

Community-based Hazard Mapping Project in Sri Lanka

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Background

Natural disaster events in Sri Lanka have shown an increasing trend in the last two decades. Recently in the Galle district, 16 people were killed and over 22,000 people were affected by the flood in May 2003. By the 2004 Indian Ocean Tsunami which made disastrous impacts on the affected communities in Sri Lanka, 4,330 lost their lives and 564 persons have been reported as missing (as of 05 April 2005) in Galle.

The findings of the questionnaire survey carried out by authors in March 2005 for the general public in Galle district reveals that the natural disaster related knowledge and awareness are considerably low in the area. Besides the comments made by government officials highlighted a dire need of educating various levels of community on disaster related issues. Of which the grass-roots level would be the most suitable level to disseminate the message over other levels since the informal links are relatively strong in Sri Lanka that in turn could be used as a strategy to expedite the process of information delivering in mass scale.

Objectives

- To raise public awareness of various categories of citizens on disaster reduction as a strategy of capacity building based on the findings of the questionnaire survey.
- To achieve a comprehensive and sustainable disaster risk reduction through improving capacities in all community levels starting from the grass-roots level which is crucial end to begin the process.

Outline of the Project

The beginning of the project, trainer's training was conducted in the District Workshop held in April 2006. The initial process started from a series of theoretical lectures by Japanese and Sri Lankan experts which was followed by practical sessions on disaster reduction. The practical session consists of community-based hazard mapping program of which the results were used to identify the disaster vulnerable areas in community neighborhood by the participants with the help of Japanese resource persons. In this exercise the total number of about 100 participants were divided into 10 groups with a view to evaluate their group outputs for comparison purposes and to identify the problems encountered by different work groups, to discuss them openly and to suggest possible remedying actions.

This process of trainer's training and the outcome made the participants trainers in their localities and they repeated the same exercise to educate the community to be proactive in actual disaster. The progress of the project was followed up by the Japanese experts in year of implementation. The Community Workshops were conducted from May 2006 to March 2007 in 19 DS-divisions. Activities in the Community Workshops are displayed in Figures 1 - 3. An example of survey result summarized by a group in a community workshop is shown in Table 1. Status of work performance in the communities is shown in Table 2. A total of 3,390 residents had participated in the 102 Community Workshops.

Conclusions

The project enhanced the people's knowledge on disaster risk reduction issues coupled with hands-on experiences on how to deal with a natural disaster minimizing both human and property losses as much as possible. The exercise also involved with education on proactive measures to reduce vulnerability and reactive measures as well to mitigate losses after an occurrence of disaster event. Participants showed positive response to activities in the workshops.

Keywords: community-based hazard mapping, disaster management, capacity building, grass-roots activity, Sri Lanka
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Figure 1. Exploration in the Local Area



Figure 2. Hazard Mapping



Figure 3. Presentation by Rapporteur

Table 1. An example of Investigation Summary (Baddegama)

Problems	Solutions	Responsibility
Sand mining at bathing places and near the houses	Prohibit sand mining	Divisional Secretariat, Department of Geology
Erosion of river banks	Plant protective vegetation	Divisional Secretariat, Department of Forestry
Rivers overflow in this area owing to the bend of the river	Plant bamboo and other varieties	Department of Irrigation
People living at hazardous places	Remove the people	Divisional Secretariat
River is deep due to sand mining	Install signal boards	Provincial council

Table 2. Breakdown of Community Workshops by DS-division

DS-division	Number of Participants	Number of Community Workshops
Benthota*	204	6
Balapitiya*	232	7
Karandeniya	230	7
Elpitiya	308	9
Niyagama	221	7
Thawalama	67	2
Neluwa	61	2
Nagoda	228	7
Baddegama	167	5
Welivitiya-Divithura	134	4
Ambalangoda*	143	4
Hikkaduwa*	163	5
Galle Four Gravets*	157	4
Bope-Poddala	296	8
Akmeemana	189	6
Yakkalamulla	88	3
Imaduwa	154	5
Habaraduwa*	211	7
Gonapinuwala	137	4
Total	3,390	102

Note: * means DS-division which is located in coastal belt.