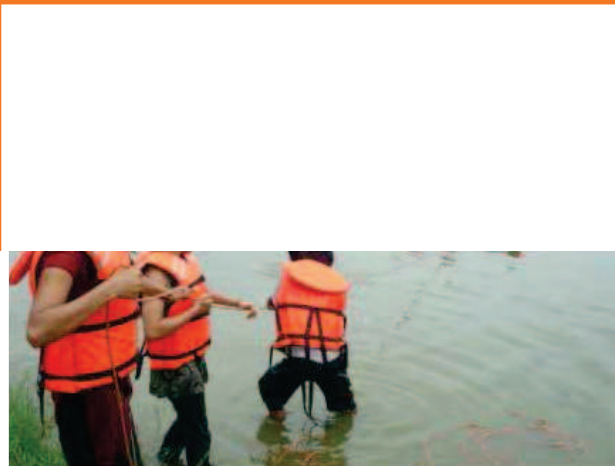
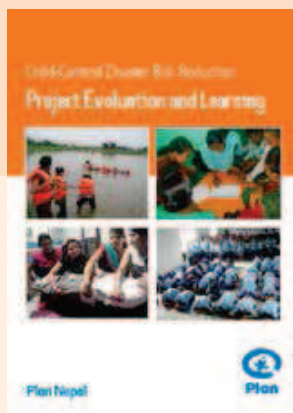


# Child-Centred Disaster Risk Reduction: Project Evaluation and Learning





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**Cover:** Children and youth engaging in drills, simulations  
and capacity building initiatives (Photo: Plan)

Child-Centred Disaster Risk Reduction  
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## Foreword

Natural disasters of unprecedented magnitudes are causing children and their communities to suffer. These disasters also threaten the realisation of Plan International's vision of a world where children can realise their full potential. Plan, as a child-centred organisation, puts children at the centre of its work. With this aim in mind, it engages children and their communities in the empowering process of disaster risk reduction.

In 2010, Plan implemented a two-year child-centred disaster risk reduction programme in eastern Nepal with the support of Plan Ireland and Irish Aid under a Humanitarian Partnership Programme grant. The objective of the program was to build the capacity of both government bodies and local communities, including children, to better respond to, prevent, and mitigate the impacts of disasters. Embracing the principles of the Hyogo Framework of Action (2005-2015) and the National Strategy of Disaster Risk Management of the government of Nepal, the project was piloted with the help of Plan's local partner, Human Development and Environment Protection Forum, in three village development committees in Sunsari District.

The results of the initiative are profoundly positive. Children and communities are far more confident about their ability to respond to all stages of disasters and are far better prepared to do so. Communities have prepared development plans which include provisions for responding to disasters keeping children at the centre. Resource persons have been groomed; people have been empowered to speak their minds and demand resources to meet their needs associated with disasters. In particular, the project has assisted in developing the skills that people need in all stages of a disaster. Such capacity-building has rendered community people more confident in their own abilities and more assertive in demanding support from various agencies. Most importantly, children have realised that they have a unique capacity for reducing the risk related to disasters and can serve as agents of change. Children's voices are reflected in local plans prepared to mitigate the effects of disasters. Local institutions active in communities have been inclusive in their incorporation of disaster risk reduction components designed to reduce vulnerability in their regular plans and programmes: no group, not women or Dalits or children or the disabled, are left out.

The experience of the project is that children are often the most vulnerable to and adversely impacted by disaster but also that they can play a crucial role in changing people's attitudes toward and behaviour in anticipation of disaster. The four prongs of Plan's approach—preparedness, capacity-building, mitigation and prevention—saw the potential of children and youths put to full use. The project's aims tallied with Plan's mission as well as with those of the national government and the international community. It was a fruitful two years in building confidence in and capacity for addressing disasters.

Plan is delighted to publish this report, 'Child-Centred Disaster Risk Reduction: Project Evaluation and Learning.' It provides vivid examples of how the project reached children and of the progress it has made so far in improving preparedness. This evaluation shares crucial learning from the experiences of the communities involved for use by individuals and institutions with a mission to implement child-centred disaster risk reduction and help build disaster-resilient communities and children in similar context elsewhere in the country. Plan Nepal itself will also incorporate the learning and recommendations suggested by this report into its regular programmes.

A word of thanks to all that contributed to this crucial evaluative and learning document. Plan's partner organisations also deserve commendation for their penetrating insights, thoughtful critiques, and sustained support.



**Donal Keane**  
Country Director  
Plan Nepal

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## List of abbreviations and acronyms

DDC	District Development Committee
DEO	District Education Office
DRR	Disaster Risk Reduction
HUDEP	Human Development and Environment Protection Forum
UNFCC	United Nations Framework Convention on Climate Change
UNFCO	United Nations Field Coordination Office
VDC	Village Development Committee

## Summary

The flooding of the Koshi River in 2008 devastated Sunsari District in Nepal, and while Plan Nepal's role as one of the lead disaster support agencies was praiseworthy, the fact that so many children saw their rights to survival, education, and protection compromised underscored an important point: to secure the wellbeing of children before, during, and after a disaster more needs to be done than simply provide humanitarian aid after a natural hazard wreaks havoc on a community ill-prepared to cope. Since much of Nepal is prone to hazards, be they floods, landslides, earthquakes, fires, or other phenomenon, and since monsoon-induced hazards will only increase in frequency and intensity as the full impact of climate is felt, the urgency of boosting the resilience of children is acute. Thus, Plan Nepal decided to change its approach.

Embracing the principles of the Hyogo Framework of Action and the Nepali government's Disaster Management Strategy, in July 2011, Plan Nepal, with the help of its local partner, Human Development and Environment Protection Forum (HUDEP), piloted an 11-month child-centred disaster risk reduction (DRR) project in four wards of three villages in Sunsari District selected with input from the district's development and disaster relief committees and with due consideration to their exposure and vulnerability to hazards. The project's objective was to build the capacity of both government bodies and local communities, including children, to better respond to, prevent, and mitigate the impacts of disasters. This objective recognised both that children are often the most vulnerable to and adversely impacted by disaster and that they can play a crucial role in changing people's attitudes toward and behaviour in anticipation of disaster.

The project was relevant, effective and efficient, and is likely to be sustainable and have a considerable and positive impact. The project's relevance lies in the fact it targeted needy villages whose diversity allows for comparative study; allocated more than 90% of funding toward capacity-building, mitigation, and preparation;

and exploited the potential of children and youths; and that the project's aims tallied with those of Plan International, Plan Nepal, and the Sunsari Programme Unit as well as with the those of the national government and the international community.

Its efficiency was ensured by using a tried-and-tested design characterised by a participatory and inclusive approach and influential activities; a small, democratic management team that kept progress on track with monitoring; and the sharing of financial and human resources with village development committees (which, for example, supplied timber) and Sunsari Programme Unit (which lent its staff).

Two key approaches made for an effective project: first, it engaged multiple stakeholders at the community, village and district levels and, second, its high degree of participation and transparency inspired trust amongst those stakeholders.

Incipient signs of sustainability include the fact that a number of social carriers of DRR were established, not just DRR institutions, but also youth and child clubs and youth cooperatives. The latter are key as they provide loans—discounted for the disaster affected—that build economic resilience. Evidence that people are both more knowledgeable about and more skilled in DRR practices is abundant and the plans they have made for community, village and district-level disaster management have widespread support.

The project's positive impact is also obvious: confidence in the ability to ward off disaster has displaced fatalistic pessimism; project beneficiaries implement DRR practices like assuming a duck-cover-and-hold position during tremors, building second stories on their houses, and raising plinth levels and their neighbours imitate those practices; DRR resource persons have been groomed; and people have been empowered to speak their minds and demand resources to meet their DRR and other needs.

The achievements of the project were many despite a number of limitations, including the reduction of the project tenure from 15 to 11 months officially and further to nine through the celebration of many festivals; the lack of sufficient local resource persons to run trainings; the shortage of Plan staff to monitor the dozens of activities implemented; and the difficulty in acquiring land for shelter construction. Every target activity—all 183—was achieved.

Key achievements included increasing awareness about DRR, among government officials with the celebration of the International Disaster Reduction Day, the posting of disaster preparedness and response plans on United Nations Framework Convention on Climate Change (UNFCCC) website, and visits to project sites as well as Plan's growing visibility and reputation in this sector; and among community members with behaviour change communications materials like a documentary video as well as with FM radio broadcasts and street drama.

A second key achievement was the building of capacity. The project trained 175 government officials in SPHERE disaster response standards as well as education and child protection in emergencies; and besides training hundreds of children in child-centred DRR, it also trained 93 and 33 specifically in first aid and search-and-rescue techniques respectively. These efforts have paid off handsomely, resulting in, for example, the development of school contingency plans based on hazard-vulnerability-and-capacity assessments, dialogue about including DRR in the curriculum, treatment of minor ailments locally, the construction of child-friendly toilets, and more concern among adults about children's issues.

The project was also able to ensure that disaster preparedness and response plans were improved at a pre-monsoon workshop attended by 56 stakeholders from 16 districts in the East. Of them, it helped to implement seven, that of Sunsari District and those of its three target villages and of the three schools it worked in. Implementation was limited but includes six performances of street drama, six drills, and three showings of a DRR documentary.

In addition, the project established participatory

and inclusive DRR institutions. There are a total of 123 members, about one-third of whom are women and another third of whom belong various minority groups, in three local disaster management committees, three youth groups, and three child clubs. Through their efforts as DRR spokespeople, the beneficiary communities have seen a rise in solidarity and harmony, greater mobilisation of local resources, and the development of the practice of helping those in need.

A fifth major achievement lay in the project's ability to empower people to speak up. It groomed a total of 154 resource persons, 121 of whom participated in a hazard-vulnerability-and-capacity training and 33 in a climate change adaptation training; provided youths with leadership skills; and ran extracurricular art, song, debate and quiz competitions in all three target villages for 1306 children, 38% of whom were girls. All of these activities built participants' confidence to speak about their needs and to demand that duty bearers fulfil their needs.

A sixth and final achievement is the strides the project in developing physical and economic infrastructures: with 12% and 20% community contributions respectively, it built two safe shelters and one resource centre and established three youth cooperatives, giving each NPR 15,000 (USD 208) as seed money to establish a credit facility. The cooperative in Harinagar has already increased its fund to NPR 273,000. (USD 3791)

Despite these successes, there were lessons to be learned and good monitoring mechanisms helped project staff identify them. First, since people are accustomed only to getting relief after the fact or, in some instances, to having structural mitigative measures like embankments built, they initially resist the idea of DRR and need to be better persuaded to embrace it wholeheartedly. Three things were seen to change their minds: awareness-building techniques, primarily street theatre and documentaries as they have the most powerful impact; drills and simulations as they provide hands-on experience of the need to know ahead of time what to do; and a project focus on multiple hazards as people's fears are diverse.

Second, training must be improved. This can be accomplished by ensuring that the timing



of sessions is convenient and that their content is suitable for the participants, in particular that it is modified to suit children's needs and capabilities. It is also essential to emphasise that capacity-building is a process that need to be built sequentially and to be supported by providing the equipment needed to put theory into practice. youth ought to be employed as trainers as they have a unique ability to reach their peers and a more sophisticated understanding than adults.

The third key lesson is that local DRR institutions must be granted responsibility if they are to be accountable, that they must be trained at least in humanitarian standards and in education and protection during emergencies if they are to make wise decisions, and that they must be inclusive if they are to adequately represent the needs of all community members.

The fourth and last major lesson has to do with the project's entry point, schools. While DRR education should start here by ensuring that both primary and secondary curricula provide comprehensive teaching in DRR, it should not end here; instead, schools must form a partnership with communities so that children can easily pass on DRR messages to all stakeholders.

To make this particular project more successful, it is necessary to take four steps. It is essential, first of all, that there be guidelines for the operation of DRR institutions, shelters, and resources centres so their management does not fail simply because it is ad hoc. There is also a need to regularly update the hazard-vulnerability-and-capacity maps already prepared as well as baseline indicators and emergency contacts not just to ensure that disaster response is effective but to make people feel good about the progress they make. Third, initiatives must continue to receive support; in particular, youth cooperatives require technical backstopping and district education offices, assistance in incorporation DRR into the school curriculum. Finally, DRR must be integrated into

the core programmes of Plan Nepal's Sunsari and other programme units and crosscutting themes like gender inclusion must be made part of DRR projects.

When projects of this nature, that is, child-centred DRR, are carried out in the future, it would be best to make a few crucial alterations. First, there is a need to improve the social and physical infrastructure of DRR, specifically by altering the composition of local disaster management committees (electing a chair, for example, rather than appointing the VDC secretary); by constructing models of necessary changes like child-friendly toilets, earthquake retrofitting, and riverbank bio-engineering in order to demonstrate techniques and serve as inspiration; and by providing the materials people need to act on what they have learned, including boats and search-and-rescue equipment.

Second, capacity-building activities must be extended: child should learn about climate variability by monitoring school-based meteorological stations as well as how to swim, youths should be trained to serve as local resource persons and researchers, and visits among the staff of non-governmental organisations should be facilitated in order to promote sharing. Third, schools need more attention to see that they implement earthquake- and flood-resilient structural and non-structural measures after an assessment is carried out and a contingency plan drafted. Masons who can implement the required changes in schools (and other buildings) need to be trained and mobilised. Fourth, the DRR project needs to cover a wider area, at least the other wards in the target villages if not all of Sunsari and beyond, and Plan must extend its sharing to all members of the disaster clusters and other organisations it belongs to. A final needful adjustment is that DRR should get core funding and not depend on grant aid and that child-led indicators be used to ensure that the project is, in fact, child-centred.

# Plan Nepal's Child-Centred Disaster Risk Reduction Project

## 1. The context: Disasters threaten Nepali children

Around the globe, climate change has caused increasingly unpredictable and extreme weather that, whether it is sudden like a flood or gradual like a drought, is wreaking havoc in the lives of children, threatening injury, even death; preventing them from meeting basic needs; and jeopardising their rights to education and protection. And, with global warming modelling forecasting that the frequency and intensity of natural hazards will grow, their plight is likely to worsen unless, that is, DRR initiatives to reduce their vulnerability and increase their resilience are launched.

The topography and climate of Nepal render Nepali children particularly vulnerable to disasters. Largely because Nepal lies in a monsoon climatic zone, every year the low-lying southern plains of the Terai flood and the friable soils of the Siwalik hills and the Mahabharat and Himalayan ranges to the north experience landslides. Both phenomena already exact a heavy toll in lives and property and that impact is only slated to grow worse as monsoon downpours grow more intense and frequent.

After the Koshi River breached its embankment in Sunsari District in 2008, displacing 7000 families and creating a great humanitarian crisis, Plan Nepal assumed the role of lead agency in the response effort, a role which made manifest the insufficiency of entirely after-the-fact reactions to disaster. The experience prompted it to pilot a forward-thinking DRR project, one which keeps in mind the perspective of the most vulnerable group, children, and draws upon their unique

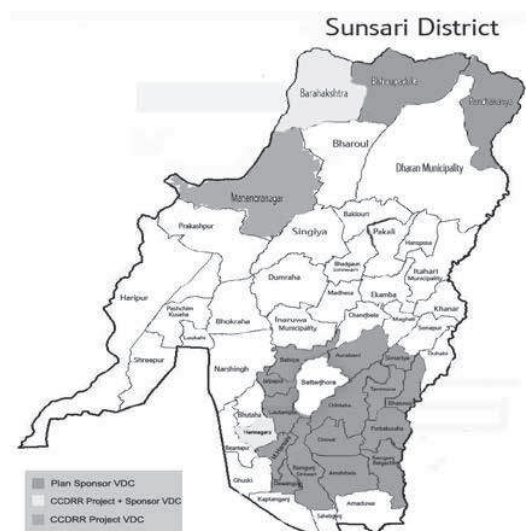
talents to serve as agents of change. This project is the Child-Centred Disaster Risk Reduction Project.

## 2. The project: Realising the potential of children to reduce disaster-related risks

Plan Nepal launched the project on 1 July, 2010, with grants from Irish Aid and Plan Ireland. Though the project focused on four flood-prone wards<sup>1</sup> in three villages in Sunsari District-Mahendranagar, Harinagara and Barahachhetra (see Figure 1) -some of its capacity-building activities and policy advocacy took place at the district and central levels. In the 11 months it ran, the project directly benefited 30,892 people in 6121 households.

<sup>1</sup> Ward No. 2 of Barachhetra (Pulthegauda), wards nos. 6 (Terahaddi) and 4 (Tirtigachhi) of Mahendranagar, and Ward No. 7 of Harinagara (Dastole and Netatole).

Figure 1: Project villages





The goal of the project was to protect the rights of children, youths, and local communities during disaster-induced emergencies and to reduce the negative impacts of disasters and climate change through capacity-building exercises in child-centred preparedness, mitigation, and response. Local governments and the Sunsari District Disaster Response Committee were also capacitated.

### 3. The evaluation: objectives and methodology

To assess the relevance, efficiency, effectiveness, impact and sustainability of the project, identify its achievements and limitations, highlight key learning, and make recommendations for future initiatives, Dr. Dhruba Raj Gautam, the executive director of the National Disaster Risk Reduction Centre in Kathmandu, Nepal, conducted a 15-day evaluation of the project after it drew to a close on 31 October, 2011. The process included a week-long field study which he conducted from 15 to 22 November, 2011, after reviewing all relevant project documents and, in consultation with the staff of Plan Sunsari and its partner HUDEP, preparing checklists for use in focus group discussions and key informant interviews with a wide variety of local-, village-, and district-level informants. This also included local disaster management committees; youth and child clubs and youth-led cooperatives; teachers, students, school management committees, and parent-teacher associations; members of community-based organisations; and officials in Sunsari's development and disaster response committees and education office. Transect walks were used to observe the extent and benefits of structural mitigation work, which included two safe shelters and a resource centre. Plan Sunsari and the HUDEP staff cross-checked the information and provided feedback on the preliminary findings.

### 4. Key achievements

The project was able to achieve its first and second objectives, increasing, respectively, the capacity of local governments and district disaster response committees and that of children, youths and communities to prepare for, respond to, and

mitigate against disasters using a child-centred DRR approach, by taking the following steps.

#### Increasing awareness about DRR

To foster national-level awareness, the project organised celebrations of the International Disaster Reduction Day and informed officials about the provisions of Hyogo Framework of Action (which calls for governments to prioritise DRR locally and nationally). Further publicity was achieved when UNFCCC shared community and village disaster risk management plans and the project's major achievements at the district, regional and national levels on its website. Visits to the project by the under-secretary of the Ministry of Local Development, representatives of the United Nations Development Programme, and district disaster response committees also raised the profile of the project.

Organisational reputes also brought attention to DRR when the Association of International Non-Governmental Organisations in Nepal made Plan Nepal the district lead support agency for Sunsari and Makwanpur districts in 2010 in recognition of its response to the 2008 Koshi flood in Sunsari and when it joined a team formed under the regional directorate of education and lead by the government to conduct a damage-and-needs assessment in the East after the September 2011 earthquake.

These awareness-building activities have had a positive impact. The government has adopted DRR

#### Knowledge is more important than material support

At first, we were quite unhappy with project authorities. They kept inviting us to training sessions, but we wanted resources to build gabion spurs to protect the riverbank. Now, however, thanks to the persistence of project facilitators, we've adopted some good practices, like acting locally to reduce risk, sharing what we learn as trainees, distributing resources equitably, and putting community rules into practice. We also know that requesting the VDC for funds is our right. In the long run, information, knowledge and skills are more important than material support.

*-Focus group discussion with children and youth aged 13 to 21, Harinagara, Sunsari*

strategies and allocated resources to implement them and, with Plan Nepal's support, prepared a national disaster management plan. The Ministry of Local Development, in coordination with some international non-government organisations, including Plan Nepal (working in the project area), piloted the guideline on local- and village-level disaster preparedness and responses plans it developed with the Ministry of Home Affairs. The government has agreed to form a disaster response management council and to delegate duties so that the Ministry of Local Development focuses on preparedness, the Ministry of Home Affairs on response, and the Ministry of Physical Planning and Works on recovery and reconstruction work.

At the community level, the project used other tactics to build awareness, including behavioural change communication materials, FM radio broadcasts, and street drama. One thousand posters on preparedness for and response to earthquakes and floods, one thousand pamphlets on DRR, and one video on the disaster risk management cycle (preparation before, during and after disasters) were designed in consultation with members of local disaster management committees, youths, children, and project staff to ensure they would be easily understood, even by the illiterate. The response was positive: informants, who were exposed to these materials

in a variety of contexts, including training sessions, meetings, focal group discussions, drills, and simulations, reported that they now understand the difference between hazards and disasters and know what actions to take to reduce their risk.

The video, a joint effort of Plan Nepal and the Disaster Preparedness Programme of the European Commission's Humanitarian Aid and Civil Protection Directorate General was especially popular: every child informant said that he or she had enjoyed it and that it was one of the best tools for teaching as viewers, even the illiterate,

### Appropriate educative material

"Behavioural change communication materials target students, out-of-school children, and community members, educating them about the risk of disaster and ways they to prepare for it. Materials were gender- and culture-sensitive, and they were field-tested so that misleading text and illustrations could be corrected."

—Teachers at Kausika Lower Secondary School, Barachhetra, Sunsari

learn by seeing. The documentary depicted how communities manage disaster risks by mobilising local resources; their example, which audiences discussed in review-and-reflection interactions, convinced others to take action too. Children, for example, improved school safety, particularly by trimming trees that could pose a threat during a windstorm, and villagers controlled grazing and implemented agro-forestry-based income-generating activities on riverbanks.

The project also capitalised on the power of the mass media, using local FM radios like Radio Paribartan Itahari and Popular FM Inaruwa to broadcast 18 programmes about child-centred DRR, which included discussions with children on DRR and child rights, a live discussion with policy actors and stakeholders, and a presentation of the project's major achievements. This initiative was very effective as it was broadcast in the local language, Maithili, and reached thousands of villagers living outside the three target villages. Not only was the message about DRR heard by Maithili speakers across Sunsari, Saptari, Morang,

### Pride in eliciting a good listener response

"Though no listener clubs were formed to elicit feedback and judge programme effectiveness, we did collect valuable information from listeners. For example, we set the timing of the show—7:30 to 8:00 p.m.— after consulting children and youths. We got a very good response in the project areas and as well as in communities in India."

—Focus Group discussion with children and youth aged 13 to 21 years, Barachhetra, Sunsari

Dhankutta and Udaypur districts in Nepal but also by those in the Saharsha, Supurl, Purniya districts of the state of Bihar in India. And the benefits for listeners were not limited to becoming more knowledgeable about DRR: they also learned about the needs of children and their potential to serve as agents of change. As for the youths who designed the programmes with support from experienced radio announcers, they grew, they say, in confidence, self-esteem, and analytical abilities.

Another popular awareness-raising activity was street drama, which depicted the reality of disaster risk in local communities and demonstrated how one irresponsible individual could increase not only his or her own vulnerability but that of his or her family. Drama by its very nature communicates messages very powerfully, and these particular plays were rendered more effective by the fact that they were performed in Maithali by a team

### Street drama has an unforgettable impact

“We were impressed by the street drama. Its subject touched our hearts and filled our eyes with tears. Drama is more interesting and understandable than movies. We wish our teachers would use it as the messages conveyed through drama are so easy to remember that we could all get good marks on our exams.

*-Focus group discussion with children aged 10 to 14 years, Barachhetra, Sunsari*

of locals from the town of Itahari who had been trained by the project to incorporate pressing DRR issues explored during hazard-vulnerability-and capacity assessments. People didn’t just enjoy the plays, however; they were inspired to, among other things, develop rules to protect riverbanks and control grazing, promote community sanitation to reduce the risk of epidemics, and construct drainage networks to reduce water-logging. The plays also made it easier to evacuate and rescue people during the floods of 2011 (though they were small-scale) because people remembered what they had learned. Life skills education also helped develop a culture of peace and respect for human rights among students.

Quantitative proof that the project’s awareness-building efforts worked comes in the form of a

comparison between the results of base-line and end-line surveys administered to 364 people in selected wards in order to gauge the impact of the project on knowledge, attitudes, and practice. There is no question that children, youths, and adults are now more familiar with different types of hazards and risks and their underlying causes.

### Conducting capacity-building initiatives to boost knowledge and skills

Because a total of 175 members of district disaster response and local disaster management committees, and district and village development committees; and education stakeholders (district education officials and members of school management committees and parent-teacher associations) participated in various technical training workshops—in Humanitarian Charter and Minimum Standards in Disaster Response (SPHERE), in the Interagency Network for Education in Emergencies, and in child protection in emergencies—learning about climate change adaptation issues; hazard-vulnerability-and-capacity analysis; and contingency planning, they

**Table 1: Training workshops and trainees**

Workshop	No.	Days	Male	Female	Total
Response standards (SPHERE)	1	3	28	9	37
Education in emergencies	3	3	79	22	101
Child protection in emergencies	3	2	31	6	37

Sources : Project Report 2011

are now more accountable to local people in the provision of good-quality DRR measures. Since the staff of Plan Nepal and HUDEP also participated in similar trainings, the government has a strong network of support.

The training has had its intended effect. These days, all newly constructed shelters, resource centres, and child-friendly toilets and hand pumps meet SPHERE standards and thereby ensure that those displaced by disaster will have adequate living conditions. Project communities understand the threats emergencies pose to education and can address both physical damage (including damage to school buildings and furniture, obstructions of routes to schools, and loss of books and stationery)

as well as psycho-social repercussions (such as fear, trauma, and anxiety). Sunsari District Education Office has begun to take steps to reduce the adverse impacts of emergencies on education, particularly by engaging resource centres to collect data on the number and location of disaster-prone schools and on hazards along routes to schools. For their part, schools have drafted contingency plans.

Hundreds of children and youths attended training sessions in child-centred DRR and 93 and 33, one-third of whom were girls, got the additional opportunity of taking part respectively in one three-day first aid and in three two-day light search-and-rescue training sessions. The training has had a positive impact: trainees have, for example, started to advocate for constructing more and safer toilets and drinking water facilities in their schools and for making these facilities more child-friendly by measures as simple as lowering the latches to within reach of the shortest students. Since flooding submerges open defecation areas and household latrines, students are pushing for flood-resistant alternatives. They

### Children are safer both in school and at home

“The most impressive training session was that in first aid as we can apply the skills and knowledge we learned at home and at school. The child clubs established in our schools have made visible changes, including improving sanitation, and members compete to contribute the most to DRR. We can now, for the first time, identify which areas of our village are most at risk.”

*-Focus group discussion with youth aged 16 to 22 years, Harinagara, Sunsari*

also claim that they are more aware of risks and how to protect themselves.

By providing material support, the project ensured that trainees will be able to put their new capabilities to good use. Each trainee received a small first-aid for use at home and each of the three youth groups established by the project was provided with a substantial first-aid kit, seven life jackets, eight helmets, seven whistles, ropes, shovels, and buckets—to be stored in the village resource centre (itself outfitted with two tables, 15 chairs, and a cupboard) under the supervision of the local disaster management committee. While the youth clubs still need additional equipment,

### Search-and-rescue training is a life-saver

“The training in and equipment for search-and-rescue efforts are the most essential component of the project as they will help us save the elderly and the disabled as well as our personal belongings. We discovered that we had not known enough to reduce the risk ... [and] are now happy that we are equipped with both skills and materials.

*-Focus group discussion with students aged 10 to 14 years, Barachhetra, Sunsari*

including carabineers, inner tubes, hand-operated sirens, and stretchers, locals are aware of the nature and number of materials they do have and know how to use them. In fact, they put some to good use in rescue efforts carried out in 2011. Equally encouraging, first-aid trainees have helped people save the NPR 150 they used to spend travelling to Dharan, the nearest city, to get the essential drugs that local health posts did not stock. According to the members of the Barachhetra disaster management committee, “trainees now... have the confidence to help neighbours in need.” They also have the skills. The same informants pointed out that in the past, ignorance saw much improper assistance provided in the name of first aid but that now student and teacher first- responders can skilfully treat bleeding, fractures, and shock as well as provide artificial respiration, make stretchers, and carry patients safely.

Since training in child protection issues made parents and members of school management committees and parent-teacher associations more

aware of the risks that disasters expose children to, including sexual abuse and exploitation, trafficking into prostitution or hazardous labour, injury due to accidents, abduction for ransom, and increased domestic violence, trainees are now more able to prevent rights violations. The children of Harinagara VDC said that they are glad that adults are now more knowledgeable about and thereby more capable of addressing their disaster-related concerns, which include psycho-social distress, interrupted schooling, and increased insecurity.

### **Promoting school-based DRR through curriculum development and contingency plans**

Three Interagency Network for Education in Emergencies training sessions, a symposium, and a series of interactions convinced education-related stakeholders of the need to incorporate DRR into school curricula. While meetings of district education office officials, experts in various school subjects, and disaster professionals were held to promote a new solution-centric curriculum that will help children be resilient to disaster risk, much effort is still needed.

With the participation of both child and adult stakeholders, each of the three schools in the project area—Harinagara Higher Secondary School in Harinagara, Basanta Ritu Secondary School in Mahendranagar, and Kausika Lower Secondary School in Barachhetra—developed a contingency plan after conducting a hazard-vulnerability-and-capacity analysis which assessed potential risks, including damage to school infrastructure, furniture, and learning material and time lost due to closure. Each plan adhered to the principle of ‘DRR through schools’ not ‘DRR in schools’ so that they could accommodate a

wide variety of issues, all of which put children at their centre. Schools have started to implement these contingency plans, renovating toilets and clearing, levelling, and fencing school grounds to reduce the risk of snake bites, accidents, and incursions by domestic and wild animals. While all the contingency plans are closely aligned with the school improvement plans developed with support from the district education office, familiarity with those plans needs to be increased, perhaps by displaying the activities they prescribe on school walls. Eleven-to-sixteen-year-old students at Basanta Ritu Secondary School in Mahendranagar praised the

### **Allocate resources for capacity building**

“We are surprised that such initiatives [those that make a school safe] have not been adequately implemented at our school.... A big river flows right next to the school grounds. How, then, can we be safe from flooding? We think the project, the school, the VDC and the government should allocate resources to build student capacity and improve the physical condition, and thereby the safety, of our school.

*—Focus group discussion with student aged 11 to 16 years at Basanta Ritu Secondary School*

school-based effort: “The project’s decision to make schools safe first makes good sense as the collapse of a house affects one family but the collapse of a school affects many families at once.”

However, much remains to be done. While students are now more aware of the measures they can implement to make their schools safer, including forming disaster task groups for search-and-rescue efforts, first aid, early warning, and evacuation and drafting an emergency evacuation plan—social changes they can implement on their own—they feel frustrated by the lack of support from duty bearers for implementing necessary physical changes.

### **Promoting the implementation of ever-better disaster preparedness and response plans and the translation of new knowledge and skills into practice**

To disseminate its good practices and learning, the project, in collaboration with the Ministry of

### **Drawing up a contingency plan**

“We drew a map of a safe community, took a transect walk, prepared a risk and resource map, and drew up a timeline and seasonal calendar after interviewing adults. We then prepared a disaster matrix ranking diagram and prioritised our responses. We are happy that our concerns are incorporated in the plan.”

*—Focus group discussion with student aged, 10 to 12 years, Harinagara Higher Secondary School*



Home Affairs, the Association of International Non-Governmental Organisations in Nepal, and UNFCO, conducted a two-day pre-monsoon preparedness workshop for 56 members of the disaster response committees of 16 districts in the eastern development region, enabling them to better address hazards by updating their disaster preparedness and response plans and aligning and integrating them with other development plans to make sure they would be translated into action. Participants reviewed the performance of each cluster and, incorporating the suggestions visitors had made in “lessons-learned” workshops, systematically aid out further plans of action. The project further ensured that each plan had input not just from disaster response committee members at the district level but also from those at

and 22 females. The dissemination of these plans among a wide variety of stakeholders has helped ensure that they get the financial support they need and that lofty ideas on the printed page are actually executed. While it is Sunsari Disaster Response Committee that is responsible for executing the plan, children, youths and families have been engaged and empowered through the participatory planning process and are capable of pressuring local authorities to influence policy regarding DRR and to secure long-term financing for it. Furthermore, the very making of the plans had benefits: the process encouraged communities to come up with creative solutions for their own problems and to understand their roles and duties.

### Ensuring the implementation of plans

“Disaster preparedness and response plans were widely shared with village- and district-level stakeholders to promote the mobilisation of resources for their execution. There are indications that resources from next year’s budgets will be allocated to these plans. Sunsari District Development Committee, at least, is convinced that it should allocate a proportion of its budget [for implementing the plans].”

*-Bhesh Raj Ghimire, Programme Officer,  
DDC, Sunsari*

the local and village levels as well as from political parties, the Nepal Red Cross Society, international and local non-government organisations, and journalists. Each plan includes an assessment of the disaster situation, an analysis of the resources and capacity available to address it, a description of the roles and responsibilities of DRR-related institutions, and a statement of the commitments of DRR-related stakeholders to execute the plan. All plans are dynamic and will continue to be amended as the project learns and the disaster context evolves.

The project also helped implement a total of seven disaster preparedness plans—that of Sunsari District as well as those of the project’s three target villages and three target schools. Each of the last was made at a three-day workshop attended by a total of 101 individuals, 79 males

Some parts of some plans were executed during 2011. The district plan, for example, saw the timely mobilisation of all 10 clusters, including education, water and sanitation, health, food, and emergency shelters, and on International Disaster Reduction Day children and youths organised rallies promoting DRR and presented each VDC secretary with a request to allocate budget for DRR. Most village plans, however, will be executed only next year, when secretaries have promised to bring up DRR at the first council meeting of the new fiscal year in April 2012.

At the community level, the project conducted initiatives to make sure that the knowledge and skills people acquired during trainings could be translated into action and to increase people’s confidence in their capacity to manage disasters; in addition to the six street drama performances and three showings of the project’s DRR documentary mentioned above, these including six drills in earthquake, fire and flood procedures. Earthquake drills saw students and teachers identifying areas of high, medium and low risk within their school compound; estimating the occupancy of each safe



assembly space; and drawing arrows to indicate the safe route to those areas. Participants also discussed what to do within a classroom when a tremor struck and how to exit it after the shaking had subsided. Eleven-to-sixteen-year-old students at Basanta Ritu Secondary School in Mahendranagar spoke of drawing a floor plan of

### Simulations reinforce book learning

“Now that people have experienced an early warning simulation, they understand its benefit and can respond appropriately.... The simulation was very effective as it increased our knowledge of disaster management and provided us with the chance to test our plans. We are now quite capable of issuing a warning about flooding using drums and announcements on local radio.

—Focus group discussion with youth aged 15 to 22 years, Harinagara

classroom furniture, identifying safe spots (under tables and desks and in doorframes) and danger zones (near windows and unstable furniture and under heavy hanging objects like fans). These and other simulations—of flood warnings, for example—were instrumental in teaching people how to respond without undue panic in a real-life situation and to assume the roles they had laid out in their preparedness and response plans. People reported that when the September 2011 earthquake struck, they remembered to execute the very same ‘duck-cover-and-hold’ technique that they had learned and practiced a month earlier and that there was none of the chaos and terror that had characterised their reaction to the August 1988 quake. In general, drills and simulations helped to fill gaps in people’s knowledge about DRR and to translate skills and knowledge into practice at the individual, family and community levels. In doing so, they enhanced the self-confidence and self-reliance of the participating communities and increased their resilience to disaster risks.

### Forming participatory and inclusive DRR institutions

The project formed and capacitated 12 participatory and inclusive DRR institutions—one local disaster management committee, one

youth clubs, one youth-led cooperative, and one school-based child club in each of the three target villages—with a total of 123 members to serve as child-centred DRR pioneers and agents of change. It tried to rectify historical marginalisation by encouraging females and minorities, including Dalits, indigenous ethnic groups, persons with disabilities and Muslims, to participate (see Table 3). All of these institutions (even the local disaster management committees, each of which had one child and one youth member) recognise the contribution children and youths make, not just with their unique perspective on disaster risk but with their level of creativity, proprietary sentiment, and enthusiasm, a level not generally seen among adults. These DRR institutions not only promoted DRR-focused capacity-building, experience-sharing, advocacy and resource mobilisation, but also, through their inclusiveness, helped locals better understand the importance of social solidarity. As a result, people have begun to help out the vulnerable. The local disaster management committee in Harinagara, for example, settles local-level conflicts, mediates in cases of domestic

**Table 3: Membership in DRR institutions**

DRR Institution	Total	Females	Minorities
Local disaster management committees	51	13 (25%)	20 (39%)
Youth groups	35	11 (31%)	12 (34%)
Child clubs	37	15 (41%)	11 (30%)
Total	123	39 (32%)	43 (35%)

Source: Project’s records, 2011

violence, and handles border issues, while Barachhetra has mobilised local resources to protect the banks of the Gauri and Karam rivers with bioengineering.

Other positive effects of the project’s emphasis on inclusive participation include the fact that relationship between immigrants from the hills and local Madhesi are now more harmonious and that girls and women are more vocal, confident, and able to interact with outsiders. Children are better empowered to demand resources and engage in transformative action designed to reduce their vulnerabilities, whether on their own or with adults. As children grew more willing to speak up about issues that affect their wellbeing, their guardians began to see them not as victims

### Children see themselves as agents of change

“We can prove that children are better than adult to respond disaster and that we are agents of change. We are part of society, so we should be involved in ... assessing the situation and designing and executing DRR plans. It is because we are innocent and uninterested in party politics that we are ignored. DRR stakeholders should ... use our knowledge and understanding in the best way possible.”

*—Focus group discussion with children aged 10 to 14 years, Barachhetra, Sunsari*

but as active players in preventing, preparing for, mitigating and responding to disasters. Indeed, children demonstrated that, equipped with accurate information and appropriate tools and bolstered by a strong support system, they are effective agents of change who can foster resilience to disaster. Another important development was that local DRR networks have been formalised, making it easier to mobilise a response to a disaster and to protect children during that disaster. However, some, including teachers at Harinagara Higher Secondary School, recommend more visits among DRR institutions be arranged to increase opportunities to learn from each other.

It is not just local DRR institutions which are inclusive; so are village disaster management committees. Since they are chaired by VDC secretaries, these committees serve as a nodal institution which can promote resource-sharing and sustain DRR initiatives even after the project’s dissolution. Unfortunately, the transfer of these government-appointed officers, as occurred in Barachhetra and Mahedranagar, can hamper efforts unless, as did in fact occur, the secretary’s authority can be transferred to the vice-chairperson. Greater representation was an unforeseen benefit of this transfer that both villages enjoyed: the people themselves had nominated the vice-chairperson.

### Empowered children, youths and adults to speak up

A variety of strategies, including hazard-vulnerability-and-capacity assessments, leadership training, ambassadorial roles, and extracurricular activities, were employed to enable people to give

voice to their concerns and to advocate policy changes and demand resources at community, district and national forums.

Training sessions in hazard-vulnerability- and capacity assessments empowered 121 participants, 45% of whom were women, to identify their various vulnerabilities and to make plans for immediate action in a systematic manner involving both primary and secondary stakeholders, including the district education officer, while training sessions in climate change adaptation for a total of 33 participants, 39% of whom belonged to various marginalised groups, reinforced the need to act promptly and to mobilise external resources. The outcome of each assessment was displayed on notice boards erected at schools and

in public places. It included a map of hazards and vulnerable areas; a list of most-at-risk individuals, including people with disabilities, pregnant women and lactating mothers, and the elderly); an assessment of community capacity (measured in terms of different types of capital and assets); and the contact numbers of DRR service providers and organisations. This information was then used

### The importance of assessment

The hazard-vulnerability-and-capacity assessment we conducted helped us to explore the root causes and effects of vulnerabilities as well as to come up with solutions using a participatory approach. We now have a plan of action with defined roles and responsibilities....We have realised that actions are not effective unless an assessment is conducted first.

*—Focus group discussion with children aged 10 to 13 years, at Kausika Lower Secondary School, Sunsari*

to formulate disaster risk management plans. It is also had a powerful psychological impact: the once fatalistic ‘nothing-can-be-done’ point of view of many children and adults has been replaced by a positive ‘yes-we-can’ outlook.

For their part, the 154 villagers who were trained, many of whom are teachers and youths, now serve as local resource persons who actively disseminate key messages about climate change adaptation and DRR not just within but outside of schools. The changes their instruction has brought in children have demonstrated the value of making children the primary audience for awareness-raising and education. Indeed, youths trained in climate change adaptation advocacy skills went a step further than mere education: they increased the demand made by rights holders for funds from duty bearers to support small-scale climate change adaptation initiatives at the community and school levels.

The project created an environment conducive to increasing the leadership skills and confidence of youths and children in two key ways: using them as peer educators to teach other children and having them interview adults in the process of assessing risks. Giving children such responsibilities didn’t just reduce the workload of adults and promote a means of spreading messages to children in a way often more powerful than other, traditional ways, but also groomed them to lead other initiatives.

The project included youths in training-for-trainers sessions and later mobilised them to facilitate their own training sessions in climate change adaptation. In choosing to give youths such a significant role, the project drew upon past experience of Plan Nepal, which demonstrates that learning in peer groups can be more effective than classroom learning because there are no social boundaries to cross or formal protocol to adhere to and that once young people are knowledgeable about DRR, they readily disseminate that knowledge to their parents, thereby reinforcing their own understanding and increasing their parents’ and promoting a previously non-existent exchange of DRR ideas. Youth trainers got the chance to put to use what they had learned and, in their own testimony, experienced a huge boost in self-confidence.

## A confidence booster

“We are very confident now. We have learned so much that we are more expert about the local context and local issues than outsiders are. Some children...now address us with the honorific ‘sir’. We are very proud that we have been able to do something for our peers.”

*—Focus group discussion with youth aged 15 to 23 years, Sunsari*

## Extracurricular activities

The project conducted 12 DRR-related extracurricular activities—three competitions each (one in each target village) in art, folk songs, debate and quiz—among a total of 1306 children and youths, 38% of whom were female. These activities were instrumental in increasing children’s understanding of disasters; providing them with an opportunity to share their knowledge with their peers, families and communities; promoting cognitive and emotional development; encouraging them to hold drills and talk programmes on the last Friday of every month; and inspiring them to set their sights higher. Ten-to-fourteen-year-old students at Kaushika Lower Secondary School in Barachhetra, for example, are proud to have followed their contingency plan and cleared bushes and cleaned their school compound, but vow to do more: “More work has to be done, but we will do it.”

Children’s impressive performances at these events convinced school management committees and parent-teacher associates that children can indeed play a considerable role in DRR and, because they were attended by large audiences, the events

themselves spread awareness widely. Children also painted murals in local languages to increase awareness about child-centred DRR. Still, the possibilities for disseminating DRR information have not yet been exhausted: assemblies, prayers, parades, sports, and scouting could also be used

### Establishing physical and economic infrastructures that boost resilience

With community contributions of not less than 12%, the project helped construct two 75-m<sup>2</sup> safe shelters, one in Barachhetra and one in Mahendranagar, and a 20-m<sup>2</sup> resource centre in Harinagara (see Table 4). While the centre was built with wooden trusses and Corrugated Galvanised Iron sheeting, the shelters have steel trusses and meet SPHERE standards: they are linked to a safe evacuation route and have direct access to two toilets and a hand pump supplying potable water. In addition, rainwater can be harvested in a large tank for non-drinking purposes. However, while the shelters are outfitted with ramps for the physically disabled, the toilets lack handrails and the verandas, railings. People have to travel one to one-and-a-half hours

**Table 4: The cost of physical infrastructures**

Infrastructure	Contribution (in NPR)		
	Project	Community	Total
Shelter	1,213,144	160,500 (12%)	1,373,644
Resource centre	99,954	24,981 (20%)	124,935

Source: Project's records, 2011

upstream to reach the safe shelters, each of which can accommodate 60-72 people (i.e. 10-12 families). The people who contributed to the construction of these infrastructures have also developed a code of conduct for their operation and maintenance and put local disaster management committees in charge of their management. Fortunately, since one shelter is in the compound of a school and the other in that of a VDC office, security is not a problem and the facilities can be used for multiple purposes, including conducting health check-ups, hosting community feasts and festivals, carrying out training and orientation sessions, and running extra classes for students. Now that there are separate shelters, it is unlikely that students will see their right to education interrupted as it was when families displaced by disaster were housed in schools.

Though the buildings are now almost complete, their construction took place only after considerable delay. Finding plots of land free of dispute and getting VDCs to supply timber was a lengthy process to begin with and the transfer of VDC secretaries in the midst of the process meant having to start again from scratch. In addition, political wrangling saw VDC offices closed for several days and administrative processes at a standstill. Building the resource centre also required appeasing the residents of Haringara, who, until they though they are now almost complete understand that the centre served a different purpose from a shelter, were unhappy that they had received less money.

### Youth-led cooperatives

The project established three youth-led savings and credit cooperatives, one in each project village, and provided each with NPR 15,000 (208 USD) to serve as seed money to start a fund for use in emergencies, when livelihoods are often devastated and people's ability to cope with further stresses is severely compromised. These cooperatives provide easy loans at reasonable rates of interest (comparable to those of other cooperatives, though the disaster-affected get a rate of 14% instead of 18-20% and have a longer and more flexible pay-back schedule) in order to help people ward off the terrible impacts of a disaster, including the loss of assets and income earners. Such loans can keep a downward spiral into ever-deeper poverty at bay and build resilience to cope with future disasters. While a portion of the monthly savings of the cooperative members is designated as an emergency fund never to be touched in ordinary circumstances, the rest is put to productive use, mostly to start up micro enterprises in local markets and, on the odd occasion, to invest in agriculture or animal husbandry. While these cooperatives promise to increase economic resilience, there is a need to

**Table 5: Youth savings and credit cooperatives**

Cooperatives	Rate of interest	Total savings (NPR)
Bipad in Harinagara	20%	273,000
Samabesi in Mahendranagar	20%	40,000
Toribari in Barachhetra	18%	25,000

Source: Project's records, 2011

### Local emergency funds foster independence

“The establishment of an emergency fund promoted solidarity and a desire to help others.... We intend to increase the amount so that we don’t have to rely on support from outsiders. We’ve had no difficulty in raising money because our rules and regulations are flexible and because we operate our fund following community decisions. People are ready to pay because the risk of flooding is very real.”

—Focus group discussion with students aged 10 to 16 years, Basanta Ritu Secondary School, Sunsari

train a second-tier of leadership to counter the possible attrition they will experience due to high rates of youth migration.

## 5. Project limitations and adjustments

The project faced several challenges. They included delays in conducting training workshops because of a lack of appropriately skilled local resource persons and a lack of sufficient staff to monitor, evaluate, and provide technical backstopping for large number of activities the project implemented. The fact that holidays for festivals reduced the actual project duration from 11 to nine months did not help; nor did the fact that, in the absence of an elected local government, it took time to build functional coordination with VDCs, Sunsari District Development Committee, and political leaders. Arranging to acquire land on which to construct the two safe shelters and the resource centre was also a lengthy process: reaching a consensus involved several rounds of discussions. Besides, enthusiasm for DRR was initially limited.

The project was supposed to run for 15 months, from 1 March, 2010, to 31 May, 2011, but its launch was postponed till July 2010, reducing both its budget and its duration. Even so, except for the final touches on the safe shelters and resource centre, all 183 targeted activities—seven designed to achieve objective 1, which focused on local government and district disaster response committees, and 176 to achieve objective 2, which focused on children, youths

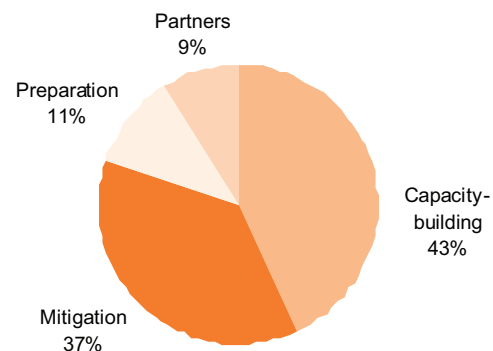
and communities, were achieved within the project tenure and before the 2011 monsoon, which put the beneficiaries’ newly-acquired skills in and knowledge about how to prepare for, respond to, and mitigate against emergencies to the test. Altogether, Barachetra and Haringara saw the implementation of 25 activities each, while Mahendranagar benefited from 29; twelve additional activities took place at the district level and 85 had a variety of beneficiaries.

## 6. Relevance

There is no question of the project’s relevance: it met a need and made a contribution. It provided a needy population with appropriate inputs, capitalised on the capacity of schools to serve as an entry point and of children to serve as agents of change, and dovetailed with the aims of Plan Nepal, the Nepalese government, and the international community.

The VDCs were selected consensually by the members of Sunsari Disaster Response Committee, VDC secretaries and major stakeholders. None had been served by the recently concluded Disaster Preparedness Programme of the European Commission’s Humanitarian Aid and

Figure 2: Allocation of Project Resources



Source: Project’s records, 2011

Civil Protection Directorate General or the ongoing Post-(Koshi) Flood Recovery Project despite their vulnerability to floods. The diversity of the populations-Barachhetra and Harinagara are upstream villages on the banks of the large Saptakoshi River and are dominated by hill migrants and Mahendranagar is a downstream



village on the banks of the small Sunsari River and is dominated by Madhesis—provided much scope for comparative study. Just 9% of the total budget went to the management of operations with Plan Nepal's partners; the rest, as is fitting, was devoted to either improving the capacity of beneficiaries (43%) or to mitigating and preparing for disaster (37% and 11% respectively) (see Figure 2).

Using schools as the entry point for introducing DRR was a sensible idea for several reasons. First, they are one of the few institutions virtually unaffected by the insurgents of the various politically- and economically-motivated gangs which operate in Sunsari District. Second, they provide a convenient physical space in which to educate children and youths about disaster preparedness and response and are already associated with DRR as they are often used to house populations displaced by disasters. In addition, a school-based project gives ready access to children and youths, groups which can contribute much to making disaster preparedness and response plans holistic because their perspective on risks is unique and well-informed perspective and because their priorities differ from those of adults. Young people can drive change by communicating DRR messages to their peers and families and even to local government officials, often more capably than adults can.

The project helped Plan Nepal fulfil the goals and objectives of its third country strategy plan (2011–15) and its Disaster Risk Management Strategy (2009), both documents which focus on upholding children's right to education during disasters by minimising disruptions and restoring services quickly. The project also complements the Sunsari Programme Unit Long-Term Plan (2011–15), which calls for building awareness about and capacity in carrying out child-centred DRR in schools and communities among children and youths and their families and for establishing child and youth groups. The goal of child-centred DRR—to build resilience—is an achievement which complements Plan International's child-centred community development approach in that it supports children, in collaboration with adults, in utilising their knowledge and skills to create a safe, child-friendly, and resilient environment.

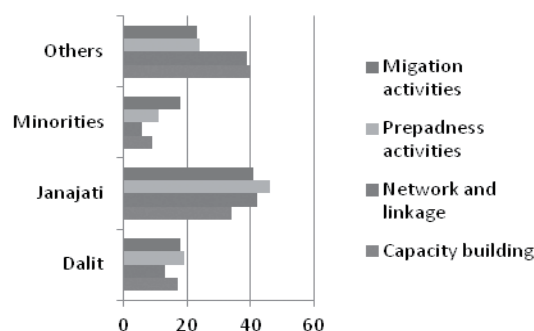
The project was also relevant in both the national and international contexts. The goals of the government's Three-Year Interim Plan (2007/08–2009/10) included developing disaster-resilient communities and those of the Local Self-Governance Act (1999) include the sort of decentralisation which the project's handing over of the safe shelters and resource centre to VDCs accomplished. The project helped Nepal meet its second millennium development goal (decreasing the child mortality rate); the fifth priority area of the Hyogo Framework of Action (reducing the impacts and losses associated with disasters by ensuring that communities in hazard-prone areas are well-prepared); and the UN's campaign to see education for all by 2015. More specifically, the construction of the two safe shelters and the resource centre contributed to the United Nations International Strategy for Disaster Reduction, Safer Schools Campaign. Indirectly, the project contributed toward the UN's decade of sustainable development (2004–2014) as well as to the government's fourth flagship, which broadly aims to increase resilience by promoting and building capacity in all facets of disaster risk management, including preparedness and response.

## 7. Efficiency

The design and, management, and funding of the project were efficient; neither time nor money was wasted.

The project was designed to maximise its impact. It used tried-and-tested approaches, for example, and employed different strategies for upstream

**Figure 3: Involvement of various ethnic groups in DRR institutions**



Source: Project records, 2011



and downstream villages. The establishment of inclusive DRR institutions (see Figure 3) ensured a high level of participation and focusing on capacity-building ensured success in implementing activities, mobilising resources, and coordinating with local-, district- and national-level stakeholders. Indeed, many community-level interventions were designed to have a wider effect, in part by involving a variety of stakeholders, including district development and disaster response committees and VDCs, in formulating and executing disaster preparedness and response plans, engaging in policy advocacy and carrying out mitigation efforts.

The project was executed by a small team at minimal cost. Plan's Water and Environmental Sanitation Coordinator was in charge of overall coordination and policy advocacy, while at the Sunsari Programme Unit, the Child-Centred DRR Manager oversaw implementation and monitoring and the Water and Environmental Sanitation Manager, technical quality, both under the supervision of the Programme Unit Manager. Plan's local operating partner, the HUDEP, also managed activities well and cheaply; HUDEP staff's knowledge of local dialects and culture accelerated mobilisation efforts and the HUDEP board's evaluation of implementation ensured that the non-governmental organisation's work was good quality. The management style was democratic and participatory: it fostered team spirit and belongingness and gave each stakeholder room to develop his or her strengths and learn new ideas.

Despite several hindrances, managers ensured that all project targets, including community contributions and land acquisition, were met within the stipulated timeframe (just 11 months after the delayed start). Though the time for review and reflection was extremely short, effective monitoring of objectively verifiable indicators at multiple levels—the district, village, project, and community—ensured that the project stayed on track and that, despite its short tenure, the extent of learning was considerable

High levels of mobilisation of and cooperation among DRR stakeholders made it possible to establish a culture of resource-sharing. VDCs, for example, provided the timber needed to build

the two safe shelters and the resource centre; and, to show the documentary, schools served as venues and the affluent in Harinagara arranged for a generator free of cost. In addition, Plan Nepal tapped into its core funding, providing NPR 177,065 (USD 2214) to Barachhetra for first-aid training and Morang Programme Unit contributed NPR 150,000 (USD 1875) to co-fund a regional pre-monsoon preparedness workshop with Sunsari Programme Unit. To get more value for its money and promote knowledge management, the project invited the staff of other Plan programme units to its training sessions. Finally, the project had to pay only a project manager as Sunsari Programme Unit incorporated the project into its core programme and its staff contributed voluntarily, in the case of the accountant, administrative coordinator, programme manager, and development coordinators, or charged minimal person-days given the output generated in the case of the Programme Unit and Water and Environmental Sanitation managers.

## 8. Effectiveness

The effectiveness of the project was ensured by engaging and building the capacity of multiple stakeholders using a participatory and transparent approach and thereby inspiring considerable trust in the project.

The project was able to have a powerful effect because it targeted a wide range of stakeholders, including the ministries of Local Development and

### Sharing inspires trust

"Though [the information desk] has to be strengthened, it has nonetheless enhanced trust among stakeholders as well as in the disaster preparedness response plan formulated under the leadership of Plan's Sunsari Programme Unit, and has added value and encouraged progress."

—Om Koirala, Resource Person, DEO, Sunsari

Home Affairs at the central level and, at the district level, disaster response committees, child welfare boards, police, and political leaders. The latter it shared information with effectively by establishing

an information desk at the Sunsari District Administration Office. The project's coordination with UNFCC cemented these intra-national links and also fostered international ones; in fact, many of UN and government high mission to eastern Nepal visited the project and provided positive feedback.

At the community level, VDCs, school management committees, parent-teacher association, youths, and children were mobilised and capacitated taking into account the local seasonal calendar. The project was flexible in its plans, amending them to have a greater impact by, for example, celebrating International Disaster Reduction Day and facilitating joint monitoring visits by the Ministry of Local Development and district disaster response committees even though neither activity was part of its original plans. Since the staff of Sunsari and Morang programme

units had already been trained in a variety of child-centred DRR issues, including contingency planning, emergency management and SPHERE, in a workshop organised last year with technical support from the National Disaster Risk Reduction Centre and financial support from the German National Office, they were already well-positioned to move ahead with DRR efforts.

The project's insistence on participation in every activity, from the very first introductory meeting to forming DRR institutions to conducting hazard-vulnerability-and-capacity assessments to drafting disaster preparedness and response plans, facilitated the mobilisation of children, youths and teachers and inspired trust, as did the employment of local masons and local materials in building the two safe shelters and the resource shelter.

That trust was cemented because all plans, programmes, decisions, and financial transactions were displayed in public places. Even though there was no formal social audit, all the informants expressed their satisfaction with the degree of transparency the project achieved.

## 9. Sustainability

While it is too early to claim for sure that project initiatives will be sustained, there are a number of positive indications, including the strength of youth networks, cooperatives and other community-based organisations; the significant increase in the capacities of multiple stakeholders; and the support for disaster preparedness and response plans.

Since the project set clear expectations for community involvement and emphasised self-reliance, the formation of local institutions, the mobilisation of local resources, and joint social action, it is likely that beneficiaries will continue to implement to differing degrees, of course—the activities the project initiated, even after the project is phased out. Project interventions enhanced organisational and leadership capacity among the staff of HUDEP as well as members of local disaster management committees and child and youth clubs, giving them the wherewithal to act independently. The VDC secretaries who chair local disaster management committees will serve as a two-way link between local and district DRR issues, thereby creating a strong support system, especially in terms of funding; and

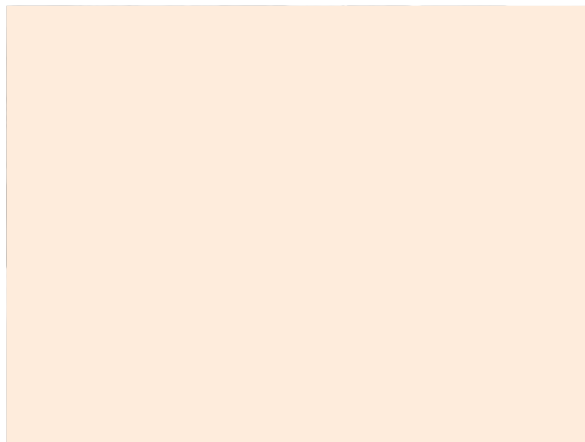
### Helping in Main Streaming

“The project helped us to mainstream DRR in the district development planning process and to successfully test the local and village disaster preparedness and response plans developed by the Ministry of Local Development. All the preliminary work for implementing child-centred DRR in district-level plans has been done. These efforts will help ensure that resources to execute disaster preparedness and response plans are provided regularly.”

*-Focus group discussion with  
Government Officials in Sunsari District*

HUDEP, because it is local, can continue to provide technical backstopping. Still, institutionalisation of groups and activities is a lengthy process and there is no guarantee of success.

Youth groups could provide the long-term backing villagers need to sustain DRR efforts. Youth-led cooperatives, in particular, have an ever-growing fund for use in promoting sustainable livelihoods and a fixed emergency fund which provides the disaster-affected with loans at discounted interest rates for extended periods. Youth clubs are in the process of registering themselves and soon will have a legal mandate to lay claim to VDC resources to carry out DRR initiatives. These clubs have also started to increase their clout by networking.



Indeed, the chair of the project-formed Harinagara youth group is the vice-chair of the newly formed Devangunj-Harinagara-Madhayharsahi youth club network. In addition, since Plan Nepal's core programme in Barachhetra and Harinagar includes the strengthening of youth cooperatives, it is likely that these cooperatives will continue to get financial and technical support.

Another factor boosting the project's sustainability is the fact that the project's capacity-building activities provided the knowledge, skills and equipment locals needed to carry out search-and-rescue missions and develop small-scale early warning systems with confidence. These capacities are not readily lost. Trained members of local disaster management committees and youth groups have sufficient expertise in search-and-rescue techniques, including the lifting and stabilising of loads and surface extrication, safety and security, situation assessment, and mapping to face a variety of hazards, including floods,

earthquakes, and fires. As a result, communities are substantially less vulnerable than they were before the project was launched. It is likely that the child-to-child and child-to-adult models of sharing DRR information encouraged by the project will enable people to test and refine their DRR knowledge and practices and to develop new, more effective approaches in the future.

If disaster preparedness and response plans are linked with government plans, they get extra support. School contingency plans, for example, are closely aligned with school improvement plans, and as the district education office provides funding to execute the latter, it is likely that some DRR initiatives will also get funding, at the very least indirectly. Some project communities have already received support from VDCs; others are in the process of receiving it. Involving district-level government officials as resource persons in some training workshops, like that on education in emergencies, helped promote linkages, as did involving the Nepal Red Cross Society in first aid and search-and-rescue training sessions. Regular coordination and collaboration among DRR and educational agencies at all levels also promoted sustainability by encouraging ownership.

## 10. Impact

After just 11 months, it is difficult to suggest what the project's long-term impacts may be; most of the results of the interventions were simply effects or outcomes. Still, there are indications of a future characterised by substantial positive changes, including changes in attitude, the practice and replication of preparedness initiatives, the development of local DRR resource persons, and an increase in successful appeals for support.

People no longer see disasters as being the will of God. Nor do they see themselves as helpless victims. They understand that the effects of a natural hazard can be minimised and have taken concrete steps, like mapping high-risk areas, to increase their resilience. Fatalism has made way for activism. Thanks to the project's capacity-building and other activities, people are more confident in their own abilities and more assertive in demanding that government agencies support them. In their project-initiated DRR efforts, people

have relied heavily on the power of teamwork; in fact, it could be said that the project has fostered a culture of charitable helping during emergencies, nurturing, in the process, greater social solidarity and neighbourliness in ordinary times as well.

The project's interventions have made people safer. Through drills and simulations, individuals have become familiar with what to do (and not do) before, during and after disasters. In fact, the majority used their new knowledge and skills during the September 2011 earthquake. Students no longer leave the classroom during a thunderstorm and do not cross torrential rivers without very careful consideration. At the household level, too, changes have taken place. People living in areas vulnerable to flooding have started to raise plinth levels and to build a second story where they can store grain and take refuge. They have begun to keep valuables, including jewellery, cash, and important documents like bank passbooks and cheque books, citizenship and birth registration cards, and land ownership certificates, in safe places. Instead of wooden bhakari they use clay vessels to store their grain and some have exchanged their thatched roofs for CGI sheeting or tiles to reduce the risk of fire. At the community level, local disaster management committees have begun to stock both food and non-food relief items, including beaten rice, sugar, noodles, dried vegetables, blankets, bandages and other medical supplies before the onset of the monsoon season. People have begun to make earthen dikes around vulnerable villages to hold back flood waters, to construct elevated earthen roads to serve as evacuation routes, and to identify places to serve as safe havens during emergencies.

Some good practices have been replicated by those the project did not serve directly. For example, in Barachhetra, students at Shree Jaldevi Primary School in Ward No. 6 formed child and youth groups and those at Kausika Lower Secondary School had a compound wall constructed after mobilising local resources. These students and many other children were influenced by the 18 project-supported radio programmes to adopt safer practices. Money to replicate DRR efforts has also been forthcoming: Barachhetra Disaster Management Committee advocated spending 35-50% of local revenue on DRR activities and Barachhetra VDC allocated NPR

200,000 to execute village-level disaster response and management plans. Plan's Rautahat and Banke programme units have also begun to replicate child-centred DRR activities and 16 municipalities in eastern Nepal are preparing disaster response and management plans akin to the project's village-level plans with funding from the GIZ-sponsored Urban Development through Local Efforts Project.

The attitudinal and behavioural changes described above are supported by youths whom the project capacitated to serve as local DRR resource persons. It is under their instigation that children and adults, for the first time, are discussing preparedness for and prevention and mitigation of disaster. People used to wait for relief and rescue after a disaster, but now, having been taught by resource persons how to act for themselves, they are taking the initiative in increasing their resilience.

The project's rights-based approach and focus on empowerment and participatory and inclusive hazard-vulnerability-and-capacity assessment helped groups who have never been heard due to historical marginalisation to speak out and have their concerns heard. Engaging in collective advocacy for DRR boosted the confidence of children, strengthening their voices and encouraging them to go straight to relevant duty bearers and demand their rights. In Barachhetra, for instance, children ran sanitation campaigns and secured VDC resources for toilet construction. Advocacy had bigger paybacks for disaster-affected families: Sunsari District Agriculture Development Office, the lead agency of the food cluster, and Plan's Sunsari Programme Unit distributed food worth more than NPR 1 million (12,500 USD) in response to repeated demands. Capitalising on its association with the project, HUDEP also managed to leverage resources, which it used to distribute relief during the 2011 monsoon.

## 11. Learning

Though the project was just an 11-month-long pilot project, strong monitoring mechanisms enabled its staff to derive much learning from their efforts. While further review and reflection will no doubt unveil other key lessons, the project already has ideas about how to better convince people of the need for DRR, how to improve the quality of training

and the strength of DRR institutions, and how to maximise the benefits of school-based entry.

### Convincing people of the importance of DRR

It is essential that people first be convinced that DRR is even worth their time and money since a long history of structural mitigation activities like training rivers by building embankments

#### Video changed minds

“Before this project, we had not realised what preparedness entails. We believed that mitigation was the only way to tackle disasters. The video documentary changed our minds; it showed us that many small things can be done at home as part of preparedness.”

*-Members of the Barachhetra Disaster Management Committee*

and using spurs to divert river flow has biased them against other DRR measures like capacity-building, empowerment, prevention and preparedness. The techniques that best accomplish this change in perception are drills, street theatre and documentaries as well as the more standard training and orientation. The visual impact of seeing other Nepalis living in disaster-prone areas struggle to reduce the impacts of disasters by implementing a variety of preparedness activities was powerful indeed and people now understand that if proper preparedness measures are not implemented, the effectiveness of mitigation measures is limited. Advertising price tags also goes a long way towards

#### Addressing multiple risks

“Our right to protection...is only very weakly upheld during disasters. We are forced to engage in the risky behaviours on the way to and from school. We have to travel long distances to fetch water when water pumps dry up during droughts. We have to take livestock far away to graze as there are no grasslands nearby and river banks are so covered in sand they are like deserts. However, there has been a positive start [in addressing these hazard-related problems] and we are very optimistic.”

*-Focus group discussion with students aged 10 to 14 years, Kausika Lower Secondary School, Mahendranagar*

convincing people: preparedness activities cost only one-quarter what mitigation activities do. Besides enabling people to see the impact of DRR on the screen or in dramatised form or to participate in drills themselves, interest in DRR can be aroused by addressing multiple hazards. The project focused on floods as these hazards pose the greatest threat to the target population, but it piqued beneficiaries by also disseminating information on other hazards, including cold waves, fires (a frequent occurrence in Harinagara), wildlife attacks (a problem in Barahachhetra and Mahendranagar), thunderstorms, and epidemics. Since the project was willing to expand its focus to address issues pertinent to the people, participation and interest were high. Children are especially interested in seeing the project address the wide range of risks which they face, particularly to the threat which disasters pose to their right to protection.

### Improving training

Timing and content are crucial to making training sessions effective and talk must be followed up with the equipment to act. Students, teachers and parents all agreed that capacity-building initiatives which target students should be held on weekends so that they do not interfere with their studies and so that there is no conflict of interest. Training should also keep in mind local seasonal and school calendars so that they are not scheduled during busy times like examinations or harvest time.

The content of training sessions needs to be correlated with the nature of the participants; in particular, if the targets are children, the level of the standard curriculum needs to be modified to make the material more accessible. For example, amendments to the first aid and light search and rescue training modules to include more hands-on activities enabled even young children to appreciate the lessons. Another way to ensure a match between content and participants is to employ a stringent selection process so that all meet certain agreed-upon criteria like age, interest, and existing knowledge. When the content of a training workshop suits the needs of children, the knowledge and skills they acquire makes a deep impression on them and devoting themselves to putting into practice what they have learned and to sharing that learning with others. Many students trained in first aid, for example,



spent their allowance not on snacks but on re-stocking their first aid kits.

Another way to ensure that training actually has on-the-ground benefits is to provide trainees with the equipment they need to put their new knowledge and skills in to practice and coach them in using it. Student participants in the first aid training, for example, were provided with kits stocked with Dettol, Betadin, gauze, a pair of scissors, a thermometer, and adhesive tape—all of which they put to good use treating family and neighbours. Light search-and-rescue training was made more meaningful by enabling participants to try out the life-saving equipment and bestowing youth clubs with both equipment and a place to store it. Youths aged 13–21 of Kausika Lower Secondary School in Barachhetra, explained with pride that they had been able to use their new equipment in the 2010 monsoon due to focus on practical applications: “We used life jackets and a rope to search for Parash Neupane and Ramesh Karki, both of whom drowned in the Chatara canal in August 2011. Though we were unable to rescue them, we did recover their bodies.” If local materials and indigenous skills are exploited, interest and confidence grows that much more. Youths expressed great satisfaction in having learned to make boats from bamboo and banana trees and flotation devices from bottles and jerry.

A final way to improve the quality of training is present it as a process rather than an event. Building capacity is a life-long endeavour, one which sees the investment of much time, energy, and resources. Training should be organised only after assessing need and should develop knowledge and skills in a systematic fashion, linking new lessons to those taught in earlier sessions. Refresher training also needs to be scheduled; it should focus on review and reflection and on promoting child-centred action.

In conducting training, a project should capitalise on the strengths of youths, who, if they are trained properly, have tremendous potential to serve as teachers and resource persons.

### **Building the strength of DRR institutions**

In order to ensure that people have faith in DRR institutions, it is essential that those institutions

be accountable for the activities implemented. This can be accomplished as the Child-Centred DRR Project did, by giving them significant roles in every stage of the project and requiring the utmost transparency in all their endeavours. Because they assumed full authority for the success or failure of all activities, they came up with innovative solutions to all problems and were able to inspire trust among both the communities they were formed in and the district-level DRR stakeholders they sought support from.

DRR institutions also need to be strong; organisational weaknesses erode people’s faith. It is essential that members of DRR institutions, especially district preparedness and response committees be trained in a number of key areas, including SPHERE and education and child protection in emergencies and that they

### **Paving a right way for cooperation**

“Because of the trust that was built, disputes were resolved amicably with no adverse ramifications. The project paved the right way by fostering cooperation and coordination among community-based organisations and, for the first time, the leadership of DRR institutions was acknowledged. In fact, faith in DRR institutions has made us believe that DRR initiatives can be continued locally even without the project’s support.”

*—Teachers of Harinagara Higher Secondary School, Sunsari*

receive support in updating and modifying their disaster preparedness and response plans as the local context changes and as they learn from experience. Only if the members of DRR institutions have sufficient skills and knowledge and a well-considered plan of action and work harmoniously is effective and timely preparation for, mitigation of, and response to emergencies possible.

It is also essential that DRR institutions be inclusive, for only then will the activities they initiate address the needs of the most vulnerable. Because the majority of the historically marginalised, including, besides children, women, the disabled, Dalits, and indigenous ethnic groups, have comparatively little access to educational resources and income-generating opportunities and shoulder heavy economic and social



burdens, they are disproportionately vulnerable to the impacts of disasters. By mandating that participation in a project be non-discriminatory, all populations, even the most disadvantaged, will become less vulnerable and more disaster-resilient, thereby benefiting the community as a whole. The inclusiveness of DRR institutions also facilitated the mobilisation of all villagers, even the once marginalised segments of society, in designing, planning, implementing, and following up on project activities.

### **Maximising the benefits of a school-based entry**

Schools serve as a convenient entry point for DRR education because the government has designated them “zones of peace” and because large numbers of children are gathered in a place conducive to learning. However, introducing DRR into schools must not be seen as an end; rather, because children serve as agents of change, passing messages to their peers, their parents, and the larger community, they serve as a means to ensure the widespread dissemination of information about DRR. An added advantage is that sharing with adults fosters a reciprocal exchange, so that children’s ideas can be refined with the wisdom that comes from age, experience, and generations of tradition. This sort of two-way learning, in turn, helps change adults’ perspectives on what children can contribute to DRR and to development in general. In fact, it is precisely because of the viral effect of children’s becoming better educated that investment in school-based DRR has excellent returns.

Teachers at Harinagara Higher Secondary School made a number of observations about how the benefits of using schools to introduce DRR can be maximised. It is crucial, they argue, that DRR be part of both the formal curriculum (at both

the primary and secondary levels as children are never too young to start learning to protect themselves) and extracurricular activities. Also critical is introducing information about survival skills both theoretically and practically so that actions reinforce words and vice versa. They also underscore how important it is that learning at school be carried into the community. In their view, children must be an integral part of, if not the leaders of, DRR initiatives and their role in securing a community’s wellbeing during disasters and in increasing its resilience before and after them must be acknowledged. They also advocate developing partnerships among schools to promote the sharing of the emerging culture of safety.

What students highlight is the need for a comprehensive education, for they can only convince adults if they themselves are thoroughly informed. They also note how crucial it is for that information to have a child-centred bias because it is precisely children who, in the traditional scheme of things, have the least ability to cope with disaster and are most vulnerable.

## **12. Recommendations**

The following 10 recommendations are based on the findings of the external evaluation and on the internally generated learning. They are intended to help good initiatives mature and to improve the design of similar projects in the future.

### **Four immediate actions to secure and reinforce good initiatives**

So that the gains it made are not squandered, the project must prepare operational guidelines for DRR institutions and infrastructure, provide for the regular updating of all information, continue to support nascent initiatives, and integrate its DRR, core and crosscutting programmes.

All project-established DRR institutions perform well and their local-level visibility is high, but though some do have codes of conduct, none have official operational guidelines. To ensure that they continue to operate beyond the current generation of leadership, it is essential that Sunsari Programme Unit and HUDEP provide assistance in preparing guidelines which emphasise the

### **Keen to learn impacts of climate change**

“Unless we have a thorough knowledge of both disasters and DRR initiatives, we cannot convince adults. We are keen to learn the reasons for and the consequences and impacts of climate change. It is essential that DRR be child-centred as this approach will reduce the impacts disaster has on our lives and our education.”

*- Focus group discussion with Youth, Harinagara*

interconnectivity of all DRR institutions, rules and regulations and their enforcement, and both the structural and non-structural aspects of DRR. It is a good idea to incorporate tried-and-tested ideas from the Sunsari Programme Unit's core programmes instead of reinventing the wheel, so to speak. While the two safe shelters and the resource centre are well constructed, if they are to remain in good condition, their operation and maintenance must be discussed and official guidelines drafted. These guidelines ought to include a consideration of how the buildings can be used in the best interests of children and adults.

Hazard-vulnerability-and-capacity maps must be updated regularly, or at least whenever the disaster context changes, so that people feel good about the progress they make and so that resources are not wasted where they are no longer needed. It is especially important that emergency telephone numbers are up-to-date to avoid potentially life-threatening delays. Because it is so successful, the hazard-vulnerability-and-capacity-assessment process should be used to carry out baseline and end-line surveys and any mid-term reviews as well.

Emerging youth-led cooperatives need some form of technical backstopping. One possibility is the 'micro-finance-plus' approach of Bangladesh Rural Advancement Committee. To make sure that the programme's school-based DRR initiatives get sufficient support, a one-day orientation should be organised for resource persons at district education offices and for members of the Private and Boarding School Organisation of Nepal so that the project's good practices, including mainstreaming DRR education in school curricula, can be shared.

Since Plan's Sunsari Programme Unit demonstrated a strong sense of ownership of the project, volunteering its staff, for example, it should plan to replicate the project's learning in its various core programmes, including FACT (Fight against Child- and Gender-Based Violence), HOPE (Creating Hope for Children), and social inclusion. At the same time, Plan Nepal's crosscutting issues like birth registration, community-led total sanitation, and child protection should be replicated in the villages where the child-centred DRR project was

implemented, thereby promoting two-way sharing and learning. Such an integrated approach will reinforce the individual strands of development and promote sustainability.

### **Six key points to consider while designing new DRR projects**

Future DRR projects ought to devote themselves to improving both social and physical infrastructure; increasing the number of initiatives to build the capacity of children, youths, and Plan's non-government partners; improving efforts to enhance the safety of schools; broadening their impact with greater coverage and sharing; and ensuring that both DRR and child-centredness get sufficient attention.

A good project uses both social and physical infrastructure to its advantage. In terms of child-centred DRR, one key change that should be made is the current composition of local disaster management committees. Having VDC secretaries serve as chairs is problematic for two reasons: their frequent transfer leaves an unproductive vacuum and they are not democratically elected officials. It would be better if they served as general members and if the chair were elected directly by the concerned community. In addition, members of water and forestry-related community-based

"Teaching is not effective if the physical facilities of a school are poor.... Because they fear that the building could be damaged at any time, teachers do not deliver their lessons confidently and students do not absorb the knowledge proffered efficiently."

*-Teachers at Basanta Ritu  
Secondary School, Sunsari*

institutions should serve as ex-officio members as they have a vested interest in protecting water supplies and forests from the often devastating impacts of disasters.

While developing institutional actors to perpetuate DRR is essential, it is equally essential for the project to support the construction of disaster-resilient physical infrastructure, both to serve as inspirational demonstrations of small-scale mitigation activities and, more fundamentally, to keep people safe. Promoting good sanitation is of particular importance in areas prone to flooding

and epidemics. The project should promote child-friendly, elevated, and arsenic-free hand pumps with platforms and good drainage systems as well as raised toilets and, to enhance the effectiveness of these physical changes, launch community- and school-led total sanitation campaigns. In addition, child clubs and youth groups should pressure DRR stakeholders to adopt one-house-one-toilet schemes.

Other key infrastructural changes include the development of child-friendly recreational facilities nearby safe shelters for use in alleviating the fear and trauma associated with disasters and the introduction of basic infrastructural modifications, including outward-opening doors, two in each room, lighting rods, and raised plinths, in schools, homes, and public buildings after conducting a multiple-hazard risk assessment. In drought-prone areas, rainwater harvesting systems should be established; and in flood-prone areas, community and school-based early warning systems. Providing boats to island communities in upstream villages and establishing embankments and bio-dykes with green belts in downstream villages are other key interventions. To ensure that people's interest in DRR initiatives is sustained in the long-term, riverbank bio-engineering efforts should include the plantation of climate-resistant crops following climate-smart agricultural patterns. To make sure that material already provided, specifically first aid kits and search-and-rescue equipment, is in top condition, local disaster management committees should conduct quarterly assessments. There is also a need to stock schools and health posts with fire extinguishers and first aid kits; Plan Nepal should design and implement a 'right-to-safe-schools' campaign in coordination with local health officials and members of parent-teacher associations to see this need fulfilled.

While it is true that capacity-building is a continuous process and there is always for growth, certain significant gaps need to be remedied. First, children ought to be better informed about climatic variability. This objective can be easily accomplished by establishing school-based meteorological stations at which students record temperature, wind speed and direction, barometrical pressure, and rainfall and develop an idea of weather patterns and, by inference, climate change. To make this initiative work, Plan Nepal

can borrow ideas from the Canadian Cooperation Office-funded and NDRC-led project<sup>2</sup> in Kushma, Kapilvastu District. If such stations are linked to the Department of Hydrology and Meteorology, they will make a valuable contribution to the nation's collection of climate data, which, at present, is severely limited by the shortage of stations. Youths and children, especially those who live in flood-prone areas, should be taught to swim.

A second key adjustment in the current approach to training is to prepare more youths to serve as local resource persons. Those who were trained as trainers very effectively facilitated their own climate change adaptation training sessions in child clubs and schools; there is no reason why more can't do the same, capitalising on the fact that in peer-to-peer teaching no social boundaries impede the wholehearted sharing of knowledge or information or even feelings. In the long-term, Plan Nepal's Sunsari Programme Unit should plan to employ youth trainers as trainee and later independent researchers. To ensure that the number of trained volunteers suffices, local disaster management committees should conduct quarterly review-and-reflection sessions.

A third group that needs more attention is Plan Nepal's non-governmental partners. If they are to be effective vehicles of change, Plan Nepal should build their capacity in DRR. To promote sharing and learning, Plan should encourage visits among groups.

As most buildings were not constructed with sufficient attention to safety, a third recommendation is that there be more advocacy promoting safe schools. At the majority of schools during evaluation period visited, classrooms had only a single, inward-swinging door. Where there were two doors, the second was usually locked and obstructed and therefore of no use in providing an alternative escape route during a disaster. In addition, the main doors to most school buildings are too narrow to allow many students to pass through at once, so students may be crushed in the rush to get out. Indeed, because most of these doors swing inward, it may be impossible to open them at all. Some schools have outer walls with large windows, a style of construction which reduces the strength of the wall and increase the likelihood it will collapse in an earthquake. Another

commonly found structural flaw that poses a threat to students is beams that are positioned very close to windows; these often crack and even fall when there is a tremor. In addition, the fact that benches and desks are attached makes it difficult for students to take cover under them.

Building codes should be shared with DRR stakeholders to boost awareness and model school retrofitting work should be demonstrated in strategic locations to show the interested how to take proactive protective measures. Plan Sunsari Programme Unit should make a list of local masons in the villages in which it works (and, if it has extra resources, employ them in constructing new schools and other buildings. Special attention has to be devoted to getting their support as past experience has shown that if masons are not convinced of the need for DRR, they are unlikely to implement earthquake-resistant design feature.

Besides modifying construction techniques, DRR projects should insist that all schools conduct assessments of structural and non-structural risks and incorporate possible measures for addressing safety shortcomings in their contingency plans. These plans should include plans for responding to crises so that precious time is saved during emergencies as well as plans to implement preventive safety measures like pruning trees within the school compound, levelling school grounds, and building railings on stairs and around verandas. To get more support from district-level government agencies, including district education offices, Plan Nepal should sign a memorandum of understanding with the Ministry of Education. .

There is a further need for any future DRR project to have a greater scope than this pilot project did. First, projects should be run in all nine wards of a village rather than in just a few as the concerned VDC will be more inclined to provide resources if the majority of people will benefit. As a first step, the project's initiatives should be extended to the other wards of Mahendranagar, Harinagara and Barahachhetra and then to other villages in Sunsari and other districts, keeping in mind which villages are most vulnerable to disasters. .

Plan Nepal should take advantage of its good reputation as the district lead support agency

in Sunsari and Morang districts and an active member of the protection; education; and water, sanitation and hygiene humanitarian clusters in order to regularly share the good practices and key learning of its future DRR projects. It should also share project initiatives and preliminary reflections with the members of the other networks to which it belongs, including the Task Group on Disaster Management of International Agencies in Nepal, Disaster Preparedness Network, and Nepal DRR Platform in order to solicit the feedback and suggestions without which its future efforts will not improve. Successful approaches and activities and lessons learned should also be shared with all of Plan Nepal's programme units, the country office, and regional and global Plan staff using conference calling and other means. Again, the project-oriented goal of such sharing is to request input designed to spur further learning and improvements.

A final concern future projects must address is whether or not they are truly DRR-oriented and child-centred. Plan International's Disaster Management Strategy mandates that all countries work on DRR. However, though Plan Nepal has included DRR in its third country strategic plan, the Child-Centred Disaster Risk Reduction Project was funded by grants and core budget is allocated only for emergency response not DRR. Child-centred DRR projects should also get a proportion of the core budget. Whatever funds are allocated should be distributed equitably rather than equally across and within Plan's programme units so that the most most-at-risk villages, communities, and populations get the most help.

While many child-focused organisations across the world promote children's involvement in DRR projects, Plan International's position--that children should assume leadership role--is unique. In generating resources, Plan Nepal should capitalise on its vastly different approach, one that is rooted in Plan's espousal of child-centre community development and which stresses the cognitive development and wellbeing of children. To ensure that the child-centeredness of the design and subsequent implementation of DRR projects is not overlooked, the child-led indicators used by Save the Children Sweden should be reviewed.









### Plan's Identity

Plan is an international humanitarian, child-centred community development organisation without religious, political or governmental affiliation. Child sponsorship is the basic foundation of the organisation.

### Plan's Vision

Plan's vision is of a world in which all children realise their full potential in societies that respect people's rights and dignity.

### Plan's Mission

Plan strives to achieve lasting improvements in the quality of life of deprived children in developing countries through a process that unites people across cultures and adds meaning and value to their lives by:

- enabling deprived children, their families and their communities to meet their basic needs and to increase their ability to participate in and benefit from their societies;
- building relationships to increase understanding and unity among people of different cultures and countries and;
- promoting the rights and interests of the world's children.



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