



RISKS, HAZARDS AND VULNERABILITY IN THE MOUNTAIN REGION OF NEPAL: A FOCUS ON KARNALI





Implementing Partners





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Abbreviations

| ACAP | Accessibility, Communication, Attitude and Participation |
|---------|--|
| ADCR | Alliance for Disaster and Climate Resilience |
| CBDRM | Community Based Disaster Risk Management |
| CCA | Climate Change Adaptation |
| CBDP | Community Based Disaster Preparedness |
| CBDRR | Community Based Disaster Risk Reduction |
| CSO | Community Based Organization |
| DDMP | District Disaster Management Plan |
| DDRC | District Disaster Response and Relief Committee |
| DIPECHO | Disaster Preparedness ECHO |
| DPRP | District Preparedness and Response Plan |
| DRM | Disaster Risk Management |
| DRR | Disaster Risk Reduction |
| EWS | Early Warning System |
| GLOF | Glacial lake outburst floods |
| IDDR | International Day for Disaster Reduction |
| KIRDARC | Karnali Integrated Rural Development and Research Centre |
| LDRMP | Local Disaster Risk Management Plan |
| MoFALD | Ministry of Federal Affairs and Local Development |
| NSET | National Society for Earthquake Technology |
| NGO | Non-governmental Organization |
| OCHA | Office for the Coordination of Humanitarian Affairs |
| PhD | Doctor of Philosophy |
| SBDP | School Based Disaster Preparedness |
| VCA | Vulnerability Capacity Assessment |
| VDC | Village Development Committee |

Introduction: Risks, hazards and vulnerability in the mountain region of Nepal: a Focus on Karnali

Nepal is the one of the 20 most disasterprone countries in the world. The country is exposed to multiple hazards, most prominently earthquakes, floods, landslides, windstorms, hailstorm, fire, glacial lake outburst floods (GLOFs) and avalanches.

The country is divided in 3 ecological belts: (1) the Terai, flat plain and low altitude where most of the population is living. is mainly affected by large-scale flood following monsoon period, (2) the hills, ranging from 100 to 3000 meters above the sea level, where landside, mudflow, sometimes epidemic outbreak are multiple but of medium to small-size scale, and finally (3) the mountains range, from 3000 to 8000 meters altitude, which see scarcely populated zone, but affected with frequent small-scale hazards such as landslide. avalanche, rock fall, and potentially GLOF in certain districts. Finally, Nepal has a long history of earthquake activities due to its location on a tectonic active zone. The presence of 3 main fault lines, each running east to west, are causes of earthquakes of small and greater magnitude in Nepal. These fault lines are result of the movement of the Indian plate under the Eurasian Plate.

If data on disasters in Nepal are available and accurate, in mountains regions where access is difficult, the information on disaster impact is scarce and incomplete.

In order to get primary information, Mission East conducted a short risk analysis in 2009 in 6 VDCs of Humla. The findings showed an increase of disasters events in the last decades, with 3 major hazards: Human epidemics, fire, and landslide.

Number of event per decade from 1960 until 2009





In total, from 1960 to 2009, 148 disaster events were reported in the surveyed area. When compared with official statistics produced via the Desinventar Database on the same period we could estimate that two

The 2009 epidemic in mid and far west caused more than 300 casualties (OCHA -2009). Nevertheless, none were reported in Kalikot, Jumla, Mugu or Humla. Based on ME data collected, 18 people died of diarrhea in 2009 only in 31 communities of 6 VDC from south Humla. Although we could not link it specifically to the 2009 epidemic outbreak, we can assume that a significant number of people died in Karnali region from the 2009 diarrhea epidemic, but this was not reported to central level. We believe that in Karnali, the death toll on vulnerable population (elderly, children) is so important that the connection between an epidemic outbreak and a "normal" death rate due to low hygiene and lack of health services is hard to make. People tend to consider such death as "normal" and won't necessarily report it to District Authorities.

third of the disasters in Humla have never been reported to the central level. The main hazards reported were epidemic diseases (mainly cholera and diarrhea), followed by fire and landslide. These 148 disaster events primarily affected livestock, and



A large stone fell on a school in Shreenagar in August 2009 – No children were in the classroom.

agricultural lands, (considered as most vital assets more than buildings which can be rebuilt) and surprisingly even human life.

Most of waterinduced disasters are linked to the monsoon season, and generate landslide, flood and mudflow, that mainly affect land and livestock. Whereas the monsoon increases the risk of epidemics and remains the most dangerous season for Karnali population, the dry season is also not free from disaster. Epidemics can spread during dry season due to lack of water, fire will threaten animal hay and houses, and although not analyzed here, drought will generate food shortage.

Apart from reviewing the history of past disasters, the survey included a participatory mapping exercise with the communities as well as transect walks to identify hazards based on geological/morphological observation of the surrounding landscape.



The observation focused on water-induced disaster risks, which could be mapped and anticipated.

The most critical potential hazard identified was rock fall, followed by landslide and flash flood. Such hazards have a magnitude, intensity and localization extremely hard to anticipate, and will be of high frequency and small-scale. As they occur very fast, anywhere and very frequently they represent a real and dangerous threat to population. But how can we prevent them? What early warning system can be effective for such hazards? This survey showed people relatively well aware of the threat surrounding them, but with very limiting coping capacity, seeing all these events as "act of God".

Population of Karnali is usually aware that landslide are caused by deforestation and terracing, but since both wood, firewood and new land plots are vital for the communities even if they are well aware of the serious threat they create by deforestation practices, they know of no other alternative.

Main issue identified for CBDRR in the mountains of Nepal

The work of Mission East in Nepal, is to focus on poverty alleviation in the Karnali region, highly affected by food insecurity, water scarcity and absence of public services for isolated communities living away from any transportation infrastructure by walking paths that requires many days of hiking before reaching the communities.

Mission East has engaged in Disaster Risk Reduction since 2009 to complement its poverty alleviation activities after realizing that in some districts of the region, **two third of disaster events are not reported** (2009 risk assessment conducted by ME and NSET in Humla district – See introduction).

The difficulties to access the region and report disaster events is one cause but also the frontier between a disaster and "usual" accident of life is unclear in such context



Top view of Manma, the headquarters of Kalikot district. Many settlements in the mountain region of Nepal are situated on hill slopes, making them vulnerable to disasters.

of extreme poverty and vulnerability. In its strict definition, "disaster" is a serious disruption of the functioning of the society exceeding ability of the affected people to cope with their own resources. In Karnali region, the size of damages is often limited and geographical isolation is so important that affected people have no other choices but to find themselves local resources to recover. So we cannot call these many events that strike the region a "disaster" in comparison to larger scale disaster that affects hundreds or thousands of people, but when such events are regular and frequent, it poses visible threat to the whole communities' development (see box 1).

Migration is an important coping mechanism in the region. Males migrate to India to find seasonal work and relieve the households from food insecurity, but leaving women alone with the elder and children with a huge responsibility and workload to keep the household and its members with minimum wealth conditions. Living conditions being extreme, each and every member of the community is then expected to contribute to maintain the community, and people affected by impairment and can contribute less owe their survival to close

Box 1

In 2008, in Majhpatal community (Humla District) an ambitious project aiming at connecting water flow from at least eight different sources along a nearly five kilometre long canal was implemented by Mission East with an important contribution of the community. Hundreds of people reportedly showed up to work on the construction site. The project came to fruition and water flowed for about a month until a large landslide occurred, which completely disrupted the water flow. The landslide proved a crushing blow to the community, which had laboured intensively to get the system operating. Members of community complained that they've done too much work and there is no impact, "pani chuinchha, janchha" – i.e. the water leaks and goes away. But this landslide did not affect life or dwellings and it was not reported to District Headquarters.

Evaluation report from "Community Development leading to Sustainable Food Security in Humla District, Mid West Nepal" - June 2009

family members support, when possible, and are excluded from the community social life. Women, elder, children, people with disabilities, will be the first to be left behind during a disaster. Since few years, the government of Nepal with the support of international community is engaged in a policy shift, from a sole response model to a comprehensive Disaster Management process, from preparedness to response. Many guidelines have been developed to support this shift, from VDC to district level, under various ministries. Such efforts are slowly moving the country and its population to better readiness to cope with disasters, but addressing disaster in Karnali and the mountainous region of Nepal is facing additional the challenges.

In such context, Mission East considered that in this inaccessible part of the country, population are confronted to "hidden disasters" and that standard Communitybased Disaster Risk Reduction (CBDRR) model must be reconsidered.

The report aims at addressing few key issues identified during implementation of CBDRR by Mission East and its partners since 2009, based on the specific context of Karnali and more generally the mountainous region where communities live in isolation.

The **first topic** will discuss the issue of designing early warning system at community level to save life. While main hazards are flash flood, rock fall and landslide (see previous chapter), it is extremely complex and costly to design an early warning system for such hazard.

We will then assess in the **second topic** how the national standards for Disaster Risk Management (DRM) can be applied in Karnali and we will particularly look at the use of Local Disaster Risk Management Plan (LDRMP) by communities and its challenges. Affected households after a disaster are too isolated to benefit from central support and resources at district level are too far away, only accessible by long days of hard walk, to be rapidly deployed, living them alone for the recovery phase.

The **third topic** will give an insight of the coping and recovery practices by one affected community in Kalikot where 11

people were killed in a flash flood in June 2013. Extreme poverty aggravate factor of exclusion and marginalization, creating context of extreme vulnerability in front of disasters for Dalit groups, women, children, elderly and people with disabilities.

The **fourth topic** will introduce a model for inclusive CBDRR that has been tested by Mission East with some good results.

Finally, due to limited access to state services, many communities still have to rely on the dynamism of local civil society (community-based organization, NGO, etc) to receive aid and assistance. Nevertheless, the role of Civil Society Organisations (CSOs) in DRR is currently challenged by the government and the donors, arguing the absence of sustainability for organizations entirely depending on external fundings.

The **fifth topic** will debate on this approach, showing that where the state remains weak to address its people needs and rights, the role of role of CSOs to reinforce government capacity while making it accountable to its population can be vital and effective collaboration and dialogue between CSOs and government brings better result to reduce risk of disasters.



Topic 1: Cost and analysis benefit for landslide monitoring and early warning system

Initially, Mission East in collaboration with other DIPECHO partners approached a team of geologists to devise a model for landslide monitoring. But the cost of the intervention to be conducted in Kalikot made Mission East reconsider the action. While the cost of designing, testing and implementing a landslide monitoring and early warning system (ews) was estimated to reach about 30,000 to 40,000 USD per site, Mission East realized that a preliminary survey on the socio-economic impact of landslide was necessary to assess the cost against the benefit such EWS would generate. In order



Panikhola landslide

to assess such cost/benefit of investing in monitoring and early warning system for landslides, Mission East and KIRDARC conducted an analysis on socio-economic landslides impact on local community and infrastructures from a Disaster Risk Reduction perspective. The study was conducted in Phukot VDC of Kalikot district.

The mountains of Nepal are characterized by rugged topography, steep relief, variable climatic conditions, complex geological structures affected by active tectonic process and seismic activities. Such topography make the mountains of Nepal highly prone to landslide and erosion. On an average 128 people lose their lives annually in Nepal. The average number of



Bagpani landslide



Puchhregaun landslide

people injured every year due to landslide in Nepal is 37 and 16 peoples are missing every year. 14,120 houses are affected on average. 469 houses become fully destroyed and 353 houses are damaged every year. The total loss per annum is estimated to be 23 million Rupees. The loss of agriculture and livestock is also significant. Landslides have substantial negative impact on income, employment, poverty reduction and food availability but precise socio-economic cost and impact of landslides at the community level is difficult to measure and is frequently under-evaluated.

Kalikot district is one of the landslide hazardous districts of Mid-Western Region. Its altitude ranges from 738 to 4,790 meters above sea level. Frequent landslide disasters and land subsidence are common in the district. Out of 30 VDCs in Kalikot district, 14 VDCs are most vulnerable with devastating landslide events in 1996, 2008 and 2010. During 1985 to 2011 (25 years of time), 50 people died, 36 injured, 139 houses destroyed and 155 damaged, with 1510 people relocated in the Kalikot district. The total monetary value of the tangible loss at district level during the same period comes around USD 3,442,440 and loss per annum is estimated to be 137,697 USD (district statistics).

For better insight, the study analysed the situation of Phukot VDC, one of the most vulnerable VDCs to landslide hazard in Kalikot, where necessary data was collected through primary as well as secondary information/sources. Primary information was collected through community meetings, interview/discussion with key informants and focal group discussion. The analysis of data showed that the economic loss (agriculture land, food, buildings, livestock) due to landslide in Phukot during the period of ten years (2003-2013) was about 467,000 USD, making an average loss of 46,000 USD per year.

If many minor landslides are observed in Kalikot and in general in Karnali region due to steep slope failure, Phukot VDCs concentrates the risk around 4 major landslides.

In order to simplify the cost/benefit analysis, the past destruction of 467,000 USD during last 10 years can be split across the 4 main identified landslide risk sites, making an average loss per each landslide per year at 11,600 USD. Since more landslides will occur in Phukot, this figure is maximum while in reality the damage for each identified landslides will be less. Despite the fact that this cost does not cover human loss, loss of social capital and bio-diversity, it shows that the expected investment necessary to monitor and early alert risk of landslide (estimated at 30,000 to 40,000 USD) is 3 to 4 times higher than the loss it generates.

The social impact is more complex to analyse and would require heavy survey protocol and investigation. Nevertheless, observation showed that landslide reduces access to land, forcing people to relocate, affecting primarily groups living under most hazardous places such as the Dalits communities living in poor settlement (30%



of the total population of Kalikot). Forced migration leave women as singled headed households, increasing their vulnerability and those of the family members left behind: the elder and the children. Given steep slope profile of the lands, a landslide would destroy local vegetation and biodiversity for long time, while free animals grazing will slow down the process of natural stabilisation of slopes by re-vegetation or reforestation.

If cost for monitoring and early warning system has been shown not cost/ effective, the mitigation of landslide is another challenging task. Among the four landslides observed in the Phukot VDC, the geo-morphological nature of the Sim landslide would require high-cost solution, since low-cost available technologies would not be sufficient to reduce the risk. The remaining three landslides and other minor slope failures can be partially mitigated by locally available and low cost techniques. Simple support structures, planting large trees like bamboo at the base of the slide for the protection, planting grasses for covering the slope, plantation of bushes and trees are the simple and low cost techniques for the mitigation of such landslide. But population currently does not have the resources or the skills to implement such action: it requires a few engineering techniques, and regular monitoring of the landslide for sustainable landslide mitigation.

As conclusion, the survey could demonstrate that for mountains, the standard CBDRR solutions such as ews and small-scale mitigations solutions are not cost beneficial neither are they affordable for local communities. The solution to complement low-cost bio-mitigation needs to address the root causes of the problem, which are unsustainable land management practices, wild animal grazing, and deforestation. By addressing such root causes via concerted efforts of communities and district authorities on sustainable land and soil management, landslide risk can be minimized with various further positive effects on forest, water resources and quality of soil for livestock and agriculture.

Disaster vulnerability of Kalikot district

Topic 2: Testing the Local Disaster Risk Management Planning (LDRMP) Guideline of Ministry of Federal Affairs and Local Development (MoFALD)

In 2011, the Ministry of Federal Affairs and Local Development (MoFALD) published the LDRMP guideline to orient communities and VDC secretariat on how to collect hazard, vulnerability and risk information for the production of Disaster Risk Management Plans of Action. This guideline became a standard for community-based DRR action and all DRR stakeholders active at community level are using it. It is a unique standard for the entire Nepal.

While using this guideline, Mission East and its partner KIRDARC were rapidly confronted by challenges during its implementation, due The main obstacles observed during LDRMP implementation were as followed:

- People did not understand many of the tables from LDRMP guidelines
- Different groups (Dalits, women, leaders) have different understanding of hazards (see box 2)
- People cannot recall past events beyond 4-5 years
- Ward level assessment is not doable because settlements overlap 2 or 3 wards
- Hazard mapping has limited usefulness while hazards (landslides, rockfall) can hit everywhere



to relatively lack of people's understanding of the process, high illiteracy rates of participants having difficulties to formulate actions, contradictory information collection and diverse perception from diverse groups on hazard context, leading to inconsistent results. With the aim to adjust the LDRMP to a simplified version, Mission East engaged a Risk Analyst Mr Pablo Villanueva Holm-Nielsen to conduct a test of the LDRMP in 3 villages of Bargaun VDC, Humla district.

- People live in 2 settlements (winter and summer) and migrate seasonally, making mapping at community level challenging
- VDC secretary or key people of community (health workers, teachers) are often not present in VDC but stay in district HQ, hence cannot pilot the process
- Asset destruction are rarely reported at district central level, making crossverification impossible
- People are extremely poor and not very motivated by the process (see box 3)

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Example of findings in Bargaun VDC



After testing each of the 18 steps indicated in the LDRMP guidelines, the survey found out that we could bring it down to 8 steps, and operate a shift from hazard-based planning to resource-based planning.

Table 1: Hazard-based planning

| Topics | Difficulties | Keep or drop? |
|--|---|------------------|
| Cause of disaster and loss | Part of life, people do not remember | drop |
| Hazard mapping and ranking | ard mapping and ranking Impossible to rank, mapping have limited interest | |
| Hazard calendar | Important and well understood | keep |
| Historical timeline | People do not remember | drop |
| Hazard analysis | ard analysis Too complex for people to know causes | |
| Social mapping Work well, very visual, people understand | | keep |

Legend: Example of steps during VCA process that have been tested for their usefulness in mountainous context

Box 2:

Ranking hazards does not make consensus except for draught and snow fall. Otherwise, each focus groups sees it very differently a transect walk and a mapping will be enough to observe and discuss the hazards and address the problem from multi-hazard perspective.

Box 3:

Dalit FG discussion in Bargaun: "Our lives are hard and without development, reducing risk from natural disaster will not necessarily improve our life. Planning like this have been made before, but later, nothing happens. Give us the materials and we will build a better safer settlement ourselves." Finally it was found that to increase interest of people participating in the process, it was better not to plan after surrounding hazards (as per LDRMP approach) but after priority sector for development (transport, education, health, water, land, etc) which can be located far from community but are essential to local development.

Based on such outcome, a simplification of the LDRMP was devised to be further tested in 6 VDCs of Kalikot districts, using 3 VDCs to test the simplified version, and 3 VDCs to test the government LDRMP. A consultant was hired to assess the impact of the exercise comparing the 2 test groups.

| Table | 2: | Key | features | of full | and | simplified | LDRMP |
|-------|----|-----|----------|---------|-----|------------|-------|
|-------|----|-----|----------|---------|-----|------------|-------|

| S. N. | Indicators | Full LDRMP as per the guide- line of MoFALD | Simplified LDRMP by Mission East |
|-------|--|--|--|
| Α. | Training duration for VCA and LDRMP production | Six days | Three days |
| В. | LDMC committee | No health post in-charge in the committee | Health post in-charge as the member secretary of the committee |
| C. | Training contents | Contents follows the 18 steps of the guidelines | Contents are simplified with 8 steps and exam- ples are focused on the mountain area. |
| D. | Area coverage Under VCA | All wards/communities of the VDC | Two most vulnerable communities of the VDC. |
| E. | LDRMP Plan Strategy | More focused on disaster management cycle including planning, mitigation activities etc. | More concentrated to interlink between disaster management and VDC sectoral development |
| F. | LDRMP preparation cost | NRs. 55,000 to 60,000 in full LDRMP- | NRs. 30,000 to 35,000 in light LDRMP |

The total population of the study area was 33,515 with 5,518 households. The socioeconomic indicators in the 6 VDCs showed a common pattern of poverty and vulnerability across Karnali, in comparison to Nepal in average. The population is mostly living below the poverty line in semi-permanent type of houses. With no electricity available the overwhelming majority of the households depend on firewood for cooking. More than 80 percent of the households depend on agriculture for their livelihood. Literacy situation is also low compared to Nepal in average.

2.1Comparative knowledge impact of both LDRMP models

In order to assess the knowledge of different categories of people in the study area, 15 questions were asked with 95 options about the understanding on the various issues of

hazards and disasters. 2 VDCs were chosen where the simplified LDRMP was used (Ramnakot VDC) and the full government model employed (Thirpu VDC). The table below illustrates the average score obtained by various groups of people including the LDMC members.

This table reflects that the knowledge impact of the community people as well as LDMC members was more or less similar in full as well as light LDRMP implemented VDCs. There were minimum differences. Therefore, it is concluded that there has not been significant differences on knowledge impact whether full or light LDRMP model is implemented.

2.2 Comparative implementation impact of both LDRMP models

Each 6 VDCs had LDRMP, budget

| VDC | Score obtaine | Score obtained | | |
|-----------------------|---------------|----------------|---------------------------|--------------------|
| | Dalit | Women | People w/ disabilities | by LDMC members |
| Ramnakot (simplified) | 32 | 36 | 41 | 47 |
| Thirpu (full) | 34 | 35 | 42 | 48 |

Table 3: Knowledge score on DRR in the study area

allocation for disaster mitigation, task force created and trained. The efforts of local communities for mitigation were limited more or less to plantation and vegetation and community level discussions. LDRMP planned activities were incorporated by the VDCs in their annual development programs. So, similar to the knowledge impact, the implementation impact was also more or less similar for full and simplified LDRMP implemented in the 6 VDCs. No significant differences on the implementation impact were observed whatever LDRMP model was implemented.

2.3 Stakeholders' view on the full and simplified model

Various stakeholders comprising Chief District Officer, Local Development Officer, President of the Nepal Red Cross Society Kalikot District Chapter, District Superintendent of Police, President of Alliance for Disaster and Climate Resilience (ADCR), LDMC, project staff, etc were interviewed during the study period.

All of the district level stakeholders notified that they did not have much information about the implementation of the simplified LDRMP model. Views of other stakeholders such as project staffs, LDMC member and community people were in the favour of simplified LDRMP as it shorten the training duration, and focus on the mitigation of hazards identified around the VDC level planned programmes (roads, bridges, schools, etc) enabling a better allocation of scarce resources.



2.4 Recommendations

Strengths were observed in both full as well as simplified LDRMP model. Therefore, it is suggested to combine the strengths of both models and to adopt mid-path as proposed below:

Training package: four or five days training package is recommended with less intensive days of training, to enable better participation of people, especially those coming from far away or with households obligations (women). Content can be similar to the simplified model.

Inclusion of health post in-charge in LDMC Committee: Despite not planned in the full model, the health post in-charge is recommended (as per simplified model) to act as alternative member secretary of the LDMC Committee in Karnali region. It is because the first aid and rescue training are linked with health institution and because of regular availability of the health post in-charge in the VDC.

Area coverage under VCA: All wards communities of the VDC are covered for Vulnerability Capacity Assessment (VCA) under the full LDRMP model whereas only two most vulnerable communities of the VDC are targeted for VCA under the simplified LDRMP model. It is recommended to follow the full LDRMP model because the vulnerability scores of various wards were found diverse in the project area.

LDRMP planning approach:

The full LDRMP approach is focused on hazard identification, leading to risk management as per a cycle including planning, mitigation activities etc. The simplified LDRMP model is concentrated on identifying the sole hazard that can pose a threat to the VDC sectoral development plan. Owing to scarcity of resources, it is recommended to follow the simplified LDRMP model because it encourages mainstreaming process.

Topic 3: An Unseen Reality: Recovery following small disasters in remote areas

In Nepal, little is known about how communities, especially in remote mountainous region respond in the aftermath of disaster and what the recovery process is like. Given such a context, Mission East Nepal carried out a study in Kalikot district to examine the recovery experience of the small and remote communities of Sannighat in the aftermath of a flash flood that occurred in 18th June 2013 and killed 11 members of the community with extended damages to infrastructures and assets.

Sannighat is situated one and half days walk away from Manma, the district headquarters. The Sannighat River flows down from the northern Himalayas into the Karnali River north of Manma, Sannighat lies at an altitude of 1600-2000m and is divided by the Sannighat River. Both sides were connected by a suspension and a wooden bridge. On 18 June 2013, the monsoon rains caused the Sannighat River to burst into a flash flood, killing 11 people and injuring many more. Around 13 houses and 10 shops were washed away. A vast area of productive land and forest was destroyed. Substantial infrastructures, such as a primary school, two bridges, and several foot trails were flooded. Severe

damages occurred in the electricity power house, flour mills, and drinking water and irrigation channels. The rice crop was almost ready for harvest and the flood swept away much of the crop.

During 2 weeks, a staff from Samjhauta Nepal, partner of Mission East, lived among the population of Sannighat and collected information based on a research methodology provided by a PhD student of Auckland University. The recovery process was discussed over three sequential periods: the first two weeks, week two till week twelve, and week twelve to week thirty-six. Recovery therefore covers a total period of nine months after the disaster. This phased analysis allows for an examination of the varied activities of the local community and external agencies in each phase.

The recovery experience of the Sannighat community

The table below provides a comparative analysis of the degree of involvement of the local community, government, and external agencies support (financial, technical, coordination) in community recovery in the aftermath of the 2013 flood.

| Period 1 (first two weeks after disaster) | Period 2 (week two ti | ll week twelve) | Period 3 (week twelve until week thirty-six) | |
|---|--|-------------------|--|--|
| Meet basic necessities (food, shelter, clothes) | Meet basic necessities (food, shel- ter, clothes | | Meet basic necessities (food, shelter, clothes | |
| | | | | |
| Primary health care | Formation of emergency groups for receiving external support and facilitat- ing recovery activities | | Reconstruction of public infrastructure | |
| | | | | |
| Search and rescue | Efforts to seek exter | nal support | Efforts to seek external support | |
| | | | | |
| Psychological support | Re-establishment o vices | of education ser- | Re-establishment of physical and social services | |
| | | | | |
| Temporary shelter (safer locations) | Return to the previous (disaster affected) location and starting the reconstruction of homes | | Reconstruction of homes | |
| | | | | |
| | | | Re-establishment of employment | |
| | | | | |
| Legend | | | | |
| Involvement of community | | | | |
| Involvement of government | | Time | (Source- author) | |
| Involvement of a non-government a | gencies | inne | | |
| | | | | |

Table 4: Recovery Activities

As shown in Table 4, physical survival was the community's focus in the first two weeks. These were largely met with the help of other community members, neighbouring communities, external government and non-government agencies.

The key priority of the affected communities in the period from two to twelve weeks after the disaster was to collect aid to meet their basic needs, and to seek further external aid to re-establish the basic physical and social amenities necessary to run the community. The aim was to return to a relatively normal functioning community. The need for basic food, shelter and clothes, however, didn't end quickly. of flooding lessened. The coping actions in this period were dominated by the activities of the affected communities. Compared to the first period, the involvement of external agencies was significantly less.

The dominant activities in the third period (week twelve until week thirty-six) can be summed-up in the community's efforts to provide their basic necessities "on their own", independent of external aid. People started to return to work or look for employment. Repair and reconstruction of major physical infrastructures became a priority to allow new employment opportunities to emerge. The reconstruction



The landscape of Sannighat area in the post-disaster period. On the right side, a wooden bride built by the community after 12 weeks of the disaster. Week 12 to 36 was used by the community to provide basic necessities "on their own" independent of external aid.

The community considered the school as an important social amenity, and considerable efforts were made to re-establish its activities. The school resumed teaching quicker than any other service. People were also anxious to leave their temporary shelters to return to their former homes, or the site of their former homes especially towards the end of monsoon when the risk of the school and re-housing were other important activities in this period. There was even less external aid available in the third period, despite the perpetuity of the community's own efforts to acquire such external support.

Nine months after the disaster, these needs still existed for some families. Community

help continued to support needy families with basic necessities. While other community members and neighbouring communities continued to provide basic needs, help from external agencies quickly tailed-off and stopped completely within three months of the disaster.

Community members stand out as the key drivers of recovery following the disaster. The community demonstrated its capability to organize itself and this was of enormous importance in helping explore recovery options and was crucial in promoting reconstruction of communal physical infrastructures, re-housing victims, reestablishing infrastructures and social services, and voicing the need for external aid and support. In many recovery activities (more than 40%) community members are the sole group involved (see Table 4). Social resources in the form of existing family ties, wider social networks and cultural norms are key driving forces in recovery. Helping relatives, friends and neighbours was the socially expected norm. Community members helped each other obtain basic necessities, including money and physical assistance. Moral support from the broader community and religious beliefs contributed to psychological healing. The disaster also raised people's awareness.

After the flood, locals of Sannighat realized the existing flood risk of their locality, and expressed the need to be relocated to 'safer places', which according to them is 'higher ground, and away from the river bank'. They also generated debate as to the importance of forest in controlling landslides and erosion. To them, the direct cause of the flood was the landslide and mass erosion on the upper reaches of the Sannighat River. They, similarly, highlighted the urgent need for flood mitigation measures in Sannighat.

The case of Sannighat shows that both governmental and non-governmental agencies do provide aid and relief when communicated to. However, such support are mostly focused on meeting the survival needs in the immediate aftermath of the disaster. Such support is inadequate to meet the recovery needs of the affected communities. The kind of support required for full recovery was found to be neglected by the government. Non-governmental organization, however, did make efforts to address them.

The existence of a police station in the community was of considerable value as it allowed effective and timely communication with agencies concerned and helped activate services including search and rescue and primary health care in response to the disaster.

In Sannighat, as in other remote areas, the research suggests that after a disaster households, in particular those that have to rely entirely and directly on natural resources such as subsistence farmers, suffer, and for them, the process of recovery is particularly difficult. Families who have members employed in the service sector are less affected. For families with households headed by a woman, recovery is particularly challenging due to a number of factors, not least the discrimination they face in various aspects of life, limiting their choices. The study also found that Dalits are less vulnerable and are relatively more resilient than other caste groups since they do not essentially rely on natural resources such as land for their livelihood and also have alternative sources of income.

The research suggests that existing policies are inadequate to properly facilitate community recovery. Economic and human resources for recovery remain largely inadequate and existing regulations for disaster relief and recovery support are unclear. The roles and responsibilities of departments and government bodies concerned at different levels are not clearly documented nor widely known. The potential economic resources are distributed widely among so many different ministries and departments (and at different levels within those ministries). As a result, the channelling and coordinating of aid to disaster sites is difficult, costly, and time consuming. If not properly channelled, the resources provided as aid may be far too little to make any significant impact on recovery. Better coordination among multiple aid agencies is also required, but is difficult to achieve. Recent years have, however, shown some signs of hope. The government is increasing its efforts to revise its policies with respect to disaster management including preparedness, relief and recovery. The focus to date, however, remains on early recovery, specifically relief support, and preparedness activities. These principally involve community awareness, rescue management and related training to the community members.

These findings are used to generate a number of specific recommendations for NGOs in the following areas:

3.1 Disaster preparedness

The Community Based Disaster Preparedness (CBDP) model, currently promoted in Nepal, while remaining an essential model to increase community resilience, is way too demanding for remote communities considering their poor physical accessibility and harsh socio-economic conditions. Such CBDP model therefore needs to be adjusted and simplified for remote communities.

3.2 Disaster mitigation measures

Mitigation practices could involve bio-engineering or civil engineering techniques, or some sort of combination of the two, to ensure slope stability and reduce erosion.

3.3 Linking community forest management with disaster risk management

Connecting community forestry, or other related development work, with disaster management could broaden the scope of action for a more effective community level disaster management plan (such as creation of community fund, and risk-sensitive training and planning)

3.4 Food aid

Post-disaster food aid, provided predominantly by external agencies, is useful, but is largely inadequate to meet the need of the affected communities living in food insecure areas of remote



The landscape of Sannighat area after the disaster. Risks, hazards and vulnerability in the mountain region of Nepal: a Focus on Karnali

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The police post in Sannighat, which was spared from the disaster due to its situation on an elevated site. The police was very crucial in providing the immediate help in the aftermath of the disaster and informing government and non-governmental agencies.

Nepal. Food distribution and aid should therefore not only be calculated to cover the short-term rescue phase, but should also be incorporated into the longer rehabilitation phases. This would help to retain manpower for effective reconstruction of essential infrastructure assets (bridges, roads, mill, etc)

3.5 Employment re-generation recovery programs

NGOs should, therefore, design and facilitate more projects that offer startup capital for small rural businesses, coupled with the provision of necessary skills and guidance training. It is also crucial that these projects ensure the creation of equal opportunity across all sectors of society. Most vulnerable groups, such as families headed by single women and those whose sole income is impacted, should be prioritized by these programs.

3.6 Education and health support for disaster affected children

The myriad of adaptive functions and roles the school can play in terms of social recovery in the context of remote communities in the aftermath of disaster is something that is not yet fully utilized, despite its unlimited potential in contributing to child-centered community recovery. It is recommended to further explore and incorporate this potential of schools under the School Based Disaster Preparedness (SBDP) model— a model that is currently promoted in Nepal.

3.7 Reconstruction

Similarly, NGOs could get more involved to help communities in the repair and reconstruction of vital public buildings and amenities using safer and stronger technologies that would resist better the next disaster.

An important challenge raised by DRR stakeholders (Lesson Learned Workshops DIPECHO 6th Action Plan) is the complexity and number of various tools that exist to address inclusion for diverse vulnerable groups such as people with disabilities, children, women, minorities, people living with HIV/Aids, etc In remote and isolated region, especially the mountains characterized by extreme poverty of the population, illiteracy, stigma and exclusion are more important (see introduction) and led to further marginalization of groups such as women, people with disabilities, Dalit etc. With the ambition to devise a DRR approach that could be inclusive for all, ACAP was conceived to address this complexity proposing a simple, non-technical, easy to measure, model to encourage all organizations to adopt inclusive approach in DRR.

ACAP stands for Accessibility, Communication, Attitude and Participation and is considered as a framework, embracing the four cornerstones/principles for inclusion, initially devised for people with disabilities.

The ACAP framework was discussed during a consultative workshop in April 2013 where DRR actors and inclusion experts identified that such framework can be valid for all forms of exclusion, not only for people with disabilities but also for minorities, women, etc Using the framework, Mission East Nepal further adapted it into a monitoring tool that guides project design across the input, process and output levels and incorporates 4 key outcome indicators.

4.1 Main indicators:

Indicator 1: The number of marginalized people that have access to DRR services has increased through the baseline/end line survey.

Indicator 2: 100 % of DRR, emergency and early warning communication messages are developed and disseminated through appropriate media, and are accessible by different marginalized groups.

Indicator 3: 50% of the marginalized people acknowledges a change of attitude of the community people towards them

Indicator 4: A proportional representation of ALL groups (including the marginalized) is ensured across all processes of DRR activities including decision-making. (meaningful participation)

ACAP framework was tested in Kalikot district with a DIPECHO project during 20 months. The condition of inclusion or exclusion of target groups into community-based DRR activities and the impact of the ACAP framework on their exclusion was analysed via a survey conducted among 400 individuals representing the most marginalised groups.

4.2 Situation before ACAP deployment:

- 70% of households discuss DRR within families but information is collected and shared firstly by male (81%) (women:19% and children 3% only) showing a strong male domination concerning access to information related to DRR.
- 83% of respondents did not access any training on DRR mainly because they did not receive invitation (78%), few had no time (9%) and only 2% were not allowed by their families.
- 77% of respondents are not informed about planning process and 87% did not participate in any DRR planning. Communicating the DRR plans and inviting marginalized people to participate in DRR discussion was very weak.
- For the 23% who participated in DRR planning process, 87% felt listened to and their input considered.

4.3 Conclusion: The main constraints and obstacles felt by respondents to take active part into CBDRR process is first their absence from discussion (not invited) followed by the lack of communication and sharing of information toward them on DRR plans and decision.

4.4 Situation after ACAP deployment:

- An increase in access to information and sharing of DRR related topics by women by 13% (from 19% to 32%)
- 100 % of the respondents attended at least 1 training on DRR

 Slight improvement on being informed on DRR related planning and participation in the planning process, where the main reasons for exclusion are gender disparity and to a much lesser extent ethnicity or disability.

4.5 Conclusion:

All marginalized people accessed at least 1 training on DRR related topics, hence the access to information increased tremendously. Main obstacle to meaningful participation is less in relation to ethnicity and disability, but more related to gender disparity.

4.6 Lessons learned:

- The ACAP framework was for the first time to be introduced in CBDRR projects as model promoting inclusion for all, and project staffs were excited about the possibilities this framework offers
- ACAP framework is in its infancy and more coaching is needed to better utilize the developed tools, such as the checklist on accessible meetings/ training
- The indicator on accessibility seemed to be over ambitious, as the remote mountainous region has in general already huge environmental barriers, the additional barriers people with disabilities can face are challenging.

4.7 Way forward:

 ACAP will need to be reviewed with people of target communities to make



it more contextualized to the remote, mountain context.

- There is a realization that ALL people should be included in inclusive CBDRM, however identified actions should be followed up. Example: knowing that people living remote and thus not being able to participate is not sufficient; action could be to organize at times the meetings in this remote setting.
- Well structured information sharing, consultation and joint planning with marginalized groups, with clear guidelines on ACAP will result in more appropriate implementation of activities e.g., accessibility of the venue, timing of the activity, availability of support persons, organization of safe and



acceptable toilets, hence increasing the possibility to meaningful participation.

- Focus group discussions and individual interviews are excellent ways to collect the information on specific groups; strong representation of marginalized groups LDMCs has proven to be successful to incorporate the issues of the marginalized groups in the local Disaster Risk Management Plans.
- More flexibility must be ensured for the ACAP indicators as less ambitious targets set for inclusion can be "good enough" for the project in this stage of inclusive development.

Topic 5: Role of CSO in DRR: from service providers to advocates

In Kalikot, as in many of the mountainous districts of Nepal, the effort of the government to address disasters and disaster preparedness have a limited impact due to the remoteness of villages, limited state services available at ward and VDC level, combined with extreme poverty. lack of education and low awareness level of the population. To address this situation, many local Civil Society Organizations (CSOs) are working in delivering services to the population in livelihood development, climate change and disasters, health and education. The problem raised by the government and donors is the sustainability of such action, knowing that CSOs action will stop as soon as donor funding and INGO support stops, while CBDRR is a long term action that should be renewed every year to update community risk profile, CBDRR planning and refreshing training of community members for key action such as First Aid, Rescue, evacuation, etc

If sustainability is indeed an issue, no one can deny that the role of CSOs in a country and for region where the state services are limited, is essential. Mission East and KIRDARC have realized that CSOs role can be effectively shifted from DRR service providers to other roles that fully contribute to build the resilience of the population:

- Every NGO in Nepal has diverse mandate to support local development process and possesses various expertise in multiple domain of intervention. Since DRR in mountain is primarily a development issue, each NGO can be trained to mainstream DRR into their own development mandate.
- Additionally, CSOs can play a vital role to monitor and assess grassroots situation and report it to district administration while advocating for the implementation of DRR as per government guideline. This can be done via constructive and collaborative dialogue process, such as the Karnali Kachahari platform (dialogue for change) hosted by KIRDARC to encourage dialogue and reflection among governments, CSOs, political parties, media, professional and communities on key issues crucial for the development of Karnali, among which DRR is one.





5.1 The Alliance for Disaster and Climate Resilience: ADCR

Since 2011, Mission East and KIRDARC, with the support of Danish funding, has encouraged CSOs to mainstream DRR into their action and advocate for inclusive DRR with local authorities. To ensure that all voices are heard, even those coming from small NGOs with limited resources, KIRDARC organized an alliance of some NGOs representing the most vulnerable people and trained them to advocate for DRR and CCA mainstreaming into local development planning.

In Kalikot district, the alliance took the name of ADCR: Alliance for Disaster and Climate Resilience. It is a loose forum committed to prepare joint advocacy plan to address the issues of DRR and CCA beyond project-based approach. This concept was replicated in other districts of Karnali region.

5.2 A brief review of the outcome of this initiative

Pre-existing situation: The government's capacity to support local development and address disasters in mountainous district of Karnali is limited. In such condition, а number of CSOs are supporting/ substituting the local authorities in various sectors. Some of them are working in the sector of disaster risk reduction and climate change adaptation to minimize the impacts of disasters, but their action depended on funding support from donors, and regarded by local stakeholders as "usual" NGO projects with limited capacity of NGOs to advocate local authorities, not on project basis, but on long term vision of the local civil society. It was for example difficult for the NGOs to increase awareness of the local government and other related stakeholders on the importance and rationale of mainstreaming DRR and CCA in the district level activities. For example, 2 years ago, the National Earthquake Safety day and International Day of Disaster Risk Reduction day was celebrated in Manma, district headquarters of Kalikot, by one single organization focusing on their own



beneficiaries with limited impact for the larger population. Other NGOs were not working together to join strength to increase their capacity to influence the government and the impact was very small.

Intervention

Mission East and KIRDARC have devised together a long term objective to strengthen civil society capacity to advocate for DRR and CCA mainstreaming into local development of Karnali region. Thanks to such long term partnership, ADCR was formed in Kalikot in 2012 with the purpose to join strength and efforts to advocate local authorities on DRR/ CCA mainstreaming purpose. In 2013, the alliance was reinforced by providing training on inclusion, mainstreaming, advocacy, and how to prepare an action plan to mainstream DRR and CCA actions into their activities. With a strong focus on inclusive DRR, KIRDARC could strengthen ADCR common platform with 5 LNGO representing the most marginalized groups such as Dalits, Women, and People with Disabilities. The president of Dalit Women Empowerment Centre was selected as the coordinator. KIRDARC Nepal as secretariat and others as general members during review meeting of the IDRR day. Minimum financial resources were made available for joint initiatives on DRR to help each member to mainstream DRR in their respective action.

Positive changes observed so far

• The alliance could prepare joint action

plan in 2013 to advocate mainstreaming DRR and CCA in three VDCs and at district level of Kalikot. Besides/ after support from Mission East, they managed to raise additional funds from CARE Nepal (almost 1000 euro).

 ADCR could effectively advocate the local authorities to mainstream DRR and CCA in district level activities as being engaged in sectoral planning process. As results, District Disaster Response and Relief Committee (DDRC), included ADCR as the member of Communication cluster and the District Development Committee nominated Chhaya Sunar, coordinator of ADCR, as member of the selection review committee under climate change program (LAPA¹).

Similarly, ADCR prepared one week long joint program plan to celebrate National Earthquake Safety Day in coordination with DDRC, which resulted in the celebration of one week long program in Manma that included street drama, Deuda² and drawing competition, photo exhibition, rally and simulation of First Aid and Light Search and Rescue. More than 70% people of district headquarters participated in the program with active support of DDRC.

• A survey on earthquake knowledge conducted among the population of

²A typical song of Western region

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¹ LAPA is joint climate change program of government and UNDP

Manma³ before and after the event indicates the increase of knowledge by 69% of the total residents of Manma. At the end of the event, governmental organizations, DDRC, ADCR, local NGOs and all related stakeholders of Kalikot district provided seven point commitments to mainstream DRR and CCA in their activities.

ADCR has created a sense of unity and collaboration among NGOs that normally do not interact and discuss together. During the review meeting of ADCR members to discuss the week long celebration of National Earthquake Safety Day, president of Disability Rehabilitation centre, Kehab Devkota, stated, "One year before, we celebrated a number of events such as Earthquake Safety Day with only 30 participants. None of the organizations working in this sector actively participated in the event. After the alliance was formed, a weekly program actively engaged local NGOs, DDRC; and more than 70% people of Manma, including women, Dalit, people with disabilities participated in the program, which was only possible because of this alliance". Similarly, the president of Chetana Avibrithhi Samai. a Dalit women NGO member of ADCR, stated,"Local organizations working in different sectors in Kalikot used to organize the similar event where participation of beneficiaries used to be very low".

Sustainability

ADCR as a lose platform requires a modicum amount of funds to exist. Their presence in 2 key district committees (DDRC and LAPA) already makes the alliance an actor in district. ADCR has already gained experience of fundraising to advocate DRR/ CCA in Kalikot district (CARE Nepal). All these are good signs of sustainability.

Replicablity

Discussion between KIRDARC and local NGOs of Humla and Mugu districts on the effectiveness of the alliance formed in Kalikot and its possible replication are ongoing. Similar alliance in Humla and Mugu districts have now been established and have already benefitted from financial support from CARE to mainstream DRR/ CCA in their VDC and district level activities.

5.3 Kachahari: The Dialogue for Social Change

The mountain region's extreme poverty has been further aggravated by deprivation of basic human rights resulting basically from discriminations based on caste, ethnicity and gender. In addition to this, frequent occurrence of natural, human and climate induced disasters have impacted adversely on human safety, food insecurity, leading to loss of human lives, arable lands, and crop productions. This has further pushed the population deeper into vicious cycle of poverty. Such state of things have placed the region as the most under-developed region of Nepal.

Considering the fact, Mission East and KIRDARC Nepal realized a need of forum for discourse involving policy makers, practitioners and right holders from the wider spectrum of society: a) Politicians, policy makers, development workers, researchers, intellectuals, social leaders, academicians, students, media and right holders to seek common solution of the problems/issues and agendas with collective effort. Thus, a forum was conceptualized as Kachahari to streamline these voices collectively with the lens of Disaster Risk Reduction.

The Kachahari was conceptualized to create common forum for continued dialogue on the DRR issues of people for bringing about change as well as to bridge the gap between the policy makers and implementers at micro, macro and meso level in DRR and CCA issue.

Rationale for Kachahari (Change)

- Concrete effort of the stakeholders can make the difference and lead to effective change.
- Information sharing is the greatest enabler for change.
- Learning experiences, when translated into action, accelerates the change process.

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5.4 Approaches and Outcomes of Kachahari

The bottom up approached is used in the Kachahari process, where the issue is raised from ward and VDC level and further discussed at the district level. Series or preparatory meetings to refine topics of discussion are conducted by KIRDARC among stakeholders concerned. Thematic papers and presenters are identified during this process. At district level, a one-day workshop is organized to open the debate with local policy makers.

To discuss inclusive DRR, KIRDARC already conducted 2 district Kachahari. One in Kalikot and the other in Surkhet in response of the massive flood that hit the district in August 2014. Government representatives, DDRC and ADCR members, Nepal Red cross chapter, political parties, NGOs/INGOs and local people are taking part in the program. The views of policy makers, practitioners, community people, and journalists during discussion are consolidated to form a Declaration that served as baseline commitment for further action.

In Kalikot, a 14 points commitment "Kalikot Karnali Kachahari Declaration" was agreed and signed by all participants. The major highlights of the declaration were the initiation to establish District Emergency Centre, prioritizing DRR during development planning, initiation to establish mountain suitable early warning system, ensuring earthquake safety infrastructures such as house, schools, hospitals and offices through implementation of National Building Codes and identification of vulnerable zone for small scale mitigation etc.

In Surkhet, a 11-point commitment "Surkhet Kachahari Declaration" was agreed. During the massive flood and landslide in the district that killed more than 35 people, left 100 missing and 17 injured along with a huge destruction of infrastructures, the government, INGOS, NGOS and community people played a key role for rescue, relief support and rehabilitation. During the Kachahari, key learning raised were a) Lack of proper data collection mechanism hindered effective support b) Lack of sufficient relief support for the disaster affected people c) Lack of proper communication among stakeholders related to relief support hindered the coordinated work and, d) Lack of effective use of DPRP during disaster.

The declaration highlights commitment of government to speed-up relief and rehabilitation program, updating DPRP with scenario of larger scale disaster, mainstreaming DRR in development activities, collection and validation of data to identify the real victims and mainstreaming DRR in development activities.

5.5 Key learning

- CSOs (ADCR) mobilization with joint advocacy plan accelerates mainstreaming of DRR in the mountain region.
- Technical support and effective mobilization of CSOs helps to reinforce government capacity and support to make the government accountable.
- Kachahari, a platform for dialogue for change, is essential for the sharing of experiences with the stakeholders to bridge the gap between the policy makers and implementers at micro, macro and meso level in the issue.
- Dissemination of key learning/experiences through media help to make the communities living in the dispersed areas with the limited resources aware.



Conclusion and way forward for DRR in mountains

After 5 years of experiencing resilience building and DRR activities in the mountainous district of Nepal, Mission East and its partners have cumulated a significant amount of experiences and learning that should be considered to adjust DRR practices in mountains.

Karnali zone suffer from weak socioeconomic condition that makes people very poor and isolated from mainstream development initiatives. Remoteness and rugged topography, isolation from main marketplace and transportation facilities, extreme poverty and limitation from state services are obstacles for easy and affordable deployment of standard CBDRR as per government guidelines. Additionally, mountains have a different risk profile than plains or hilly regions, leading to high frequency but small intensity and impact of disasters. The typical DRM cycle applied in such context will not lead to significant progress in resilience building due to the specificity of the hazards, until and unless it is strongly connected to development initiatives.

The various research and action deployed by Mission East in Karnali enabled to draw some conclusions and recommendations that differ from the "usual" CBDRR approach and models.

- It is not cost beneficial to address the issue of landslides in mountains with a monitoring and early warning system. The loss incurred does not worth the heavy investment required. Actions addressing root cause of landslides Karnali, mainly deforestation, in terracing and livestock overgrazing, combined with low-cost bio-engineered mitigation, would be sufficient to reduce the numerous slope failures and landslides that threaten practically each and every community. Construction of infrastructures (road, schools, bridges) must be devised with full consideration of landslide risk and mitigation work embedded in the budget required for construction.
- National guidance for disaster management must be simplified for mountains. Analysis of the implementation of LDRMP showed that a simplified guideline lead to same results in term of disaster preparedness and planning, at a lower cost and less time consuming for people. Similar

exercise can be worthy to implement DPRP and DDMP at district level.

- The capacity of communities for self-recovery is very strong in the mountains due to their culture of isolation and structural absence of external aid. Nevertheless, recovery process of isolated communities in the mountains lead to further vulnerability given their limited preparedness and response capacity. As it is not realistic to imagine each and every community in the mountains are trained and equipped for disaster preparedness, mitigation and response, government and international communities must make additional efforts in supporting community initiatives in response and recovery to bridge the resilient gap. It can be done by delivery relief aid adequate to limit temporary migration process otherwise forced by the lack of food, support reconstruction of key essential infrastructures better resistant to hazard, ensure continuity in children education and re-install productive tool lost during the disaster. With such key support, affected communities will be able to return faster to development process with increased resilience.
- Exclusion of the most marginalized planning. people from DRR preparedness and response, is not a fatality. It is possible to address inclusive DRR for all even in challenging environment such as the mountains. Mission East has tested the ACAP framework with positive results. ME encouraged all DRR stakeholders to adopt an approach inclusive for ALL marginalized groups, by joining efforts and devising simple models such as ACAP, to ensure that nobody will be left behind during a disaster.
- Civil Society has an important role to play in promoting inclusive DRR. In the mountains where the presence of state support is limited, CSOs can support the government in mainstreaming DRR into their own work, as well as organizing themselves to assess the real situation at the grassroots, report to government, and make it accountable for planning and implementation of inclusive disaster risk management and its effective monitoring.



Humanitarian Aid and Civil Protection The European Commission's Humanitarian Aid and Civil Protection Department (ECHO), the largest single donor in the world, aims to save and preserve life, prevent and alleviate human suffering and safeguard the integrity and dignity of populations affected by natural disasters and man-made crises. A significant part of the European Commission's humanitarian assistance to Nepal goes towards helping communities resist, withstand and cope against natural disasters such as floods and landslides through the creation of community based rescue mechanisms, disaster-resilient infrastructure, early warning systems and flood management.

www.ec.europa.eu/echo



Mission East (ME) is a Danish non-profit international relief and development organization that works with the most vulnerable communities in Eastern Europe and Asia, making no political, racial, or religious distinction among those in need. ME's mission is to help the vulnerable people through humanitarian relief aid, development assistance, the linking of relief, rehabilitation and development, and supporting communities' capacities to organize and assist themselves. ME's 'Values in Action' are honesty, integrity, compassion, respect for all people and valuing the individual. In Nepal, Mission East started working since 2007.

www.miseast.org



Karnali Integrated Rural Development and Research Centre (KIRDARC) Nepal, which is an NGO established in 1999, is an initiation of youths from Karnali zone with a vision of just and prosperous Karnali region with people having access to and ownership over resources. KIRDARC Nepal's mission is to enable Karnali people to claim and exercise their human rights, including the right against poverty and neglect by way of educating, organizing and mobilizing people themselves in actions that promote human rights; research and evidence-based policy advocacy; and just and judicious resource mobilization in the region.

www.kirdarc.org



Nepal National Dalit Social Welfare Organization (NNDSWO) is a national NGO established in 1982 that has been working for the rights and development of Dalit, the most marginalized groups in Nepal. It has nation-wide outreach in Nepal having 71 district chapters out of 75 districts of the country. It envisions an equitable and prosperous Nepal free from all forms of discrimination, exploitation and poverty where human rights, social justice and dignity of all people are respected.

www.nndswo.org.np



Samjhauta Nepal is a national NGO established in 2001 with the mission to create opportunities for Women, Youth and Children to develop their skills and resources needed to achieve social, economic, civil, environmental and political justice. Since its establishment, it has been engaged in building different interventions in community education and empowerment through literacy, saving, loan, micro enterprises, health and sanitation, sexual and reproductive health, HIV/AIDS, democracy and governance, peace building and dispute resolution, community housing and different researches and consultancy services related to strategy and program development in order to develop a strong relationship with community and shift the ownership of development to them.

www.samjhautanepal.org.np

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