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Roles of microfinance in critical environmental transition by natural disaster: Case study of resettlement after the Indian Ocean Tsunami in 2004

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Introduction

In order to help the victims to adapt to the environmental transition after a disaster, it is better to reconstruct houses affected by disasters in the same place rather than to relocate them to different places. However, recent examples of natural disasters indicate that there are inevitably situations in which people cannot avoid housing relocation (Oliver-Smith, 2009). It is pointed out that housing relocation after disasters is a critical environmental transition for the victims.

The word “environment” as used here is taken to include different types of environment such as physical, social and cultural. In addition, the “environmental transition” for people is likely to be more difficult if change of environment is of multiple types.

This study focuses on a neighbourhood community in Sri Lanka and clarifies the adaptation of individuals in the community to environmental transition due to housing relocation in the aftermath of the Indian Ocean Tsunami in 2004. The number of people dead or missing due to the tsunami in Sri Lanka totalled 40,959 (DCS, 2005) and over 830,000 people were relocated due to the tsunami and subsequent reconstruction policy. The people affected by the tsunami and relocation are mainly small fishery families and their lifestyle seems not to be adaptable to transition from coastal areas to inland areas (Wijayaratne, 2003).

Settlements in Sri Lanka are generally composed of about 40 to 60 households and they are called “watta”. Watta means “land” in local

language and watta dwellers have similar socio-economic characteristics such as jobs, kinship, income level, ethnicity and caste (Silva and Athukorala, 1991). Those different communities were mixed in resettlement sites and it often caused conflict among residents and instability of resettlement sites.

In 2008 I researched (Maeda, 2012) all resettlement sites (a total of 14 sites) in the Welligama area of the southern part of Sri Lanka and clarified relationships between the physical environment of resettlement sites and continuity of residence in resettlement sites. In addition, this chapter focuses on the social environment of a resettlement site and aims to clarify the effects of microfinance on adaptation of the victims to environmental transition due to relocation to the resettlement site.

In this study, “physical environment” means location, numbers of house units, housing type (e.g. collective type, detached type) and institutions (e.g. meeting hall, school, commercial complex), and “social environment” means social relationships such as neighbourhood relationships, blood relationships and microfinance relationships and user/owner relationships of buildings and land.

Outline of field research

I selected for this case study a resettlement site that is located on an inland hill area and composed of 101 detached housing units (Figures 18.1 and 18.2). The resettlement site is improved from the original settlement in terms of disaster risk and quality of house structure and infrastructure and had a high stable settlement ratio (approximately 90%) as of December in 2008. On the other hand, the resettlement site is far from the beach and market and its inconvenience causes problems of life and job reconstruction for victims (especially fishermen). Furthermore, the resettlement site has problems of community.

For example, some residents feel anxiety about few acquaintances or relations in the resettlement site and hate to live with different caste in the neighbourhood (Maeda, 2013). I undertook a field survey in October of 2010 about microfinance which is supplied by non-governmental organizations (NGOs) (hearing about their activity and reference about record of group lending) and relationships of residents.

Characteristics of microfinance in the resettlement site

Microfinance is a small loan system for poor people and it supplies loans to a group which is generally composed of 5–10 persons without any

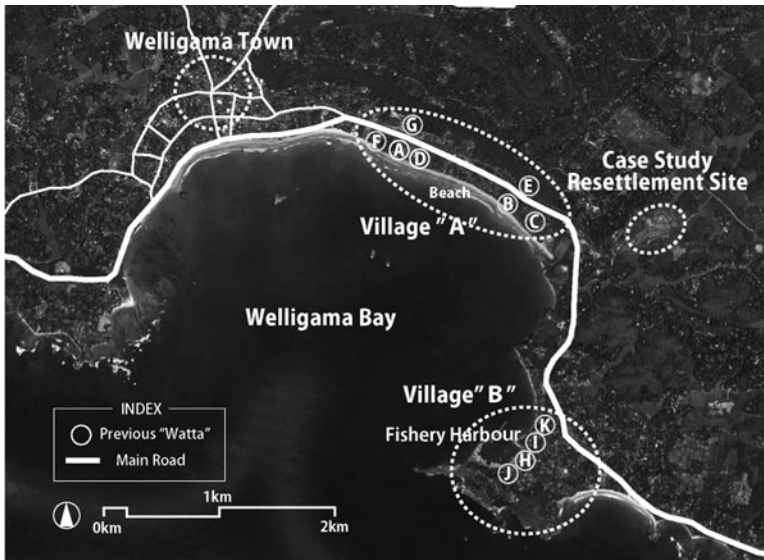


Figure 18.1 Location of previous settlements and resettlement sites in Welligama

security. In the resettlement site, a total of 46 members (all women) belong to six saving groups. There are two kinds of loan system in the microfinance. One is an NGO loan and another is a saving group loan. The repayment ratio of NGO loans is 100% and that of saving group loans is near to 100% except for one group (Table 18.1). It took about 1 year to prepare to start saving groups (Figure 18.3).

During this period, residents reduced outgoings in households by recycling household garbage and house gardening with support of NGO staff and they created funds to join the saving group. Furthermore, residents and NGO staff got to understand each other through the processes of cooperation in the saving groups. They could continue maintenance and utilization of houses and surrounding space with loans from microfinance, and NGO staff supported and enhanced productive activities.

Effects of microfinance on continuity of jobs

An NGO loan is funded by an NGO. A member who hopes to borrow money from an NGO fills in an application form with the reason why she/he needs a loan, a plan of repayment and signatures of all other members and then submits it at a weekly meeting of the saving group. The average amount of an individual loan is 5,000–10,000Rs (average

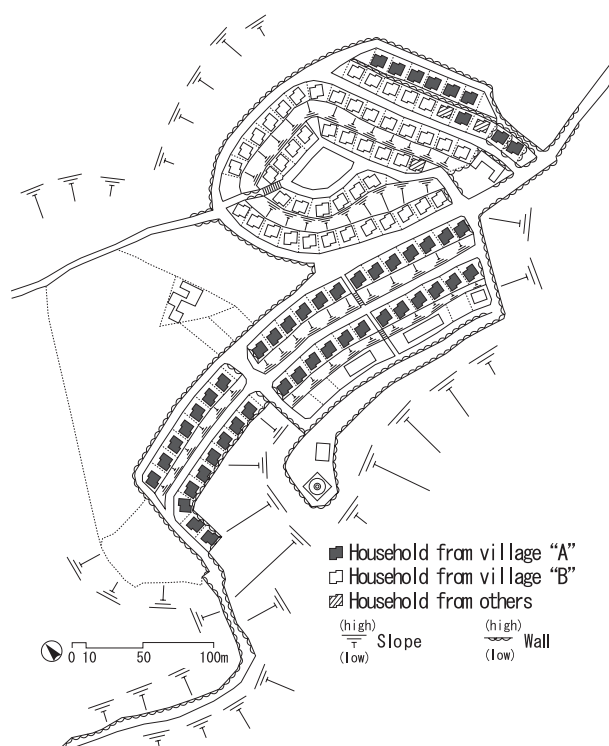


Figure 18.2 Layout of the resettlement site for the case study

household income per month is 10,000–30,000Rs) and people repay a loan within a half year. Members use NGO loans for their family's job such as a husband's fishery or for other jobs of family members, such as the coconut fibre industry and home gardens (Table 18.2). the income from women's jobs is generally small; however, it tends to be stable and thus it is useful for supporting the unstable income of fishery households. It is difficult for residents of the resettlement site to continue jobs because it is located at an inconvenient place and there are few livelihoods inside the resettlement site. However, residents continue jobs with loans by utilizing their house and surrounding space (Figure 18.4).

Saving group loans are funded by members of saving groups. A member who hopes to borrow from a saving group tells the other members and the loan requires agreement at the weekly meeting. The amount of saving loan is about 500 Rs at the first time. When members complete repayment they can borrow a larger amount the next time. Members of Groups A and B are especially active and their total amount of saving

Table 18.1 Borrowing and repayment of loans in each group

No. of groups	No. of members	Borrowing and repayment of loan							
		Savings group loan				NGO loan			
		Total amount of borrowing	Borrowing amount per member	Repayment ratio	Total times	Total amount of borrowing	Borrowing amount per member	Repayment ratio	Total times
A	9	420,750 Rs	46,750 Rs	100.0%	5	23,000 Rs	2,556 Rs	100.0%	5
B	6	122,100 Rs	20,350 Rs	100.0%	4	10,450 Rs	1,742 Rs	100.0%	4
C	12	128,550 Rs	10,713 Rs	100.0%	12	66,500 Rs	5,542 Rs	100.0%	12
D	5	41,400 Rs	8,280 Rs	92.3%	3	15,000 Rs	3,000 Rs	100.0%	3
E	9	44,250 Rs	4,917 Rs	96.0%	5	24,000 Rs	2,111 Rs	100.0%	5
F	5	23,900 Rs	4,780 Rs	68.2%	5	24,500 Rs	4,900 Rs	100.0%	5

* 1 Rs (Sri Lankan rupees) = about 0.9 Japanese yen (as of April 2010).

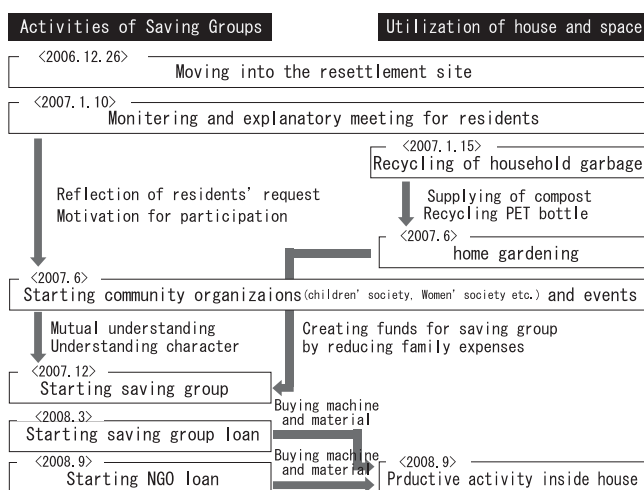


Figure 18.3 Process of starting a saving group in microfinance

Table 18.2 Spending of NGO loan

Spend of loan	Times	Total amount
Fishery	12	63,000 Rs
Coconut fibre industry	4	14,000 Rs
Handicrafts	3	20,000 Rs
Small shop	3	14,000 Rs
Dry fish (make & sell)	3	11,500 Rs
Dress making and repairs	2	9,500 Rs
Selling coconuts	2	9,000 Rs
Home garden	1	5,000 Rs
Selling clothes	1	5,000 Rs
Trading food & items	1	5,000 Rs
Masonry	1	5,000 Rs
Food production	1	2,450 Rs

Spent for member's job

Spent for other's job

loans is larger than NGO loans (see Table 18.1). Members use saving group loans for jobs similar to those listed for NGO loans. In addition, they also use them for living costs such as food, education and medical purposes (Table 18.3). For example, some members who have small children use saving loans for food and education such as stationery

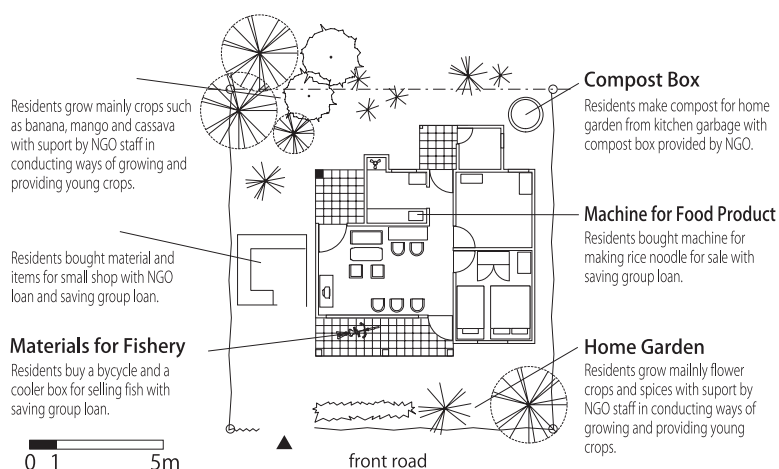


Figure 18.4 Typical jobs taking place inside and around the house

Table 18.3 Spending of savings group loan

Spend of loan	No. of persons
Fishery	23
Food	15
Transportation	14
Education	14
Medical expenses	13
Dry fish (make & sell)	9
Small shop	5
Food production	4
Handicrafts	4
Coconut fibre industry	3
Masonry	2
Fuel and light expenses	2
Dress making & repairs	2
Home garden	2
Selling coconuts	2
Selling clothes	2
Sending money	1
Spices (make & sell)	1
Trading food & items	1

Spent for member's job

Spent for other's job

Spent for living costs

or schooling. Some members who cannot easily access their previous settlement or job place use loans for transportation such as bus or taxi fees. Some members who are injured or sick as a result of the tsunami use loans for medical purposes.

Effect of microfinance on reformation of residents' community

Some saving groups are composed of members who came from the same settlement (village and watta) (Table 18.4). A watta is, as described above, a kin's dwelling unit and therefore a saving group includes blood relationships. A reason for success of microfinance in the resettlement site is utilization of existing neighbourhood relationships or blood relationships for organization and cooperation of saving groups. I examined this by analysing transformation of multiple social relationships among resettled households (Figure 18.5).

Other saving groups are composed of members who came from different settlements (Table 18.4). Their main previous settlements were villages A and B. The economic situation was different in village A and

Table 18.4 Relationships of members in each savings group

No. of groups	Number of members	Neighborhood relationships (original village and watta)	Blood relationship (number of members who have family or relations in saving group)	Micro Credit relationship (number of members who have experience to join)
A	9	village B (watta I:4, H:2, K:1), other village:2	4	6 (3)*
B	6	village A (watta B:5, A:1)	5	5 (3)*
C	12	village A (watta A:12)	6	8 (2)*
D	5	village B (watta I:4, J:1)	0	4 (1)*
E	9	village A (watta C:5, A:2, G:1, D:1)	2	6 (4)*
F	5	village A (watta F:1, G:1), village B (watta H:2, J:1)	0	4 (2)*

*Numbers in parentheses indicate the number of members who joined a micro-credit group in their previous settlement

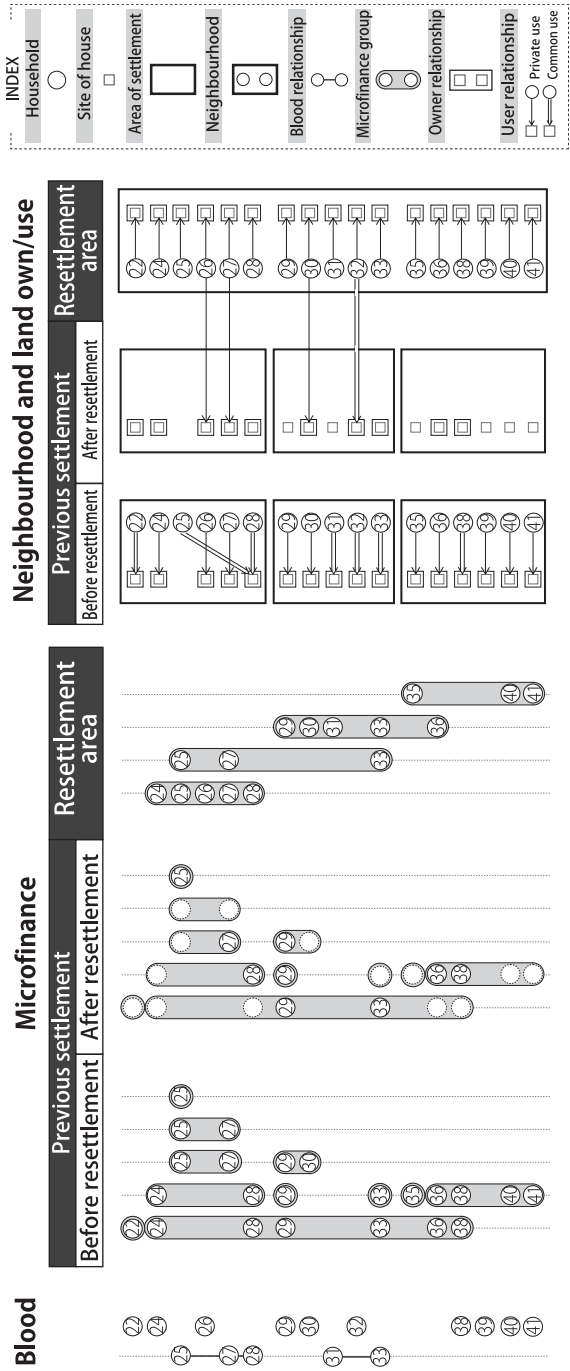


Figure 18.5 Example of analysis on multiple relationships among resettled households

village B and castes are also different in each watta. In interview research, NGO staff said that some residents at first hesitated to join in a saving group with those who are different from them in economic situation and caste. However, they actually join with them through experience of cooperating in saving groups and other related activities. The fact that people who have different social backgrounds join in the same saving group and they realize a high repayment ratio of loans indicates that they created new social relationships.

Conclusion

This study analysed the effects of microfinance on adaptation of the victims to environmental transition due to resettlement in Sri Lanka after the Indian Ocean Tsunami in 2004. The findings of this study can be summarized in three steps as follows:

Firstly, microfinance has an economic effect in terms of supporting the residents to continue their job with utilization of loans. It is notable that microfinance has most effect on women in fishery households, which are most seriously affected by the location of the resettlement site remote to the sea and scarcity of livelihood in a resettlement site.

Secondary, microfinance has social effects in terms of supporting residents to reorganize their social relationships among households through cooperation of saving groups with NGO staff and other residents. High repayment ratios of loans are observed even in a group composed of individuals who do not have neighbourhood relationships in previous settlements nor blood relationships. This phenomenon indicates a creation of trust among residents behind social barriers such as caste and economic class.

Finally, the effects described above show that microfinance has a key role in reducing the influence of critical environmental transition due to a large-scale natural disaster and in increasing continuity of residence in a new environment of resettlement sites.

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