

Project formulation study on

**DISASTER PREVENTION MEASURES BY COMMUNITY PARTICIPATION IN  
SOUTH ASIA REGION**

Report on

**WORKSHOP ON DISASTER RISK MANAGEMENT MEASURES WITH  
COMMUNITY PARTICIPATION**

Submitted to:

**JICA Study Mission**  
Kathmandu  
Nepal

Submitted by:



**National Society for Earthquake Technology – Nepal (NSET)**

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# 1. Introduction

## 1.1. The JICA Study Team

Considering the fact that South Asia is a region prone to a multitude of disasters, and there is a need to enhance capacities of all stakeholders in these countries by integrating disaster risk management activities into development sectors and also to engage communities, local and central government as well as NGO institutions in this quest, JICA commissioned a Team for a Project Formulation Study on Disaster Prevention Measures by Community Participation in South Asia Region for a period of July-September 2008. The Study selected Nepal as a model target country and earthquake as a target hazard. The Study Team consisted of three senior professionals, specialists in Community Based Disaster Risk Management and Participatory Activity Planning.

The Study Team visited Nepal during 31 July to 11 August 2008. The objective of the Study Team was to initiate a wide discussion with the stakeholders to make recommendations on:

- How to harmonize disaster management activities with existing community activities, and
- What measures/efforts should be taken by stakeholders involved in community based disaster risk management.

## 1.2. Involvement of NSET

The Study Team, based on a long term experience of the National Society for Earthquake Technology – Nepal (NSET) in earthquake risk management in Nepal and the Region, and also NSET's extensive experiences in working with Japanese institutions including the organizations involvement in past JICA study, commissioned to a) appraise the Team with initiatives implemented in Nepal since the previous earthquake disaster study by JICA and Home Ministry of Nepal, a) provide assistance to the team in meeting related central government, local government, donor and regional organizations based in Kathmandu who are contributing to Disaster Risk Management efforts in the country, and b) facilitation of a Workshop on Disaster Risk Management Measures with Community Participation on 11 August 2008. NSET also organized a field trip for the visiting Japanese team for appraisal of activities being implemented in the field.

This report covers only the workshop proceedings including discussions and conclusions arrived at.

# 2. The Workshop

## 2.1. Organizer of the Workshop

The workshop was organized by JICA Study Team at Yak Palace, Narayani Complex, Pulchowk, Lalitpur, Kathmandu, Nepal during 2-5 pm on 11 August 2008.



## 2.2. Workshop Attendees

A total of 25 representatives of different related organizations attended the workshop. A list of participants appears in Annex 1. The workshop was organized by Study Team at Yak Palace, Narayani Complex, Pulchowk, Lalitpur, Kathmandu, Nepal during 2-5 pm on 11 August 2008.

## 2.3. Workshop Objectives and Expected Outputs

The main objective of the workshop was to:

- 1) Share preliminary finding of the Study Team after conducting interviews with stakeholders – central and local government institutions, NGO/INGOs implementing DRM initiatives, UN System and donors supporting such initiatives, and communities that are being supported by the initiatives,
- 2) Get feedback on the findings from stakeholders, i.e. the workshop attendees, and
- 3) Discuss challenges and opportunities for going ahead in this quest, including CBDRM implementation. The challenges to be discussed, based on analysis of identified good practices, were:
  - a. Sustainability of efforts and results
  - b. Scaling up of initiatives throughout the country
  - c. Institutionalization of the lessons and results of the best practices, and
  - d. Discussion on other issues

## 2.4. Workshop Agenda

The agenda included opening remarks by Mr. Kenichiro Kobayashi, Chief of the JICA South Asia Division.

The JICA Study Team made three presentations on a) Mission Statement of the Study Team, b) Existing Disasters and Current Endeavour, and c) JICA's Capacity Development Strategy and Japanese Experience. These presentations set the scene for an elaborate discussion subsequently.

In order to meet the stated objectives of the workshop, the workshop allowed participants to a) present good practices in earthquake risk management in Nepal, b) identified suitable approaches that have worked successfully, c) and the challenges faced.

A guideline for discussion urged participants to identify good practices and involvement of community in the initiatives, urgent needs for effective DRM in the country, and ways for achieving sustainability, scaling up and institutionalization.

## 2.5. Workshop Proceedings

### Mr. Kenichiro Kobayashi, Chief of the JICA South Asia Division

Delivering his opening remarks, Mr. Kenichiro Kobayashi, Chief of the JICA South Asia Division, welcomed the participants and expressed sincere gratitude to NSET and JICA study team for organizing the workshop. He recalled that JICA since a long time has been a development partner of Nepal providing support and assistance of diverse range. Realizing the need to strengthen capacity of disaster risk management in responsible agencies, JICA



has so far dispatched many experts to Nepal and supported Earthquake Disaster Mitigation Study in Kathmandu Valley in 2001. Currently, two JICA experts are working very hard in two agencies – Mr. Yamamoto in Lalitpur Municipality, and Mr Koori working with NSET. Even though in Nepal we support by our experts, unfortunately every year Nepal faces big damage due to flood and landslide disasters and Nepal loses significant number of precious human lives. In addition, Nepal may have big earthquake any time. Then the question is what we should do? Nepal has many problems demanding immediate solution, for example, there are political problems every day, poverty alleviation challenges, gender and social inclusion challenges, provision of basic needs to the population such as health, drinking water, education etc. These challenges make everybody very busy thinking about tomorrow, not about the future. So it's not easy to take necessary measures for disaster risk management. Therefore it is necessary to act step by step, slowly by slowly – changing community's ways of thinking towards disaster preparedness and mitigation. This is the most important approach.

The purpose of the JICA Study Team is to learn Nepal's experiences in community based disaster risk management (CBDRM) from completed and on ongoing projects, and share lessons learned with colleagues working in this areas. Today's workshop is a good opportunity to exchange our views and opinion.

Based on the discussions outcome of the workshop, JICA will prepare a report reflecting the lessons learned in Nepal into JICA projects not only in Nepal but in the South Asia region. The discussions and lessons learned will also be useful for the Nepalese officials for considering reflecting the lessons in policy making.

Thank you for your time, wish you proactive and enthusiastic engagement in this workshop.

**Dr. Takahashi,**

DR Takahashi welcomed all participants, who have been engaged in promoting community based disaster risk management, and observed that CBDRM implementation is good in Nepal. He explained mission of this study.

For studying CBDRM in Nepal, the JICA Study Team visited community, heard from stakeholders, and this workshop. Obviously South Asia, including Nepal, is prone to a variety of hazards. In order to meet the challenges, capacity should be enhanced, especially by government, local government and participation of communities and NGOs should be encouraged.

JICA should introduce CBDRM in future projects as much as possible.

He also explained the objective and expected outcome of the mission. He said that the Study Team had a chance to select country in the region, and they selected Nepal as a model country, and earthquake as the target hazard. He was convinced that the experience of approach and lessons of Nepal can be applied in for example Bhutan, Pak, Bangladesh.

But the Team is also bearing in mind other hazards such as landslide and flood are equally important, especially in Nepal.

The team wants to increase understanding of stakeholders in Nepal: community, central government, local government, communities, NGOs and donor agencies – he said. He made the observation that most of the community based disaster risk management



(CBDRM) initiatives are being implemented by NGO with support by donor agencies. This is a new phenomenon, and the challenge for JICA is to sit this side of concepts.

He gave the details of the Teams activities in Nepal and stressed on the importance of the workshop.

**Mr. Fumihiko Yokoo, Community Based Disaster Risk Management 2, OYO International Corporation, Japan**

Mr. Yokoo stated that the visits to different organization revealed much on current and previous CBDRM endeavours, future plan and planning for improving the effectiveness of activities. He listed the range of organizations visited.

He referred to the JICA Study on Earthquake Disaster Mitigation Study for Kathmandu Valley in 2001, and said that after this particular project many things changed in Nepal.

He summarised the changes as:

- 1) Significant expansion of activities in DRM. Several important works were done. A lot of organizations say they are doing these activities. In 2001/32002 we didn't find such activities in Nepal. He listed major milestones.
- 2) Development of common language regarding disaster management such as Mitigation, preparedness and contingency plan. Earlier central government and also local governments did not understand simple words such as mitigation, preparedness and contingency plan etc. Now everybody talks about Hyogo FA 2005-2015 and how CBDRM based on HFA has been realized. Link between Poverty alleviation and DRM realized. Gender and children considered
- 3) Establishment of Networks by various stakeholders
- 4) Inclusion of DRM into development programs - earlier development was development – nobody talked about mitigation. Now more development programs include DRM e.g. Water storage in Lalitpur retrofitted water tank.
- 5) Expanding of activities from capacity development of individual and individual institutions to socialize and institutionalize
  - a. Initially, activity were undertaken mainly by NGO/volunteer – then gradually local governments got involved, and central government is also is involved in several activities, for example implementation of Building code.
- 6) Autonomous Activities of Communities: example Kshetrapaty DMC ward 17
  - a. First stage \_ awareness by community watching
  - b. Present: store emergency equipment, Retrofitting community hospital
- 7) There are good activities, but not enough activities, to mitigate earthquake disaster. So we have to consider and discuss and come back to this points:

**Ms. Tomoko Shaw, Participatory Planning, OYO International Corporation, Japan**

Ms. Shaw started with Japanese experiences in DRM. She informed the house that JICA has a guideline on CBDRM, and explained the main gist of the guidelines



She referred to Inamura no hi – how villagers evacuated the village after tsunami. She explained that usually there is always something related with community people with disaster mitigation; for example, she explained that the shrine along the Inamura No hi embankment is placed so that people come there every morning and pray by doing that they compact the soil making it stronger

She talked about the Kobe Earthquake which struck during the time when IDNDR was a global campaign, and showed video on Kobe earthquake, M7.2.

The Kobe earthquake triggered concept of CBDRM, and the 1<sup>st</sup> CBDRM project was initiated by the UNCRD, Kobe.

After IDNDR came ISDR, under ISDR CBDRM has been stressed – living with risk was published – then Kobe world conference was organized and since then, a lot of guidelines on CBDRM were published after 2006

JICA strategy about capacity development is not only transferring knowledge and technology, models and processes, but it is a process enhancing capacity of recipient countries to identify their own issues, setting targets, and solving the issues.

Research institutes, like DUDBC are also the key players. Local governments are also key players of CBDRM. The Ministries provide policies, and NGOs are the collaborating partners together with community organizations. As per the new policy, JICA will support all actors, not only community

This is a comprehensive capacity building program in 3 tiers

- 1) Individual – such as tech, knowledge, at organizational level, sharing, or equipment, all activities
- 2) Social level: integration of CDRM into policies, partnership of community and government, very important. It will lead to sustainability

Earlier only individual and organizations were targeted! Currently, social aspects are also considered!

She presented the standard flow of community plan and planning steps

- 1) Database, Risk assessment, and ranking
  - a. damage assessment and ranking
  - b. diagnosis date base; vulnerability, basic data such as building and results of social structure, level of awareness etc
  - c. awareness of citizen
  - d. suggestion by citizens – community people opinion – local government ask citizens to form a working group, advisory
- 2) Planning stage
- 3) Inclusion of citizen
- 4) Compiling issues of disaster management – city government dispatched experts to provide tech. assistance
- 5) Finally disaster management planning will be prepared

She described the case of Tokyo with explanation of damage estimation, including technical details such as liquefaction, fire, and other collateral hazards. In her presentation,



she several times referred to some similar works of CBDRM such as community watching, a Japanese methodology, and the publication of the Japanese folklore "Inamura no hi", both by NSET, as good examples of replication being successfully implemented in Nepal. She showed movies and photographs on several Japanese experiences in disaster mitigation.

**Mr. Ram Chandra Kandel, Director SESP/NSET** facilitated the discussion that followed. He invited participants to comment, suggest, express opinion on the messages in the presentations, issues raised and, if they want, to raise further issues. He requested the participants to focus on ways to go ahead considering the challenges of replicating and scaling up the best practices, how to achieve sustainability of community-based DRR efforts, and the ways to institutionalization of best practices.

**Mr. Bijay Upadhyay** then continued facilitating the workshop. He asked participants to write in meta-cards good practices (projects/initiatives, implementing agency, and other details) implemented by different organizations in aspects of disaster risk management in Nepal.

After the good practices were expressed, Mr. Upadhyay picked up the issue of Sustainability and asked participants to write down in meta-cards what should be done for ensuring sustainability of the initiatives and also to write what has already been done in this endeavour. He repeated the same procedures for the issues of scaling up or replication and institutionalization of the best practices in terms of what should be done and what efforts have already been made in meeting these challenges.

The participants used meta-cards of different colours for writing their opinion on the various issues – all the meta-cards, of different colours for different issues were stuck into the pin-board for collective observation. The cards were reorganized into different issues on the pin-board.

Annex 2 provides a copy of the meta-cards organized into the "Good Practices", 'Issues of Sustainability', 'Scale up / Replication', and 'Institutionalization'. The challenges on these issues were further subdivided into "What should be done" and what has been done".

Then discussion followed on what should be done on good practices, sustainability. The following paragraphs provide the expressions by the participants on the issues of good practices and challenges.

#### **Julie Dickens, ICIMOD**

Although the International Centre for Integrated Mountain Development (ICIMOD) is not specifically working on earthquake risk management (ERM), but approaches an methodologies that ICIMOD is employing for other hazards can be useful in terms of sharing experiences and lessons learned. ICIMOD is working on aspects of disaster risk management (DRM) on several hazards.

In hydrological disasters we have a project for Himalaya – Hindukush region covering Nepal, Pakistan, Bangladesh and India. Part of this project that could be of interest to this



workshop is our efforts on **documentation of local knowledge in disaster risk management, mainly** in flood preparedness in eastern Nepal and Pakistan. This is a best practice. We think that unless we take into account the existing local knowledge on disaster preparedness it will be difficult to implement DRM. Actually, there have been several case studies highlighting importance of local knowledge on disaster preparedness (DP) even in 70s-80s, but this consideration of local knowledge is still not implemented in field. As part of this project we have developed very simple framework on how on the use of local knowledge on DP, which can be replicated in any country for any type of disaster. We think that local knowledge should be combined with scientific knowledge. For this, we are developing model on how to integrate local knowledge with scientific knowledge.

For institutionalization, it is necessary to include such local knowledge into school curricula. Then generation of communities will realize that the knowledge available with them is important and can be employed for making them safe from disasters.

We are implementing another project **too much and too little of water** that focuses on understanding how implementation and non-implementation of policies affect community's capacities in adapting to climate change — draughts or floods, how communities adapt to climate change in the region. Expected outcome will be clear policy guidelines for policymakers.

Here I want to tell also about the role of regional organizations in documenting in key role and disseminating practices, because local NGOs have lots of experiences and information, but they don't have time and capacities in documentation. It is the responsibility of regional organizations such as ICIMOD to help local NGOs in such documentation of does it themselves.

**Mr. Madhav Pahari, UNCEF:**

I work in the area of Water & sanitation, so I will be confined to the issues of wat/san for now. Since we are one of the lead agencies to work with the government for water & sanitation and nutrition, advising the government on this issue, the experience and lessons learned are good for any kind of disaster.

First, let me tell you about our earthquake-related project for ensuring continued water supply in Lalitpur of Kathmandu Valley. The project is call Disaster Preparedness and Response Framework (DPRF). We learned lessons from the good research and findings of the JICA study of 2001 as the starting point. JICA report forecasts that there will be heavy damage to water supply system of Kathmandu Valley and that 90% of the system will not work after a scenario earthquake. So how to secure water during a disaster? There could be two options: either treat the water from the river which is heavily polluted and hardly possible. The other option is to draw groundwater in the valley. UNICEF, Lalitpur Municipality, and NSET, in collaboration with ECHO implemented this project. It consisted of three components: a) preparing local government's capacity to provide water – they are responsible for any kind of disaster and the municipality can use the documents prepared to seek funding from donors, b) create alternate mechanism for ensuring safety of affected/displaced population by identifying and planning the possible evacuation places. We worked closely with the local municipal residents, municipal council, district disaster relief committee (DDRC), and the district development committee (DDC), and c) installed





earthquake-resistant infrastructure including two treatment plants and other infrastructure so that we can provide uninterrupted water supply to the evacuation sites. We have invited other critical facilities such as schools, electricity, health facilities to be a part of this DPRF and we would like to continue these efforts in other municipalities of Kathmandu Valley (KV).

Apart from earthquake, UNICEF obviously does work in areas of flood disaster management. We are working with Ministry of Physical Planning and works (MPPW), and the department of water supplies and sewerage - to help them integrate disaster component into their regular programs, prepare programs in wat/san sector. Many times projects are implemented but not followed up, so we want to build this component into regular program of the government to achieve sustainability. Another area is landslide disaster management. We have contingency plan to supply water in the areas affected by heavy flood and landslide in Nepal. In education sector, we are investing in securing earthquake-resistant school buildings. I can not say much on this effort on education because colleagues from the department of education, with whom we work, are better placed to talk about it.

**Mr. Shambhu Prasad Uprety, Senior Engineer, Department of Education (DOE)**

DOE is constructing 12,000 classrooms per year investing about 3 billion Nepali Rupees (NR) per year. These constructions consider disaster risk management. DOE has prepared alternative type designs for school buildings considering environmental, earthquake and other aspects. The designs are different for different physiological regions: terai, hill and mountain regions. Within every region, there are different type designs for different construction materials making 4-5 designs available for each physiographic region. The designs are circulated to all regions and made mandatory for construction of school buildings. However, if schools want to prepare their own design based on their location, and resources availability, their design should be approved by DOE prior to start of construction. These provisions are made to ensure that the school buildings incorporate earthquake-resistant elements making them save. One of the main donors in our effort is Japan – several thousand of schools are being constructed with support from Japan Government. Other donors are the World Bank (WB), Asian Development Bank (ADB), DANIDA, FINNIDA, NORAD, EC, and DFID –almost all donors working in Nepal help in school construction and education sector.

While implementing this, DOE is not much working in software part: for the last two years, we have developed new modalities for school construction. This modality consists in working closely with NGOs and INGOs for construction management. Currently, in 41 districts, INGOs are implementing construction management. The benefit derived is that they task social mobilizers for awareness raising for regular maintenance successfully.

However, challenges are still there – technical as well as social mobilization for safe schools and maintenance is still not happening as per the plan. The main reason is that both the government and INGOs are not strong enough to take up the tasks fully. So, what we should do is to make joint efforts of government, national and local NGOs and INGOs so that ownership is taken by communities. In this endeavour, we get reliable and sound support from NSET.



**Mr. Sanjeev Kaphle, Nepal Red Cross Society (NRCS)**

NRCS is engaged in community based disaster preparedness (CBDP) since 1997. At present, our coverage is 35 districts particularly in community based disaster risk reduction (CBDRR). We have developed a small database system by which we monitor hazard profile of all 75 districts to know the potential hazards in all districts.

In Kathmandu Valley (KV), we did response preparedness initiative since 2003 and recently we have finalized contingency plan focused for KV. The plan is available in [www.nrccs.org](http://www.nrccs.org).

Our lesson is that we should well understand the dynamics of potential hazards, it's possible progression and reach: how it moves from 0% to 100%

Besides, we have also to consider the actual conditions on grounds to match peoples' interest with the project objectives. The situation of political conflict and growing poverty are not very supportive for their effective participation in CBDRR. Further, lack of a system of DRM also effects adversely – uncoordinated pieces of works are being done by different organization. There are no standards to follow that should have been endorsed by the government.

Luckily, the National Strategy for DRM and commensurate policies and legislations have been drafted. Once endorsed by the government, these will greatly help us do things better in future.

Reaching communities is always an opportunity. Once we reach the community we see the possibility to understand the necessity to shift our efforts from single hazard approach to multi-hazard approaches because most communities are being affected by many hazards simultaneously: conflict, population movement, or natural hazards. So we have to look at the situation comprehensively, we have to categorize how we can adjust values and issues

For scaling up we have to categorize situations: in some areas of the country, the community is strong but lack presence of strong authority. There are places where the community is weak but there is a good presence of organizations and authorities. The third situation is where both authorities and communities are weak. So we have to understand the situations, and careful consideration should be made regarding which are is best suited approach and method for implementation of DRR or its replication and scaling up.

**Mr. Niranjan Tamrakar, UNOCHA**

UNOCHA's work is related to Humanitarian works, we don't have specific programs but work for national or international coordination of humanitarian affairs. We are now doing contingency planning for Nepal. We also do the annual CAP process. We also do emergency response coordination at international level. On national level, we are in the process of helping the government with the establishment of emergency operation (EOC) at the Home Ministry with whom we coordinated for this endeavour. This initiative includes provision of assistance to the Home Ministry in capacity enhancement of the national organization.

The UNOCHA Headquarters in Geneva is organizing disaster simulation in 2009 in Kathmandu. OCHA is also assessing capacities of national and NGO organizations in emergency preparedness and response.



### **Mr. BN Sharma, Ministry of Local Development (MOLD)**

There are 75 districts, 58 municipalities and 3915 VDCs in the country. That way MOLD has direct formal development relation up to community level, for DRR. MOLD has established DRM focal desks including designated personnel at Ministry, Municipality and DDC levels. They are working in collaboration and coordination with the municipalities and DDC. Currently, lack of elected bodies is a problem; all activities are coordinated by only bureaucrats deputed from the Ministry.

Because of resources, and appropriate capacities, these focal points the designated focal persons and supporting staff are unable to handle responsibilities efficiently. So we need to be supported by resources for strengthening capacities in terms of knowledge enhancement and equipment.

In many cases, local bodies are given responsibilities, and they try their best to discharge responsibilities. But they also need to be supported. Once strengthened, we can go to the communities and do DDR at grassroots level.

### **Amod Dixit, NSET**

Mr. Dixit thanked JICA and the Study Team for selecting Nepal as a model country and earthquake as a target disaster, and also for giving opportunity to NSET in providing assistance to the JICA team during the mission.

Mr. Dixit summarized the statements made by the participants, emphasizing on their recommendations on lessons, good approaches and ways to meet challenges. The following bullets capture some of the statements.

- While about a decade ago, there was not much awareness on DRM, but the international positive influence, including the Study by JICA in Kathmandu Valley, the IDNDR/ISDR process and a lot of efforts by local organizations in collaboration with international development partners, have tremendously enhanced awareness and knowledge, created a conditions of increased investment in DRM. This has resulted in development of methodologies suitable to Nepalese conditions, implementation of a host of DRM initiatives at various levels in Nepal. A lot of good practices have been created that have been found technically, socially, economically and culturally feasible in Nepal. Many of these initiatives have influenced similar process in neighbouring developing countries by way of replication and exchange.
- Some of the good practices recognized as important are:
  - Disaster Preparedness and Response Framework preparation in Lalitpur Municipality by UNICEF in collaboration with Lalitpur Sub-Metropolitan City (LSMC) with financial support from ECHO and technical support of NSET.
  - School Earthquake Safety Program that was started by NSET with support from USAID/OFDA, and now being implemented by NSET and host of different organizations.
  - Community based Disaster Prepared Programs in Lalitpur, Kshetrapaty Ward 17 by the Disaster Management Committee (DMC 17), in different



districts including the flood –prone areas of Terai, etc. This type of projects is gradually shifting to multi-hazard approach.

- Building Code Implementation by LSMC which provided impetus to the government to make the Building Code mandatory for all municipalities and urbanising centres of Nepal.
- Housing Earthquake Safety Initiative (HESI) implemented by the Department of Urban Development and Building Construction in collaboration with UNCRD, Hyogo Disaster management Planning Office (UNCRD) and NSET. This project focuses on creating suitable conditions for the implementation of Building Code in municipalities considering the engineering and social aspects. Creation of Model Buildings in each district headquarters by the government (DUDBC) emanated from this program
- Retrofitting of Community Hospital by the DUDBC and DMC 17 and the Kshetrapaty Clinic. This will develop appropriate engineering norms for such retrofitting works by the government and other several institutions including professional engineering societies.
- Mason and small contractors' training in earthquake-resistant method of construction by DUDBC and NSET
- Prepositioning of community level emergency search and rescue equipment (NSET), relief supplies (NRCS, ARC and NSET; and also by NRCS \* Danish Red Cross) and propagation of household level emergency kit by Kshetrapaty Clinic and DMC17.
- Capacity building and training programs in which several agencies have joined hands, with a series of target groups from housewives and children to adults and volunteers and policy makers.
- Mobile Earthquake Safety Clinics by NSET
- Inclusion of disaster prepared in rural development by NRCS
- A host of earthquake awareness programs using FM radio stations, print/electronic media, including observing annual Earthquake Safety Day program under the leadership of Home Ministry, DUDBC and NSET, with close involvement and ownership by a host of organizations of Nepal including the UN system and international partners.
- Regional programs on documentation of experiences, lessons learned, capture of local knowledge and incorporation of local knowledge into initiatives in western Nepal and Pakistan, and community capacity enhancement for climate change adaptation by ICIMOD
- Formulation of National Strategy for Disaster Risk Management by Home Ministry with support from UNDP Nepal and NSET. Also development of compatible legislation draft by Oxfam Nepal
- Immediate shelter response planning by DUDBC and IFRC with participation of several government and non-government agencies.



- Efforts towards development of school curricula for school to teach DRR and preparedness
- In terms of meeting the challenges, the following points were made:
  - Transition from single-hazard approach to multi-hazard approaches
  - Emphasis on actions, mainly by building upon what has been accomplished
  - Multi-stakeholders involvement, multi-hazard approach,
  - Building on what exists, revise modify approaches, methodologies to suit local physical, social and political conditions
  - Sustainability can be enhanced by:
    - integration of DRR into development program using CBDRM methods adds value
    - inclusion of DRR and DP into school curricula
    - document and integrated local knowledge and practice after validation with scientific and technical tests
    - joint efforts by central government, local government, national/local NGOs and communities enhance effectiveness and sustainability
    - Inter-sector understanding, and cooperation,
    - Funding for DRR is necessary for sustainability
    - Awareness and education is the key for sustainability.
    - Changing the hearts and minds in community is key to sustainability.
  - Scaling up
    - Several good practices that have been success and have generated valuable experiences and capacities should be expanded to other areas and municipalities in the country. Otherwise not only the need will not be covered, but also the valuable lessons will be lost.
    - Need funding support from Central Government, in collaboration with international partnering organization such as JICA to the efforts of scaling up good practices.
    - The National Strategy for Disaster Risk Management (NSDRM) should be endorsed and acted upon by the government including enactment of compatible to NSDRM legislation
    - CBDRM should be the central approach to be adopted for ensuring engagement of local communities, VDCs, and municipalities
    - Capacity development in VDCs and municipalities will be the key for their involvement and ownership of initiatives. It will help to capture available local and indigenous knowledge in implementing CBDRM replication projects. For this establishment of disaster management training centres will be a pre-requisite. Knowledge exist now, ten years ago it was not there. Knowledge available with national institutions and international practices should go to the communities – Nepal can't do DRRR without Community level organizations and



without CBDRM approaches. This requires intensive involvement of CBOs, NGOs and other non-formal organization is crucial.

**Mr. Masakazu Takahashi, Study Team Leader, Community Based Disaster Risk Management 1, OYO Corporation**

Mr. Takahashi thanked all participants for attending the workshop and for their contribution to the discussion.

In concluding, he observed that the workshop enlightened him about the variety of aspects of CBDRM, and that Nepal has accumulated so many knowledge and practices last ten years. He said – “we heard opinion from various agencies, learned much, these will be very important not only for Nepal but for the countries in the region”.

According to him, some activities that have been started obviously need continuation. It is also necessary to scale up and institutionalize the good practices.

He invited everybody to refreshments which followed after the closure.



Report on Workshop on Disaster Risk Management Measures with Community Participation

Annex 1: List of Workshop Participants

The following list presents names, designation and contacts of the workshop attendees.

Workshop on "Disaster Risk Management Measures with Community Participation"

Organised by:

Japan International Cooperation Agency (JICA)

Date : 11 August, 2008

Time: 01:30 -5:00

Venue: Yak Palace, Pulchowk, Lalitpur

S.No.	Name of Participant	Designation	Name of Institution	Off. Tel.No.	Off. Fax No.	E- mail of Participants	Signature
1	Kam Harsi	Head master	Bal Bikram School	4-150136	-		
2	Uddhab Dhimel	Teacher					
3	Kenichiro Kobayashi	Chief	JICA HQ	81-35372			
4	Yusuke Tsumuri	ARR	JICA Nepal	95513			
5	Fumihiko Yokoo	study team member	OYO International	91-3-523			
6	Atmakam Nepal	Nipponkwaio	Nipponkwaio	4-253958			
7	MIKIO YAMAMOTO	JICA SV	LSM	9276-8147			
8	Y. Koopli	JICA SV	NSET	9550-3585			
9	Bhim Nela	J.S	Mold	985102622		bn.stone@kemi.c	
10	Om D. Rajopacharya	DDG	DUBC	984840053		odhara@ntc.net.np	
11	R. K. Dhakal	J-E	L.S.M.C	98418002			
12	Gauri De Kena		ICIMAB	5008222			
13	Sanjeev Kaphy	Director	Nepal Bazar	422261		sanjeev@nbs.org	
14	Bijay Upadhyay		NSET				



Report on Workshop on Disaster Risk Management Measures with Community Participation

Workshop on "Disaster Risk Management Measures with Community Participation"

Organised by:  
 Japan International Cooperation Agency (JICA)

Venue: Yak Palace, Pulchowk, Lalitpur

Time: 01:30 -5:00

Date : 11 August, 2008

S.No.	Name of Participant	Designation	Name of Institution	Off. Tel.No.	Off. Fax No.	E- mail of Participants	Signature
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18	Amud Dixit		NSET				
19	Ramesh Guragain		NSET				
20	Madhav Pahari		UNICEF				
21	Surya Narayan Shrestha		NSET				
22	Ram Chandra Kandel		NSET				
23	NIVA UPRETI						
24							
25							
26							
27							
28							





Report on Workshop on Disaster Risk Management Measures with Community Participation

Annex 2: Table with copy of Meta-cards Organized According to the Challenges

Best Practices	Sustainability		Scale Up / Replication		Institutionalization	
	What Should be done (Need)	What has been Done (Action)	What Should be done (Need)	What has been Done (Action)	What Should be done (Need)	What has been Done (Action)
Retrofitting Chhetrapati Community Shool	To be included in govt. plans programs with budgetary allocation	GON started including programs such as mason training	Focus on developing trainees in large scale through out the country	Several TOTs have been conducted by DUDBC & NSET	Need to build upon local knowledge of DPDM is incorporated in relative policies in Ktm Valley.	Some Schools and hospitals are really constructed and retrofitted in Ktm Valley.
Community (User's Committee) Hazards Risk Reduction Project	Program based rather than project types activities	retrofitting of public structures etc. in annual plans and budgets	insure safety of all newly constructed schools (Working in all districts)	Shake-table demos	Institutionalization should be continued	A shelter Cluster contingency plan is being prepared by DUDBC & IFRC/UNOCHA
Community Based Multi-Hazards Risk Reduction Project	Support local formal/informal organization through in Capacity Building	Community organization Training Dpp Linking with other senior authorities	Expand safe drinking water provision in other municipalities in the valley (Replicate LSMC Model)	E/Q Safety day	Regular Simulation Drill in Each DMIC	Focal Desk Establishment in the ministry, DDC and Municipalities
Nepal Red Cross/Danish Red Cross 2005-2009	Budget from Municipality and Central Govt. on DRR (CBDRM)	Integration of DM Development program	Conducting mass awareness program at Community level	NSET has initiated works in several Municipalities	Include Earthquake Safety Technology into regular curricula eg building code in engineering education	
Mason & Small Contractors Training by DUDBC and NSET	Scientific and Local knowledge for hazard mapping, EVS etc.	Consciousness should be created every where	DOE Through INGOs conducting such program, but coverage<30%	ERRRPP has been initiated in six municipalities	Integrate the activities through coordination between shelter cluster members	
On-going (covering 30 masons in each district every year)	Emergency funds	Maintenance fund raised govt. support in some cases is not sufficient	Joint effort of government line agencies, INGOs, professional org. ns		Establishment of Disaster Management, Training Center in the National Level	
School / Hospitals should be retrofitted	Practice of hazard mapping		Expand DPRF in all KTM Valley municipalities		Enhance Disaster Awareness and Education	
Design Code should be prevailed to all the City	Drama and information program is being done in every school		At least every 6 month's drill and event should be executed		Formalization of Community Connecting with Community with emergency fund	
Renovation and Rehabilitation of Emerg. Water points in LSMS	Awareness and Preparedness for children's education		Capacity building of CBOs and NGOs with pre-positioning of DM-Kits.		Operationalise DRM Strategy, policy and Act and Implement Accordingly	
Committed formed and Training Conduct	Ownership by community should be done		Coverage/extension of ward level disaster Management Committee		Schools should be made responsible	
Capacity Building of Local Groups and School Children on DRM	Central local govt. should provide program/budget endorse and encourage		Institutional Partnership		Through school management committee being done but not enough	



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Construction of Eq. Resistant Primary School Bldg.	Multi-stakeholder dialogue	TOT	Strong Monitoring Mechanism and capacity building of schools
Prepositioning of Life saving supplies (relief tents)	Comprehensive DRM for all sectors and work in a coordinated fashion	Awareness	Mobilize Communities in All Aspects of DRM
DMFW Prepared	Awareness raising frequent monitoring by DEO's and DOE	Raise awareness for preparedness	Know how exists, practice Negligible
Training of Women on Eq. preparedness and non-structural safety	Integrate DRM intervention into regular Development program and give continuous attention	Use mass media	Incorporation of Local Knowledge on DP/DM in School curricula
Training of Community Disaster Volunteers continued effort in many communities esp.		Working to 58 Municipalities	Need to Strengthen Desk (Unit) and Build the capacity of the focal persons
Cheertrapl and Lalipur			Ward Level DMC should be institutionalized in Municipality Work Plan
Mobile Earthquake Safety clinics continued endeavour of NSET			Need Support Municipalities fir Disaster Safety Section
Mason Training on Eq. Resistant Consn.			Integrate DRM into Development Activities at all levels
School Earthquake Safety Program			Promote CBDRM with policies in Background
Emergency Water pre-positioning for Lalipur			Work Closely with sector line ministries and harmonize intervention
Building Code implementation by LSMC			Linking DP Plan and Testing Practice
Ward level Disaster Mgmt. Committee formed by NRCS			Identification of Vulnerability, Risk and Hazards
Construction of Eq. Resistant 3 storey RCC frame school buildings			Move from Project to Program Approach
Activities of Cheertrapl ward no. 17- Self supported			Institutional mapping of possible stakeholders and strengthening their capacity.





## 収集資料リスト

現地収集資料リスト

2012年9月平成20年 作成

地域	調査団	調査内容	調査の種類	プロジェクト名	作成時期	南アジア/南アジア第二種			
国名	機関名	南アジア地域コミュニティ防災プロジェクト形成調査(民間提案型)	調査実施期間	08年07月 ~ 08年08月	調査実施地				
番号	資料の名称	形態	バージョン	フォーマット	枚数	収集先	備考	納入予定日	納入済
1	小学校の防災計画、防災教育書 (ネパール語)	book		original	1	DWIDP			
2	防災教育用 漫画冊子 (ネパール語)	book		original	1	DWIDP			
3	Final Report on Gurubari Khasta Sabo Model Site	book		original	1	DWIDP			
4	Final Report on Duhachowk Sako Model Site	book		original	1	DWIDP			
5	ネパール自治体災害軽減支援プロジェクト	book		original	1	DWIDP			
6	JICA防災活動一冊	book		copy	1	DWIDP			
7	Refining Disasters. Launch of the report in Nepal and seminar	brochure/DVD		original	1	Oxfam			
8	The Snake and the Hyve Don't Hun Sleight, Local Knowledge on Disaster Preparedness in the Eastern Tazara of Nepal	book		original	1	ICIMOD			
9	Herders of Choral The Lost Messengers? Local Knowledge on Disaster Preparedness in Chitral District, Pakistan	book		original	1	ICIMOD			
10	Disaster Preparedness for Natural Hazards, Current Status in Nepal	book		original	1	ICIMOD			
11	Gender Matters, Lessons for Disaster Risk Reduction in South Asia	book		original	1	ICIMOD			
12	The Melting Himalayas, Regional Challenges and Local Impacts of Climate Change on Mountain Ecosystems and Livelihoods	book		original	1	ICIMOD			
13	Sustainable Mountain Development, Climate Change and the Himalayas	brochure		original	1	ICIMOD			
14	Flash Floods in the Himalayas	leaflet		original	1	ICIMOD			
15	Glaciers and Glacial Lakes, Indicators of Global Climate Change	leaflet		original	1	ICIMOD			
16	2008年度総合資料	brochure		original	1	シャブダコーポ			
17	防災と農村開発、ネパールの新農村プロジェクトの挑戦	book		copy	1	シャブダコーポ			
18	災害に備へ地域づくりを目指して、南アジアに展開した地域防災-開発プロジェクト	book		copy	1	シャブダコーポ			
19	レンパの運送地経路、タイプ図	leaflet		copy	1	日本工業			
20	Selected Evacuation Sites and Deep Tube Wells in Lalitpur Sub-Metropolitan City for Earthquake Emergency	leaflet		copy	1	Lalitpur Sub-Metropolitan City			
21	Annual Report August 2006-July 2007	brochure		original	1	Nepal Red Cross Society			
22	the Fifth Development Plan 2008-2010	brochure		original	1	Nepal Red Cross Society			
23	Rural Gravity Flow Water Systems	book		original	1	Nepal Red Cross Society			
24	The Problem of NBC, The 3rd Semina by Dr. Yamamoto & Mr. Maharajan	PDF配布資料		copy	1	山本シニアアドバイザー、Lalitpur			
25	National Arsenic Mitigation Programme in Nepal	leaflet		original	1	UNICEF			
26	National Arsenic Mitigation Programme in Nepal, 注冊配布資料(ネパール語)	leaflet		original	1	UNICEF			
27	NSET Event Tracker, Period Covered: Sep 2007 - Feb 2008	book		copy	1	NSET			
28	For Earthquake Safe Communities	leaflet		original	1	NSET			
29	Earthquake Safe Construction Technology	leaflet		original	1	NSET			
30	Mainstreaming Disaster Risk Reduction in Megacities	leaflet		original	1	NSET			
31	For Earthquake Safe Communities	brochure		original	1	NSET			
32	Earthquake Safety	brochure		original	1	NSET			
33	冊子の作成 (ネパール語)	book		original	1	NSET			
34	School Safety Approach and the Scaling Up Strategy	brochure		original	1	Acton Aid			
35	Responding to earthquakes 2008, Learning from earthquake relief and recovery operations	book		copy	1	UN OCHA			

36	住居被害調査ガイドライン	leaflet		original	1	Catstrapali, Ward 17 KMD						
37	Ward 17 Disaster Management Committee (DMC 17)	leaflet		original	1	Catstrapali, Ward 17 KMD						
38	Earthquake Preparedness (Handbook)	brochure		original	1	Catstrapali, Ward 17 KMD NSET						

事前収集資料リスト

2018年08月作成

地域	南アジア	調査国	ネパール	調査地	南アジア地域コミュニティ防災プロジェクト形成調査（民間提案型）	調査の種類	現地調査	プロジェクト期間	2018年07月 - 2018年08月	作成言語	英語	調査者	南アジア調査チーム
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番号	資料の名称	資料の種類	言語	フォーマット	作成/更新時期	作成/更新場所	作成/更新者	資料の用途	資料の入手状況	資料の入手時期	資料の入手場所	資料の入手経路
A-1	Nepal Red Cross Society - Strategic Health Plan (2008-10)	document		original	1	Nepal Red Cross Society						
A-2	Nepal Red Cross Society - Fourth Development Plan 2003-2007	document		original	1	Nepal Red Cross Society						
A-3	The Kathmandu Valley Earthquake Risk Management Action Plan	book		original	1	NSET						
A-4	Impacts of Flood Hazard and Coping Strategies	book		original	1	Department of Geography University of Bergen Norway						
A-5	Inventory of Glaciers, Glacial Lakes and Glacial Lake Outburst Floods	book		original	1	ICIMOD						
A-6	Housing Report - Traditional oval-shaped Rural Stone House	paper		copy	1	EERI / IAEE						
A-7	Earthquake process of the Himalayan collision zone in eastern Nepal and the southern Tibetan Plateau	paper		original	1	Geophysics Journal International						
A-8	発展途上地域における詳細活断層図の作成とその意義ーネパールを対象としてー	paper		original	1	地誌研年報14号						
A-9	Experiencing a Great Earthquake in Western Nepal	paper		original	1	Journal of Nepal Geological Society						
A-10	Global Seismic Hazard Program (GSHAP) in Continental Asia	paper		original	1	Global Seismic Hazard Assessment Program						
A-11	ネパール国カトマンズ盆地地震防災対策調査	paper		original	1	JICA						
A-12	The Melting Himalayas, Regional Challenges and Local Impacts of Climate Change on Mountain Ecosystems and Livelihoods	paper		original	1	ICIMOD						
A-13	Sustainable Mountain Development, Climate Change and the Himalayas	brochure		original	1	ICIMOD						