healy: Resilience -Why Things Bounce Back, *Business Plus*, 2013
4. "Area" in this study means community units called "*Moto-gakku*" in Kyoto. They are former school units which originated with the first introduction of primary school institution in Japan at the beginning of the Meiji period. It is composed by 20-30 *cho* and has a role in area management.
5. *Cho-kai* is composed of sub-groups called "*Kumi*". They support the work of officers mainly in providing information to each household and collecting membership fee of *cho-kai* etc.