



International Strategy for Disaster Reduction



Building Disaster Resilient Communities

Good Practices and Lessons Learned

A Publication of the "Global Network of NGOs" for Disaster Risk Reduction

2007



United Nations



International Strategy for Disaster Reduction



Building Disaster Resilient Communities

Good Practices and Lessons Learned

A Publication of the "Global Network of NGOs" for Disaster Risk Reduction

Geneva, June 2007



United Nations

Please send your feedback and suggestions (including further case studies for consideration) to:

Michele Cocchiglia
NGO Liaison Officer
UN/ISDR secretariat
cocchiglia@un.org
www.unisdr.org/ngos

Disclaimer:

The information and opinions expressed in this publication do not necessarily reflect the policies of the UN/ISDR secretariat.

Foreword

Disasters are first and foremost a “local” phenomenon. Local communities are on the frontlines of both the immediate impact of a disaster and the initial, emergency response, which, experience has shown, is crucial for saving the most lives.

It is therefore altogether fitting that we focus our energies on improving local communities’ resilience to natural hazards. Local communities are the essential cornerstone in our effort to make the *Hyogo Framework for Action* a practical tool for saving lives and livelihoods.

Disaster risk reduction begins at home – in our schools, places of work and worship, and throughout our local communities. It is here where we will either save lives – or lose them – depending on the steps we take today to reduce our vulnerability to tomorrow’s hazards. For greatest impact, these steps must be grounded in local knowledge and communicated broadly so that everyone, from a local school child to a village grandmother to the municipal mayor, knows how to protect him or herself from nature’s vicissitudes.

Education is vital, as is the sharing of experience within and among communities. As importantly, disaster risk managers need to listen and learn from the grassroots up – not vice versa – so that we can build upon examples of risk reduction that have been tried and tested in the crucible of local experience.

This publication, “*Building Disaster Resilient Communities: Good Practices & Lessons Learned*”, has been developed with that purpose in mind. We hope it will educate and inspire further practical efforts at the community level while contributing to the overall global “movement” for disaster risk reduction. Working together, we can – and will – save lives.

Margareta Wahlström
UN Assistant Secretary-General,
Deputy Emergency Relief Coordinator

Preface

The Special Unit for South-South Cooperation (SU-SSC), through its team at the UNDP Regional Center in Bangkok, has been collaborating with the secretariat of the United Nations International Strategy for Disaster Reduction (UN/ISDR) in promoting disaster reduction at all levels, since 2005. The SU-SSC is proud to jointly publish with the UN/ISDR secretariat a book entitled: "*Building Disaster Resilient Communities: Good Practices and Lessons Learned*". This publication is a compilation of articles contributed by Non-Governmental Organizations (NGOs) working in various poor and vulnerable communities in Latin America and the Caribbean, Africa, Central Asia, South-East Asia and the Pacific.

The SU-SSC acknowledges the important role the NGOs play at the local, national and international levels in the ongoing process of advocacy for safer communities. The book clearly illustrates that NGOs work hand in hand with communities to develop their capacities to prevent, prepare for, cope with and respond to disasters. This publication is vital for learning lessons and sharing experiences amongst various entities in different parts of the world, which forms a solid ground for South-South Cooperation. This exchange of experiences is consistent with the SU-SSC's Platform for "Sharing of Southern Development Knowledge and Solutions".

Since disasters are recognized to be one major stumbling block in attaining development goals, disaster reduction should be a major concern for all. There is a need to promote those disaster reduction activities that can be replicated, as stated in the book. This book can be used by development practitioners as a reference in their own practice in disaster risk reduction. This knowledge product is another tangible result of an ongoing meaningful collaboration with the UN/ISDR secretariat.

Yiping Zhou

Director,

Special Unit for South-South Cooperation, UNDP

Introduction

This publication is a joint effort of the “*Global Network of NGOs for Disaster Risk Reduction*”, an emerging network of national and international NGOs aiming to reduce disaster risk worldwide. The idea of publishing a compilation of good practices in Community-Based Disaster Risk Reduction (CBDRR) has come out from a consultative meeting held with the core members of the “Global Network of NGOs” in Geneva, in October 2006.

This publication showcases the essential roles played by NGOs in addressing disaster risks at the local community level. It makes the case for increased community-oriented DRR action, and is aimed to stimulate more interest in the subject from donors, policy makers, as well as other stakeholders.

To this end, close to 100 case studies have been collected through the Network members from different parts of the world. To make the task easier, practitioners were only asked to fill-in a questionnaire by “bullet-pointing” very specific answers. To conclude the process, the “good practices” compiled in this publication were selected and polished. The remaining ones will be used for other forthcoming publications and will be uploaded on the ISDR website for consultation.

Most of the good practices were or are implemented by local NGOs, with support from international NGOs, donors, and regional organizations. All of the cases involve disaster-vulnerable communities, either directly or through community-based structures. The good practices selected also reflect the way disaster risk reduction is “understood” and implemented in different regions, and offer unique perspectives of and approaches to CBDRR.

For ease of reference, an abstract is provided at the beginning of each good practice and each of them is presented in a format that enables the reader to go directly to a particular section of the case study (lessons learned, potential for replication, and so forth). Contact details for each of the case studies presented are also available at the end of the publication.

For a good practice to be of immediate practical use, it must be replicable in and relevant to the reader’s context. Hence, one of the criteria for selecting the present good practices in CBDRR was their potential for replication. Additionally, attention was also paid to geographical balance and thematic coverage.

As an initial step, this compilation provides a good introduction of the essential role of NGOs in reducing community risks and vulnerabilities to disasters and guidance for various actors to learn from these good practices and utilize them in their activities. The next step will be to improve and evolve this publication by adding further collections of similar case studies, as well as subsequent analyses of the trends and features observed.

Our hope is that this first publication will generate more interest in the subject, and allow for a more comprehensive picture of community-based disaster risk reduction to be presented to the world.

R. Alain Valency
Editor

* For more information on the “Global Network of NGOs” visit www.unisdr.org/ngos

Table of contents

Afghanistan	Raising Awareness of Risk through Radio Drama3 <i>Tearfund</i>
Bangladesh	Voluntary Formation of Community Organizations to Implement DRR6 <i>Practical Action Bangladesh</i>
Ecuador	"Critical Video Analysis" of Volcanic Eruption Mitigation Project9 <i>Catholic Relief Services (CRS)</i>
El Salvador	Children and Youth at the Centre of Disaster Risk Reduction12 <i>Plan International</i>
Haiti	Community Members Design and Implement Information Campaigns for Their Communities17 <i>Oxfam GB</i>
India	Masons with a Disaster Risk Reduction Mission20 <i>SEEDS India</i>
India	Disaster Micro-Insurance Scheme for Low-Income Groups23 <i>All India Disaster Mitigation Institute (AIDMI)</i>
Indonesia	Combining Science and Indigenous Knowledge to Build a Community Early Warning System26 <i>PMPB - Community Association for Disaster Management</i> <i>(In partnership with Yayasan Pikul)</i>
Kenya	Linking Relief and Development through the Drought Cycle Management Approach29 <i>Catholic Organisation for Relief and Development (CORDAID)</i> <i>(In partnership with CODES, PISP and CIFA)</i>
Kyrgyzstan	Rural, School "Disaster Teams" to Boost Preparedness33 <i>Christian Aid (In partnership with Shoola)</i>
Malawi	Small and Medium-Scale Initiatives to Control River Flow36 <i>Tearfund (In partnership with Eagles)</i>
Namibia	Supporting Local Decision Making with Inter-Community Platform and Local-Level Monitoring40 <i>Desert Research Foundation of Namibia (DRFN)</i>
Peru	Disaster Prevention among Native and Mestizo Communities43 <i>German Agro Action (In partnership with ITDG - Soluciones Practicas)</i>
Philippines	Mainstreaming Community-Based Mitigation in City Governance46 <i>Center for Disaster Preparedness (CDP)</i>
Tajikistan	Sustaining Community DRR with "Endowment Funds" and Natural Resources Management49 <i>CARE International</i>
Vietnam	Flood and Typhoon-Resilient Homes through Cost-Effective Retrofitting52 <i>Development Workshop France (DWF)</i>

Afghanistan

Raising Awareness of Risk through Radio Drama

Heightening Awareness of the Need for Disaster Risk Reduction in Afghanistan

Tearfund



An excerpt from the BBC cartoon publication which supports the radio drama "New Home, New Life"



Abstract

Afghanistan is not only a country that has suffered from wars and conflicts; it is also prone to disasters (earthquakes, avalanches, floods, drought, etc.) and its human development index is one of the lowest in the world. Partly because of its mountain ranges, the country is also hindered by lack of transport; hence the existence of perhaps the most isolated villages in the world. These isolated villages are extremely vulnerable to disasters.

Inspired by Priority for Action Three¹ of the Hyogo Framework for Action (HFA), the international NGO Tearfund is working alongside communities, partners and the Government within Afghanistan to communicate Disaster Risk Reduction (DRR) messages. In August 2006, Tearfund entered into an agreement with the BBC World Service Trust to integrate, for a one-year period, disaster risk reduction messages into the story lines of the very successful BBC educational radio programme called "New Home, New Life", NHNL.

The BBC World Service Trust had launched NHNL 13 years earlier to support returning internally displaced

persons. Its success is based on its commitment to research issues that are most relevant to communities themselves. After reviewing the issues with experts, the BBC integrates appropriate community education messages into the programme's story lines.

The first four months of implementation of the Tearfund-BBC agreement saw the issues of earthquake, drought and flood explored through drama set in a fictional remote village of Afghanistan. Disaster story lines have been integrated into the NHNL programme at least every other week. The messages are broadcast at certain hours of the day to suit women as well as men. The DRR messages have reached a wide audience because, among other reasons, a large section of the Afghan population listens to NHNL.

It is early to assess the full impact of the DRR messages, but there are indications that the communities are keen to listen and understand more about what they can do in times of disaster. Also, reports from an evaluation team include evidence of success from the previous story lines.

¹ HFA Priority for Action Three: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

The Initiative

This is a disaster risk communication project based on the use of proven communication practices targeting local communities. Disaster risk reduction messages are integrated into the story lines of the very successful BBC educational radio programme called "New Home, New Life", NHNL. As the NHNL was launched by the BBC World Service Trust 13 years earlier to support returning internally displaced Afghans, it is broadcast in two Afghan languages. The DRR-related project includes a disaster-based radio drama series set in a fictional remote village in Afghanistan.

As between 60 to 68 per cent of those who have radio sets in Afghanistan listen to the BBC programme which is broadcast five times a week in the Dari and Pashtu languages, the DRR messages have reached a wide audience. Between two to four times per month, a programme on the findings of a research conducted at community level and an expert-advised story line on disaster issues are broadcast. The story lines are generally hazard specific and are run for up to a period of four months as a reoccurring theme (e.g. April to August on earthquakes). The programmes are rebroadcast at different times of the day and are aired on a variety of radio frequencies and channels to ensure wider audience. The story lines have been operating since July 2006.

Goal and Objectives

Afghanistan is not only a country that has suffered from wars and conflicts; it is also a country prone to earthquakes, avalanches, floods and drought, and its human development index (HDI) is one of the lowest in the world. Partly because of its mountain ranges, the country is also hindered by lack of transport; hence the existence of perhaps the most isolated villages in the world. These isolated villages happen to be extremely prone to disasters. In the light of this, and as 80 per cent of Afghans have radio sets in their homes and between 60 to 68 per cent of them listen to the above-mentioned NHNL, the idea of integrating disaster risk reduction (DRR) messages into the BBC programme was born.

Moreover, Afghanistan's 2003 National Disaster Management Plan stresses the need to work closely with communities, yet much of the initial institutional strengthening was done at national and provincial levels. The Project therefore provided an entry point for community-level action. The idea was that DRR aware communities would be in a better position to engage with local government structures in the development of local disaster management plans.

In view of the above, the major goal of the Project is to support the development of disaster-resilient communities across Afghanistan. Its major objectives are:

1. To raise community awareness of hazards and disaster risks;
2. To promote understanding of hazards and communities' vulnerabilities; and
3. To help communities enhance their capacities to address their vulnerabilities.

Outcomes and Activities

Following an initial period of research and consultation, Tearfund entered into a contract with the BBC World Service Trust in August 2006 for an initial one-year period. Because a large section of the Afghan population listens to NHNL and its supporting programmes, research for the DRR-related radio programming is being conducted across a variety of different provinces, covering multiple hazards and involving programme recording with trained actors in the capital, Kabul. To maximize impact, NHNL not only bases its messages on the research conducted at community level, it also ensures that the messages are broadcast at certain hours of the day that suit women as well as men.

A typical real-life community disaster reduction story picked by NHNL as an entry point for its programmes - and accompanying features and publications - is the following. One community recalled when forests of tamarind trees surrounding their village had been cleared so that the trees could be sold, and this resulted in heavy destruction caused by a flood. After hearing on NHNL, a few years ago, that destroying forests could lead to destructive flood impact on farms and houses, the community established a local council and decided to fine anyone who cuts trees. The forest trees have now been growing for 4-5 years and the community is happy with the many benefits accruing from them: no flood impact on houses, less dust, good pastures for animals, etc.

It is early to understand the full impact of the DRR messages, but indications are that the communities are keen to listen and understand more about what they can do in times of disaster. Also, reports from an evaluation team include evidence of success by the previous story lines. An evaluation of the effectiveness of the messages is indeed being conducted, and those who use the programme material in their projects are also being asked to provide information on their effectiveness.

The Good Practice

The good practice in the Project lies in the commitment of NHNL to make the programme as accessible and acceptable as possible to Afghan communities. The comprehensive research on the context of the issues faced by communities makes the programme very popular. Also, the programme design team has a clear understanding of dialects, accents and listeners' motivations. And the involvement of experts - such as Tearfund - to support and advise on key messages responding to the communities' felt and expressed needs helps ensure relevance and effectiveness.

Moreover, an innovative element is the fact that NHNL is also supported by a series of supplementary feature programmes which expand on some of the issues raised in the dramas. The feature programmes pick the findings of the community research and communicate actual examples of community actions or evidence of learnt messages. The feature programmes also provide supporting information for community structures to debate the issues raised. NHNL also has a quarterly publication that repeats the messages in cartoon format for partners to circulate and use in their discussions with communities. The BBC World Service Trust can also produce children's publications relating to the messages, which can be used in formal and informal learning methods.

Another innovative element is the use of community radio to reach some communities which sometimes can be reached only after a three-day donkey-riding journey. Community radio is a cost-effective and effective way to reach the large section of the population (80 per cent) who have radio sets in their homes. Indeed, the communities' remoteness makes hands-on community-based projects extremely difficult, if not impossible.

Lessons Learned

The key lessons learned from this project are:

- The messages need to be integrated effectively into a drama that is entertaining. In-depth analyses of issues are needed but they are not always possible.
- The opportunity to get community social networks or mobilizing structures to discuss the messages needs to be nurtured. It is hoped that the above-mentioned separate stand-alone audio stories will help trigger local debates.
- There is a need to work closely with the BBC to ensure that its staff members have an understanding of the basic concepts of DRR. This would help script writers communicate the messages effectively in a culturally relevant way.

The key success factors are:

- NHNL can be integrated into any community-based DRR project implemented in Afghanistan. The programme story lines will be extracted onto a separate set of audios which can be used in a stand-alone setting. Also, Tearfund's current chairmanship of the Disaster Risk Reduction Consortium in Afghanistan will facilitate the circulation of the audios. The Consortium is an NGO network linked to the Government and the UN and which is dedicated to sharing good practices and lessons learnt.
- The programme can address multi-hazard issues in one setting. Displacement and migration is still common place in Afghanistan, and understanding the different hazards that communities could face when they are displaced into a new location is also beneficial.

Potential for Replication

Even though it is not unusual for community messages to be communicated through radio drama in other countries, NHNL has been designed specifically for Afghanistan. Also, the cost of having consistent and long-term community researchers may be high, but it provides the most accurate understanding of the needs of communities and therefore the best point of departures for effective and relevant messages. If these two issues are dealt with adequately, the Project can be easily replicated through state-funded radio programmes as part of an integrated package of DRR initiatives at community level.



Bangladesh

Voluntary Formation of Community Organizations to Implement DRR

Forming and Strengthening CBOs
to Implement DRR Activities in Communities

Practical Action Bangladesh



An informal meeting with
community members

Abstract

Bangladesh is known worldwide for its recurrent flood disasters. To help address community vulnerability to floods, Community-Based Organizations (CBOs) have been formed voluntarily by selected community volunteers under an ongoing project entitled "Mainstreaming Livelihood-Centered Approaches to Disaster Management". The CBOs are involved from the initial stage of problem and solution identification and participate in the implementation of community-based activities through the country's Participatory Action Plan Development (PAPD).

During the planning phase, the CBOs identify their vulnerabilities and prioritize their needs with minimum

assistance from the project staff. The project aims to help reduce the vulnerability of the communities to recurrent flooding problems while lifting them from extreme poverty and insecurity.

Adopting a participatory approach to problem and solution identification has strengthened the social bondage of the community. The approach creates self-confidence among the poorest and most vulnerable families. In addition, the CBOs are responsible for disseminating early warning messages to the communities and creating mass awareness. They are also charged with rescuing marooned people in times of flood disaster.

The Initiative

This is a community-based participatory project that is part of an ongoing larger project entitled "Mainstreaming Livelihood-Centered Approaches to Disaster Management."

It is about forming voluntary community-based organizations and strengthening them to assume a leading role in the formulation and implementation of Disaster Risk Reduction (DRR) or disaster resilience-related projects initiated by the community.

The project was launched in January 2006, lasting five years. It is being implemented in Northwestern Bangladesh in the following unions (lowest tiers of local government): Kamargani Union in Gaibanda District; Sariakandi and Norsis unions in Bogra District; and Kazipur and Maizbari unions in Sirajganj District. The three districts are located on the Western bank of Jamuna River in Northwestern Bangladesh.

Practical Action Bangladesh and its local partner NGOs are implementing the project. Stakeholders are different community groups like marginal farmers, fishermen, daily-wage labourers, local elected bodies, local educational institutions and government service providers. The project, which targets 33,000 men, women and children from 6,000 households, is funded by the UK government Department for International Development (DFID), based on previous Practical Action Bangladesh experience of working with local communities susceptible to flooding.

Goal and Objectives

The project aims to demonstrate that increasing the resilience of poor communities' livelihoods reduces vulnerability to disaster risk while contributing to poverty reduction. Evidence of the impact of this approach is used to influence local government officials and policy makers to be more responsive to the needs of the poor.



Participatory development of an action plan

Outcomes and Activities

The project supports CBOs to implement the identified activities by transferring technology, strengthening capacity and providing input support. The baseline for solution identification is hazard analysis, together with vulnerability and capacity assessments, all based on the sustainable livelihoods approach. In addition, the CBOs are responsible for disseminating early warning messages to the communities and creating mass awareness. They are also charged with rescuing marooned people in times of flood disaster.

As a result of this project, the livelihoods of community members have been strengthened and diversified. Union and *upazila*² disaster management committees have been cooperative, as are *upazila* service providers (Agriculture, Fisheries, Livestock, etc.). Liaison with district officials indicates their willingness to try to incorporate a livelihoods approach into local and eventually national development and disaster plans, making them more responsive and effective in enabling poor communities to reduce disaster risks that threaten their livelihoods.

Other outcomes of this project include: strengthened community cohesion and social bondage, communities' increased capacity to make informed decisions regarding their own well-being, and increased self-confidence among the poorest and most vulnerable families, all as a result of CBOs' involvement in the decision-making process.

As this is an ongoing project, it is too early to identify concrete and verifiable results regarding policy influencing.

² Upazila: Intermediate tier of local government between union and district

The Good Practice

The good practice lies in the fact that the project is based on a participatory approach whereby facilitation techniques are used to empower communities to assess their vulnerabilities and capacities in the face of identified hazards. Their involvement in identifying their problems, solutions and the implementation of their own strategies empowers them. Appropriate technologies are introduced to increase their capacity.

The key to success is the involvement of the community and the CBO in all stages of the process. Technologies which both strengthen local coping strategies and diversify livelihood strategies are offered on demand

Lessons Learned

The key lessons learnt from this practice are:

- Communities always try to adapt to changing situations. Initially, they use their indigenous knowledge to cope with the situation.
- Coping strategies are often inadequate and need to be reinforced through training to enhance skills in alternative livelihood options.
- Technological support is commonly needed both during and after flooding.

Potential for Replication

It would not be difficult to replicate this approach elsewhere. The community-led approach is suitable for any context and geographical locations. As mentioned earlier, this project is about the voluntary formation of a community-based organization (CBO) which brings the community together and which can assume a leading role in the formulation and implementation of projects initiated by the community. This means that the role of the NGO is only to facilitate and support this process. This practice can be replicated in a different context as long as this last principle is applied strictly and fully.

Ecuador



"Critical Video Analysis" of Volcanic Eruption Mitigation Project

"Critical Video Analysis" of Project Entitled
 "Communities Affected by Tungurahua: Mitigating
 the Risks of Living Near an Active Volcano"
Catholic Relief Services (CRS)



An interview in the
community of Bilbao

Abstract

Tungurahua is one of the most active volcanoes in Ecuador. After its eruptive period from 1916 to 1918, it entered a new phase of activity that intensified in 1999, culminating in new eruptions in 2003 and 2006. The new eruptions produced mud flows and volcanic ash that are affecting the country's central provinces, with the greatest impact in Tungurahua province. Across the area, the volcano has caused serious damage to the economy and health of the affected populations.

In 2003, as new eruptions intensified and the risks persisted, the Roman Catholic Diocese of Ambato and Catholic Relief Services (CRS) developed a project entitled "Communities Affected by Tungurahua: Mitigating the Risks of Living Near an Active Volcano". The project was financed by the European Commission Humanitarian Aid Office (ECHO) through its disaster preparedness programme called DIPECHO (Disaster Preparedness, European Commission Humanitarian Aid Office), with support from the Catholic Agency for Overseas Development (CAFOD). The project's objective was to strengthen the capacity of the communities and institutions affected

by Tungurahua with the goal of reducing the impacts of current/future disasters through preparation, mitigation and prevention. It benefited 35 high-risk communities in Tungurahua province.

The project, which involved the development of evacuation routes, education regarding threats and conducting risk mapping within at-risk communities, was implemented from 24 March 2005 to 7 December 2005 (11 months). When the volcano erupted again on 14 July and 16 August 2006, no single death was reported from communities that participated in the project.

The present case study is on a recent "Critical Video Analysis" of the project, an analysis that set out to gather, using a non-traditional medium (videos), the best practices and lessons learned from the project as well as the challenges faced during its implementation. The videos are being used with donors, partners and project promoters/implementers to advance work in the fields of emergency and risk mitigation.

The Initiative

The initiative is a "Critical Analysis" of a previous successfully implemented multi-partner volcanic eruption risk mitigation project targeting communities living near an active volcano.

The "Critical Analysis" was carried out on a project entitled "Communities Affected by Tungurahua: Mitigating the Risks of Living Near an Active Volcano", also referred to as DIPECHO III Tungurahua Risk Mitigation Project. The project was implemented in central Ecuador in the two urban cities of Ambato and Quito and among the rural communities of Bilbao, Cusua, Cotalo, Pingue and Chacauco, all being high-risk areas in close proximity to Tungurahua Volcano in Tungurahua Province, central Ecuador. The following stakeholders were involved in the Project: CRS national and regional staff; European Commission staff; the Ecuadorian Civil Defence; ECHO project beneficiaries, promoters/implementers and partners (Diocese of Ambato); the National Geophysical Institute; provincial authorities; teachers; community leaders and members; and HASGA Productions (a media production company).

Even though another phase of the DIPECHO III Tungurahua Risk Mitigation Project was not initially planned, a new risk mitigation project (DIPECHO IV) focusing on flooding is being discussed between CRS regional/national staff, ECHO and HASGA Productions.

Goal and Objectives

The objective of the "Critical Analysis" was to document the effectiveness and impacts of and lessons learned from the above-mentioned DIPECHO III Tungurahua Risk Mitigation Project - through a non-traditional assessment (videos) of how participating communities responded to recent volcanic eruptions; hence the term "Critical Video Analysis". The assessment focused on four main aspects: (1) Community emergency response structures; (2) Community emergency response committees and sub-committees; (3) Communications and early warning systems; and (4) Evacuation routes.

The Critical Video Analysis was prompted by the realization that best practices and lessons learned from the DIPECHO III Risk Mitigation Project, as well as the challenges faced during its implementation, had to be gathered and analyzed in an innovative way to enable donors, partners and project promoters/implementers to advance similar work in the fields of emergency and risk mitigation.



A school roof collapsed under the weight of volcanic ash

Outcomes and Activities

The Critical Video Analysis was carried out from November 2006 to 26 January 2007. It was entirely funded by CRS, contracted to HASGA Productions, and involved five professionals (two media producers, an emergency expert and an international development expert) and 20 interviewees.

Regarding beneficiaries of the initiative, their number is still to be determined as it is contingent on the number of professionals, donors and beneficiaries that have the opportunity to see the videos. To date, some 75 to 100 development professionals have watched the videos.

The impact of the Critical Video Analysis is collective "re-visiting" of the Project, which has served as a constructive learning process for project promoters/implementers, donors and partners. For the project beneficiaries, it has served as a content review and has given a chance to share concerns.

The concrete results of the Critical Video Analysis initiative are the two videos produced (Video One lasting 10 and Video Two lasting 24 minutes). Its verifiable results are the documented testimonies of project beneficiaries, promoters/implementers and partners.

The Good Practice

This Critical Video Analysis initiative is considered a good practice not only because the knowledge gained allows for project and programme improvement, but also the exercise was more critical and objective than a traditional "lessons learned" review. Indeed, contracting outside the organization brought fresh perspectives and objective critical assessments, and eventually broadened the project understanding within the field of international development.

The initiative is innovative as it contains a strong artistic element which makes the delivery of the analyses more "user friendly" and therefore accessible to both specialists (donors, professionals, etc.) and the public at large in a quick, enjoyable medium rather than a verbose document full of technical jargons.

The initiative was implemented through the two videos that were produced, involving 20 interviews with project donors, partners, promoters/implementers and beneficiaries. The interviews include commentaries from the leadership of CRS, ECHO, the National Civil Defence, the National Geophysical Institute and local partners, as well as thoughts and recommendations on the project from civilians affected by the recent volcanic eruptions. The initiative was initiated by CRS and facilitated by a CRS staff member in collaboration with two HASGA Productions staff members.

Strategies and methods that were implemented included participatory processes such as interviews and collaborative meetings, and contracting project implementation outside the organization for the sake of greater objectivity.

The key success/failure factors include: (1) Logistical challenges posed by timely completion of interviews in two different cities and five different rural communities located in difficult-to-reach regions near the volcano; (2) Extracting, re-phrasing and editing contents that were appropriate but not "video friendly".

Lessons Learned

The key lessons learned from this practice stem from the valuable feedback that came from both project promoters/implementers and beneficiaries, who indicated that the training worked as planned (i.e. saving lives) and that they were grateful for the project's implementation. Their subjective testimonies also corroborated the facts that the communication systems, evacuation routes and emergency committees established were successful, which was statistically supported by zero death among participating communities during the most recent eruptions.

As mentioned above, one of the major challenges was logistics. Coordinating all necessary interviewees, in a total of at least six different cities/pueblos, in countless different settings (offices, communities, shelter sites, kitchens, destroyed buildings, etc.) and in difficult-to-reach areas was a significantly large hurdle. This was overcome by solid communication and joint travels by CRS and HASGA Productions staff as well as through a shortened project timeframe which required more focused and efficient work.

A critical conclusion from the project analysis is that more emphasis could have been placed on community post-disaster management and the restoration of livelihoods. Specifically mentioned numerous times was the lack of post-disaster psychosocial support both for children and adults, and how unprepared beneficiaries were to this particular aspect of emergency. Also, certain communities now find themselves divided between two different shelters, which obviously affect the functioning of both individual community members and the community as a whole.

Potential for Replication

This project would be very easy to replicate, provided that organizational funds are available to hire a media production company, and that staff are available to facilitate and direct its implementation.

This said, the benefits of this project are directly linked to the context of implementation as the same partners and beneficiaries involved in a previous project were also part of this one. This allowed for continued strengthening of working relations with partners and of previously established relationships with beneficiaries, as well as the ability to engage all project parties - donors, partners and individuals - into the critical analysis.

The practice could also be replicated in a different context through carrying out the critical analysis during the project implementation instead of after its completion.

El Salvador



Children and Youth at the Centre of Disaster Risk Reduction

Children in El Salvador at the Centre of Disaster Risk Reduction

Plan International



Children participating in Plan International's DRR activities

Abstract

Children represent more than a third of disaster victims, yet the humanitarian sector generally restricts their role in disasters to that of passive victims. Yet, involving children directly in Disaster Risk Reduction (DRR) activities enables them to develop skills to be prepared for any threat. Furthermore, the emphasis on rights-based approaches to humanitarian work brings forward the right of children and youth to be protected from hazards and vulnerabilities through their participation in disaster-related decisions and efforts.

In the light of all the above, Plan International has mobilized children and youth in El Salvador, Central America, to play a significant role in environmental resources management and disaster risk reduction. The children and youth have worked with their communities in developing risk maps, designing community emergency plans, setting up early warning systems, and implementing response, mitigation and risk reduction plans, among other activities. Plan International's experience in El Salvador has already been replicated in other Central American countries.

The Initiative

This project has evolved from an initial disaster preparedness initiative targeting communities affected by Hurricane Mitch in 1998, two earthquakes in 2001, and more recently by Hurricane Stan in 2005. Previous response and preparedness work has since been extended to disaster risk reduction. Plan International's disaster management activities in the targeted Salvadorian communities began in 2002, in response to the impacts of Hurricane Mitch in 1998. The DRR phase of the work began in January 2006 with December 2010 as its completion date.

The project is implemented in 12 municipalities of three departments (La Libertad, Chalatenango and San Salvador) in El Salvador, Central America. 56 targeted communities and youth groups are involved in the project, as partners. They first came together in response to Hurricane Mitch in 1998 and to the 2001 earthquakes.

Stakeholders include: local and national authorities (Health Ministry, Education Ministry, Environment Ministry, the Department of Civil Defence, the National Service for Territorial Studies); CSO/NGOs concerned with disaster management; community leaders and volunteers' organizations; the National University's Faculty of Medicine; the Central American University; ACISAM (Association for Training and Research for Mental Health); the El Salvador Red Cross; the Centre for Tropical Agriculture Research and Education (CATIE); and the Maquilishuat Foundation.

The targeted beneficiaries are: 56 communities; 56 youth groups (1,120 girls and boys); community emergency committees that were formed and trained at community and municipal levels (1,740 women and men); and 50 schools that received disaster prevention training. The different phases of the project have been funded by the Canadian International Development Agency (CIDA), the European Commission, the UK Government's Department for International Development (DfID) and Plan International.

Goal and Objectives

The project's main goal is to reduce the impact of disasters on the targeted communities, especially on children and youth. The project's purpose is to strengthen the capabilities of 56 communities in El Salvador to withstand disasters, developing replicable disaster risk reduction practices centred on children in their communities, thus contributing to positive changes in local, national, and international policies and practices.

With children representing more than a third of disaster victims, the humanitarian sector can no longer restrict children's role in disasters to that of passive victims. Providing children the opportunity to be directly involved in DRR activities enables them to develop skills to be prepared for any threat. Furthermore, the emphasis on rights-based approaches to humanitarian work brings forward the right of children and youth to be protected from hazards and vulnerabilities through their participation in decision making and efforts to address disaster management and risk reduction. This is in line with the international legal framework set under the UN Convention of the Rights of the Child, which upholds children's rights to protection (Article 6) as well as participation (Articles 12, 13).



School children prepare disaster management and risk reduction plans

Outcomes and Activities

The project activities have expanded to cover training and capacity building on risk reduction and mitigation through tools such as: participatory vulnerability assessment; risk vulnerability and capacity mapping; preparation of community plans; coordination and mobilization of groups with municipal governments, schools and CSOs. Support has also been provided for micro-projects defined by youth groups (to raise awareness of risk reduction and assist an expanding range of small disaster prevention projects) and to strengthen inter-institutional networks to ensure children's voice in these projects.

Good Practices and Lessons Learned

As a result, the following outcomes have been achieved:

- Increased community, CSO/NGO and government capacity to manage child-centred DRR processes, through the integration of child and youth participation in planning, implementation and evaluation.
- Partnership established with the Education Ministry to integrate and scale up "School Protection Plans" which ensure DRR mainstreaming into school infrastructure, teacher training and curriculum integration, and the implementation of complementary projects on environmental management and risk reduction.
- Increased knowledge, among policy makers and other national and international actors (international humanitarian NGOs, academics, media, etc.), of the importance of child and youth participation in DRR.
- Strengthening of risk management actions and DRR by youth in communities, schools and municipalities.
- Incidence in public policies for the reduction of disaster risk with the participation of children.
- Communication and dissemination of child-centred DRR learning material.
- 50 schools have designed hazard maps and mobilized resources to implement their own disaster management plans to address identified risks in their communities.
- School-based emergency committees are now functional in 56 most vulnerable communities.
- Regular meetings and interaction between 56 local emergency committees, school-based committees, health units, municipal disaster preparedness task forces and other stakeholders.
- Youth have advocated for greater attention and action on disaster prevention by authorities.
- Children's participation in the following areas: managing evacuation centres, protecting river banks, protecting their families and communities, and implementing environmental management projects³.

The Good Practice

This project is a good practice because of its emphasis on integrating children and youth in disaster management. In particular, it proves the need for inclusion of their voice and agency in ensuring a holistic approach to disaster management (including preparedness and mitigation), and supports the value of a rights-based approach to child-centred DRR.

The innovative elements of the Project include the targeting of children as actors and agents of change - whereby child-focused risk reduction can tangibly help reduce disaster threats and impacts. In particular, the Project offers implications for conceptual approaches to risk communication and how this might influence the design of early warning systems and community mitigation planning.

Success has been observed, with noted added-value in supporting the children's and youth's roles in risk communication, education/awareness raising, advocacy and practical risk reduction activities. The key success factors of this project are: (1) The communities' trust in an outside agent helping support the organisation of youth groups; (2) The communities' strong sense of social cohesion; and (3) The communities' support for the establishment of an environment that is conducive to child participation.

Lessons Learned

Key lessons learned from this practice include:

- Not only do children and youth have unique needs in disasters, they also offer a potential role as a resource or receiver of information.
- Young people can act as informants within unofficial communication networks which evolve within a community setting as the need arises, and thus have an important role in information dissemination.
- In communities with high poverty indices (i.e., where parents are illiterate, do not have the time to attend training/meetings, share a strong sense of apathy or subordination, or do not have access to information sources), children and youth already play a major role as interpreters and relays of messages to their households and communities.

³ For instance, youths from 45 communities have participated in a waste recycling project, whereby tons of plastic waste have been collected and sold to a recycling company.

- In all community and household settings, there is a need to promote greater awareness of the value of listening to children. In many societies, neither parents nor teachers believe that children have a useful role or have relevant things to say.
- Children are able to convey messages with a meaning shared by their families and friends, and they are generally trusted by message recipients. As the child is embedded within the family structure, this relationship means risk information and mitigation actions may be continually reaffirmed, whereas external messages rely on small windows of opportunity to convey information and influence action.
- Risk maps carried out with youth groups show that children understand and can respond constructively to and communicate effectively about the risks they recognize⁴.
- Children recognize the wider nature of risk reduction (e.g. how seemingly unrelated external factors such as abuse and lack of love can greatly influence their vulnerability). This points to the need for a holistic approach to DRR - addressing vulnerabilities related to health, environment, education, religion, household economic security and other sectors, which impact together on a community and individual's wellbeing.
- Children offer immense creativity and the will to reduce risk. When given the resources and the opportunity to take action, children can become catalysts of simple yet significant strategies to make their communities safer.
- Children are able to participate beyond a disaster preparedness role, into taking action in risk reduction and even disaster prevention work. This includes taking charge of their risk environment, acting to control it, and through their actions obliging not only their parents and peers to take notice but also promoting changes in local government policies .
- Direct involvement in disaster management work gives children a better sense of community and civic consciousness while they are still young.

Major challenges faced by this initiative include:

- The existing gap between stated positions and the practice of humanitarian agencies on applying adult participation in itself; with most agency representatives dismissing child participation as impractical and marginal compared to other DRR stakeholders .
- As power and authority on disaster management are being increasingly granted to technical and sectoral agencies, non-participatory practices are undermining the ability of local communities to respond (including children and youth who form up to 50 per cent of vulnerable populations).
- In El Salvador, one of the Project's key humanitarian partners was at first quite sceptical about engaging children and youth in disaster management and mitigation. However, the Project has provided evidence that children bring with them dynamism to add to adult experience, and the partner now believes that "working with children and youth in communities leads to sustainability; adults have certain taboos and will accommodate to disasters but children are more prepared to change and develop a culture of prevention and mitigation". The local humanitarian partner had never originally planned or appreciated the need to work with children, but this project has shown them that children bring with them dynamism to add to adult experience.

⁴ Agencies attribute the constraints of engaging with children as: the difficulties experienced in an emergency, the culture of the society experiencing the disaster, as well as the attitudes and approaches of other external stakeholders.

Potential for Replication

With appropriate capacity building on child protection and child participation skills as well as a conducive policy environment whereby stakeholders (those in authority - including parents and teachers) are appreciative and supportive of children and youth participation, the practice of child-centred disaster risk reduction can be replicated elsewhere and in different contexts.

The Project's outcome to date has benefited from Plan International's operational programme approach centred on child participation in community development being implemented in the localities. Therefore, Plan International's overall work has provided a platform for carrying out the child-centred disaster risk reduction initiative.

Plan International is working on developing replicable tools for implementing child and youth-centred DRR as a way to contribute to positive changes in local, national, and international disaster management policies and practices.

Meanwhile, Plan International's experience in El Salvador has already been replicated in other Central American countries affected by Hurricane Mitch and other natural hazards. Lessons learnt from El Salvador's experience in child-centred DRR have also been adopted in Plan International's disaster management initiatives in Asia and Africa.

Haiti



Community Members Design and Implement Information Campaigns for Their Communities

Community-Based Information Campaigns for Disaster Preparedness

Oxfam UK



A panel created by the Local Civil Protection Committees in September 2004

Abstract

Haiti is known for its extreme vulnerability to natural hazards. In 2004, innovative community-based information campaigns were developed in the Northern Haiti town of Cap-Haitien, as part of a "Community-Based Disaster Preparedness Project". The approach to communication and public awareness allowed 22 newly created Local Civil Protection Committees (LCPCs) to design and implement their own information campaigns for their communities. Each of the 22 local committees was given technical support and project funding to design and implement its own disaster risk reduction campaign.

Because the local actors were asked to develop their own campaigns, the communication methods used were genuinely adapted and "acceptable" and proved to be effective. Final evaluations of the project showed that the approach to risk communication contributed significantly to developing a "culture of safety" among the 22 communities targeted. It modified the risk-related attitude and behaviour of the people at risk and stimulated community participation in disaster mitigation.

The Initiative

The project was a community information and awareness sub-component of a larger "Community-Based Disaster Preparedness Project".

The information campaigns were carried out in 22 high-risk outlying settlement areas of the Northern Haiti town of Cap-Haitien. Some of the communities targeted (nine) were located on the precarious mountainside overlooking the town, while the others were in the lowlands along the banks of Haut-du-Cap River. The total population of the 22 settlements in 2004 was between 124,900 and 368,600 people. Such a big difference between the two figures was due to constant migration and the difficulty of conducting census surveys in the areas. Twenty-two newly created Local Civil Protection Committees (LCPCs) were involved in the planning and implementation of the information campaign, which amounts to some 550 people (as each committee had about 25 members). The local Oxfam GB team which developed and supervised the initiative was also involved through a project coordinator, a project officer and six promoters.

The project was funded by the Directorate-General of the European Commission Humanitarian aid Office - Disaster Preparedness (DG ECHO - DIPECHO).

Goal and Objectives

The larger project's goal was to reduce the vulnerability to natural hazards of some 80,000 people living in the most high-risk outlying settlement areas of the Northern Haiti town of Cap-Haitien. The larger project was implemented between the second half of 2003 and October 2004. The planning of the information campaign began in June-July 2004 and the information campaigns culminated in August-September 2004. The larger "Community-Based Disaster Preparedness Project" was only the first of a series of projects that are part of Oxfam GB's overall disaster risk reduction strategy in Haiti. From October 2004 to 2007, this disaster preparedness project was followed up by several other projects and was replicated in 15 other municipalities. Nevertheless, the specific community-based information campaign component, successful though it may be, has not been replicated *per se* yet.

Among the expected results of the larger project were: (1) Improved disaster preparation and mitigation for 22 high-risk urban settlements; (2) Improved awareness and knowledge of and attitude in relation to risks and disasters among the targeted communities.

Outcomes and Activities

First, workshops on the communication and information campaigns were conducted with members of the 22 Local Civil Protection Committees (LCPCs). During the workshops and follow-up meetings, the LCPCs planned and developed their campaign activities. As a general pattern, they all decided to combine two communication methods that are very popular in Haiti: festive event/community assembly and information billboard.

To implement these activities, each LCPC received a grant worth 5,000 gourdes (about 150 USD) under a funding protocol. (Each LCPC also raised at least an additional 150 USD from LCPC members themselves and from other community members). To motivate further the LCPCs' commitment to developing good quality campaigns, it was decided that an incentive would be awarded to the best campaign - in the form of cash toward a community disaster fund worth about 2,000 USD. Indicators were also developed and shared with LCPC members to evaluate the campaigns.

As a result, 22 two-sided billboards were set up and strategically positioned in the communities, and 22 half-day community assemblies/events were held, each time gathering over 400 people. To gather people, the events usually started with a soccer match and ended with a dance party. In all the settlements, big decorated podiums were installed with complete sound systems where the Committees organized disaster quiz with small prizes, rescue demonstration, short drama plays as well as formal presentation of the Committee members and their roles, the community warning system and evacuation system, the contingency plans, etc. Some of the LCPCs also invited local singers and dance groups for some traditional performance.

Finally, because of the high quality of the campaigns, each Committee received a prize. The eight best campaigns received 20,000 gourdes (about 600 USD) for their community disaster funds; the rest received 10,000 gourdes (about 300 USD) also for their community disaster funds. Most of the committees used their funds to complete their disaster response kits (rescue, clearing and communication equipment); others used them to organize and duplicate more training (specifically on water rescue - with support from City Council fire-fighters and the Red Cross) or open bank accounts to support their operating costs.

The Good Practice

This was a good practice because it served successfully two purposes - public awareness and capacity building - and it effectively helped enhance the safety of the population at risk.

An innovative aspect was real optimization of local knowledge and local resources by local stakeholders, as well as significant mobilization of the creative and innovative energies of local actors (including local artists - Haiti is well known for its paintings - and local traditions to facilitate community assemblies - where local voodoo groups presented traditional dances, etc.). These resulted in genuine ownership by and empowerment of local actors and groups.

At the end of the project, two types of evaluation were carried out: (1) A traditional evaluation; (2) A Knowledge, Attitude and Practice (KAP) survey. Both showed similar findings: In terms of social vulnerability/capacity, the larger project facilitated and encouraged the creation of a new social dynamics where people shared values and behaviours towards cooperation amongst themselves but also a proactive responsibility towards the community. Regarding individual attitudes and behaviours, a more responsible and proactive conduct was observed as the population was keener to evacuate preventively. Indeed, it was the first time that people in Cap Haitien evacuated willingly, with their belongings, before it started raining heavily. The presence of about 430 families (2,550 people) from the most high-risk areas was recorded in LCPC-managed evacuation centres the night before Hurricane Jeanne struck.

A key success factor of this initiative was the combination of two main communication modes: (1) A permanent one - the billboard (most of the billboards were still standing and visible two years after the end of the project); (2) A one-off one - the festive event/assembly.

Lessons Learned

Key lessons learned from this practice were:

- It is essential that public awareness activities on preparedness and risk reduction are carried out on a sustained basis with the active participation and implication of local actors. One-off public awareness and information campaigns have little positive impact on risk reduction. However, even though the campaigns were a one-off activity, they were followed by several other initiatives (more traditional ones like the use of broadcast media, radio soap opera especially designed for Cap-Haitian, print brochures, calendars, celebration of the international Day for Disaster Reduction, etc.). These initiatives were also combined with labour intensive low-cost mitigation activities as demonstrative measures to reduce risks (cleaning and rehabilitation of drainage, evacuation stairs, protection walls, etc.). Now in 2007, the Committees and the population have remained actively mobilized and engaged in disaster risk reduction.

This said, several difficulties were encountered during the project, including:

- To be able to provide adequate support to the development of the campaigns, the project team needed to have good knowledge and experience in two disciplines: communication and disaster risk management.
- The information campaign initiative was very time-consuming and the project team had to deploy lots of efforts and demonstrate tenacity (in supervision and support) to ensure a good quality campaign and good financial management by the Committees.

Potential for Replication

As this practice is driven exclusively by local practices and local resources, it has a great potential for replication.

India



Masons with a Disaster Risk Reduction Mission

Toward a Disaster-Resilient Built Environment:
Creating a Culture of Safe Buildings

*Sustainable Environment and Ecological Development Society
(SEEDS)*



Masons certification
programme in Datrana village,
Patan District of Gujarat

Abstract

Following the devastating 2001 earthquake in Gujarat State, Western India, rehabilitation programmes incorporated several Disaster Risk Reduction (DRR) features. Among them was an initiative by the Sustainable Environment and Ecological Development Society (SEEDS) to create a pool of masons trained in earthquake-resistant construction. The cadre of trained masons was expected to address the immediate need for reconstruction and a long-term need for a culture of safe buildings.

Over the years, the SEEDS Mason Association (SMA) has expanded to an 800-member organization, of which 200 have been certified by the Government for having

reached internationally accepted standards in construction skills. The masons are now serving their local communities, educating fellow masons in other regions at similar risk, as well as responding in disaster-hit areas for shelter reconstruction and capacity building.

The SMA initiative is an effort in consolidating training and research on good quality safe construction practice at grassroots level. The Association also acts as an information centre for dissemination of modern technologies in construction through newsletters and public meetings.

The Initiative

This is a disaster risk reduction programme aimed at creating a culture of safe buildings under the following vision: "A Disaster-Resilient Built Environment".

Training activities were initiated in Gujarat State, Western India, in 2001, but the SMA was formed in 2004. The first members of the Association were from communities affected by the 2001 Gujarat earthquake. They were trained by engineers and architects from SEEDS. It was their wish to sustain their learning and share it with more like-minded individuals.

Over the years, the SEEDS Mason Association (SMA) has expanded to an 800-member organization, of which 200 have been certified by the Government for reaching internationally accepted standards in construction skills. It is expected that the Association, which has now a countrywide presence, will continue to grow and serve the needs of the burgeoning building industry in the country. It would focus its efforts in creating resilience among communities at risk to natural disasters.

Goal and Objectives

Following the devastating 2001 earthquake in the Indian State of Gujarat, the Sustainable Environment and Ecological Development Society (SEEDS), an NGO with a focus on DRR, resolved to create a pool of masons trained in earthquake-resistant construction. The trained masons were expected to address the immediate need for reconstruction and a long-term need for a culture of safe buildings.

The programme's objectives are:

- To respond to the shelter needs of communities affected by disasters;
- To address the needs of trained construction workers in the fast-growing construction industry; and
- To promote disaster-resistant building technologies among communities in high-risk areas.

Outcomes and Activities

The masons are now serving their local communities, educating fellow masons in other regions at similar risk, as well as responding in disaster-hit areas for shelter reconstruction and capacity building. The Association also acts as an information centre for dissemination of modern technologies in construction through newsletters and public meetings.

The Association has received recognition and support from the Government. Donor support has come in the form of specific reconstruction projects. Members of the Association also pay regular membership fees.

In regions where activities have been carried out, there is clear evidence of communities learning from the training imparted by the SEEDS Mason Association.

The SEEDS Mason Association is currently active in five locations across the country:

- In tsunami-affected Andaman & Nicobar Islands, it has promoted bamboo-based demonstration housing. The Association constructed temporary shelters for 354 families.
- Following the Kashmir earthquake in 2005, the SMA constructed shelters for 404 families. A local chapter of the SMA was launched. The local chapter is now imparting training in local communities as part of the rehabilitation exercise.
- The SMA is training local building contractors and masons in Shimla on retrofitting of school buildings.
- The SMA is involved, in the Western State of Barmer, in the reconstruction of 300 shelters.
- In Gujarat State, which was affected by the 2001 earthquake, SMA members sat exams and have been certified by the Government through a unique internationally designed certification programme.

The Good Practice

This initiative is considered a good practice because: (1) It has been mainstreamed into development from the very beginning; (2) It addresses an important need for safe buildings; (3) It has a grassroots reach; (4) It is very accessible to the poor and to vulnerable households.

It is also innovative as it promotes peer learning as well as a single-point access for disseminating information related to safe buildings. A key success factor of this initiative is that the Association is supported by SEEDS, an NGO with a focus on DRR. SEEDS ensures that the Association is partnered with in every related initiative.

Overall, such a grassroots movement has tremendous potential as over 57 per cent of India's national territory is prone to earthquakes, and vulnerabilities to other disasters put India's one billion people at risk.

Lessons Learned

The key lessons learned from this initiative are:

- Disasters are opportunities for bringing in change such as disaster-resistant construction as part of reconstruction;
- Peer-level exchange and learning at grassroots level has proved to be effective in building capacity; and
- Institutionalization of efforts is important for promoting building safety.

The major challenges of this initiative are:

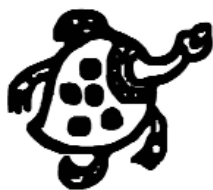
- Difficulty to overcome the inertia among existing construction workers to absorb new technologies;
- High demand from the building industry and limited supply has led to poor quality that characterizes the building sector - which has increased disaster risk; and
- Recognition and acceptance by communities that have not been affected by disasters yet, has been sluggish.

Potential for Replication

Such models exist in other parts of the world, though not necessarily focused on disaster reduction. Moreover, they seldom look into training and up-gradation needs. Such models can be introduced where they do not exist. Alternatively, existing institutions of construction workers should be sufficiently equipped to disseminate disaster-resistant technologies at grassroots level.

In the light of many unsustainable practices of post-disaster training in safe construction, a grassroots institutionalized approach should preferably be adopted. Moreover, the larger issue of availability of skilled construction labour is key to the success of similar initiatives.

India



Disaster Micro-Insurance Scheme for Low-Income Groups

A Case Study of the "Afat Vimo"
Disaster Insurance Scheme

All India Disaster Mitigation Institute (AIDMI)



AIDMI presents the
Afat Vimo insurance scheme
in a tsunami-affected area

Abstract

In 2002, the majority of the 2001 Gujarat earthquake relief beneficiaries were still exposed to disaster-induced financial losses. Various studies - including the Gujarat Community Survey of 2002 by the Gujarat-based All India Disaster Mitigation Institute (AIDMI) and ProVention Consortium - revealed that access to risk transfer was correlated with sustainable economic recovery among victims⁵, yet only two per cent of those surveyed had insurance. A micro-insurance scheme was designed to augment AIDMI's ongoing Livelihood Relief Fund⁶ activities. The resultant scheme, called "Afat Vimo", was the result of extensive discussions and negotiations with insurance providers who could be interested in supplying low-premium insurance policies to poor clients.

Afat Vimo policyholders are covered for damage or loss up to the value of 1,744 US dollars for non-life assets and 465 US dollars for loss of life, which gives a total damage and loss coverage of 2,209 US dollars. Current *Afat Vimo* clients include 5,054 individuals from low-income households with an annual income of 280 US

dollars. These households are mainly involved in small enterprises in the informal sector and have assets worth approximately 209 US dollars. It is striking that 94 per cent of the clients did not have any other insurance prior to *Afat Vimo*, and 98 per cent today have no other insurance besides *Afat Vimo*.

The scheme covers 19 disasters including fires, explosions, riots, malicious damage, aircraft damage, cyclones, tempests, floods, inundation, earthquakes, lightning, implosions, strikes, impact damage, storms, typhoons, hurricanes, tornados and landslides. *Afat Vimo* policyholders are also supported with micro-mitigation measures such as fire-safety training, seismic-safe construction practices and business development services. The policy is available for an annual premium of less than 5 US dollars (about a four-day wage). Damage to policyholders' houses, household assets, trade-stock and losses of wages due to accidents are covered. The earning household member's life is also covered.

⁵ All India Disaster Mitigation Institute. (2002). Community Survey: Gujarat Earthquake 2001. AIDMI and ProVention.

⁶ Established after the 1998 Kandla cyclone, the Livelihood Relief Fund (LRF) of AIDMI has supported livelihood recovery of 13,336 victims to date. This demand-driven and tailor-made relief worked in the 2001 Gujarat earthquake, 2002 riots, December 2004 tsunami, 2004 Gujarat floods and 2005 Jammu and Kashmir earthquake.

The Initiative

This is a disaster micro-insurance scheme for low-income households. The *Afat Vimo* scheme is part of the Regional Risk Transfer Initiative (RRTI), an action learning project (ALP) of the Gujarat-based All India Disaster Mitigation Institute (AIDMI). The RRTI teaches insurance companies, authorities, donor communities and NGOs how to facilitate a convergence between micro-finance tools and disaster risk reduction strategies.

The RRTI was launched on 25 September 2003. It is an ongoing initiative. The *Afat Vimo* scheme has been implemented in the Indian states of Gujarat, Tamil Nadu, Pondicherry, and Jammu and Kashmir. Lessons have been shared in Sri Lanka, Pakistan, Iran and other Asian countries through policy dialogues, regional courses, and publications. The *Afat Vimo* insurance scheme is implemented with ProVention Consortium, the Indian Chamber of Commerce and Industry for Small-Scale Business (CCISB) and local insurance companies.

Goal and Objectives

Various studies - including the Gujarat Community Survey of 2002 by AIDMI and ProVention Consortium - indicated that access to risk transfer was correlated with sustainable economic recovery among victims, yet only two per cent of those surveyed had insurance. The *Afat Vimo* micro-insurance scheme was designed to augment AIDMI's Livelihood Relief Fund activities.

The poor amongst disaster victims are repeatedly exposed to and affected and impoverished by disasters. They are also perpetually restricted in their access to vital financial services such as micro-insurance, which has recently made progress in reducing disaster risk among the poor. As spreading further such micro-insurance products requires continued innovations, the *Afat Vimo* was developed bearing in mind local conditions and contexts.



A household affected by the 2006 Gujarat floods and reimbursed by the insurance scheme

Outcomes and Activities

Feedback from beneficiaries who made claims under the *Afat Vimo* policy has been very positive and encouraging. To date, 204 claims were made to insurance companies. Of these, 155 were successfully settled, giving a combined payout of 21,940 US dollars. It emerged from a 2006 internal evaluation survey of *Afat Vimo* clients that 100 per cent of the surveyed clients were willing to renew their policy. Seventy-five per cent of those surveyed felt that *Afat Vimo* offered them better protection and 24 per cent said it offered them significant protection.

All the surveyed clients said the *Afat Vimo* scheme needed to be extended to more people in other disaster-affected states. The main reasons given for this view were the value of having insurance in times of crisis (36 per cent), reduced dependence on outside relief (33 per cent) and the affordability of the scheme compared to other insurance schemes (20 per cent).

A participatory review of the Regional Risk Transfer Initiative (RRTI) was conducted in January 2007 by an international consultant. The review found that the scheme was clearly welcomed by clients and that there was pressure to extend it. The review also concluded that most of the practical problems encountered were addressed. The insurance companies have proved to be quick in resolving claims (average about 20 days) and flexible in adjusting and clarifying the terms of insurance. Evidence collected for the review suggested that the main value of micro-insurance lies in limiting indebtedness that can quickly be triggered by an event such as disaster, accident or death.

The Good Practice

The good practice in *Afat Vimo* lies in the fact that risk is transferred from the individual level to the community or inter-community levels, which include groups based in different geographic locations and which are not equally disaster prone.

The *Afat Vimo* scheme represents an innovative approach to risk identification, pooling and transfer, which recognizes the fact that the majority of poor disaster victims have little or no access to risk transfer schemes. According to a recent study of micro insurance policies in India by the International Labour Organization⁷, 45 per cent of micro-insurance schemes researched cover only a single risk and only 16 per cent cover three risks. As *Afat Vimo* covers 19 disaster risks, it is one of the most comprehensive products in India. This not only makes the policy more attractive to clients, but also makes investment in the policy more efficient in economic terms. Another aspect of *Afat Vimo* that sets it apart from other micro-insurance policies is the extensive range of eventualities covered under the policy.

Last but not least, *Afat Vimo* policyholders are also supported with micro-mitigation measures such as fire-safety training, seismic-safe construction practices and business development services. The policy is available for an annual premium of less than 5 US dollars (about a four-day wage). Damage to policyholders' houses, household assets, trade-stock and losses of wages due to accidents are covered. The earning household member's life is also covered.

Lessons Learned

AIDMI has learned that operational know-how on promoting risk identification, risk transfer, risk pooling and advocacy in favour of disaster risk transfer from small businesses is hugely lacking in India and South Asia. The project has also taught AIDMI that extending micro-insurance services to the poor faces many challenges at micro-level such as affordability, access, service delivery, lower renewal rates and long-term sustainability.

The *Afat Vimo* case study also shows that micro-insurance cannot be used as stand-alone measure for disaster risk reduction. To ensure the viability of such products from a commercial point of view, they should be backed up by other micro-finance services and risk mitigation measures. To succeed, both poverty and risk must be reduced - not merely transferred. In this connection, as mentioned earlier, damage to *Afat Vimo* policyholders' houses, household assets, trade-stock and losses of wages due to accidents are covered, as well as the life of the earning household member. *Afat Vimo* policyholders are also supported with micro-mitigation measures such as seismic-safe construction practices and business development services.

Similarly, macro-level challenges such as creating incentives for risk reduction, balancing public-private roles and responsibilities, and making up-to-date data available to decision-makers have been identified as key barriers in enhancing benefits of micro-insurance to the poor. To address these key challenges and achieve higher penetration levels, a greater need for learning across disaster events and stakeholders - including governments, insurance companies and civil society organizations - is envisaged as a way forward.

Potential for Replication

The key for extending micro-insurance benefits to the poor affected by disasters lies in a combination of devolution to local organizations, scaling-up, tougher bargaining for commissions from the insurance companies and strengthening the policy framework to put more pressure on the companies. Risk comes at poor people from many angles and it is only a combination of savings, credit and organization can help them overcome the obstacles.

⁷ International Labour Organization (2005). India: An Inventory of Microinsurance Schemes. Geneva: ILO.

Indonesia



Combining Science and Indigenous Knowledge to Build a Community Early Warning System

Preventing Drought-Induced Food Shortage
in Southeastern Indonesia

*PMPB - Community Association for Disaster Management
(In partnership with Yayasan Pikul)*



In the Oeniko village,
mother and daughter have to walk
five km to get drinking water

Abstract

The eastern part of Nusa Tenggara (Southeastern Indonesian islands) has a three-month rainy season and a nine-month drought season. Over the last 100 years or so, food shortage has characterized its drought season as lack of climate-related knowledge and information within the local population often leads to crop failure.

A Community-Based Disaster Risk Management (CBDRM) initiative was launched in 2005 to address

the issue in a highly vulnerable community of rural farmers. The initiative seeks to build a monitoring system for food security and livelihood with the aim of preventing the food shortage.

With help from a local NGO and the Community Association for Disaster Management⁸, the community has developed its own food early warning system.

⁸ A local network of NGOs working on food security, emergency response and disaster management.

The Initiative

This initiative is about building a monitoring system for food security and livelihood through Community-Based Disaster Risk Management (CBDRM).

The initiative was launched in 2005 after the local NGO Yayasan Pikul had gathered some information on communities that were at risk of food shortage. The initiative is still under way as a 3-5 year programme in Sikka District (to the West of East Timor).

It is implemented by the local NGO Yayasan Pikul and the Kupang Community Association for Disaster Management - known locally as PMPB -Kupang, with support from the targeted local farmers themselves. They all operate directly at *kecamatan* (village) level through a Participatory Risk Assessment (PRA) approach.

Goal and Objectives

East Nusa Tenggara in Southeastern Indonesia has a three-month rainy season and a nine-month drought season. Over the last 100 years or so, food shortage invariably has characterized its drought season as lack of climate-related knowledge and information within the local population often leads to crop failure.

Hence, the major goal of this project is to prevent food shortage observed during prolonged drought. As such, its intended outcome is the establishment of a food shortage prevention mechanism that increases community resilience to drought.

Its major objectives are:

1. Awareness: Raising awareness to such an extent that the community develops its own indicators to monitor food security and livelihood.
2. Community early warning system: Ensuring that the community develops its own early warning system to prepare for food shortage.
3. Advocacy: Advocating the government not to promote agricultural systems that are not appropriate to Eastern Nusa Tenggara conditions.



Maize planted between rocks in the community of Pulau Pura

Outcomes and Activities

The key components of this initiative are: (1) Participatory Risk Assessment (PRA); (2) community gathering; (3) capacity building for local farmers by sending them to learn in other places; (4) assistance to the development of the early warning system; and (5) advocacy to government

The concrete and verifiable outcomes of this initiative are as follows:

- The 13 local farmers targeted have acquired the capacity to manage dry lands, now have their own early warning system and know what issues to refer to the government.
- The community early warning system has been built through locally developed monitoring indicators for food security and livelihood through a participatory approach.

The Good Practice

This initiative is a good practice because:

- It was initiated by the community itself to address crop failures that were also brought about by agricultural approaches from Java Island which were not suitable to drought-prone East Nusa Tenggara.
- It incorporates indigenous knowledge and develops mechanisms that help prevent food shortage and build community resilience to prolonged drought.

One of the innovative elements of this initiative is the fact that the locally developed early warning system has been developed using a combination of both modern science and indigenous knowledge.

A key success factor of this initiative is the involvement of local people on the basis of their local agricultural conditions.

Lessons Learned

A key lesson learned from this initiative is that local communities do have basic capacity, what they need is only little additional capacity. The following challenges have been observed while implementing this initiative:

- All the activities are still being funded by local farmers. Even though such a financial self-reliance may be in itself a good practice, supporting a 3-5 year programme is a real challenge for farmers that are at risk of food shortage. To ensure that the entire initiative does not collapse because of lack of funds, efforts are under way to identify donors.
- Something has to be done to enhance coordination with the other NGOs. Indeed, each NGO comes with its own approach and the great variety of approaches ends up creating confusion among the project beneficiaries.

Potential for Replication

This practice can be easily replicated in a community with a low level of education that lives in an area highly prone to prolonged drought.

To improve similar initiatives in the same area:

- There is a need to approach local development agencies and establish a joint secretariat for the government and local NGOs. As a matter of fact, the local government is not highly supportive of the initiative.
- One should be aware that crop failures are also linked to population growth, as well as shift of production and consumption patterns.
- Community members' knowledge should be enhanced further to enable a more participatory assessment of the area's environmental context.

Kenya



Linking Relief and Development through the Drought Cycle Management Approach

Drought Cycle Management and Community-Managed Disaster Risk Reduction

Catholic Organization for Relief and Development Aid (CORDAID)

(In partnership with CODES, PISP and CIFA)

A local community participating in the project



Abstract

The people who live in the arid and semi-arid areas of the Horn of Africa are subject and vulnerable to many risks, the most obvious one being drought. Whenever a disaster strikes, emergency appeals will lead to a coordinated effort to respond to the situation to try and save lives.

Conventional responses to disaster are not always sufficiently effective though, and it is often observed that development initiatives and emergency responses in a certain area are treated as separate issues and that development activities are halted, while there are costly delays in putting the disaster responses in place. It is more effective to combine development and relief and thus plan for long-term investment to reduce risks and at the same time protect people's acute needs when necessary.

This is the essence of Drought Cycle Management (DCM) and Community Managed Disaster Risk Reduction as practised by the Catholic Organization for Relief and Development Aid (CORDAID) and local partner organizations in parts of Kenya, Ethiopia and

Uganda. These community-based approaches aim to strengthen people's livelihoods throughout normal, alert, emergency and recovery stages, matching realities on the ground (i.e. doing the right things at the right time).

During the drought that affected parts of Kenya in 2005/2006, CORDAID and its partner organizations CODES (Community Organization for Development Support), PISP (Pastoralist Integrated Support Program) and CIFA (Community Initiative Facilitation and Assistance) responded to the emerging disaster as part of their Drought Cycle Management Programme strategy with additional funding by ECHO (European Commission Humanitarian aid Office). This Drought Emergency Intervention Programme (DEIP 2006) was evaluated by Acacia Consultants Ltd. This case study looks into the concept of Drought Cycle Management in relation to an emerging disaster like the drought of 2005/2006 and to the lessons that can be learned in order to be better prepared for a next drought.

The Initiative

The Drought Emergency Intervention Programme (DEIP) was a response to a developing emergency situation after a long period of alert. DEIP was implemented in Samburu, Marsabit and Moyale districts in Northern Kenya between March and August 2006, and was co-funded by ECHO and CORDAID. The programme was implemented in the wider context of CORDAID's long-term Drought Cycle Management programmes in the three districts.

The purpose of DEIP was to improve access to water and animal protein in order to reduce the impact of drought and to ensure livelihood security in Samburu, Marsabit and Moyale districts. DEIP was implemented through three local partners: the Community Initiative Facilitation and Assistance (CIFA), Community Organization for Development Support (CODES) and the Pastoralist Integrated Support Programme (PISP) in Moyale, Samburu and Marsabit districts respectively.

Goal and Objectives

People living in arid and semi-arid areas in the Horn of Africa are subject and vulnerable to many hazards, the most obvious one being drought. It is often observed that development initiatives and emergency responses in a certain area are treated as separate issues and that development activities are halted, while there are costly delays in putting the disaster responses in place. It is more effective to combine development and relief and thus plan for long-term investment to reduce risks and at the same time protect people's acute needs when necessary. This is the essence of drought cycle management and community-managed disaster risk reduction as practised by CORDAID and local partner organizations in parts of Kenya, Ethiopia and Uganda.

In particular, DEIP was implemented in Moyale, Marsabit and Samburu districts in northern Kenya from March through August 2006, as a logical and integrated part of the wider ongoing Drought Cycle Management Program. DEIP aimed to improve access to water for 162,375 drought-affected pastoralists and sedentary people comprising 86,059 women and 76,316 men, as well as 297,000 tropical livestock units (TLUs). In addition, the project was to improve access to animal protein for 34,800 people (from women-headed and destitute households, orphans and school children) and ensure livelihood security for the target populations. The indirect beneficiaries from the catchment's population were estimated at 78,187 pastoralists, 41,439 women and 36,748 men. Other categories of beneficiaries were expected to be local institutions, district steering committees and national/local drought management groups/teams.

Outcomes and Activities

Two different sectors were covered (i.e. water and food security) by the three projects in the respective districts. The water sector aimed to improve access to water by human and livestock populations while the food security aimed to provide animal feeds and de-stocking that went hand in hand with provision of animal protein to vulnerable segments of the population.

The evaluation carried out by Acacia Consultants Ltd. concluded that DEIP was relevant (the most crucial needs of the communities were addressed), and as result of the activities, lives and livelihoods were saved. The programme was judged to be effective as the planned results were realized. The cost-benefit analysis indicates that the input-output ratios were also favourable. Finally, the initiatives were related to and form an integrated part of longer-term development in the areas, like for instance the making of water pans and livestock marketing.

The Good Practice

As indicated by the headline, the practice of DCM aims to link relief and development. Droughts and other emergencies normally trigger responses that are separated from ongoing development efforts. When applied in isolation from ongoing development efforts, relief aid may save lives but may not necessarily save livelihoods. In fact, the opposite may happen for a number of reasons which include:

- People may become dependent on relief supplies.
- Free handouts interfere with local market mechanisms.
- Relief distorts traditional coping mechanisms and does not help reduce vulnerabilities.
- Relief distribution centres encourage inappropriate settlement.
- Relief is expensive, while money may be better spent on reducing people's vulnerabilities.
- Relief responses by external actors normally come late, while early warnings often do not trigger timely responses.

Innovative concepts like the "Community-Based Drought Cycle Management" and the "Community Managed Disaster Risk Reduction" will not only be cheaper than dealing with the ensuing emergencies. By supporting livelihoods, the effects of disaster may be reduced as well as the consequences of a next drought or flood. Here follow the principles of these concepts, which could indeed prove to be more efficient and effective in dealing with recurrent disasters:

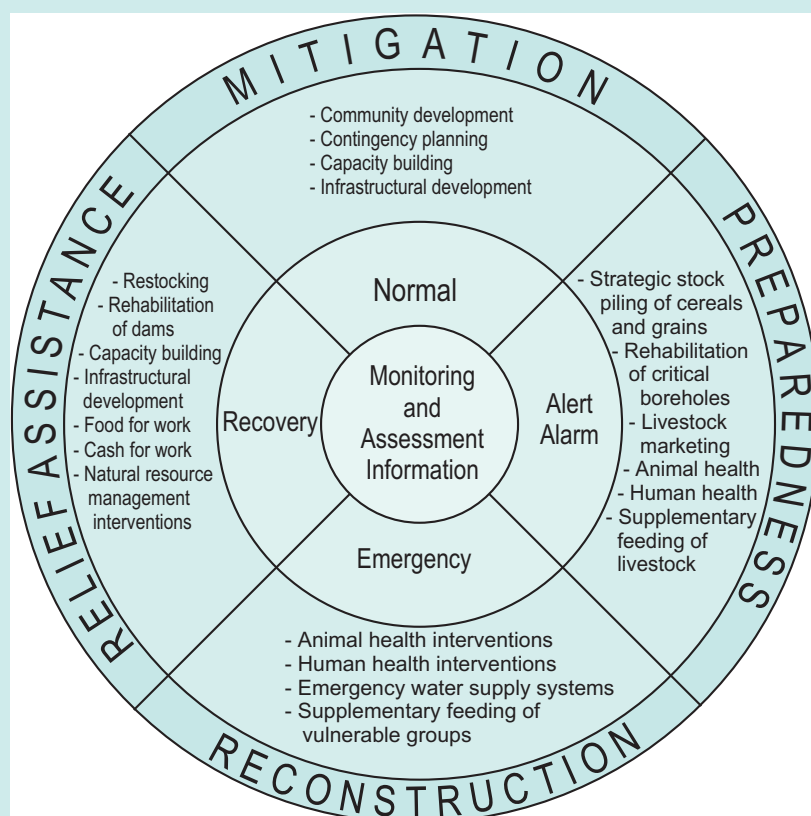
- They are participatory in process and content.
- Activities are responsive to the community's felt and real needs.
- The approach is integrated and activities are not implemented in isolation from the community's environment.
- The approach is proactive and emphasizes preparation and prevention.
- They are also multi-sectoral and multi-disciplinary.
- Communities are empowered as their capacity and control to response increase.
- The concepts are developmental and reduce vulnerabilities, while contributing to long-term development and poverty reduction.

Lessons Learned

The overall conclusion of the evaluation of DEIP was that the emergency initiative realized its objectives. The other conclusion was that impacts of drought-related emergencies will continue to worsen unless four factors are addressed:

1. Reduction in livestock numbers in the pastoralist areas;
2. Re-introduction of community-based grazing management with community bylaws enforced by both the community and the Government;
3. Insecurity and therefore opening up large tracks of pasture land that remains inaccessible. Linking pastoralists to the rest of the economy is an important strategy that needs to be explored; and
4. Strategic preparation for droughts during the preparedness phase.

The last point reflects the emphasis of this case study, namely the paradigm shift that periods of drought can be prepared for as long as projects and activities are planned for and implemented within the logical framework of the drought cycle, and as long as planning and implementation are community based. Development and relief can thus be linked and help prevent or lessen the intensity of a disaster.



The Drought Cycle

Potential for Replication

Probably the most important precondition for replication is the willingness of donor organizations to become flexible in budget allocation, allowing different kinds of activities depending on the phase of the risk cycle, including preparing for emergencies. Contingency funds must be set aside to be made available during actual emergency situations.

Development organizations must thus develop the capacity to prepare for and deal with emergencies, and humanitarian organizations must shift their emphasis more into the direction of preparedness and prevention. It is in this way that ECHO and CORDAID now cooperate in funding longer-term drought cycle management programmes, in addition to specifically support preparedness activities and set contingency funds aside in case of the onset of an actual emergency.

Kyrgyzstan



Rural, School "Disaster Teams" to Boost Preparedness

Mobilising Rural Communities for
Disaster Preparedness in the Kyrgyz Republic
Christian Aid (In partnership with Shoola)



Training of "school disaster teams" on preparedness and first aid

Abstract

The initiative described below has targeted five villages and local government representatives over a one-year period in the Eastern part of the Kyrgyz Republic. In each village, "rural disaster teams" and "school disaster teams" were formed and supported in their development through a simple and transparent process.

The local disaster teams underwent theoretical and practical training on disaster management, preparedness

and risk reduction. This enabled them to raise community members' awareness of existing and potential hazards and disaster risks.

After an early warning system was developed, and the team members trained in first aid and on how to respond to emergency situations, they were able to plan community response to disasters.

The Initiative

This is a community capacity building and small-scale structural mitigation project that involved both communities and local government authorities in project implementation, for the sake of sustainability.

The first phase of the project was implemented from January 2006 to December 2006. A second phase is planned in 2007 covering the same target villages. The project was implemented by Christian Aid's partner Shoola, with funding from DIPECHO (Disaster Preparedness, European Commission Humanitarian aid Office).

The following stakeholders were involved in the project: (1) *Primary stakeholders* - Rural and school disaster team members in five villages (approximately 100 adults and 125 children); staff of regional, district and local government; 11,301 community members of the five targeted villages; (2) *Secondary stakeholders* - 100,000 residents of Issyk-Kul Region that were informed about hazards and disaster risks through a video and other material broadcast by the local TV channel.

Goal and Objectives

The project sought to enhance disaster mitigation and preparedness among villagers. The five villages targeted were located in Ton, Djetioguz, Aksuu, and Tjup districts in Issyk-Kul Region in the Eastern part of the Kyrgyz Republic, Central Asia⁹.

Outcomes and Activities

Over a period of two months, rural and school disaster teams were formed. They underwent training and engaged in capacity building activities involving other community members. The preparation of village maps and risk areas, and preparedness and contingency plans was done in a participatory manner under the leadership of the disaster teams. They also supported Shoola in facilitating repair and construction work using the *ashar* method (free community labour).

The rural disaster teams and school disaster teams were formed in the five villages to support the development of community awareness and preparedness measures. The teams received capacity building support in the form of training on disaster risk reduction and management, and were equipped with tools and kits for emergency preparedness and response including spades and shovels, first aid kits and stretches, flashlights, tents, etc. Each rural disaster team consisted of 20 adult members, and each school disaster team of 23-25 school children. The teams drew disaster risk maps of the villages, planned escape routes, and prepared contingency plans. They also facilitated structural mitigation work including strengthening river banks, reconstructing reservoirs and building dikes.

To ensure sustainability and continuity, each school disaster team formed one "duplicate" disaster team consisting of younger children who had not been involved in the initial activities. The school disaster teams also conducted training on disaster risk in the schools of neighbouring villages, which were not directly involved in the project. Competitions and summer camps were organised for the youth, where they could demonstrate their skills and knowledge. These events and construction activities in the villages were broadcasted by the local TV channel for the residents of the whole Issyk-Kul Province.

Overall, the major outcomes of this project were raised awareness, structural mitigation work and enhanced disaster preparedness. Concrete and verifiable results achieved by this initiative include:

- Five rural disaster teams and five school disaster teams formed in the five villages. Each rural disaster team consisted of 20 adult members, and each school disaster team of 23-25 school children. In other words, the five villages are supported permanently by 100 adults and 125 or so school children who are key disaster reduction actors.
- Disaster risk maps of the villages, planned escape routes and contingency plans developed.
- Structural mitigation work completed: river banks strengthened, reservoirs rebuilt and dikes built.
- Five "duplicate" disaster teams consisting of younger children formed by the five school disaster teams to ensure sustainability and continuity.
- Children actively engaged in disaster issues and learnt about the importance of community initiative in disasters through innovative methods and in a playful manner.
- 11,301 community members of the five villages benefited from structural mitigation, raised awareness and the early warning systems.
- 100,000 residents of Issyk-Kul Region informed about hazards and disaster risks through a video and other material broadcast by the local TV channel.

⁹ The villages were identified in an assessment undertaken in December 2006.

The Good Practice

This can be considered a good practice because:

- The involvement of both communities and local government authorities meant that raising awareness about existing and potential risks reached all relevant stakeholders. Moreover, the rural and school disaster teams were linked to the local government in that they were both actively involved in the project implementation.
- Forming the rural disaster teams from community members and training them helped build sustainability into the structural mitigation components of the project. Indeed, the teams facilitated maintenance and repair work, and passed on their knowledge to other community members and neighbouring communities through formal training and informal communication.
- The school disaster teams ensured that children were actively engaged in the issues and learnt from an early age about the importance of community initiative in disasters. Knowledge about disaster risks and response was conveyed using innovative methods and in a playful manner.
- Linking capacity building with small-scale structural mitigation work - that included community contribution - provided motivation and tangible results for the communities to build on.

Lessons Learned

- A major challenge was the political and administrative culture still prevalent in the Central Asian region: top-down approaches and government-led planning remain dominant and the concept of participation is a relatively new phenomenon. Furthermore, NGOs are put at a disadvantage by an unclear perception and much scepticism from government towards private, non-governmental and community-based development organizations. In the light of this, the project aimed to link local government and communities, and Shoola tried to play a merely facilitating role.
- Receiving funding or contributions from government departments remains problematic. Therefore, it can be seen as a success that the project managed to secure contributions from local government in the form of providing their relevant staff to get involved in the planning and implementation of the project. This included staff participating in training as well as experts supporting the structural mitigation work.
- Ensuring and keeping up community participation is another key challenge, also due to a history of top-down decision making. Shoola had to remain directly engaged in motivating the disaster teams and visiting the communities on a regular basis to ensure participation throughout the project period.
- The one-year project duration was too short because the activity was new to both Shoola and the target communities. Therefore, Shoola and Christian Aid have decided to implement a second phase to achieve more sustainable collaboration between the communities and the local government authorities.

Potential for Replication

The project approach can be easily replicated as it made sole use of local experts and locally available materials. However, a key challenge for replication and scaling up will be the commitment of local and national government authorities. This is an area which Shoola and Christian Aid are aiming to develop further over the next year and in similar initiatives in South and Central Asia.

Malawi



Small, Medium-Scale Initiatives to Control River Flow

"Together, We Can Make a Difference":
Benefits of Multi-Stakeholder Flood Management
Tearfund (In partnership with Eagles)



Villagers from Pende village reinforce dyke with sand bags

Abstract

Over 10 to 15 years, the district of Chikwawa in southern Malawi suffered from the increased impact of flooding from Mthumba River, including disruption of agricultural production, loss of lives and destroyed buildings. This not only re-enforced the local cycle of poverty but also reduced the impact of development gains in the district.

In 2003, Tearfund's partner NGO "Eagles" undertook a "Participatory Assessment for Disaster Risk" with five villages. The villages' specific vulnerabilities to flooding were assessed, and their capacities to address the problem reviewed. Some of the root causes of their vulnerability were identified, as well as the reasons for a more frequent occurrence of the hazard. In conjunction with the villages, Eagles initiated small-scale mitigation initiatives, including the creation of a wood lot and a storm drain.

In 2005-2006, Eagles consulted with another 11 villages and the local government authorities, as it became clear that a multi-stakeholder approach was needed. Sufficiently motivated after two years of awareness raising efforts by Eagles, the villagers established a community-based task force. Once created, the task force along with government authorities and experts widely consulted with all communities and designed an earthen dike that would re-instate the previous river course of Mthumba River and reduce the impact of flooding on a wide area. The impact of the project was felt virtually immediately. During the 2005-2006 rainy season, excess run-off was diverted by the storm drain, rainfall run-off was reduced by the wood lot, and the original river course of Mthumba River was restored through the earthen dike.

The Initiative

This was a flood mitigation project consisting of multiple small to medium-scale initiatives aimed at controlling river flow during rainy seasons. The project was launched in 2003. Even though the proposed flood mitigation structures (wood lot, storm drain, earthen dike, etc.) have been completed, Eagles' relationship with the communities and villages is still ongoing and the structures are managed by the community and the government through a community-based task force established in 2005-2006. The task force, made up of community members, operates under the coordination of the District Civil Protection Committee mandated by the local District Executive Committee to look after disaster mitigation and response within the District Assembly.

The project was initially implemented in five villages in the area of Mthumba, Chikwawa District, Malawi. The district lies in the Great Rift Valley in the southern part of the country, through which passes Shire River which is the single outlet for Lake Malawi. After some initial research and consultation, the project was extended to another 11 villages when it was realized that the mitigation work would require their support and would also benefit them. Relationships were also built at district level, specifically with the District Civil Protection Committee of the District Assembly, and with the District Executive Committee.

Involved in the project were: Eagles' Relief and Development Programme (for project initiation and management); the District Executive Committee (for decision making); the District Civil Protection Committee (for coordination); the District Assembly (for ratification and endorsement); Illovo Sugar Company and various government departments (for resource inputs); the community-based task force (managed by the District Civil Protection Committee); Forestry and Agricultural Departments (training support and advice); local churches (for community mobilization and consultation); two traditional elders and local chiefs (for community mobilization and consultation); and all village communities (for broad consultation, indigenous knowledge and local labour).

The project was implemented by Tearfund's partner NGO Eagles under initial funding from Tearfund. Eagles' ongoing relationship with the communities and villages is supported by Tearfund through a DFID-funded global DRR programme.

Goal and Objectives

As mentioned earlier, the major goal of this project was to reduce food insecurity through flood management. Overall, the project targeted 4,706 flood-affected farming families in over 52 villages.

Outcomes and Activities

The implementation of this project required the following activities:

- Building a storm drain in 2004 in Nedi village to protect people, their houses and their community child care centre.
- Establishing a small local tree plantation (wood lot) in 2003 in Chikalumpha village to slow down flood waters and forcing them into drains, away from the people, houses and fields behind.
- Building an earthen flood dike in 2006 in Santana village to protect crop fields. The labour for the dike was predominantly provided by the task force, with local churches and traditional authorities that agreed to work with the task force to take responsibility for its ongoing maintenance.

During the course of the design and construction of these structures, the communities were made aware of what actions they had done to cause the increased flooding. They were given new skills in tree and grass planting. They were also made aware of the consequences of tree felling and overgrazing. The task force, made up of community members, learnt to advocate to local businesses to provide inputs in kind for the project, as well as negotiate with government authorities to provide inputs such as training. As a result, the villages increased in confidence in their ability to negotiate with local government authorities and to manage and own solutions to their problems.

The project was implemented through the adoption of the following strategies:

- New multi-sectoral approach: After a comprehensive risk assessment, a new multi-sectoral approach was developed to resolve the flood problem.
- Advocacy: (1) Advocacy with government departments and District Assembly to draw their attention on the problem; (2) Advocacy to re-enforce a bye-law to prevent farmers from

Good Practices and Lessons Learned

planting within 20 m of rivers/streams; (3) Advocacy with private and public sectors to provide extra resource inputs.

- Networking: (1) Improve networking with existing government mechanisms (mainly the District Civil Protection Committee) to support disaster mitigation and response; (2) Use expertise for advice and supervision to ensure sustainable mitigation structures.
- Community mobilization: (1) Sensitize traditional and church leaders to take responsibility in their areas; (2) Mobilize communities to understand and take responsibility in their areas, and consequently develop action plans; (3) Undertake review, with all stakeholders, of previous flood mitigation efforts to understand what did and what did not work.

The following methods were used:

- Participatory Assessment for Disaster Risk methodology (a form of Vulnerability and Capacity Assessment, VCA) to identify main hazards, root causes and subsequent community capacity to draw together action plans.
- Environmental resource management training of communities by government and institutional experts, especially on the use of trees and grasses on river banks to prevent soil and river erosion.
- Use of community elders to identify the previous course of the river, which led to the choice of mitigation structures needed to re-establish the previous route of the river away from community structures and agricultural lands.
- Development of a community task force to rear tree saplings, dig the storm drain and build the earthen dike, along with the use of heavy equipment funded through the project.

The Good Practice

The overall impact for all the villages is significant. There has been a decreased incidence in water-borne diseases during the rainy season and also increased school attendance. Indeed, schools and clinics in the past had been disrupted either from the temporary closure of public buildings or through lack of access. Agricultural lands have also increased their yield and production, and there is increased food security. All parties agree that with collective discussion, agreement and action, they managed to address a problem that was previously deemed impossible to manage.

In particular, the following specific impacts have been observed from 2005-2006 onwards:

- Significant reduction of flooding in prime agricultural lands, including the re-enforcement of a river bank with a 400-metre section;
- Reduced water-borne diseases in flood-affected villages;
- Increased school attendance (flooding stopped schools from operating or prevented children from attending class during rainy season);
- Provision of food through food-for-work programmes;

Lessons Learned

The key lessons learned from this practice are:

- Communities need to be involved in the project so that they can understand how their own practices can increase flooding.
- Communities need to be mobilized to accept and own subsequent mitigation activities and for the long-term sustainability of the project.
- Local government officials' endorsement and support are needed as encouragement and as a source of resources.

The major challenges were:

- How to maintain the communities' consensus and behavioural change needed to address the underlying causes of flooding. The key was to ensure that church and traditional leaders maintained the momentum and understanding of sustainable environmental management.
- The threat of climate variability leading to changes in the seasonality and volume of the precipitation: this may lead to new levels of unexpected flooding or alternatively agricultural drought affecting the growth of the wood lot and agricultural crops. Tearfund is

- Communities' better understanding of causes of flooding;
- Communities' increased skills in planting and raising tree saplings; and
- Communities' increased confidence through all the above to solve their flood-related problems.

Furthermore, this project can be regarded as a good practice because:

- All stakeholders were consulted during the project
- Disaster risks leading to effective initiatives were analyzed in a participatory manner
- Learning was also explored from historical and indigenous knowledge
- Use of intermediate technology enabled local community involvement
- Communities were sensitized on the underlying causes of flooding.

now working with partners to understand how VCAs (Vulnerability and Capacity Analysis) can be modified to appropriately cater for scenario forecasting of climate variability.

The key success factors of this initiative were:

- Willingness of all stakeholders to discuss and learn during the lifespan of the project.
- Multiple appropriate technologies that were well considered and integrated back into wider government thinking and policies, yet owned by the community.

The key failure factors were:

- Protection of young trees, especially from livestock and in drought periods.
- Slow decision making with a volunteer task force whose mobilization was based on good will and motivation.

Potential for Replication

The following aspects of the project are generic and can be replicated almost anywhere in the world:

- The multi-stakeholder approach leading to awareness raising and consultation with communities, and the involvement of local government structures;
- Use of risk assessment methodologies to correctly assess the underlying causes of flooding and the design of appropriate technologies; and
- The development of a multi-stakeholder community-based task force as central to the sustainability and ownership of mitigation structures.

This said, the administrative and governance structures were conducive to encouraging and mobilizing the community to participate and own their own resolutions. Subsequently, in countries where there are limited administrative or governance structures related to disaster management, replication of this approach would need to be reconsidered, or at least undertaken concurrently with advocacy measures to help governments design appropriate mechanisms to supporting community-based disaster risk reduction.

Furthermore, there was an already existing strong understanding of what mitigation structures did and did not work in Malawi, which was helpful in identifying appropriate solutions. Again, in countries where there are no appropriate examples of mitigation structures available, pilot initiatives should be encouraged in collaboration with the government in active consultation with high-level experts. The project design should also have a strong component for disseminating learning across the country after completion of the pilot.

Namibia



Supporting Local Decision Making with Inter-Community Platform and Local-Level Monitoring

Community Organization: The Essential Basis for Community-Based Disaster Risk Reduction and Management

Desert Research Foundation of Namibia (DRFN)

Abstract

Drought and desertification are slow-onset disasters that impact on livelihoods of people living in drylands. They are often exacerbated by poverty and a naturally variable climate and compounded by lack of organization in communities affected. With increasing population, urbanization, climate change, evolving policy and political frameworks and other pressures, capacity of drylands residents to cope with and adapt to natural climate variability and intervening extreme events is diminished. Increased understanding of variable natural environmental conditions and potential effects of climate change, enhanced cooperation amongst the growing population, appropriate organizational and communication structures and community-based monitoring to support local decision making are all essential components of community-based disaster management and risk reduction.

In Namibia, in Southwestern Africa, an approach known as "Forums for Integrated Resource Management" has provided the platform for organization and communication within and amongst communities. This approach has contributed to placing

communities at the centre of their own development. Whether based, inter alia, on a water point committee or a farmers' association, the approach strengthens capacity amongst the community to coordinate their own activities in conjunction with service providers through planning, monitoring and adjustment of mutually agreed upon development plans.

To support information exchange and decision making, an approach known as "Local Level Monitoring" is designed by communities with support from service providers. Communities identify relevant indicators to monitor their livelihoods including key environmental elements. Service providers contribute to design of a monitoring and information capturing system. The communities discuss the results, analyze them and use them where appropriate for decision making. This provides a tool for identification of environmental changes affecting livelihoods that may be based on management actions, climate variability, policy changes or other factors. At the same time, this information can be used to identify and track evolving drought and decreasing productivity and apply the results to decision making related to coping with the identified risks.

The Initiative

This initiative started as part of Namibia's programme to combat desertification, which represented the country's National Action Programme. The "Forums for Integrated Resource Management" (FIRM) and "Local Level Monitoring" (LLM) approaches described in the abstract were initiated in the mid 1990s. The programme that developed them was completed in 2004. Since then, they have been adopted by extension services and new projects and programmes.

The initial programme was implemented in the Central North (villages and extension services in nine constituencies in Oshikoto Region), North-East and East (five Villages and extension services), North-West (three villages), West (a management committee) and South (four villages). Several spin-off projects, ongoing and planned, have adopted this approach as has the FSRE (Farming Systems Research and Extension) of agriculture extension.

The following stakeholders were involved in the initiative: the Desert Research Foundation of Namibia (DRFN), an NGO, and the Directorate of Extension and Engineering Services (DEES) in the Ministry of Agriculture, Water and Forestry (MAWF). The personnel involved included a variety of staff members at different times ranging from the Director of the DEES to field facilitators such as agricultural extension technicians (AETs). Over 1,000 people were targeted and were directly or tangentially involved in the initiative implemented by the DRFN working with the DEES under the guidance of a Steering Committee chaired by the Ministry of Environment and Tourism (MET). The initiative was funded primarily by the German development agency GTZ though other donors supported various activities and sub-projects during the 10-year programme.

Goal and Objectives

The major goals and objectives were to understand drought and desertification in the Namibian context, to develop awareness and capacity to deal with their various forms, particularly amongst communal farmers and their service providers, and to contribute to relevant policy formulation.



FIRM meeting near Okakarare, where LLM results were presented and discussed

Outcomes and Activities

The impact of this initiative has been extensive and is ongoing at community level and amongst service providers. Several policy instruments have been influenced by the project and a number of derivative projects are ongoing.

As a result of this initiative:

- The Farming Systems Research and Extension (FSRE) programme of the Directorate of Extension and Engineering Services (DEES) has adopted the FIRM approach and uses it, with greater or lesser success, at many Agricultural Development Centres (ADCs) throughout Namibia.
- Local Level Monitoring (LLM) is actively implemented by communities in five of the 13 regions of Namibia and less actively at other communities with ADCs in other regions.
- The Drought Policy and Strategy has been elaborated under the programme but is yet to be fully implemented. Several other policies take drought and desertification into consideration, e.g. Agriculture, Water.
- A number of programmes, such as the Desert Margins Programme (Global Environment Facility, GEF), Ephemeral River Basins (Norway), Oshikoto Livestock Development Project (EU) and several planned programmes as well as ongoing activities (e.g. Kuiseb Basin Management Committee) follow the FIRM approach and/or use LLM as a decision support tool.

The Good Practice

This can be considered good practice because it contributes to capacity building and institutional development amongst rural farming communities so they can enhance their own resource management and livelihoods and thereby enhance their capacity to manage and reduce risks related to drought and desertification and other potential disasters.

The FIRM approach is an innovative, flexible approach to enhancing individual and institutional capacity of rural communities; the LLM is an innovative way to monitor livelihood and environmental changes based on the communities' own interests and used by the communities for their own decision making. The LLM approach is being expanded to provide community-derived information to national level with the aim of national coverage in support of risk reduction and management.

The programme was implemented through a joint venture between NGOs and government departments working with farming communities. While NGO staff and resources undertook the community-level facilitation, the programme was guided by a national Steering Committee.

Lessons Learned

The key lesson learned from this initiative is that community capacity building requires time from the community and the service providers involved with the community. There must be obvious benefits for the community, and facilitators must be able to elaborate on these benefits from the first engagement. Since time is a key factor, funding to support the ongoing facilitation is also essential, something which is rarely available from donor programmes. Consequently, involvement of the relevant government departments is also essential - from the head office to the extension level on the ground.

Major challenges to be overcome during the project involved changing personnel in government who often were not aware of or convinced of the benefits to be derived from community capacity development. Limited capacity amongst newly appointed extension personnel was part of the ongoing capacity strengthening associated with the project.

Another major challenge was the degree of expectation from government by communities in newly independent Namibia. Communities still expect the government to provide free drought relief food, water and energy, and overcoming this perception has been an ongoing challenge to the programme. Although an enlightened drought policy and strategy was developed by the government during the 10-year programme, there has been reluctance by the government to adopt some of the key elements challenging its use to guide and enhance community capacity.

Potential for Replication

If the implementers and the communities and the government structure all have the will and the time and the interest, it would be easy to replicate this project. Governments are usually interested in DRR but do not know how to reach local communities in a non-bureaucratic manner. Governments often want to support local development but forget the step of helping communities to organize and gain capacity so they can participate fully in their own development. FIRM represents a communication platform between decision makers, communities and service providers and research workers and others contributing to addressing drought and desertification, slow-onset disasters prevalent in the region.

However, to replicate this project in a different context, the tacit support of government and the appropriate policy framework supporting participation should be in place. The establishment of some sort of communication platform, such as FIRM, requires attention. Full participation from the communities themselves is essential and not the usual top-down approach.

Peru



Disaster Prevention among Native and Mestizo¹⁰ Communities

Disaster Prevention and Emergency Response with Native and Mestizo Communities in the Amazonas Region of Peru

German Agro Action

(In partnership with ITDG - Soluciones Practicas)

Construction of gabions to prevent inundations in San Martin Alao



Abstract

Some native and mestizo communities in Peru are extremely vulnerable to natural hazards such as floods, landslides and sludge avalanches. As their vulnerability is mainly due to poor economic conditions and lack of disaster prevention and response mechanisms and services, German Agro Action and ITDG - Soluciones Practicas¹¹ embarked on an innovative disaster prevention and response capacity building project involving the communities. The project aims to enhance their capacity to respond to disasters and reduce their vulnerability through a participatory process.

Even though winning the support and participation of the communities was a major challenge, the project finally took off with the help of local Civil Defence Committees formed by community members themselves. The establishment of the local Civil Defence Committees had a positive catalytic effect on

general participation. Native elders and leaders, women's and men's representatives, teachers and students, as well as local government officials joined the project, discussing disaster issues, devising risk reduction plans, assessing flood damage, promoting disaster prevention on local radio stations, integrating the topic into schools, establishing an educational network, identifying pilot projects, and so forth. The project, launched in March 2006, will be completed in June 2007.

Even though this is a first disaster prevention initiative with native and mestizo communities in Peru, it has achieved impressive results over its first 12 months of implementation. Better still, it can easily be replicated in communities with participatory decision making processes - provided that their "political" commitment is secured.

¹⁰ Mestizo: Half-caste, of mixed race (white and Indian)

¹¹ ITDG - Soluciones Practicas : Intermediate Technology Development Group - Practical Action

The Initiative

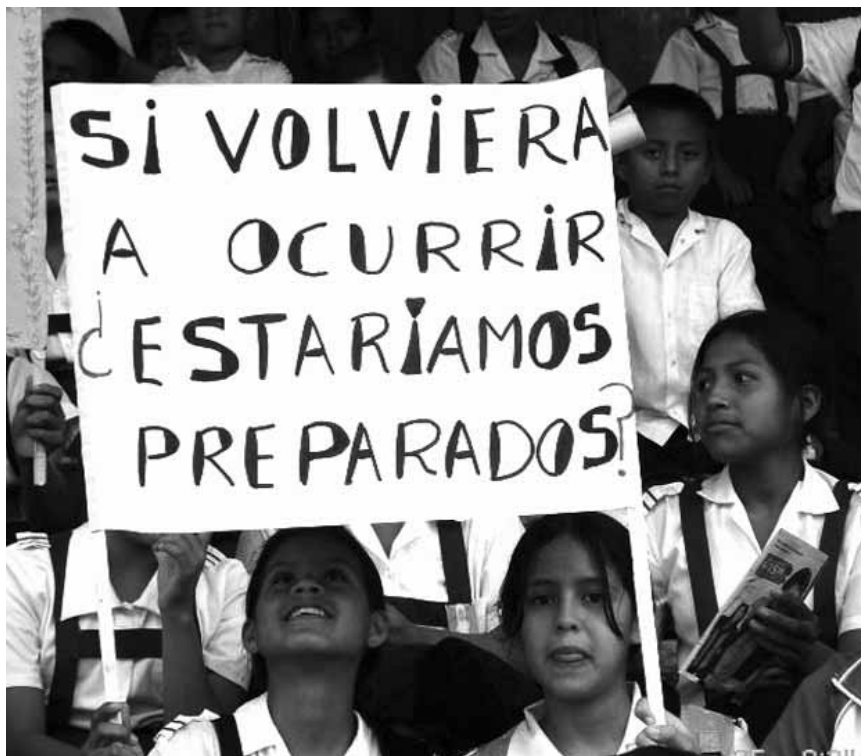
This is a disaster response and prevention capacity building project aimed at enhancing the capacity of native and Mestizo communities in three provinces of San Martin Department, Amazonas Region (Peru), to respond to disasters and reduce vulnerability to natural hazards through a participatory process including training and other activities.

The project kicked off on 1st March 2006 and will end in June 2007. Being a DIPECHO-funded project, it cannot be extended but experiences, results and lessons from the project can be transmitted to other disaster-prone and vulnerable regions. The project is under way in Peru in three provinces of San Martin Department, Amazonas Region, targeting about 8,150 direct beneficiaries among native Awajun, Kechua and Mestizo communities in El Dorado, Rioja and Moyobamba provinces.

These communities live in areas at high risk of flood, landslide and sludge avalanche, and are extremely vulnerable due to poor economic conditions and lack of disaster prevention and response mechanisms and services. Involved in the project are members of the communities - including native elders and leaders (apus), women's and men's representatives, teachers and students from 21 schools, as well as municipality officials. The project is being implemented by ITDG - Soluciones Practicas with funding from DIPECHO and German Agro Action.

Goal and Objectives

As mentioned above, this project is aimed at enhancing the capacity of native and Mestizo communities to respond to disasters and reduce vulnerability to natural hazards.



A students' campaign to raise awareness on disaster preparedness

Outcomes and Activities

The following project impacts and results have been observed:

- Establishment and training of native communities' Civil Defence Committees and implementation of disaster prevention activities.
- Evaluation of flood damage by members of the Civil Defence Committees following the above-mentioned training.
- Disaster prevention mainstreamed into schools and learning activities.
- Training of local communicators to advocate risk reduction activities on local radio stations.
- Educational material (stories, posters, puzzles) developed to support school learning process.
- Educational network formed and owned by teachers to promote topics related to disaster prevention.
- Native communities' Civil Defence Committees entered in local government budget and given premises at town council headquarters.
- Pilot projects identified by communities and implemented by the Civil Defence Committees.

The Good Practice

The project is a good practice because:

- It has achieved activity coordination between schools and communities.
- The civil defence committees have been created and trained and are able to provide technical assistance to civil defence groups in schools.
- Students have formed learning circles for risk management which are part of the project's group of communicators.
- The above-mentioned civil defence groups are operational and provide assistance to community based mitigation work.

The project also includes innovative elements such as:

- Working with native communities and forming native promoters of disaster prevention.
- Producing educational material in the native Awajun and Kechua languages.
- Forming students' working groups which facilitate the learning process and help promote DRR activities in the communities.

The project activities are being implemented through a participatory process supported by local elders and leaders. Beneficiaries are integrated into the learning process, the development of risk reduction plans and the prioritization of activities to reduce vulnerability to natural hazards.

A key success factor is people's awareness of the disaster risks and their awareness of the fact that they need to reduce their vulnerabilities.

Lessons Learned

Key lessons learned from this practice are:

- Work coordination and activity identification among schools and communities have enhanced people's participation.
- Local involvement and local "political" commitment are fundamental to the success of risk management processes. From the outset, local decision makers, elders, leaders and officials were integrated into the process and into the development of risk reduction plans.

One of the major challenges of this project was how to win the support of the native communities. Native communities had to be convinced that the process was genuinely participatory and that community members would make their own decisions on how the risk reduction process would proceed and what activities to implement. The communities have been reassured that their social systems and cultures would be respected.

Potential for Replication

The project is easy to be replicated in communities with participatory decision making processes. One precondition is local "political" commitment of all the individuals and organizations involved.

Philippines



Mainstreaming Community-Based Mitigation in City Governance

Community-Based Disaster Risk Management
& Local Governance

Center for Disaster Preparedness (CDP)

(In partnership with ADPC)



A focus group discussion
in Barangay Lasip Chico

Abstract

The present project is part of a larger initiative called "Program for Hydro-Meteorological Mitigation for Secondary Cities in Asia" (PROMISE), a programme that covers several countries in Asia.

It is considered to be innovative because it seeks to mainstream community-based disaster risk management project (CBDRM) into city good governance. Implemented in the City of Dagupan, north of Manila on Luzon Island in northern Philippines, by the "Center for Disaster Preparedness" (CDP), the project has provided an opportunity for city officials to go back

to the city's (urban) village communities and train them on CBDRM. Barangay¹² Disaster Coordinating Councils were revitalized, which helped develop village disaster risk reduction plans that have benefited the city.

The project has been instrumental in bridging the gap between high-level officials and the community through disaster risk communication and understanding of development projects. The project experience is being shared with regional partners and donors.

¹² Barangay means "village". It is the smallest administrative unit in both rural and urban settings in the Philippines.

The Initiative

This project, entitled "Community-Based Disaster Risk Management (CBDRM) and Local Governance", is part of a larger initiative called "Program for Hydro-Meteorological Mitigation for Secondary Cities in Asia" (PROMISE), a programme that covers several countries in Asia.

The project was launched in February 2006. It is still under way and a next phase is being planned. It is being implemented in Dagupan City, North of Manila, Pangasinan Province, Luzon Island, Northern Philippines. Involved in the project are Dagupan City officials, the Philippines-based Center for Disaster Preparedness (CDP) - an NGO working on disaster risk reduction - and the Asian Disaster Preparedness Center (ADPC) which is both a regional partner and a facilitator. The project created a Technical Working Group (TWG) composed of City heads and staff who are also members of the City Disaster Coordinating Council (CDCC).

The five components of this project are: (1) CBDRM Participatory Risk Assessment (PRA) Training of Trainers (ToT) for the City Officials, who in turn provide training to communities; (2) Reactivation of the CDCC (City Disaster Coordinating Council) and BDCC (Barangay Disaster Coordinating Council); (3) Institutionalization of a school "Disaster Safety Day"; (4) Celebration of the Disaster Safety Day in all schools in Pangasinan Province (where Dagupan City is located); (5) Developing and implementing a City Disaster Risk Reduction Plan.

Goal and Objectives

Increased involvement of stakeholders in CBDRM has encouraged Dagupan City heads and staff to address the vulnerability of some of the city's villages to hydro-meteorological hazards, especially after they saw for themselves the plight of the villagers.

The project seeks to mainstream CBDRM into city governance. Its objectives are:

- Adoption of specific hydro-meteorological disaster preparedness and mitigation measures to enable stakeholders to address hydro-meteorological disaster risks.
- Increased stakeholders involvement and further enhancement of strategies, tools and methodologies related to community preparedness and mitigation of hydro-meteorological disasters in urban communities.
- Enhanced coordination with donors to promote sustainability and to ensure programme activities in agreement with donor countries and regional strategies.
- Strengthened networks and stronger regional links among relevant risk management institutions/organizations for improving potential and capacity for application and dissemination of lessons learned.

Outcomes and Activities

The TWG and CDP promoted CBDRM and governance in the eight most vulnerable communities first, then within the remaining 23 barangays of Dagupan City. The revitalization of Barangay Disaster Coordinating Councils (BDCCs) was implemented by the community members themselves with guidance from the TWG and CDP.

Open dialogues allowed members of the eight target vulnerable communities to air their grievances and sentiments to the city government officials who, in turn, explained the various issues faced by the city. A wholesome atmosphere was developed, which helped the communities implement a number of disaster mitigation activities in consultation with the city officials. As a result of this project the following major outcomes and results have been achieved:

- Gap between high-level officials and the community were bridged through disaster risk communication and understanding of development projects.
- DRR plans were developed by eight target vulnerable communities and integrated into the City Disaster Risk Reduction Plan.
- Four community early warning and evacuation plans were completed.
- CBDRM and governance were promoted in eight most vulnerable communities and in the remaining 23 barangays of Dagupan City.
- Revitalization of Barangay Disaster Coordinating Councils (BDCCs) was achieved by community members themselves with guidance from TWG and CDP.
- The "Disaster Safety Day" was marked in the City on 16 July every year.
- The "Disaster Safety Day" was extended into a month-long event called "City Wide Disaster Consciousness Month" in 2006.
- A day for "River Clean Up and Mangrove Revegetation" was organized in the City.
- Earthquake and evacuation drills were carried out in various schools. The city government claimed some 55,000 students and teachers from both public and private schools took part in the drills.

The Good Practice

Mainstreaming CBDRM in good governance is a good practice. Indeed, when the NGO and other partner agencies leave the city, residents are already equipped with tools to advance disaster risk reduction. The convergence of a community-level approach and City government's participation also helps enduring sustainability and ownership. The regional network facilitated by the Asian Disaster Preparedness Center (ADPC) ensures replication and wider practice. And the active involvement of City Government and village officials ensures the overall success of the project.

This project is innovative because, unlike other CBDRM projects that are usually implemented by NGOs with communities, it is implemented in partnership with a City government.

A key success factor of this project was the City mayor's continuous support to the larger programme. The mayor's support has significantly contributed to the smooth implementation of the project.

Lessons Learned

Key lessons learned from the project are:

- Consultation with the Asian Disaster Preparedness Centre (ADPC) is essential for effective reporting of updates, logistical requirements and the overall flow of the project.
- Flexibility towards community and city schedules ensures acceptance and participation from community members.
- Children's participation ensures that their needs are considered and included.
- Networking is deemed essential in early warning system.
- Building linkages with both local and international NGOs helps in resource mobilization and in enhancing partnerships.
- Barangay residents are very supportive of the programme on disaster preparedness, especially if they are involved in events that showcase their experience to other agencies, partners and organizations.

Potential for Replication

The project can be replicated in other cities and other contexts with political will, commitment from other stakeholders and government support.

Tajikistan



Sustaining Community DRR with "Endowment Funds" and Natural Resources Management

The "Disaster Preparedness Action Plan Tajikistan" Project
CARE International



A disaster simulation exercise at the community level

Abstract

Tajikistan is prone to a variety of disasters triggered by natural hazards. In 2003, CARE International launched a community-based project entitled "Disaster Preparedness Action Plan Tajikistan". The project seeks to reduce disaster risk through better preparedness among vulnerable people in three districts of central Tajikistan.

Sixty-four village committees - in the form of Community-Based Organizations (CBOs) - have been formed to be the driving force. The CBOs facilitated the achievement of a number of activities, including: develop hazard, risk and evacuation maps at the community level; small-scale mitigation projects; community drills; training on risk assessment, disaster management, financial management, organization building, leadership, project design, monitoring and evaluation; and dissemination of information by youth volunteers.

Over 54,000 people have benefited from the project: CBO members, community members, other community members, school children, school teachers, local government officials and staff.

Better still, for the sake of long-term sustainability, each CBO has established an "endowment fund" which enables the community to tackle existing problems locally and finance other DRR activities with its own resources. Recently, in February 2007, the fourth phase of the project was launched, featuring another innovative factor of sustainability - a "sustainable natural resources management" component.

The project demonstrates that long-term sustainability of DRR activities can be pursued with the commitment, involvement and resourcefulness of local communities.

The Initiative

This project, called "Disaster Preparedness Action Plan Tajikistan", focuses on community mobilization, disaster mitigation and capacity building to sustain Disaster Preparedness Management (DPM). Sixty-four village committees - in the form of community-based organizations (CBOs) - have been formed as driving forces for disaster preparedness. The CBOs have been trained to handle disaster preparedness and mitigation issues.

The project was launched in 2003, involving three separate projects or project phases (July 2003 - June 2004; June 2004 - August 2005; September 2005 - November 2006) with an innovative methodology that establishes "endowment funds" for the sake of sustainability. A fourth project was launched in February 2007, incorporating sustainable Natural Resources Management (NRM) into DRR.

Funded by DIPECHO, the project is being implemented in disaster-prone areas of Varzob, Vahdat and Yovon districts in Khatlon region, central Tajikistan. Involved in the project are community members, school children, local authorities, the district branch of the Ministry of Emergency Situations, the district branch of the Ministry of Education, as well as officials and experts from the Institute of Botany and the Tajikistan Red Cross/Red Crescent Society.

Goal and Objectives

Tajikistan is prone to a variety of disasters triggered by natural hazards. This, as well as other factors - including increased interest in disaster reduction in the country - led to the project idea.

The main goal of the project is to reduce disaster risk in Tajikistan through better preparedness among vulnerable people living in areas most affected by recurrent natural hazards.

Outcomes and Activities

The concrete outcomes of the first three projects (or project phases) are as follows:

- 45 Youth Rescue Groups (volunteer groups) have been organized to disseminate disaster preparedness information to their families and community members.
- 64 hazard, risk and evacuation maps were developed at the community level.
- 64 small-scale mitigation projects were completed.
- Training were conducted for all 64 CBOs on community risk assessment, disaster management, financial management, organization building, leadership, fire fighting, first aid health, natural resource management, project design and project Monitoring and Evaluation (M&E).
- 124 community drills were conducted.
- 32 project proposals on DRR have been submitted to other donors by CBOs.
- Guidelines for using Endowment Funds (EFs) and realization of small-scale mitigation projects were developed and distributed to CBOs.
- Better coordination has been enforced at national, district and local levels and within CARE, providing a strong system of support to CBOs' preparedness and mitigation activities, as well as an effective venue for sharing lessons.
- Public awareness on disaster preparedness was raised through training, school competitions, evacuation drills and IEC (Information-Education-Communication) material.

In order to implement the project, CARE International suggested the formation of village committees (referred to as CBOs) for the purpose of disaster preparedness. Sixty-four CBOs, with an average membership of 31 (including men and women), have been established since 2003, getting training and support from CARE. Many of the CBOs have since become very active, taking disaster preparedness and village development into their own hands, with support from local authorities (jamoats¹³) that are involved in all project stages. Small grants have also been provided to each CBO to carry out a sample "small-scale mitigation project" (e.g. building a flood protection wall in their village) with support from and under the supervision of an engineer provided by CARE. Last but not least, CARE developed a Monitoring & Evaluation matrix and conducted monitoring using an M&E checklist.

Overall, 54,601 people have benefited from the three project phases so far, including 1,981 members of at least 64 community-based organizations, 41,000 other community members, 11,400 school children, 90 school teachers and 130 local government officials and staff.

13 *Jamoat* is often referred to as "village" or "neighbourhood".

The Good Practice

This is a good practice because its results can have a long-term impact. For instance, for the sake of sustainability, each CBO has set up its own "Endowment Fund" which enables the community to tackle existing problems locally and finance other DRR activities with its own resources. Another innovative factor of sustainability was incorporated into the ongoing fourth project phase launched in February 2007: a "sustainable natural resource management" component. Another innovative element is raising public awareness on disaster preparedness and response through school volunteers.

A key success factor of the project is cross visits among CBOs.

Lessons Learned

The project demonstrates that the community itself should be a key actor of disaster preparedness, and that long-term sustainability of DRR activities can be pursued with the commitment, involvement and resoluteness of local communities. The following key lessons were also learned from the three previous projects and incorporated into the ongoing fourth project:

- Include earthquake-safe construction techniques in the project.
- Introduce good quality training on project proposal writing for other NGOs (DIPECHO partners).
- Establish, in one pilot jamoat, a (CBO-based) "Emergency Response Coordination Centre" (ERCC) to coordinate mobilization for efficient and effective disaster response.
- Incorporate sustainable natural resource management (NRM) into disaster risk reduction.

Potential for Replication

The methodology of working with and through village committees (CBOs) is likely to work in many countries - provided that local authorities cooperate. In more segregated societies (e.g. with strong ethnic or gender differences, etc.), the composition and representation of CBOs may be a challenge.

Vietnam



Flood and Typhoon-Resilient Homes through Cost-Effective Retrofitting

"Vaccinate Your Home" - Preventive Action to Reduce Damage Caused by Floods and Typhoons in Vietnam

Development Workshop France (DWF)



Training builders on key safety points

Abstract

Vietnam's disaster risk reduction strategy pays insufficient attention to the capacity of families and local communities to play a key role. Top-down approaches need to mesh with community-based disaster risk reduction potential.

A Development Workshop France (DWF) programme efficiently demonstrates that communities can be a dynamic force in reducing risks directly related to local contexts, and that their potential can be mobilized through participatory commune-level disaster risk reduction planning, training and outreach, and preventive strengthening of housing and public buildings.

The DWF Programme seeks to help reduce the impact of typhoons and floods on housing and public buildings; loss of housing being specifically a major family setback with repercussions on all other aspects of family life and development.

The Programme is practical, efficient and cost effective. Even though financial institutions have not taken up yet the idea of granting credit to people concerned, many families and communities immediately put their money into it after seeing its concrete and tangible results.

The Initiative

This initiative is a disaster reduction programme aiming to reduce the impact of typhoons and floods on housing; loss of housing being a major family setback with repercussions on all other aspects of family life and development.

The Programme kicked off in 1999 and is still continuing with further phases planned. Phases 1 and 2 were implemented from 1999 to 2003 funded by the Canadian International Development Agency (CIDA), and Phases 3, 4 and 5 supported by the European Commission Humanitarian aid Office (ECHO) through its Disaster Preparedness programme known as DIPECHO (Disaster Preparedness, European Commission Humanitarian aid Office). The current phase runs through to 2008

Implemented by Development Workshop France (DWF) in collaboration with the Thua Thien Hué Construction Consultants Stock Company, the Programme has been run in Thua Thien Hué (TTH) Province in Central Vietnam, involving over 100,000 people annually in awareness campaigns, including: commune, district and provincial people's committees; some 600 teachers; 1,500 school children; and 550 builders. The programme targets every year some 4,000 direct beneficiaries, including some 250 families.

Goal and Objectives

The initiative has been launched because Vietnam's disaster risk reduction strategy pays insufficient attention to the capacity of families and local communities to play a key role, suggesting that top-down approaches should mesh with community-based disaster risk reduction potential. The other reason for launching the initiative is to reduce the general impact of loss of housing caused by typhoons and floods.



A model house travels to the communes to show safe construction techniques

Outcomes and Activities

Based on risk identification and the need to show how preventive action can reduce the identified risks, the Programme involves local and grassroots consultation and preventive action planning. Its central theme is to make families and the community active players in the process of reducing the vulnerability through the integration of storm resistant techniques in existing and future building. Demonstration and training have equally been key components of the Programme's strategy.

DWF promotes the preventive strengthening of existing houses and public buildings based on ten essentially generic key principles of typhoon resistant construction. It encourages the application of these same principles to the construction of new buildings by both government and the private sector and in particular as part of the Vietnam Government's "Temporary House Replacement" programmes that aim to provide a more secure environment in which the extremely poor can improve their situation.

Each of the ten key points of typhoon resistant construction describes a principle that either reduces the risk of damage to the building structure or reduces the risk of loss of materials, such as roof covering. For example, the veranda roof (a high risk item) should be structurally separate from the main roof of the house. The connections between all individual parts of the structure, from the ground to the ridge, have to be strong. Doors and shutters should allow the building to be closed up. All parts of the roof and wall structure must be firmly connected. Roof sheets or tiles must be held or tied down. Trees should be planted to form wind breaks. The ten key points

Good Practices and Lessons Learned

can be applied to almost any type of building in the communes, regardless of the type of structure or the type of materials that have been used. All but the frailest of houses can be strengthened.

The average cost of preventive strengthening is 250 \$ per house. Since the start of the programme families have always contributed to such preventive action, covering some 60% of the costs. From 2002 DWF has piloted the provision of credit for house strengthening, and families have amply demonstrated that they will borrow and repay these short term loans (18 months) to cover part of the costs.

Overall, the Programme shows that preventive strengthening of housing and public buildings is viable, cheap and effective. As hundreds of families have participated, the impact is now both popular - people now trust the approach - and official - provincial authorities have issued orders telling people to apply the DWF prevention approach. Last but not least, Typhoon Xangsang in 2006 clearly demonstrated that the DWF approach works.

The Good Practice

The DWF programme is a good practice because it is both practical and efficient. This is evidenced by the fact that families and communities immediately put their money into the DWF approach after seeing its concrete and tangible results.

One innovative aspect of the Programme is the key role of participatory communication actions that involve people from all levels in getting the prevention message across. Another innovation is the demonstrative value of showing how housing and public buildings can be made to resist disasters. The third innovation consists in showing that the whole process is economically viable.

A long-term success/failure factor of this initiative may be the fact that financial institutions have not taken up the idea of granting credit for preventive strengthening of houses, yet the idea has been well received by beneficiary families. This issue still has to be addressed. A possible link with disaster insurance should be explored.

Lessons Learned

The key lessons learned from this initiative are:

- Once convinced, people and families are well prepared to commit their own funds to take preventive action to reduce the risk of loss or damage to their own homes;
- Community residents can give equal treatment to community facilities and public facilities as long as the "common good" dimension is perceived ; and
- Scepticism about the value of retrofitting houses has been replaced by confidence.

The major challenge is that government policies consider disaster risk reduction (DRR) in macro top-down terms and dismiss the capacity and needs of local communities and families. They do not perceive them as possible key partners in DRR. As a result, national financial commitment does not cover local needs and families have to find their own resources.

Potential for Replication

Replicating this practice is easy. DWF has done so in Indonesia (Banda Aceh), and has a long history of training local builders to integrate disaster resistant construction techniques into building as far afield as Iran, Afghanistan and in the Republic of Guinea in Africa.

Some characteristics of the Programme are context specific, but the approach applied in this DWF Programme has been tested in other countries and it works in different contexts.

For more information on the good practices presented in this publication, please contact:

Afghanistan: Raising Awareness of Risk through Radio Drama
Ms. Oenone Chadburn, Tearfund
Oenone.Chadburn@tearfund.org

Bangladesh: Voluntary Formation of Community Organizations to Implement DRR
Mr. Pieter van den Ende, Practical Action UK
Pieter.VanDenEnde@practicalaction.org.uk

Ecuador: “Critical Video Analysis” of Volcanic Eruption Mitigation Project
Ms. Alexandra Moncada, Catholic Relief Services (CRS) Ecuador
Amoncada@crsecuador.org.ec

El Salvador: Children and Youth at the Centre of Disaster Risk Reduction
Mr. Nick Hall, Plan International
Nick.Hall@plan-international.org

Haiti: Community Members Design and Implement Information Campaigns for Their Communities
Ms. Marilise Turnbull, Oxfam GB
MTurnbull@oxfam.org.uk

India: Masons with a Disaster Risk Reduction Mission
Mr. Manu Gupta, SEEDS India
Manu@seedsindia.org

India: Disaster Micro-Insurance Scheme for Low-Income Groups
Mr. Mihir Bhatt, All India Disaster Mitigation Institute (AIDMI)
Dmi@icenet.co.in

Indonesia: Combining Science and Indigenous Knowledge to Build a Community Early Warning System
Mr. Jus Nakmofa, PMPB – Community Association for Disaster Management
Pmpbencana@gmail.com

Kenya: Linking Relief and Development Through the Drought Cycle Management Approach
Mr. Ton Haverkort, Catholic Organisation for Relief and Development (CORDAID)
Thacor@cordaid.net

Kyrgyzstan: Rural, School “Disaster Teams” to Boost Preparedness
Ms. Bina Desai, Christian Aid
BDesai@christian-aid.org

Malawi: Small and Medium-Scale Initiatives to Control River Flow
Ms. Oenone Chadburn, Tearfund
Oenone.Chadburn@tearfund.org

Namibia: Supporting Local Decision Making with Inter-Community Platform and Local-Level Monitoring
Ms. Mary Seely, Desert Research Foundation of Namibia (DRFN)
Mary.Seely@drfn.org.na

Peru: Disaster Prevention among Native and Mestizo Communities
Ms. Susanne Scholaen, German Agro Action
Susanne.Scholaen@dwvh.org

Tajikistan: Sustaining Community DRR with “Endowment Funds” and Natural Resources Management
Mr. Paul Borsboom, CARE Nederland
Paul.Borsboom@carenederland.org

Philippines: Mainstreaming Community-Based Mitigation in City Governance
Ms. Lorna Victoria, Center for Disaster Preparedness (CDP)
Oyvictoria@yahoo.com

Vietnam: Flood and Typhoon-Resilient Homes through Cost-Effective Retrofitting
Mr. John Norton, Development Workshop France (DWF)
John.Norton@dwf.org



United Nations
International Strategy for Disaster Reduction

Secretariat, Geneva
Tel. : (+41) 22 917 8908/8907
Fax : (+41) 22 917 8964
isdr@un.org
www.unisdr.org

International Environment House II
7-9 Chemin de Balexert
CH 1219 Châtelaine
Geneva, Switzerland

Postal Address:
Palais des Nations, CH-1211
Geneva, Switzerland

Secretariat, Africa, Nairobi
isdr-africa@unep.org
www.unisdr.org/africa

Secretariat, The Americas, Panama
eird@eird.org
www.eird.org

Secretariat, Asia and the Pacific, Bangkok
isdr-bkk@un.org
www.unisdr.org/asiapacific

Secretariat, Central Asia, Dushanbe
tine.ramstad@undp.org
www.unisdr.org/asiapacific

Platform for the Promotion
of Early Warning
isdr-ppew@un.org
www.unisdr-earlywarning.org



Special Unit for South-South Cooperation

South-South Cooperation
UNDP Regional Center in Bangkok
United Nations Building, 3rd floor
Rajdamnern Nok Avenue, Bangkok 10200
Thailand
<http://tcddc.undp.org/>