

Discussion on the factors to be identified for the sustainability of community-based disaster management (CBDM)

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Factors for Sustainability of CBDM (Shaw 2004)

Based on the flood case study of Bangladesh, and experiences of case studies from other countries for earthquake and cyclone, a few common factors are identified for sustainability of CBDM. These are:

1. A “culture of coping with crisis” and “ culture of disaster reduction” exist.
2. Risk assessment process involves participation of people and incorporates their perception of vulnerability and capacity.
3. **Community and supporting agencies share common motivation and ownership for the initiation and sustainability of CBDM.**
4. **Genuine people’s participation within capacity building objectives, with specific focus on important groups like women, elderly, children and ethnic minorities.**
5. Well-delivered training inputs in accordance with the objectives of the project and the needs of the community for training.
6. **Wide stake holder’s involvement and participation. Effective networking and knowledge Capitalization.**
7. Accumulation of physical, technological and economic assets to reduce hazards and vulnerability.
8. Legislation and in-corporation of CBDM in development planning and budgeting.

Factors for Sustainability of CBDM listed by Shaw are...

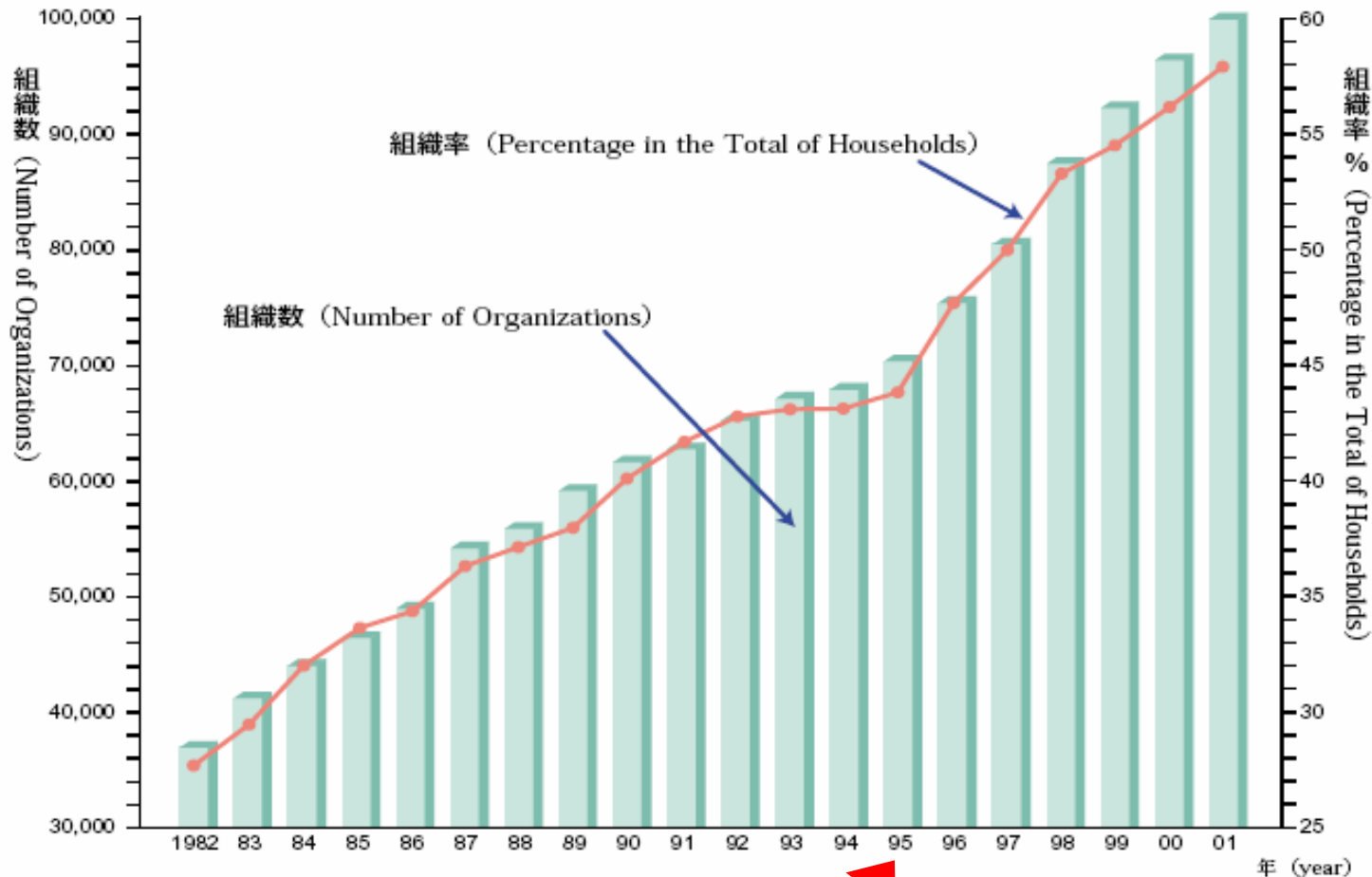
...not always the case...for this purpose
we introduce our case study from
Kishiwada, Osaka, 12.2005 – 02.2006

...are the case. Here we will show one of
our examples from Nagoya that
community people themselves recognizes
the importance of sustainability.

The organization of Jishubo

- Jishubo, literally meaning “autonomous organization for disaster reduction”, is a neighborhood association for disaster preparedness and rescue activity.
- Normal time activities:
 - To organize disaster drills, educate residents, patrol their residential area, and maintain rescue tools.
- Emergency time activities
 - To guide refugees to a shelter, rescue residents, give first-aids, and supply foods and water.
- Organizing Jishubo is persuaded by government by using traditional community governance unit, Chonaikai.

Jishubo organization rate



Cabinet Office: Waga kuni no saigai taisaku
(Disaster measures in our country), 2002

Kobe earthquake → revision of Basic
Law on Natural Disasters. Jishubo
development is government's effort duty

Problems in Jishubo system

- Government is interested in improve organization rate, but is reluctant to help specific activities of specific groups.
 - Fluctuation of quality depending on their representatives.
 - Guarantee the organization sustainability, but lack of contentious activities.
 - Members' attitudes are rather passive as being “mobilized in neighborhood events” than actively “participating to enhance disaster preparedness”.
- What makes people feel “participated”, and obtain the knowledge ownership for disaster reduction in such an organization?

Case study:

12.2005 – 02.2006 a 3-days long workshop (1 day every 2-3 weeks) on disaster preparedness was organized by the Kishiwada city government of Osaka Prefecture in Japan.

			Sex * Age Crosstabulation			
			Age			Total
			20-30	40-50	60-70	
Sex	Male	Count	0	4	17	21
		% of Total	0.0%	10.8%	45.9%	56.8%
	Female	Count	2	11	3	16
		% of Total	5.4%	29.7%	8.1%	43.2%
Total		Count	2	15	20	37
		% of Total	5.4%	40.5%	54.1%	100.0%

The purposive sample consisted of 37 members of *Jishubo*. 21 males (56.76 %) and 16 females (43.24%). 20 of them was in the age of 60-70 years old (17 – males, 3 – females). 15 in the age of 40-50 years old (4 males, 11-females). The smallest age group was 20-30 years old people represented by 2 females (5.4%). So residents over 40 years old were strongly represented while other groups had not been on the meeting.

Questionnaire design

Kendall's Tau-b	Reason of attendance	Scope of deliberation (Webler, Tuler 2001)	Sense of Involvement
Satisfaction from the meeting	?	?	?
Perceived increase in awareness	?	?	?
Perceived practical use of knowledge	?	?	?

Reason of attendance

Kendall's <u>Tau-b</u>			Reason of attendance			
			I was asked by the Local Citizens' Association.	Because I saw the ad.	Because I wanted.	If I could have said no I wouldn't have attended.
Perceived satisfaction, awareness, practical use of knowledge	General satisfaction from the workshops.	Correlation Coefficient	-.111	-.235	.369	-.438*
		Sig. (2-tailed)	.602	.376	.134	.050
		N	20	13	16	18
	Through the series of workshops I think my knowledge, awareness and coping capacity have increased.	Correlation Coefficient	-.143	-.405	.439	-.377
		Sig. (2-tailed)	.490	.116	.068	.085
		N	20	13	16	18
	I can make practical use of what I have learnt during the workshops.	Correlation Coefficient	-.067	-.328	.202	-.164
		Sig. (2-tailed)	.745	.204	.402	.454
		N	20	13	16	18
**. Correlation is significant at the 0.01 level (2-tailed)						

As it can be seen in the table, there seems to be no strong relation between the reasons of attendance and “Increase of knowledge/awareness/capacity” and “Practical use of knowledge”. However there is a negative relation significant on the level 0.05 between those who did not want to attend (if I could I would have said no) and the “General satisfaction from the workshops”. It means that those who would like to not attend if they could have said no, is not satisfied through the workshops but at the same time is not significantly different from the others in terms of perceived knowledge and skills increased.

Scope of deliberation

		Kendall's <u>Tau-b</u>	Scope of deliberation		
			I had a strong intention to express my opinions.	My opinion has been understood well, listened and reflected in the discussion	I had an opportunity to set or modify the agenda.
Perceived satisfaction, awareness, practical use of knowledge	General satisfaction from the workshops.	Correlation Coefficient	.289	.245	.183
		Sig. (2-tailed)	.167	.245	.382
		N	20	20	20
	Through the series of workshops I think my knowledge, awareness and coping capacity have increased.	Correlation Coefficient	.322	.220	.262
		Sig. (2-tailed)	.131	.307	.221
		N	20	20	20
	I can make practical use of what I have learnt during the workshops.	Correlation Coefficient	.245	.192	.132
		Sig. (2-tailed)	.240	.361	.528
		N	20	20	20

Scope of deliberation, the variable which represents the extent of individual freedom and/or influence that individual may be given in order to influence the participatory process is not correlated to satisfaction nor perceived learning and practical use of knowledge. This means that the scope of individual freedom to express one's ideas and opinions of the participation process is found to be not necessarily important.

Sense of Involvement

		Kendall's <u>Tau-b</u>	Sense of Involvement		
			I have been treated as a partner and part of the group.	There was enough time for self-introduction of every participant of the workshop.	Everyone who participated had the same opportunity to express his/her opinion equally.
Perceived satisfaction, awareness, practical use of knowledge	General satisfaction from the workshops.	Correlation Coefficient	.716**	.285	.587**
		Sig. (2-tailed)	.001	.178	.007
		N	20	19	20
	Through the series of workshops I think my knowledge, awareness and coping capacity have increased.	Correlation Coefficient	.798**	.369	.589**
		Sig. (2-tailed)	.000	.088	.008
		N	20	19	20
	I can make practical use of what I have learnt during the workshops.	Correlation Coefficient	.716**	.289	.667**
		Sig. (2-tailed)	.001	.172	.002
		N	20	19	20
** . Correlation is significant at the 0.01 level (2-tailed)					

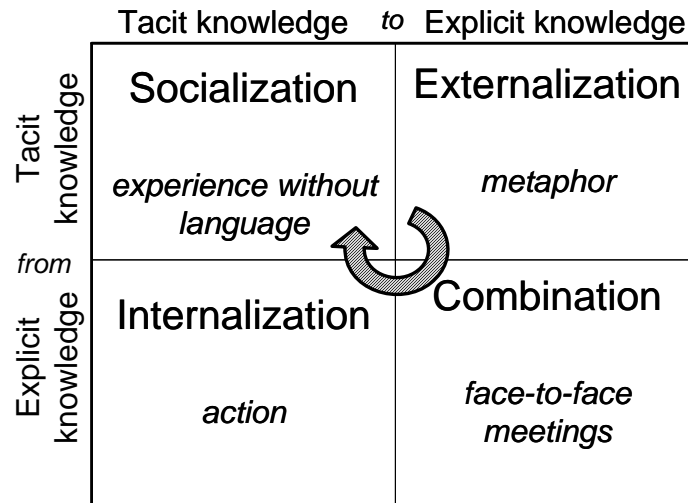
As for the sense of involvement variable, Table 4 shows that, 2 of the 3 questions representing “sense of involvement” variable are strongly (0.01 sig. level) correlated with perceived satisfaction with the meeting, perceived learning during the meeting as well as the perceived practical use of the knowledge taught during the workshops. This kind of sense of involvement is interpreted as a relevant variable to be considered when designing effective organizational frameworks for participatory processes in Japan.

Results

Kendall's Tau-b	Reason of attendance	Scope of deliberation (Webler, Tuler 2001)	Sense of Involvement
Satisfaction from the meeting	- ✓	X	+ ✓
Perceived increase in awareness	X	X	+ ✓
Perceived practical use of knowledge	X	X	+ ✓

“Well-delivered” training?

- Case in Nagoya “Community diagnosis”.



- Diagnostic survey → Prescriptive meeting

Prescriptive workshop (Apr. 2005)



Understanding the diagnostic survey results

List up local ideas to decrease weak points



Importance of sustainability found as community's local knowledge

- (Regarding to food storage) “Let us know to encourage personal storage repeatedly”.
- “We have a vague consciousness on a disaster. But it is necessary for our sense to be stimulated by posters and other printed materials to be always aware of it”.
- The keywords such as “repeatedly” and “always aware of” in the above examples indicate that they are aware of the importance of repetitive actions and continuous signals in daily life. This finding also implies that community people realize that disaster preparedness is an issue with low priority in their life and easily forgotten.

Conclusions

	Kishi wada	Nago ya
1. A “culture of coping with crisis” and “ culture of disaster reduction” exist.		
2. Risk assessment process involves participation of people and incorporates their perception of vulnerability and capacity.		
3. Community and supporting agencies share common motivation and ownership for the initiation and sustainability of CBDM.	X	
4. Genuine people’s participation within capacity building objectives, with specific focus on important groups like women, elderly, children and ethnic minorities.	X	
5. Well-delivered training inputs in accordance with the objectives of the project and the needs of the community for training.		✓
6. Wide stake holder’s involvement and participation. Effective networking and knowledge Capitalization	X	
7. Accumulation of physical, technological and economic assets to reduce hazards and vulnerability.		
8. Legislation and in-corporation of CBDM in development planning and budgeting		