

Towards a resilient future

Experiences with Community Managed Disaster Risk
Reduction and Climate Change Adaptation



An Ethiopian pastoralist with his herd

Towards a resilient future

Experiences with Community Managed Disaster Risk Reduction
and Climate Change Adaptation

Written by Marije Broekhuijsen

Edited by Nicholas Parrott, TextualHealing.nl

Petterik Wiggers front cover photo and photos on pages 6, 29, 51, 61
Benno Neeleman photo on page 65

Designed by Zoelontwerp

© Cordaid November 2009

Acknowledgements

We are thankful for the contributions (stories, films, photos, comments and ideas) of all who have been involved in developing this publication, our partners; Rustico Binas, our Global Advisor on CMDRR and all of Cordaid's staff working on CMDRR and climate change adaptation.

We are also grateful to all those who contributed to the Global Conference in Malawi, in June 2009; the partners and community leaders who presented their work on CMDRR; the CIDSE and Caritas Internationalis Southern Partner Group for sharing their perspectives on climate change adaptation; visitors to the conference who shared their ideas with us; and, in particular, CADECOM Malawi for hosting the event. We are also grateful to all those who have commented on drafts of the report.

About this publication

This publication is based on a selection of the many stories and experiences from our partners in community managed disaster risk reduction and climate change adaptation and includes details of the global declaration on CMDRR and climate change, signed by more than 80 partners and participants in Lilongwe, Malawi. The declaration and the stories provide insights into the CMDRR process, achievements with CMDRR so far and set out its potential. The stories highlight the good practices that have been developed, identify the challenges in further developing CMDRR and future opportunities to do so. There are many more stories that could not be included in this publication.

If you want to learn more about our work and future plans for CMDRR and CCA you can contact us or our partners. Please visit www.cordaid.nl and www.cordaidpartners.com for more relevant Cordaid publications on community managed disaster risk reduction and climate change adaptation.

About Cordaid

Cordaid is a Netherlands based development organisation, supporting non-governmental organisations, mostly in developing countries, carrying out development activities among poor and marginalised people. Cordaid has more than 90 years experience and expertise in emergency aid and in combating structural poverty.

Cordaid is one of the largest international development organisations in the Netherlands and has a network of almost a thousand partner organisations in 36 countries in Africa, Asia, Central and Eastern Europe and Latin America. These partner organisations work on various themes, including disaster risk reduction and climate change adaptation, health care, quality of urban life, access to markets and peace and conflict.

In the Netherlands, Cordaid is active in lobbying, campaigning and raising public awareness of development issues. It is a member of the CIDSE and Caritas Internationalis networks.

Towards a resilient future

**Experiences with Community Managed Disaster Risk Reduction
and Climate Change Adaptation**

*“A lot of little people in a lot of little places will do a lot of little things that will
transform the world” – African proverb*

Contents

Preface	4
1. It begins and ends with people	7
2. CMDRR: Building Resilient Communities.....	11
• Moving from relief to development	11
• Starting at the community level	12
• Enabling context-specific interventions	14
• Working on CMDRR	14
• Case Study - The CMDRR process in Malawi	17
3. Communities becoming agents of change	19
• Involving communities in CMDRR	19
• Working through community institutions	20
• Participatory action to reduce disaster risk	21
• Building upon local knowledge	22
• Sharing ideas and learning from each other	23
• Shifting the mindset of communities and partners	24
• Case study - Video as an empowering tool for disaster risk reduction	27
• Case study- Community developed early warning systems	29
4. Taking action to reduce risk	31
• Assessing disaster risk	31
• Investing in DRR capacity	33
• Case study - Different ways of creating resilience	37
• Case study - Sustainable livelihood as an integral part of CMDRR	39
5. The need for joint efforts	41
• Cooperation takes different forms and occurs for different reasons	41
• Funding and mobilising resources	44
• The need for joint effort to make policies more appropriate	45
• Case study - Karamojong join forces to tackle drought in Northeast Uganda	47
• Case study - Working with Panchayats and Self Help Groups	49
6. Climate change and disaster risk as a development issue.....	51
• Climate change adaptation starts at the community level	52
• Future challenges and the way forward	53
• Case study - Harvesting rain water to adapt to climate change	57
• Case study - Adapting to a changing climate in Bangladesh	59
• Case study - Linking community knowledge with science	61

7. Towards a resilient future.....	65
• Link, learn and document.....	65
• Lobbying and advocacy for.....	66
• Cooperation with other stakeholders	67
• Mobilising funds	67
Lilongwe Declaration.....	69
Participants of the Global Conference on community managed disaster risk reduction	72
Participants of the CIDSE & Caritas Climate Change Conference.....	75
Cordaid partners in community managed disaster risk reduction and climate change adaptation	76

List of acronyms

CCA	Climate Change Adaptation
CMDRR	Community Managed Disaster Risk Reduction
CSR	Corporate Social Responsibility
DRR	Disaster Risk Reduction
HFA	Hyogo Framework for Action
IIRR	International Institute for Rural Reconstruction

Preface

Cordaid views disaster risk reduction and climate change from the perspective of poor people who are the most vulnerable to disasters and changing climate, which can tremendously influence their livelihoods. These people often have limited resources to cope with these events and, all too often, become indebted in order to survive and to rebuild their lives.

This perspective is self-evident for people engaged in development work at the grassroots level. But it is not so evident among the politicians, civil servants and scientists who are discussing the climate change issue in preparation for the UNFCCC negotiations in December this year in Copenhagen. Their focus is on the reduction of greenhouse gas emissions, the establishment of carbon dioxide trading systems and industrial policies. But the relation between climate change and poverty is almost always absent from their discussions, even though it is an already-existing and very pressing issue. As a development organisation we feel it is our responsibility to ensure that the link between poverty and climate change is firmly on the agenda of these negotiations. One way to do this is to ensure that the stories of vulnerable people, from India and Bangladesh, from Kenya and Uganda, from Malawi and El Salvador are heard and are taken into account at international conferences and treaties regarding climate change.

We are entering into a new era of development paradigms which are beginning to hail a new approach to development work. The climate change issue is but one sign of that changing reality. Climate change is a real global issue in which all of humanity is in the same boat. The same holds true for migration, the energy issue and with scarcities of raw materials. Even poverty is not exclusively confined to Africa or Asia or Latin America. It is also on the rise in all developed countries, where new layers of society are being excluded and marginalised. Of course climate change, migration, the energy crisis and the scarcity of raw materials take on different characteristics in developed countries than in developing ones, but they are different aspects of the same phenomena. I see it as the challenge of the development sector to link them together, to highlight the interrelatedness of these issues and to find integrated answers. It is precisely here that the relevance of the values of Catholic social teachings – about solidarity and the common good – become visible. Only by starting from these values can we find answers that respect human dignity at a global level and that avoid adopting solutions that favour one set of countries or group of people at the expense of others.

An increasing number of programmes and projects are already taking this changing development paradigm into account. Many development organisations are integrating the new reality of climate change into their work. For example, Cordaid's partners in Chad and Nigeria, in Guatemala and the Philippines are addressing the issues of

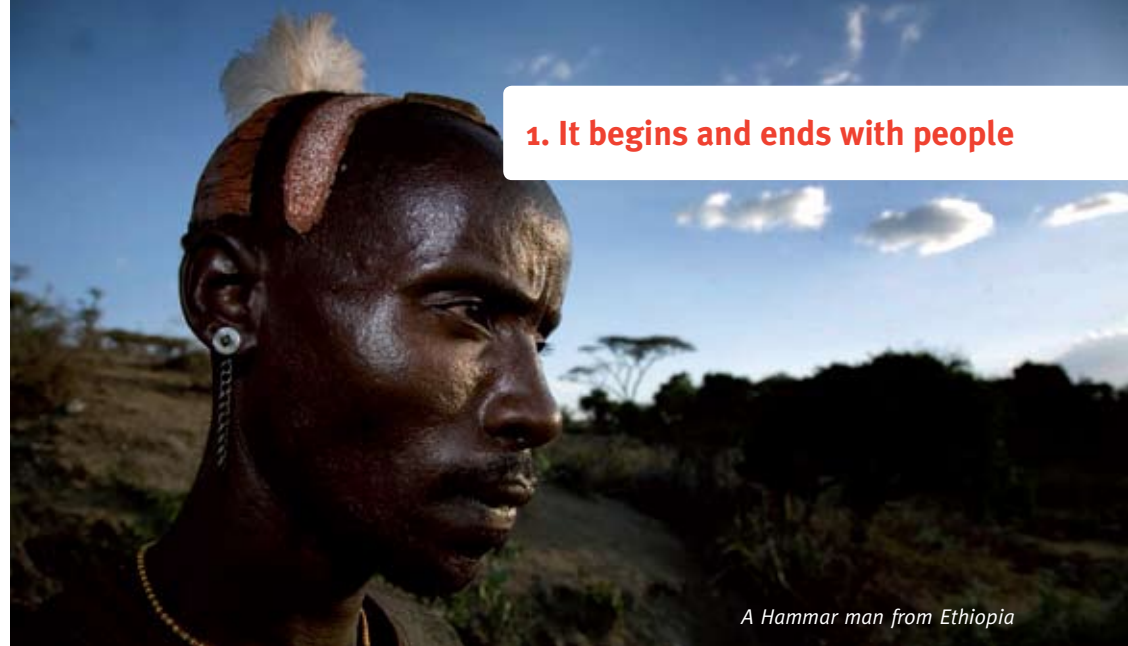
energy and the way that the global quest for energy – oil, gas and biofuels – is affecting the poorest and most vulnerable groups in their societies.

This is why I am so delighted with Cordaid's work on community managed disaster risk reduction (CMRDD) and climate change adaptation (CCA). This programme links local communities with the global community and shows that the struggle faced by local communities in coping with their own, often difficult, realities is part of a global struggle. It shows that we all need each other, because only joint reflection and joint action can provide us with the right answers and the right campaigns for change and for justice.



Beyond the local grassroots activities, the CMDRR programme has three key aspects that give it strength: networking and linking with others, producing and exchanging knowledge, and lobbying and advocacy. These aspects are based on practical experiences from work among communities. It is essential that we retain this linkage with the realities faced by families and communities. For Cordaid, development is first and foremost about people. This people-centred perspective informs our stance on policies. Disaster risk reduction and climate change adaptation are two areas where people are at the heart of our work.

René Grotenhuis
Director of Cordaid and Chairman of CIDSE



1. It begins and ends with people

A Hammar man from Ethiopia

“I am a respected old man in this Kebele. I have seen so many changes and new incidents in my life. These days, drought comes more and more frequently. The sun is becoming hotter, the days drier and the winds more intense and destructive. In the recent past our families were rich. But drought inflicted damage on my livestock and crops and reduced the productivity and value of my herds. As a result there was not sufficient milk for the family. Water is now severely scarce and there is no grass for our livestock. Our cattle are weak and emaciated. They do not provide us with as much blood we would like. Our women used to make decorations from leather and livestock products. But these are no longer available. We are worried about how we are going to save our herds. This is the first time I have ever seen a drought that led to camels dying. Our prayers and our requests for support are unheard and unanswered. If things continue like this, we will all die.”

Alka Urgema, Hammar agro-pastoralist from Assele Kebele, Ethiopia

It is time to act now

- Climate change is one of the most urgent human security, ecological and development challenges of our time – exacerbating poverty, food insecurity, forced migration, the spread of HIV/Aids and conflict.
- The greatest impact is on the poor, the most at risk and the marginalised. Building resilient communities should begin and end with these people.
- A global plan of action to address climate change and disaster risk must be undertaken with CMDRR as a central plank within it.

This testimony shows the urgency of the problems faced by people on the front line of climate change, which is exposing more and more people to increased risk of disaster and directly affecting their lives and livelihoods. Tragically, the global community turns a blind eye to the severity of the risks posed by climate change and is doing too little to help people prepare themselves for these risks. Community managed

disaster risk reduction (CMDRR) is an effective strategy of addressing the impacts and effects of climate change and reducing communities' vulnerability to disasters.

CMDRR shows that communities have the capacity to learn about climate change and more importantly to respond to it in a positive way. It shows that communities are capable of learning and of using their traditional practices, knowledge and skills to strengthen their resilience and develop their livelihoods. CMDRR can play a crucial role in drawing on these resources and helping communities respond to climate change and other hazards. CMDRR is a development tool, with hazard as its focus and disaster risk as the entry point. It is particularly relevant for

vulnerable and marginalised groups, especially women and children, who are most at risk from climate change and most likely to see their livelihoods (and sometimes their lives) at risk.

“Reducing disaster risk and adapting to climate change begins and ends with people.”

Participants of the Global Conference on CMDRR in Malawi, June 2009.

“Seeing that injustice is done and not combating it, makes you equally responsible”

José Martí,
Cuban poet.

In June 2009 many of those involved in promoting CMDRR, including Cordaid staff, partners and community leaders came together at a global conference held in Lilongwe, Malawi. This conference gave participants the opportunities to share their experiences and the lessons learnt from five years of promoting CMDRR. It also provided an opportunity to discuss future challenges and the way to expand and improve CMDRR. This resulted in the *Lilongwe Declaration*, in which all participants affirmed the need for joint efforts to increase communities' resilience. Participants also designed a Global Agenda for CMDRR to 2015, identifying the issues and activities required to improve and expand CMDRR.

The conference provided the main source of inspiration for this publication. In it you can find details of the *Lilongwe Declaration* and Global Agenda for CMDRR to 2015. But beyond this the report contains descriptions of how CMDRR works in practice, together with a selection of inspiring case stories based on the experiences of partners and communities that have been involved in CMDRR. These stories highlight that reducing disaster risk and adapting to climate change begins and ends with people.



Participants at the global conference on CMDRR in Malawi, June 2009

2. CMDRR: Building Resilient Communities



Communities at risk from flooding (Bangladesh)

Worldwide, an average of more than 1 million people die every year as a result of natural disasters, such as floods, droughts, tropical storms and earthquakes. Such disasters affect around 270 million people each year, 97% of whom are affected by climate related disasters¹. These climate related disasters are increasing in frequency and intensity due to rapid climate change. The risks associated with these disasters are compounded by poor governance, vulnerable livelihoods and increasingly fragile ecosystems². Reducing the risk of disasters and people's vulnerability to them is becoming ever more important.

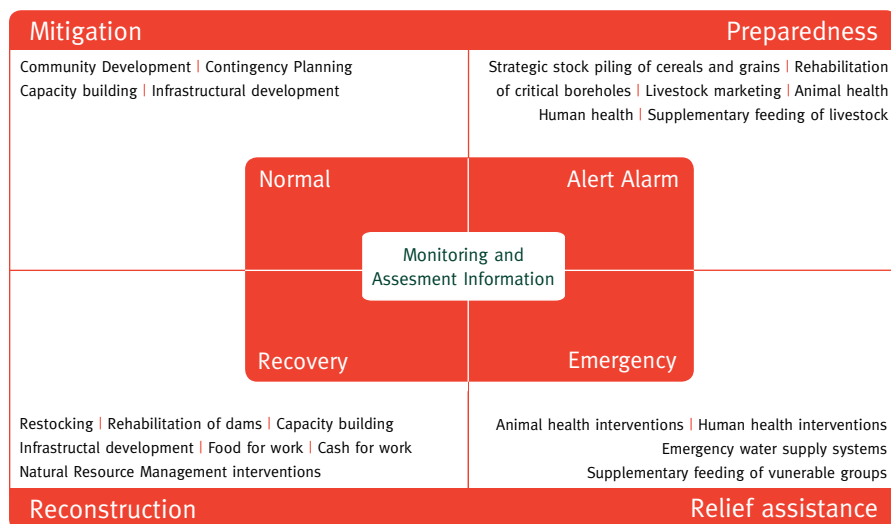
Moving from relief to development

The idea of reducing disaster risk instead of merely giving relief aid is the result of a shift in mindset among the development community, who have increasingly come to recognise the need to link relief with rehabilitation and development. Many communities have become chronic or cyclic recipients of emergency aid and the only way to break this cycle of dependency is to move away from short term interventions. Thus the line that has traditionally separated relief, rehabilitation and development is becoming blurred, with more attention now being paid to rehabilitation and reducing vulnerability to disasters.

¹ The average number of people affected and killed per year between 1999 and 2008. Source: EM-DAT, CRED, University of Louvain, Belgium.

² ISDR (2009) *Global Assessment Report on Disaster Risk Reduction*. United Nations, Geneva, Switzerland.

This shift from providing relief aid towards building resilient communities was an important motivation for Cordaid to develop a new strategy. An early step in this process was the development of the Drought Cycle Management (DCM) approach. DCM was originally designed for the arid and semi arid lands of Eastern Africa, such as Ethiopia and Kenya, and has proved to be a very successful tool. Under this approach drought is accepted as a recurring hazard in the lives of communities and is included in the planning and implementation of all development work. DCM involves four phases: preparedness, relief assistance, reconstruction and mitigation, all of which require different types of intervention. It is an approach that requires a flexible attitude among stakeholders.



The Drought Cycle Management model developed and used by Cordaid and partners

Starting at the community level

Good experiences and lessons of DCM were brought together with results from other pilot programmes of Cordaid on disaster preparedness in Malawi and conflict prevention in Sri Lanka and Burundi. Together they were used as inputs to develop community managed disaster risk reduction (CMDRR), a programme that is truly designed, managed and owned by local communities. The CMDRR process involves community members organising themselves. The first step is for them to start analysing their disaster risk. They then develop and implement their own plans to increase their resilience to disasters and climate change.

The CMDRR process aligns well with other disaster risk reduction frameworks. It focuses on avoidance (prevention) and limiting the adverse impacts of hazards within the broad context of sustainable development (through mitigation and preparedness). CMDRR is an emerging framework and strategy for development that provides a comprehensive way to address disaster risk. However, CMDRR is different from most other DRR approaches, in that it starts at the community level, by stimulating and facilitating community members to increase their own capacity to address disaster risk. It is not implemented in communities, but by communities themselves, who lead the way.

In this way, CMDRR enables communities and individuals to prepare themselves for hazards in a way that reflects their own priorities.

“In CMDRR the role of the outsider is one of facilitating the community to understand and analyse their problem, analyse their risk. From there, people assume the role of taking action and continue reducing their own risk.”

*Rustico Binas, Cordaid
Global Advisor for CMDRR*

The joint focus of CMDRR on community management and combining different short and long term disaster risk reduction (DRR) measures, involves a major shift in the thinking and attitudes of stakeholders; Cordaid's staff and field workers, its partners, facilitators, communities and government representatives. All have to start working in a proactive and flexible way that is responsive to changing situations and changing needs. Rather than merely responding after a disaster has happened CMDRR aims at prevention and preparedness, at the community level. The process is managed by communities who seek their own ways to reduce disaster risk. Hazards will always exist and may increase, but well-prepared communities can always cope with them.



Community members of Santa Rita making a village map and discussing hazards

Enabling context-specific interventions

The situation and context in every country, and among every community, differs. In some countries the main hazards are climate related, in others they are related to insecure livelihoods, while in others they are of geophysical nature. Some communities face a combination of these hazards. Hazards, such as storms and floods, can happen suddenly, or have a slow onset, such as droughts. As such DRR measures vary considerably. Some communities will prioritise early warning systems, while others will see long term livelihood development as the most appropriate activity. This is always a choice made by community members themselves.

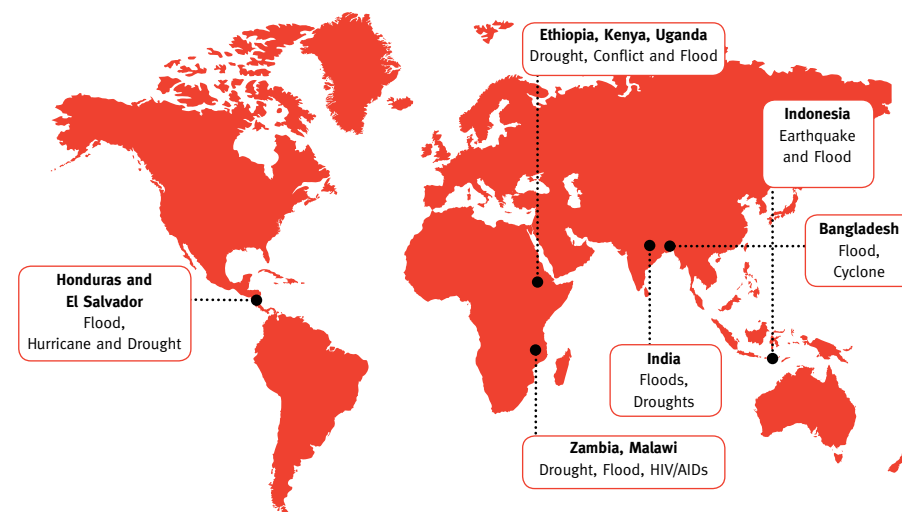
Apart from the diversity in hazards and activities, there is also a difference in the degree to which DRR is institutionally recognised. Some countries have developed legislation or regulations on DRR. In others there is an ongoing dialogue between government, civil society and communities about how to adopt and/or develop a policy for DRR. In others this has yet to take place.

Partner organisations involved in facilitating CMDRR within communities have a diversity of focuses and experiences. Some have a background in water and sanitation; others are more experienced in agriculture, economic development, food security or livelihood resilience. Others have more experience with early warning systems or in lobbying and advocacy. Sometimes this means that these partners will be able to draw on their existing expertise – at other times they will have to develop new skills or recruit other, more experienced partners.

All these differences in context, experience and capacities influence the CMDRR process. However, irrespective of the context or starting point of the intervention, CMDRR has proved to be highly effective in addressing the needs of communities. As experience shows, while the assessments and chosen responses can vary greatly, they also share many similarities. Apart from leading to the development of concrete measures to reduce risk, CMDRR always contains an element of linking and learning, which enables partners and communities to learn from each others' experiences. This learning and linking can take place on a south-south, south-north or north-south basis. This aspect is an important element of the programme, which adds value for all those concerned and provides a basis for lobbying and advocacy at the local, national and even global levels.

Working on CMDRR

Since 2004 Cordaid has been supporting 100 southern partner organisations and the communities they work with in 10 countries. Partners are trained, and in turn they train communities and other development organisations. These partner organisations are increasingly gaining recognition, from both their governments and peer organisations for the value of the work they are doing among these communities.



Cordaid and partners are promoting CMDRR in 10 countries worldwide

To guide partners and communities and to share the approach with others Cordaid, together with the International Institute for Rural Reconstruction (IIRR), has developed a CMDRR training manual³. The manual has been translated into several languages, including Bangla, Bahasa (Indonesia) and Spanish, and is currently being translated into French. Partners working with the manual often adapt the content to their own circumstances: for example, in Malawi a livelihood analysis was added.

Cordaid is currently developing further ideas for expanding and scaling-up CMDRR and giving more emphasis to long term approaches that increase the focus on climate change adaptation. At the same time Cordaid is continuing to work to integrate CMDRR and climate change adaptation (CCA) into international development policies and programmes. Cordaid is constantly liaising with partners, communities and other leading international NGOs for ways to improve the effectiveness of CMDRR and CCA.

³ Cordaid and IIRR are happy to provide free electronic copies of the CMDRR manual. Free use and reproduction of any portion of the manual is encouraged, provided that Cordaid and IIRR are acknowledged whenever it is used. Copies can be obtained from the IIRR website or by contacting Cordaid.

The CMDRR process in Malawi - Prepare well if you want to meet your enemy

The CMDRR framework consists of the following fields of action⁴:

- Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;
- Knowledge development including education, training, research and information;
- Building public commitment and developing institutional frameworks, including organisational, policy, legislation and community action;
- Application of measures including environmental management, land-use, protection of important facilities, application of science and technology, partnership building and networking, and financial instruments;
- Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.

CMDRR addresses community needs:

- CMDRR enables communities and individuals to prepare themselves for hazards in a way that reflects their own priorities.
- The joint focus of CMDRR on community management and combining different short and long term DRR measures, involves a major shift in the thinking and attitudes of stakeholders.
- Irrespective of the context or starting point of the intervention, CMDRR has proved to be highly effective in addressing the needs of communities.



Small scale irrigation creates potential for winter cropping in Malawi

CADECOM is one of Cordaid's partners, working in Neno district in the south of Malawi. The area is low-lying and regularly suffers from extremely hot weather and low rainfall, resulting in periods of drought. A big river, the Shire, runs through the area. People in the area mostly depend on subsistence farming, selling charcoal and casual labour.

CADECOM has worked with fourteen communities in the region, facilitating the development of clear strategies to increase their resilience to disaster. This process involved the following steps:

- Community meetings and sensitisation
- Building or revitalising both physical and social community structures and farmer groups
- Risk identification and problem hazard outline, through the use of several participative tools
- Problem identification and priority setting
- Problem tree and objective tree
- Relief distribution to vulnerable households
- Resource mobilisation
- Joint stakeholder monitoring at all levels (by CADECOM, the Ministries of Agriculture, Health and Forestry and church leaders)

⁴ The five elements of this framework correspond closely with the components of the Hyogo Framework for Action.

Most communities in the area identified the main problem that they face as being household level food insecurity, caused by drought. The most common coping strategies within the community for dealing with food insecurity were: burning charcoal for sale, casual labouring, selling household assets and livestock, prostitution and migration. During the CMDRR process the community members came to recognise that all these strategies had negative consequences. The CMDRR process also helped identify a number of positive strategies, such as documenting early warning signs that help farmers to adapt farming strategies to climate change. A community task force, composed of village elders, local leaders and representatives from different community committees developed a set of early warning signs and signals and adopted the motto “Prepare well if you want to meet your enemy”.

These early warning signs have helped community members in planning drought-related activities. This led to people better timing the preparation of their fields, preparing and planting them earlier if a drought is anticipated, and timely weeding and crop management. Small scale irrigation schemes have been established to grow crops in the dry season and people have started to grow drought resistant crops. These activities have led to better harvests and helped increase food security within these communities.

The CMDRR process has also led many villages to successfully mobilise resources. The establishment of community revolving loans has enabled different communities and households to purchase chickens, cassava bundles, groundnuts, treadle pumps, soy seed, banana sucklers, fruit trees, a wind mill, boreholes and a warehouse for a seed bank.

The revived farmers’ groups have encouraged the take up of more suitable agricultural practices, through the sharing of individual experiences and making it easier to arrange the delivery of extension services. Farmers have started cooperating with extension officers from the Ministry of Agriculture. Many people now multiply seeds themselves and some are now selling these seeds on local markets. Increased food security has reduced migration and prostitution levels. The CMDRR process has enabled community members to increase their resilience to disaster risk through a process that is owned and managed by community members themselves.

3. Communities becoming agents of change



Villagers in Indonesia building a water pipe for their community

Vulnerable communities living in disaster prone areas are the first to be affected by disasters and climate change and are the ones who feel the effects the most. As such these communities need to be the focus of attempts to reduce disaster risk and vulnerability. The CMDRR process allows these communities to analyse their own risk-levels and to develop plans to reduce disaster risk. This is done by enabling community members to learn and thus become agents of change. CMDRR supports communities to empower themselves and begin to exercise control over their own destinies, rather than being passive recipients of aid. Partners play a facilitating role in the process in a bottom-up approach that puts the communities centre stage.

Involving communities in CMDRR

Trust building is the first important stage of CMDRR and needs to be a constant and ongoing aspect of the CMDRR process. When entering the community the facilitators need to build trust within the community and install confidence among the community that they will benefit from investing time and interest in CMDRR. This involves explaining what CMDRR is about – a process that aims to build communities’ resilience – and how the community can benefit from it. In contrast to most emergency relief aid approaches which see communities as recipients of aid, CMDRR focuses on empowering communities to act themselves. For CMDRR to work, people have to understand and appreciate this bottom-up approach – including their own active role in the process – and what is in it for them. Building trust and encouraging active participation both require spending some time in relationship-building. There are no shortcuts here, and the process needs continuous attention. One of the first steps in the CMDRR process is for partners to facilitate a (series of)

“We have to go to the communities, because these are the foundations of the world. When we go to the communities, we have to understand that we are entering into their life spaces, and we have to be careful.”

Rustico Binás, Cordaid
Global Advisor for DRR

risk assessment(s), which are done by the community members themselves. This step can include mapping hazards, identifying the ways in which the community is vulnerable and its capacities to respond to hazards. Through this process people become aware of their own capacity to cope with and adapt to disaster risk. The results of the risk assessments are unique for every community. In some communities, drought or food insecurity are the main risks, while in others health issues or frequent floods are the most important. In most cases, a long list of risks is identified. It is therefore crucial to set priorities so the most urgent risks can be addressed.

Working through community institutions

The risk assessment process is a good time for the community to select a CMDRR committee. This committee should be responsible for leading the CMDRR process in a participative, inclusive and culturally appropriate way. They begin the process of identifying common concerns, needs and interests and start to prioritise a course of action. Individuals and the community as a whole are encouraged to contribute in the process, particularly women, youngsters and elderly, so as to ensure broad and representative participation and to ensure that the interests of the whole community are represented. This in turn will increase the sense of empowerment and ownership and help sustainable follow through.

A CMDRR committee creates a powerful platform for giving all relevant groups, including women, elders and youth, a voice in the CMDRR process. Care needs to be taken in deciding whether this should involve creating a new community structure or whether existing structures can be used or revitalised. Sometimes creating a new and additional community organisation can reduce willingness to participate. In such situations it might be best to make use of existing structures. Sometimes such structures

might target a specific group within a community, such as self help groups in India or farmers' groups in Malawi and Zambia. Such organisations can play a lead role in the CMDRR process but there is also the challenge of opening them up so they are inclusive of other interests and groups.

“As individuals we are like sand in the flood, no one listens to us. But as a group we have power.”

Community member,
Dire Dawa, Ethiopia

Making CMDRR truly participative is one of the challenges facilitators face. In some cases, a selected group of people try to take control over the process and to exclude other community members. This can happen in different settings and is closely related to individual and communal priority setting. This problem can be more pronounced in urban or peri-urban communities, where community structures and identity are often weaker. In these areas the number one priority is making sure your family has enough to eat in an environment where you cannot grow your own food, where people have more individual choices for their livelihoods, are less (visibly) reliant on common or shared resources and do not have the same history and close kinship links that people have in rural areas. Bringing such communities together, so that they think about shared risk and collective solutions can be a tough challenge. Specific and tailored efforts are required to achieve this.

Components of the CMDRR process:

- Risk assessment and analysis
- DRR measures: developing contingency and development plans
- Self-organisation
- Participatory monitoring, evaluation and learning system

Participatory action to reduce disaster risk

The course of action set by the CMDRR committee usually entails developing measures and plans to reduce disaster risk and vulnerability, including prevention, mitigation and preparedness activities. For example, in parts of Bangladesh it has led communities to better organise themselves for evacuation in case of cyclones or floods. In Malawi, it has led communities to grow different (drought resistant) varieties of crops and to use small scale irrigation systems for winter cropping activities. In the arid and semi-arid lands of Kenya and Ethiopia, communities have restored traditional deep-wells and dug water pans to harvest rain-water to counter longer and more frequent periods of drought.

All these plans are jointly implemented by the community, with support provided by the partners and sometimes the government or other agencies. The intervention is community owned and managed, and this empowers communities in their quest to further increase their own resilience. Activities are usually based on traditional knowledge and adaptation measures and generally require a limited amount of resources. These resources can be acquired from within or outside the community. However it is the community's responsibility to do this. The partner organisation plays a key role in helping communities identify the resources they require and how to source them. In some cases partners can provide financial support for community-led activities. Apart from this, partners also train the community to present its own case, through advocacy at local and district government levels and with other institutes, to find (additional) funding for activities.

Community incentive to act:

- Sometimes communities need to receive tangible assets in order to become motivated and mobilise themselves.
- The potential for improving people's livelihoods can be a strong incentive for community members to begin participating in CMDRR.
- In many cases a disaster can be a good entrance point as it makes people aware of their vulnerability.

The CMDRR process also focuses on participatory monitoring, evaluation and learning. Systems for these activities are still being developed. Communities and partners have argued the need for such a system: as they find documenting is an important aspect of the process. The lessons learnt by communities and partners need be shared with others, to provide a source of inspiration and to provide the basis for advocacy.



Local food storage facilities are improved to increase food security (Zambia)

Building upon local knowledge

Risk reduction measures are usually based on local and traditional activities that have been practised and handed down from generation to generation. Building upon existing coping mechanisms and indigenous knowledge increases understanding of the project and gives people a sense of ownership over it. It also enhances social acceptance of the process, makes it more cost-effective and more readily replicable. Communities' voices should be recognised and built upon. Their knowledge and expertise, such as traditional early warning systems, are essential elements in increasing resilience against the risk of disaster. Sometimes local or traditional knowledge needs revitalising, and in some cases it can be strengthened by linking it with new technologies. The rich traditional knowledge within communities can also be used to adapt new technologies to local realities.

Different actors within the community can all play their own role in the CMDRR process and the implementation of activities. The elders have important knowledge on the history of hazards and the coping and adaptation measures that were used in the past. They can also play an important role in passing on traditional knowledge. An example from Indonesia highlights the important role of women in CMDRR. A group of women did a household economic analysis within the community, which showed people that they were not as poor as they thought. The women successfully argued for a community wide contribution and saving scheme which could be used to pay to build and manage a water system for the whole community. In Kenya women have shown leadership in managing community water resources and cash giving the project more impetus.

The challenge of shifting communities' perspectives:

- From seeing disasters as an act of god, people need to come to realise that they have the power to cope with disaster themselves.
- Community dependency on relief aid needs to be replaced by recognition of the value of community led development and resilience building.
- Involving the whole community depends on priorities. Whose priorities count most? Those of the community or those of individuals? How to articulate shared values?
- Include all community members in the CMDRR process, including the most vulnerable: women, youth and elderly, in order to make CMDRR truly participative.
- Trust building is essential.

Sharing ideas and learning from each other

Sharing knowledge and learning from each other stimulates replicable and effective resilience building. The process of sharing can be stimulated by exchange visits and sharing of best practices and lessons learned. In several countries, such as Kenya, Bangladesh and Indonesia, measures adopted as a result of CMDRR have attracted the attention of surrounding communities and institutions, including government and the private sector, that were previously not involved in the CMDRR process. For example, a successful approach in Kenya that combined rainwater harvesting and micro-credit has been taken up by various state and non-state actors from many parts of Eastern Africa. PISP, the organisation working with this specific approach, has hosted delegations from Uganda, Kenya, Sudan and Tanzania who have subsequently started replicating the approach in their work. Sharing success stories and scaling these up can reduce dependency on external sources of support, as people spontaneously start copying positive examples of risk reduction measures, such as rainwater harvesting or winter cropping. In other cases the most successful interventions can be replicated by state and non-state actors, including community organisations and district governments as ways of preparing for and responding to disaster.



Exchange visits inspire partners and community members to take action (Malawi)

Shifting the mindset of communities and partners

The CMDRR process involves making significant changes in mindsets and established ways of working of both partners and the communities they work with. In many cases both groups are more familiar with interventions that provide material relief than with projects that facilitate awareness, risk analysis and empowerment. Communities that have experienced disaster in the past and have received relief aid may have expectations about receiving material aid, instead of analysing their own risk and managing their own development. Facilitators can also carry a 'relief mindset' and may sometimes lack the skills and experience to facilitate awareness and empowerment processes.

Opportunities for innovation in CMDRR:

- Link local knowledge with scientific knowledge.
- Increase learning and sharing to scale up initiatives.
- Use new techniques – such as video – for linking, learning and advocacy.
- Look for, and learn from, good CMDRR experiences in urban areas and with landless rural dwellers.

When facilitators have the right capacity for the CMDRR process, they can mobilise communities. But being able to offer some tangible assets, often helps initiate community motivation and helps to stimulate participation of community members. In many ways a disaster provides a good entrance point since people are very aware of the hazards they face and their vulnerabilities and with this recent memory they

can be strongly motivated to do something to increase their own resilience. Another challenge in working with at-risk communities is their belief that disasters are an act of God and that they are unable to influence events. CMDRR aims to help communities understand that the cause of disasters is their incapacity to cope with a hazard: to change people's views that 'floods are a punishment from God', to the idea that they themselves can take concrete actions to (for example) prevent their houses from flooding. This is a time consuming process, especially when working with indigenous communities. Only when community members believe they can increase their capacity to deal with disaster risk, can they take action to start building their resilience.



Facilitators need big ears, long arms and a great heart

All of these issues challenge partners involved in facilitating CMDRR. Facilitators need to have big ears, long arms and a great heart to guide the CMDRR process, to build a relationship of trust with community members and to make resilience building inclusive for all.

**Video as an empowering tool
for disaster risk reduction**

Community members in El Salvador filming their own disaster risk

In Central America communities are increasingly at risk from hurricanes, droughts and extreme rainfall. Climate change and environmental degradation, particularly the loss of forests and pollution of rivers is increasing people's vulnerability to these hazards. It is the poorest people, usually dependent on small scale agriculture, who are the most at risk.

Javier Romero, a farmer from Cementera in Honduras, tells his story: *"In the past it could rain steadily for ten days in a row, but now the rainfall is so heavy that it causes mudflows and landslides. It destroyed our surroundings, as well as my house, my chickens and my maize and beans. Now my family and I have had to move elsewhere."*

Asprode, a Cordaid partner, supports such at-risk communities, helping them to organise themselves. Jorge Pineda from Santa Rita summarised what he has learned from CMDRR: *"We are now aware that there are situations when no one else can help us, and that we need to be prepared to help ourselves and to take responsibility."*

Several partner groups in Latin America use photography and video as tools for community mobilisation. Community members very quickly learn how to use a (video) camera, and young people are very keen to get involved in the process. This can increase the awareness, commitment and confidence of community members. *"By filming, I can tell others what is happening in my community. For me this is very useful."* says María Margarita Miranda from San José Quelacasque in Honduras.

Community developed early warning systems

Using video also shows community members they can create change themselves, and in some cases can generate support from (local) government. Community members from Santa Rita in El Salvador filmed their poor water supply to convince local government to help them to tackle the problem and are now in the process of discussing what improvements can be made. In some cases filming problems by the community can raise local tensions. One community in El Salvador had its camera destroyed when members tried to film the water pipe that their corrupt mayor had used to divert their only source of water to another community. The destruction of the camera did not stop the community from taking action. They resumed their work with a new camera and continue to lobby for justice on this issue.

Cordaid partners in other parts of the world see a lot of potential in community filming of disaster risks and many partners in Africa and Asia are considering adapting it as a tool for empowering communities in the future.



Excessive droughts mean there is no water and fodder for the cattle of pastoralists in Ethiopia

In the south of Ethiopia, drought is the most common hazard affecting people's lives and livelihoods. Pastoralists living in this area suffer from food insecurity, and the increasing shortage of water and fodder affects the health of their livestock, leaving them more vulnerable to disease. Climate change is already increasing the frequency and severity of drought in this area with has led to a gradual erosion of people's assets, including their social capital and a collective sense of social responsibility. Together with increasing poverty and an escalation of conflicts, this is leaving people more vulnerable to hazards and disasters.

The Hammar are the traditional inhabitants of South Omo, in the south of Ethiopia. They have a strong pastoral tradition. As a result their children do not attend school, and most of the Hammar are illiterate. This led to communication problems with local authorities and very little contact with the local disaster management committee of the Hammar Woreda (district government). This committee only has limited material and technical capacities. At the local level, there is only one staff member to collect and report early warning information and coordinate any relief activities.

Farm Africa is a Cordaid partner, working in South Omo. They are involved in training community members as well as local relief officials in CMDRR to give them a shared understanding of disasters and the possibilities for reducing disaster risk. Involvement in this training led the Hammar to organise themselves and establish the Kebele-level Early Warning and Disaster Management committee (KEW & DMC), a committee fully supported by the community.

The membership of the KEW & DMC includes influential community traditional elders, traditional disaster event forecasters, women, youths, village and representatives from the Kebele administration.

The committee undertook a community risk assessment that helped them identify hazard indicators. The choice of these early warning indicators and their interpretation were jointly agreed on by community members and government officials. The indicators were expressed graphically so they could be easily understood and used by all, including the illiterate. This enabled the committee to monitor early warnings about disaster on a monthly basis.

The community early warning system is combined with a direct reporting mechanism that links community hazard monitoring information with the government's early warning systems. This enables the local community members to appeal for emergency supplies in a disaster situation. The local government recognises the benefit of this community-developed early warning system and is encouraging other Woredas to adopt the same system. Apart from the locally developed early warning system, the community has started to mobilise community resources. A voluntary household community contribution system has been set up to establish a local community contingency budget to respond to any disaster. This resource makes the community more resilient and setting it up has increased community cohesion.

CMDRR has helped change the power relations within the community. In the same Hammar community the programme included a component that provided goats for widows. In the past women did not have the right to own livestock and widows were sustained by gifts of milk and food products from other members of the community. This tradition was challenged during the CMDRR and the elders came to realise it was better if widows could support themselves rather than be reliant on the charity of others. Farm Africa provided several widows with goats and the elders have decided that the community will provide widows with goats from their own herds in the future.



The Hammar in Ethiopia have designed their own graphic early warning system



4. Taking action to reduce risk

Community members in Honduras take joint action

Disaster risk reduction measures increase people's resilience. There is a wide range of concrete activities can help to avoid disaster or limit its adverse impacts. Preventive measures, such as livelihood diversification, improvement of natural resource management or ensuring access to resources can all help people withstand hazards and prevent them turning into a disaster. People can prepare themselves through early warning systems, evacuation plans, stockpiling food or even providing swimming lessons. By gaining knowledge and building capacities, the adverse impacts of a hazard can be greatly reduced.

Risk reduction measures can be very diverse and complement each other. When communities develop DRR action plans, the activities that people chose to implement will be determined by the type of hazard and people's knowledge and awareness of this hazard and the coping mechanisms and capacities that they already have in place.

Assessing disaster risk

Communities are aware of the hazards that face them on a daily or recurrent basis, but often lack sufficient knowledge about why these hazards turn into disasters and the role that they can play in preventing this from happening. For this, people need to understand the causes behind the hazard itself, as well as the causes of their vulnerability. This includes an understanding of root causes (global processes that give rise to vulnerability) and dynamic pressures (the processes and activities that transform the effects of these root causes into vulnerability).

When people understand the underlying causes of a hazard and their vulnerability this stimulates participation in community risk reduction activities designed to build the capacities needed to prevent a disaster from happening.

Disaster risk assessment is a powerful tool to build knowledge and awareness on hazards and vulnerability. The extent to which this needs doing can vary. Sometimes it is only necessary to revitalise people's knowledge and experience, in other cases people do not know the background of disaster and their vulnerability. One method used for building knowledge is community hazard assessment. This tool enables the community to analyse the characteristics of the hazards they face, as well as the specific warning signals, the amount of warning they have, the speed of onset, frequency, period of occurrence and the duration of the hazard.

A useful tool for assessing hazards is conducting a hazard history analysis. Community members sit together and discuss their own hazard history, and then analyse any trends or possible changes they see over time. For example when a community of Ethiopian pastoralists did this exercise they noticed a serious decrease in rainfall that was now causing serious drought every two years. This is in sharp contrast to some decades ago, when droughts occurred every 8 to 10 years. This led them to realise that they faced a hazard that was growing and that there was a need to increase their resilience.

Part of community risk assessment is identifying vulnerabilities. People have different levels of vulnerability to disaster risk depending on their physical environment (where they live and how their house is constructed), the local economy (how they make their livelihoods and what their income level is), their social relations and the preparedness of public institutions for disasters. Vulnerability increases when local institutional capacity is weak. For instance, the absence or malfunctioning of local markets prevents people from selling or buying assets to improve or protect their livelihoods. Without sufficient access to resources, for example through micro-credit schemes, it is difficult for people to invest in their own development. Macro forces, such as rapid population change or rapid urbanisation, further effect vulnerability.

Building (or creating) knowledge and awareness on the causes of hazards and vulnerability, leads communities to develop plans to increase their capacity and resilience. Such actions need to occur at different levels. DRR measures can be implemented at the community

level, but the external factors that drive vulnerability also need to be addressed. Such factors might include limited access to power, structures and resources, depending on the political and economic situation. These issues need to be addressed by actions at the regional, national, or even global level. For communities, this is rarely an option. Cordaid and its partners use local stories from every day practice for advocacy purposes at these higher levels in order to influence the root causes that make communities vulnerable.

Steps to guide partners and communities in analysing disaster risk

Hazard assessment

- Identification of the hazards
- Prioritisation of the hazards
- Characterisation of the hazards

Vulnerability assessment

- Identification of (human and non-human) elements at risk
- Identification and ranking of vulnerable groups within the community
- Identification of main causes of vulnerability for different categories at risk

Capacity assessment

- Identification of existing coping capacities
- Establishing the capacity needed by the community to build resilience
- Identification of capacity gaps

Investing in DRR capacity

Since the impact of disasters is felt first and foremost at the community level, this is where the first actions need to be taken. Communities develop a risk reduction plan that combines a range of activities. Such a plan generally includes preventive activities, which have a medium to long term focus and mitigation and preparedness activities, which are a shorter term response to increase individual and community resilience. Some communities face multiple hazards and embark on a combination of DRR activities that will enable them to build resilience to different types of hazards.

Hazards can differ in the rapidity of their arrival and their impact. Communities facing sudden-onset disasters, such as earthquakes, volcano eruptions, tropical storms or floods, focus on preparedness. Communities develop early warning systems and emergency plans to increase their response capacities. For example, people learn to swim and school children practice emergency evacuation. Other activities include building-up the local infrastructure by improving evacuation routes or emergency shelters.

“There’s a process. A social process within that context that empowers the community and this becomes our hope. It leads to communities members who start behaving in a completely different way.”

Rustico Binás, Cordaid
Global Advisor for DRR



Camels are more resistant to drought than cattle

Communities may also combine these activities with preventive measures. In Indonesia, people have been planting trees to protect houses and water sources from volcanic ashes during an eruption. After an earthquake, houses are built back better to be more resistant to future earthquakes. In Bangladesh community members are building their houses on poles to prevent floods from destroying their houses. In Ethiopia communities are creating terraces along the river and planting trees to reduce heavy rainwater runoff and prevent flooding after heavy rainfall.

Examples of CMDRR measures to prevent, mitigate and prepare for disaster risk that increase resilience

Prevention & anticipatory adaptation

- Rainwater harvesting and water storage
- Building dams and shore protection (such as mangroves)
- Sustainable natural resource management (such as reforestation)
- Change in livelihood strategy
- (Seasonal) migration

Mitigation, anticipatory & reactive adaptation

- Livelihood diversification or intensification
- Agro-forestry
- Soil fertility maintenance
- Changes in planting and harvesting time
- Drought tolerant crops

Preparedness & reactive adaptation

- Grain and seed banks
- Early warning systems
- Evacuation plans and routes
- Swimming lessons

Key factors for taking action to reduce risk:

- Hazards turn into a disaster when people do not have the capacity to cope.
- People can develop and implement different activities to build resilience against disaster risk.
- These different risk reduction measures- prevention, mitigation and preparedness- should complement each other. Their appropriateness depends on the situation and requires a flexible attitude among all stakeholders.
- Building resilient communities also involves focusing on sustainable livelihoods and natural resource management.

Another type of hazard is drought, which can lead to famine. The onset of droughts is slow and people have more time to prepare themselves and prevent a disaster. In many cases this implies medium to long term measures and planning. In the arid and semi arid lands of Kenya, Ethiopia and Uganda, communities are diversifying their livelihoods or their farming practices through rainwater harvesting, planting drought-resistant crops or changing cattle for camels. Other livelihood activities such as milling or milk processing can provide a new source of income for some. In Malawi and Zambia, communities have built small scale irrigation systems so they can grow crops in the dry season and combine this with crop diversification and organic compost production to increase water retention.

In addition to these preventive measures, people also prepare themselves for drought in case a disaster cannot be prevented. Examples of such initiatives are communal or individual food or seed banks and, in extreme cases, selling and slaughtering livestock when there is not enough fodder and water available.

Because both slow and sudden onset disasters affect people's livelihoods, many DRR activities focus on issues relating to livelihoods and resource management, with a particular focus on breaking unsustainable patterns, such as charcoal burning and deforestation. Yet, this is only possible if people have an alternative. When people have enough to eat, they are more willing and able to invest in long term activities that build resilience and lead to sustainable natural resource management, which in turn, further increases people's resilience to disasters and climate change. Examples of livelihood activities taken up as a result of CMDRR are diverse. They range from diversification or intensification to (seasonal) migration. CMDRR also seeks to increase access to resources, as this creates new opportunities for people to expand their livelihoods. Two common approaches are creating local credit schemes or linking with risk insurance schemes, both of which effectively increase people's resilience.

Different ways of creating resilience

Social community structures are a key factor in embedding all these risk reduction activities. Building or revitalising community structures can improve information and knowledge as well as education and training. Such structures can also help to develop and oversee community rules and norms and give the community a strong voice to the outside world. Through these structures the sustainability of the action can be further increased.

Overview of actions within CMDRR related to communities' resilience and voice

Resilience	Voice
<p>Flexibility of community action is possible through development and contingency plans. These help to prioritise actions related to the situation (normal, alert, emergency, recovery), including opportunities for mobility (related to different settings, such as pastoralism, evacuation routes, cyclone shelters)</p> <p>Education and support is given to community members, building on their local knowledge and capacities, to improve diversification of livelihoods, risk pooling and spreading and converting assets in times of disaster</p>	<p>The development of community capacity to conduct their own risk assessment and develop appropriate plans</p> <p>Involvement of all community members and groups in the participatory CMDRR process, including the most vulnerable</p> <p>Stimulation and support for communities to participate in multi-stakeholder dialogue (with government, private sector and media)</p>



Villagers in Indonesia work together to build an evacuation road

In Indonesia ten Cordaid partners are involved in promoting CMDRR. The communities they work with face a diverse range of hazards – earthquakes, tsunamis, landslides, floods, drought, disease and coastal storms. In addition to this the ten partners have very different sectoral backgrounds including education, health, conflict resolution, community empowerment and economic development.

When the CMDRR programme started in Indonesia in 2006, the partners had little knowledge about this process. Cordaid started out by providing them with a number of training exercises, to learn about CMDRR, become acquainted with the tools and materials and develop their skills base. All the partners have embraced CMDRR, although some, particularly those with a strong background in community development, have taken to it more easily than others.

This diversity in hazards and sectoral backgrounds has meant that a wide range of disaster risk reduction initiatives have now been implemented in Indonesia. This diversity is also influenced by wide differences in communities' level of awareness, their experience with disaster and their economic status and community cohesion. Some communities have focused solely on preparedness or prevention, while other communities have combined both approaches.

Communities facing earthquake risk have been working with two Cordaid partners, PSPP and Bina Swadaya. These communities were affected by the 2006 earthquake in Yogyakarta for which they were poorly prepared. Out of the chaos that followed people came to recognise the need to establish a DRR forum (a CMDRR community

Sustainable livelihood as an integral part of CMDRR

committee) and to develop their own contingency plan in which roles and responsibilities of community members are clearly specified. First aid groups have been set up, people's blood types identified and vulnerable households have been mapped in the village. This information is updated every year. Children are also involved in the process, they have been shown documentary films about earthquakes, do simulated evacuation and are taught basic first aid.

CFS is the Cordaid partner involved in supporting communities around Boyolali living in the shadow of volcanoes. One of the key activities for these groups was to write a contingency plan in case of volcanic activity. The plan includes an assessment of possible victims, an evacuation plan and areas that are considered to offer safe refuges. The plan also outlines how the community members can access aid from local government and their own roles and responsibilities in the event of a disaster.

The communities of Magelang, Klaten and Kediri, Java, are also at risk from volcanic eruptions. These communities have been supported by Bina Swadaya and Insist to develop their own contingency plans. They have raised funds and provided labour from within their communities to lay sealed evacuation routes from their village. This also improves access to the villages giving them better access to markets closer and increasing economic possibilities. One of these communities lives at the foot of the Merapi volcano. With support from Bina Swadaya they have been planting trees to act as a barrier against the hot clouds from Merapi's fumes and protect the health of the community.

Some communities in Indonesia are vulnerable to drought and poor water supplies. Bina Swadaya is working with the Wukirsari community in Bantul district, where community members have taken action to protect themselves from drought. They have built a water piping system with their own labour. Through networking activities they managed to get support from a local university, who helped with GPS mapping and analysis and to attract funding from a local business to cover the cost of the well and pumping system. Water metering will ensure the maintenance of the system, which is overseen and carried out by a local committee.

In Bengkulu, Insist is supporting a DRR group at risk from tidal surges and coastal erosion. Local commercial activities (shrimp production and sand mining) led to all the mangroves and trees in the coastal area being cut down, exposing the community to the full effects of tides waves and storms. The company responsible for cutting down the trees has abandoned its activities, but has not restored the environment. Community members are now planting trees (mangrove, coconut and pines) to protect the coast. Local village rules, or Perdes, have been established to stop any future sand mining activities in the area.



Compost making is a cost effective measure for increasing yields

In Malawi, CADECOM is working on CMDRR with a number of vulnerable communities. CADECOM's role is facilitative, helping communities to analyse their vulnerability, identify the hazards that threaten their lives and livelihoods and then to design their own programmes to reduce their vulnerability. CADECOM provides guidance and some technical support to the plans, whilst the communities implement the DRR activities themselves. CADECOM's involvement in these activities has led it to add a livelihood analysis to the CMDRR manual since most of the communities it works with are very vulnerable to hazards that directly affect their livelihoods.

Most communities that CADECOM works with face droughts or floods, which threaten lives and livelihoods and cause food insecurity. DRR activities that have been established include the production of drought resistant crops (such as sorghum, cassava, sweet potatoes), the introduction of small-scale irrigation for 'winter cropping' (food production in the dry season), the improvement of natural water sources and the sinking of boreholes for drinking water. Other activities include improving soil management practices to reduce run off and erosion, creating seed and food banks to ensure safe-storage of grain (and thereby promote food security) and income generating activities for poor families affected by HIV/AIDS. Some communities, locating near large rivers, have also built flood protection structures (e.g. with bushes) to reduce the risk of flooding.

One of the communities CADECOM is working with is Chilijemalo, located in Mzuzu, Kasungu, where food insecurity is the main hazard. CADECOM started working in Chilijemalo in the aftermath of a drought in 2003, when low rainfall caused hunger

within the area, many households sold their assets, some households and individuals migrated and many people started working as casual labourers. While some relief aid was provided by the government and NGOs, community members were worried about their longer term future and were very keen to build their resilience.

One of the community members, Gilbert Mavuka, tells his story: *“When we realised the cause of the problems, we started coming up with a plan. We started with a small scale irrigation project, which gave us two crops per year instead of one. Now this year, with irrigation, I have planted half a hectare of land and I expect to produce a good number of bags of maize, more than three times what I was able to produce before. I learned to plant one seed per planting station and how to make compost manure. This has made my land fertile and more productive. I plan to have 20 heaps of compost manure for next season. I also received two goats from the project. This will increase resilience to any future shocks. These goats provide the manure for my garden. I have also started to grow other crops besides maize. I now grow vegetables and have a woodlot which also has fruit trees. I have learned how to multiply cassava and sweet potato seed. In my house we are now able to eat three times per day instead of just once or twice.”*

The livelihoods of Chilljemalo community members have diversified and food security has increased. Agricultural diversification, improvements in soil fertility and using small scale irrigation have all contributed towards this. These changes were underpinned by a change in mindset among community members after the drought of 2003 when they became aware of the need to do something to increase their food security.

The inclusion of a livelihood assessment process within the CMDRR process has played an important role in helping communities to develop new ideas to manage and minimise the risks they face. As a result their livelihoods have become more sustainable. Households that did not originally participate in the CMDRR process are now adopting some of the techniques seeing for themselves the improvements these bring.



5. The need for joint efforts

Direct access to resources allows villagers, especially vulnerable groups, to be more resilient to disasters

The success of CMDRR critically depends on good co-operation between stakeholders. Communities, partners, NGOs, government institutions and other relevant agencies need to work closely together and co-ordinate their activities. Communities need support from others to implement their CMDRR plans and activities and build their own capacity. Co-operation also provides the opportunity for different stakeholders to learn from each other's experiences about what works, what doesn't work and what new directions need to be taken. Yet such cooperation does not always come easily or naturally. It takes time for different stakeholders to understand each other's ideas, objectives and ways of working.

Cooperation takes different forms and occurs for different reasons

Cooperation between stakeholders can occur at different levels; community, district, national, regional and global. It might involve building horizontal or vertical linkages between stakeholders and, sometimes, a combination of these approaches. Cooperation can be with a variety of stakeholders, such as government, private sector, research institutes or the media.

For communities and partners building links with the government is (whether local, regional or national) is often an important element in the CMDRR process. Government involvement in, and support for, CMDRR can play a key role in promoting community resilience. Communities cannot bring about structural changes by themselves and often require the cooperation of or support from local and national authorities.

Equally, the involvement of local or national government can bring recognition of the value of CMDRR and help legitimate it at the community and district level.

“Governments all over the world should adopt CMDRR and incorporate it in their national programmes. CMDRR addresses people’s needs. Instead of treating the symptoms and coming and helping only at time of disaster, government should train and support people before disaster strikes so they can cope with whatever comes at them.”

A community leader from Karamoja, Uganda

The possibilities for cooperation with the government differs per country. In some countries governments already have a focus or a policy on DRR and this makes it easier to link up. However, most governments are mainly focusing on providing relief aid and have little or no existing policy, practical experience or capacity related to DRR and CCA. In some countries governments have hardly any policy or awareness on these issues at all, and have not yet started to implement the commitments that they signed up to in the Hyogo Framework for Action⁵ (HFA).

There are many possibilities for strengthening joint advocacy at the local and national level. Cooperation with government to mainstream CMDRR and climate change within national policy agendas can create new opportunities. Cordaid’s partners and communities who have participated in CMDRR are lobbying their (local and district) governments to adopt include CMDRR and CCA within their mainstream development policies. Some commu-

nities, with well-developed community structures may be sufficiently organised and have a strong enough voice to liaise directly with formal institutions to change power relations. Advocacy at national and local levels allows bridges to be built between bottom-up and top-down approaches and supports the process of changing the mind-sets of policy makers and those involved at the grassroots level.

When different stakeholders work together it provides opportunities for them to learn from each other and to develop policies and programmes for DRR together. In Ethiopia communities and local government were trained together in DRR. This enabled the officials and the community to build a common view of disasters.

⁵ In this framework, States, regional and international organisations, civil society and other stakeholders agreed to: 1) integrate DRR into sustainable development policies and planning, 2) to develop and strengthen institutions, mechanisms and capacities to build resilience against hazards, and 3) systematically incorporate risk reduction approaches into the implementation of emergency preparedness, response and recovery programmes.

As part of this cooperative process, it is important that knowledge and experiences of CMDRR initiatives are shared with the relevant authorities. Public awareness of a DRR initiative can be greatly enhanced by working creatively with the media, such as radio, newspapers and community newsletters. Workshops and other DRR activities are ideal opportunities to invite journalists from local newspapers and TV stations, who are likely to give the event positive publicity and thereby interest other communities facing similar challenges. Another strategy that helps build bridges is inviting members from surrounding communities to visit activities and try to interest them in adopting them too. As an initiative scales-up it will stimulate the interest of local and district government. Communities that have positive experiences with CMDRR may find themselves advising local officials about what they learnt and this gives communities more credibility as informed stakeholders for future activities.



Community members presenting their case at a film festival to raise awareness among other communities and the local authorities (El Salvador)

Communities and partners have also started to cooperate with the private sector, although the experiences here are still quite limited and mixed. In Indonesia partners are working with businesses on issues of corporate social responsibility (CSR). CSR can create opportunities for reducing disaster risk, for instance it can lead a company to improve the local infrastructure as part of their CSR policy, which can improve community preparedness in times of disaster. But CSR can also harm a community’s interests if the CSR agenda takes precedence over community empowerment. In other situations the activities of a company can increase disaster risk within an area and in such cases CMDRR can empower communities to stand up for their rights with the companies.

Funding and mobilising resources

Partners and communities often link with governments or other institutions in order to mobilise funding and other resources. For example in India people have organised themselves into self-help groups and jointly demanded access to risk insurance schemes. In Ethiopia communities have successfully lobbied for resources through locally developed early warning systems.

Some governments are adapting their funding procedures to make them more relevant to communities' needs. In Kenya a new decentralised system of funding is starting to give communities more say over how government funds are spent in their areas. There are some successes in this already; in one instance such lobbying led to a doubling of funding for rainwater harvesting tanks. However, much more still needs to be invested to empower communities to develop their strategic action plans. Also the Kenyan government needs to continue improving the accessibility of the funds. In another example, from Indonesia, the government is allocating "community development funds" throughout the islands. Communities engaged in CMDRR are learning how to engage with government and present the findings of their assessment findings and proposals for risk reduction proposals on order to access these funds to put these proposals into practice.

Donor agencies (at both national and international levels) are another, potentially important, source of funds and resources. Unfortunately it is often very challenging to mobilise resources from this level. One reason for this is that relief and development funds are usually viewed as having separate objectives. These funds are often managed by different donor agencies, or different departments within the same agency, and operate different criteria for eligibility. This creates difficulties for organisations promoting CMDRR who seek to align the two approaches.

There is a clear need for funding agencies to move from an approach that sees responding to disaster situations and promoting sustainable development as two separate activities, to one which integrates the two and prioritises disaster risk reduction. Documentation and advocacy play an important role in this process. Concrete examples of best practice are important to bring about any shift in policy. CMDRR is a lengthy process and involves building relationships of trust between partners and communities. This in turn requires predictable and adequate resource-provision that is flexible enough to link the goals of relief, rehabilitation and development according to the immediate priorities.

The need for joint effort to make policies more appropriate

The Hyogo Framework for Action emphasises the need to link relief, rehabilitation and development efforts and this, in turn, implies a multi-stakeholder approach. Yet many countries are lagging in their efforts to implement this framework, while some have not even started⁶. The effects of climate change are increasing the urgency to develop joint efforts and 'joined-up' policies. These impacts are difficult to predict and have already thrown many communities into new situations where their local and traditional knowledge does not provide solutions. Much research is being done into the impacts of climate change in the regions where CMDRR is being implemented. This information can be used to help communities develop new strategies to reduce the risks brought by climate change. Together with traditional knowledge and local preferences these new strategies have a critical role to play in informing policy decisions. Climate change is a global problem that needs global solutions and the policy messages of communities and partners need to reach out beyond local arenas and reach the international policy community.

Challenges and opportunities for enhanced cooperation:

- CMDRR has large impact if communities are able cooperate with (local or regional) government. This depend on a common awareness of hazards, communication between the community and government, and strong community organisations.
- Communicating experiences, with the media, neighbouring communities and policy makers, can help raise awareness and open new avenues for cooperation
- Many governments have not yet mainstreamed disaster risk reduction activities within their development programmes or policies. Use local community experiences for lobby and advocacy at global level.
- Many governments and donors regard relief and development as separate activities and this makes it harder to mobilise resources. Part of the process is to further increase community capacity to access resources.
- Private sector involvement needs to better include communities priorities in their corporate social responsibility policy. Opportunities that rise from corporate social responsibility initiatives need further exploration.

⁶ The report "Clouds but little rain" presents a local perspective of the progress towards implementing the Hyogo Framework for Action. This study was done by the Global Network of Civil Society Organisations for Disaster Reduction and was published in June 2009.

Karamojong join forces to tackle drought in Northeast Uganda



Communities and partners are presenting their successes during the International Disaster Risk Reduction day (Uganda)

In northeast Uganda, three Cordaid partners (Social Services and Development -Caritas Moroto, the Matheniko Development Forum –MADEFO- and Karamoja Agro-Pastoral Development Programme -KADP) came together in 2007 to form the Karamoja Consortium in order to support Karamojong communities and increase their resilience to climate change induced disasters.

The consortium did two successful risk assessments with communities in the area who identified drought and food insecurity as the main hazards facing them. The consortium has gone on to support these communities to strengthen their livelihoods, including the harvesting of rainwater and improving crop production.

One of the objectives of the consortium has been to link up with the government. This has proved difficult as its approach to development differs to that of the government, which was initially unconvinced of the benefits of CMDRR. As such the consortium is looking to improve its working relationship with the government and its various departments and to influence policy.

Having been trained in CMDRR, the consortium partners are now facilitating CMDRR training for the District Disaster Management Committee (DDMC) which is coordinated by the government. This involves training (and raising awareness among) government officials. The consortium has also become a member of the DDMC and is collaborating with Government departments at various levels in the joint implementation of DDMC activities.

Working with Panchayats and Self Help Groups

A turning point in the government's attitude to the work of the consortium came at a large and well publicised event held on International Disaster Risk Reduction Day, in October 2008. This event was attended by more than 400 participants including representatives of the communities of Karamoja; district leaders, other DRR stakeholders (including government officials), institutions and the national press. The consortium had the opportunity to present the results of several community risk assessments and gave the communities a chance to portray the benefits they have achieved through implementing CMDRR. Government officials were impressed to hear the voices of at-risk communities who have started to organise themselves. As a result government officials have been enquiring about how to start the CMDRR process and how it works and are showing an interest in working with this model.

The communities who are working through the CMDRR process are becoming articulate in identifying the problems that they face and reporting these to the government or development partners.

They have developed the confidence to write letters to government agencies to request support and, in some cases, have been successful in receiving this. Few communities in Karamoja have access to radio or television and this means that they have no information from the meteorological department on rainfall and temperature. The communities realise that this information could help improve yields. As one local villager says: *"people want to know when they can start planting. And they realise that their indigenous knowledge is no longer sufficient, because of climate change. They need this technical knowledge from the government."* The Karamoja Consortium is supporting communities to start lobbying the government to provide this information in an accessible form.



Self help groups in India are strengthening the voices of marginalised groups

India's government India has only recently formally recognised that the country is disaster prone. In 2005 the Disaster Management Act and the National Disaster Management Authority, with the Prime Minister as chairperson, was established. Most of the funds allocated to this agency are intended for providing relief and emergency responses. To date only limited resources have been provided for capacity building that will increase people's resilience.

Cordaid's partners in India are trying hard to broaden the government's focus towards supporting risk reduction measures. They have been lobbying government officials and inviting them to attend village workshops that will provide them with knowledge and ideas. Part of the activities is also to stimulate and empower community Panchayats (village council), the community governance system, and self help groups to demand their rights.

Advocacy through panchayats

Kalvi Kendra is one of Cordaid's partners that is working with flood affected communities in Tamil Nadu. As part of the CMDRR process, Kalvi Kendra has actively supported Panchayats to advocate for emergency shelters, waterpumps and housing for the most vulnerable members of the community. These resources would particularly increase the resilience of lower caste community members to future floods.


Presidents of the panchayats in the region were contacted and after an initial information sharing session a selection of motivated presidents organised themselves into a consortium with the aim of lobbying government to provide the required resources. An intensive process followed, that included lobbying government officials and elected representatives at the regional and national levels and raising media interest. This was followed up with a series of meetings and discussions with key local officials where the consortium members emphasised the risks and problems faced by their communities during floods. These efforts proved successful and the government and the local communities have both contributed resources (financial, land and labour) to build the shelters, houses and waterpumps. This has enabled the most vulnerable households to move away from the low-lying areas and become less vulnerable to floods.

Linking self help groups with insurance and saving schemes

India already has many established self help groups (SHGs) and these provide a particularly good vehicle for CMDRR. SHGs are very effective in strengthening the advocacy activities of communities, towards both government and private sector. CMDRR partners are working with these groups to create linkages with government schemes and private sector institutions, such as banks and insurance companies, who are able to provide loans and micro finance for livelihood and enterprise development. The Indian government increasingly recognises the role of SHGs, especially in damage assessment and selecting beneficiaries after a disaster has occurred. The SHGs have also mobilised significant resources from government schemes to provide emergency centres and training that contribute to promoting CMDRR. They are also playing a key role advocating for the rights of communities affected by disaster.

There is increasing recognition of the importance of savings in increasing people's resilience. Savings provide a crucial and immediate support during and after hazard events, can increase peoples' capacity to cope with and/or to avert disaster. UNNATI, one of Cordaid's partners, has started linking poor households with government social security schemes, safety nets and food and employment security programmes. As a result, community groups, individuals, livestock, assets and school buildings have been brought under insurance coverage through these links with existing insurance programs from the government, bank and insurance companies. These linkages have helped them to strengthen their livelihoods.

6. Climate change and disaster risk as a development issue



Due to climate change, drought is an increasing problem for pastoralists in Ethiopia

In many areas in the developing world people are now experiencing significant changes in weather patterns. These include extremely heavy rainfall or hardly any rain at all, changes in rainfall patterns and seasonality, hailstorms, rises in temperatures and an increased frequency of hurricanes, droughts, floods and storms. These effects of climate change further increase food and water insecurity and contribute to environmental degradation. In extreme cases it can lead to the loss of lives and livelihoods. Vulnerable communities and individuals are the first and most to be affected by these changes.

“In the past we had good pastures around. Now the grazing areas are barren and there are just a few pockets of available pasture. In the past, a young cow used to conceive at the age of three years and give birth to calves uninterruptedly. Now cows stay four to five years without giving birth. This is mainly due to the prolonged and unrelenting droughts caused by increased temperature and sharply falling rainfall and the resultant lack of sufficient fodder and water. We do not get as much milk, butter or blood as we require. Even if the cows give birth to calves, they can't feed them, let alone provide extra milk for us. In addition, the aroma, taste, colour and thickness of the milk has changed and become poor quality”.

A pastoralist living in the south of Ethiopia.

The pastoralist's story (above) is one of many stories collected last year during a survey among Cordaid's partners in Africa, Asia and Central America. All the stories show the extent to which weather patterns have already changed and the way they are increasing vulnerability among marginalised communities. It is clear that climate change is having a direct impact on people's livelihoods, their capacities and their vulnerability.

"There were always droughts, which people were prepared for. But they have been getting more severe as time goes by. They have been getting harsher and more serious. We believe that the good times of the past are unlikely to return, at least in the near future."

Community elder, Hadhesa Kebele, Guji, Ethiopia.

In the coming decades, climate change is expected to further exacerbate the risks of disasters, not only from more frequent and intense hazard events but also through greater vulnerability. More frequent and intense storms and floods and long-lasting droughts will erode the existing capacity within communities to prepare for, respond to and rebuild after successive hazard events. These compound effects will increase the vulnerability of communities to natural hazards of all types, including earthquakes and tsunamis, especially in areas that are already fragile.

Climate change adaptation starts at the community level

Vulnerable communities initially try to cope with climate change by applying traditional coping mechanisms and adaptation strategies. Some of these coping mechanisms only prepare people to survive a disaster (instead of preventing it from occurring). In other cases these responses are not sustainable in the long term. For more and more communities the growing magnitude of the problem means local knowledge is no longer sufficient for them to autonomously adapt to climate change.

Empowering and supporting those that suffer the most from hazards is crucial in tackling climate change. CMDRR has proven to be a useful process to do this, but it does require close cooperation between many stakeholders. The mechanisms that communities use to cope with disasters can provide the basis for further adaptation and be linked with new knowledge and accessible technologies. Experiences from CMDRR show that grassroots and autonomous adaptation is the most sustainable approach, is cost-effective and easily replicated.

Building the capacity of different stakeholders, particularly communities, local organisations and local government, to cope with climate change and disasters is central to this as it strengthens local expertise, experience and initiatives.

Empowering people also involves raising awareness. Many communities can see that the weather is changing, but are unfamiliar with climate change and its causes. People in Africa and Asia often believe that changing weather patterns and the increased risks of disaster are a punishment from God. They do not know that this is a global pattern that is affecting communities all over the world and will inevitably increase extreme weather events. When people become aware of this, they can start developing strategies for adapting to climate change and building their resilience. These can involve a diverse range of activities, including social protection approaches; safeguarding livelihoods and finding new ways of income generation, saving and insurance, or developing simple technologies such as rain water harvesting, depending on the outcome of the risk analysis and the context.

Many climate change adaptation initiatives in CMDRR focus on strengthening livelihood security and improving natural resource management. Examples include the introduction of camels, that are better able to withstand drought, into pastoralists' herds in Ethiopia; building flood shelters in Bangladesh and rain water harvesting tanks in Kenya; crop diversification and small scale irrigation for winter cropping in Malawi; and improving the quality and reliability of drinking water resources in Central America and Indonesia.

"Previously the rains used to start in October. We used to regard this as the rain that makes mangoes ripen or put off bush fires. The pattern started changing in the 1970s when we started getting these rains in November. These days we plan getting these rains in December."

Kabota Kanyara, 63 of Salima community, Malawi

Future challenges and the way forward

Yet such practical adaptation measures are unlikely to be enough to tackle the full effects of climate change. There is a great deal of uncertainty about what the effects and impact of climate change will be. Those adapting to climate change need more information about its likely extent and effects. Research carried out by organisations such as the Forum for Social Studies (FSS) and Concern is helping to build this information in a way that it can be used at community level in activities such as CMDRR and CCA. Communities have also started taking such initiatives themselves. The Siamasimbi community in Zambia has developed a CMDRR and CCA information centre, with one household selected to keep and disseminate information and to collaborate with the meteorological department for weather information.



Flooding in this village in Zambia has destroyed houses and people's livelihoods. Improved dissemination of meteorological information can help to increase communities preparedness.

Another major issue in addressing the challenges of climate change is the current gap between policy and practice. Governments are not always able or willing to include pro-poor adaptation measures in their policies. To bridge this gap, climate adaptation and disaster risk reduction measures need to be instigated at different levels: local, national and global. In most countries, and many international organisations, the departments responsible for dealing with disaster response and preparedness, development, environment and climate change work separately, producing their own policies and legislation. It would be more effective for these organisations to integrate disaster risk reduction and climate change adaptation within their development programmes.

Many Cordaid partners are working to integrate CMDRR and CCA within their own programming. Some of them are lobbying their governments to do the same.

In Indonesia, for example, civil society, including , local government, NGOs and communities are due to meet in Bali to discuss how climate change will affect communities in Indonesia and how all the stakeholders can work together to improve Indonesian capacity to respond to the challenge of climate change.

Key factors for successful climate change adaptation:

- Climate change is already affecting many communities in the South. Adaptation needs to become a key agenda point for development agencies now.
- Disaster risk reduction and climate change adaptation need to be integrated into development policy and practice.
- Adaptation measures should build on local knowledge and autonomous adaptation of communities.
- Additional knowledge on effects and impact is needed and should be linked with local knowledge to further develop climate change adaptation initiatives.

Harvesting rain water to adapt to climate change



Traditional singing wells in Kenya are being rehabilitated and reused so as to provide people with water in times of drought

The lives and livelihoods of pastoralists living in Marsabit, northern Kenya, are at risk. The main sources of water in this area are deep boreholes and shallow wells, but recurring droughts are reducing the water available from these sources and increasing disaster risk.

To increase access to water, PISP has been encouraging communities to introduce rainwater harvesting techniques, such as underground water tanks, singing wells, rock catchments, earth pans, sand damming, shallow wells and to rehabilitate strategic boreholes. These water sources are critical for both domestic and livestock use at times of drought.

In Forolle, a region in Marsabit along the Kenya-Ethiopia border, communities had become fully dependent on water trucking during the dry season. By establishing almost 30 underground tanks they have substantially reduced this dependency. Better access to water has proved to be a major turning point in the lives of the local pastoralists.

“We can now enjoy the water, for us a vital resource, for longer periods than before. With the reduction of the tankering period from 8 months to 4 months the effect of drought is greatly reduced. My wife now takes only thirty minutes to fetch water from the tanks as opposed to the four day trek to Ethiopia. Our lives have certainly been transformed.”

Adapting to a changing climate in Bangladesh

Seeing the positive results other neighbouring communities, and those from further away, including state actors and NGOs have adopted similar programmes to improve access to water and reduce vulnerability.

While rainwater harvesting techniques are effective in helping communities adapt to climate change, there are still challenges remaining. Technical issues, such as poor water quality, high levels of evaporation and seepage from the water pans, still need addressing. These issues can be overcome by improving techniques and learning from other similar activities. A more daunting challenge is the increasing pressure on the environment around these (semi-) permanent water sources. The availability of water has attracted more pastoralists to visit these sites and some to seek to settle around the water sources, causing overpopulation and environmental degradation.

But what will happen in the future? It is very difficult to predict future changes in local weather patterns. What happens if rainfall continues to decrease and leaves the water pans empty? The tanks and catchments, pans and wells are rainfall dependent, and if there is no rain, they will be of little use and people will once again be vulnerable to drought. The effectiveness of investments in rainwater harvesting techniques depends on future weather patterns. Unfortunately, these are still very difficult to predict.



Early warning systems and cyclone shelters save many lives in Bangladesh

Many people living in Bangladesh are prone to hazards that are being exacerbated by climate change which is leading to changes in the weather and the environment. Precipitation patterns and river flows are changing, drought is increasing as is the intensity of extreme weather events such as cyclones⁷. Future climatic trends are likely to exacerbate these patterns.

Local communities involved in CMDRR are preparing and adapting their lives and livelihoods to these changes. Initiatives for communal food storage and protecting fish ponds from flooding with fences are two strategies that have been adopted to reduce the direct impact of climate-related hazards. People are also looking for longer term ways to protect or diversify their livelihoods. A selection of such strategies is given below:

In coastal areas

- Planting mangroves on riverbanks and mudflats and planting different fruit and timber trees in raised beds behind the mangroves (which protect these trees from saline water).
- Introducing rotational shrimp and paddy cultivation to protect land degradation.
- Introducing saline tolerant rice varieties in saline areas.
- Harvesting rainwater at individual and community level for drinking water.
- Planting local saline tolerant plant species along roadsides and by homesteads.
- Homestead based integrated farming in raised beds.

- New livelihood activities including: crab and bee keeping, cultivating earthworms and pigeons and handicrafts.
- Diversified cropping.

In drought areas

- Preserving surface water by re-excavating ponds and canals.
- Diversifying crops according to the layout of the land.
- Introducing drought tolerant crop.
- Planting around the homestead and on roadsides.
- Undertaking poultry and livestock activities.

In flood prone areas

- Baira (floating garden) cultivation in low lying areas prone to waterlogging.
- Introducing vegetable species that grow in the water.
- Cultivating caged fish.
- Starting alternative income-generating activities.
- Introducing local varieties of rice that grows under the water.
- Building houses and public utilities (such as tube-wells, schools, community centres etc) on dykes created by excavating waterways.
- Building houses on stilts.
- Planting early growing crops and vegetables that can be grown before rainy seasons.



Climate change poses an extra burden on the lives of women and children who have to dedicate more and more time to fetching water (Ethiopia)

Many communities are increasingly experiencing the effects and impact of climate change and recognise that local knowledge alone is no longer enough for them to adapt to these rapid changes. They face the challenge of responding to the impacts of climate change in a timely and sustainable manner. This requires a diverse portfolio of culturally and location specific adaptation strategies that will build local resilience and resistance.

Recognising this Cordaid and its partners are working together with local research institutes to combine local knowledge and adaptation strategies with new information and knowledge on changing weather patterns and anticipated climate change. One such study was recently conducted in Ethiopia, a country that is very vulnerable to climate change.

The Forum for Social Studies (FSS) was commissioned to conduct research that combined historical meteorological data with the stories and experiences of poor pastoral and agro-pastoral people in the South of Ethiopia. These stories were collected through interviews, focus group discussions and in-depth individual case studies. These narratives showed the extent to which rainfall patterns have declined and changed in recent years and corresponded very closely with the meteorological data.

“In the good old days the rains were very normal and pastures and water resources were relatively sufficient for our livelihood activities. But this is a thing of the past; even “good” rains these days are very erratic, insufficient and unevenly distributed. A rise in temperature makes our lives harsh, because of the many long dry and hot days we have now.” said one community representative.

According to another community member *“the heat is becoming a terrible threat and there is a clear increase in the frequency of droughts. In the past we had a drought every 5-8 years, now there is a drought every other year. This leaves us too little time to recover from the shock.”*

Elsewhere along the Omo and Woito rivers, communities are being affected by floods: *“the floods have become more frequent, out of season and sudden. People have died, houses have been destroyed, together with infrastructure and crops.”* The burden is especially severe on women and children, who have to travel up to 25 kilometres a day in the dry season to fetch water. Competition over scarce pastures and water resources during severe drought seasons sparks conflicts.

Many pastoralists feel that climate change is an act of God. *“We feel that nature has turned its back on us. The rains have stopped, animals died and insecurity has grown. This is a punishment from God.”*

But the communities also recognise the influence that they have on their capacity to withstand these changes: over harvesting of fuel wood, demographic and settlement expansion, overgrazing and annexing land for cultivation all weaken local environmental resilience.

The communities have a range of measures to cope with the impacts of climate change. Seasonal mobility, diversifying the composition of their herds, rotational grazing, and differentiating rangelands into wet and dry season grazing areas are some of the most commonly used strategies. In addition, households employ a diverse portfolio of economic and social strategies to cope with climate change-induced hazards. Some of these strategies are not sustainable and some cause further degradation of resources and desertification. In short, traditional local coping mechanisms and adaptation options are limited, weak and insufficient to maintain resilience in the face of rapid climate change.

Yet at the same time the FSS study shows that most current policy and strategy documents do not recognise the developmental challenges posed by climate change. Most government response to climate change are sectoral, short-term and biased towards emergency aid. In most cases the later is inadequate and not delivered on time.

The FSS report recommends the DRR and CCA be integrated into in development strategies at all levels. Some of the main recommendations include:

- Adopt integrated disaster risk reduction and early warning systems.
- Build on existing local knowledge and practices, and strengthen local institutions.
- Adaptation and resilience to climate change to be mainstreamed in development programmes.
- Provide access to information, education and social/economic services.
- Protect assets and diversify livelihood options.
- Improve the coverage and quality of climate data.
- Promote climate friendly development initiatives.
- Empower women and other vulnerable groups.
- Mobilise adequate and stable financial resources.

7. Towards a resilient future



Photo: Benno Neeleman

This woman has a more resilient future because she has started crop diversification on her fields (Uganda)

Through community managed disaster risk reduction, Cordaid and its partners are supporting vulnerable communities whose lives and livelihoods are threatened by disasters and climate change. The focus is on empowering communities and building resilience.

To do this effectively Cordaid and its partners continually share experiences and learn from those of others. As part of this process a global conference on CMDRR was organised in June 2009, in Lilongwe, Malawi. More than 80 participants from all over the world who work on CMDRR came together to share their experiences and the lessons they have learnt, discuss future opportunities and identify future challenges. This conference resulted in a declaration, signed by all the participants and several guests. It also produced an action plan for the future, of which the key features are listed on the following pages.

7.1 Link, learn and document

To build global networks to facilitate learning and share best practices

- *Sharing and documenting best practices*
- *Linking partners' work with global donor policy*
- *Building global communities for change*

To learn from communities' practices, indigenous knowledge and documentation

- *Promoting exposure, documentation and dissemination*
- *Building local knowledge and networks*
- *Linking innovation and interventions*
- *Strengthening and reviving traditional early warning systems and practices*

To enhance capacity of facilitators on CMDRR

- *Building skills of facilitators through trainings, exposures*
- *Piloting and experimenting*
- *Documenting and sharing of the best practice*

To enable communities to become drivers for learning and change

- *Establishing demonstration sites,*
- *Creating and capturing testimonies*
- *Documenting innovations, and stories of significant changes*
- *Collecting and sharing best practice*

7.2 Lobbying and advocacy for

Sustainable livelihoods for communities prone to hazards

- *Campaigns*
- *Research*
- *Networking with other organisations*
- *Engagement with the private sector*

Acceptance of CMDRR and climate change adaptation within the mainstream of development

- *Building networks for advocacy*
- *Documenting and disseminating (best practices)*
- *Lobbying for integration of CMDRR in the educational syllabus, development policies & programmes*

Inclusion of CMDRR policy frameworks at the country and regional level, which are inclusive, participatory and development-oriented

- *Reviewing existing laws/policies on CMDRR at national and international level*
- *Identifying gaps*
- *Lobbying with other like-minded organisations for policy change/formulation*

Accountability of all stakeholders towards local communities

- *Formulating draft guidelines on Accountability*

7.3 Cooperation with other stakeholders

Capacity building and empowerment of local communities

- *To enhance capacities to negotiate & cooperate with other stakeholders*

Cooperating and linking with different stakeholders

- *Participate in forums, meetings, networks*

7.4 Mobilising funds

Community ownership

- *Community organisation and mobilisation*
- *Community contribution (cash or in kind) to every activity*

Facilitators aware of diversification of resources

- *Stocktaking of the stakeholders*
- *Facilitators network in their working area with other organisations to mobilise resources*

All partners have a fundraising Strategy

- *Capacity building of the partners to get access to diversified funding resources (donors, government, others)*

Seek long-term funding

- *Lobby donors and government to accept CMDRR and extend the normal funding period*

These objectives will be further developed and refined by Cordaid, its partners and communities participating in CNMDRR over the coming years. Cooperation with all relevant stakeholders, including governments and the private sector, will remain central in achieving these goals.

Cordaid has also identified the need for further innovation. These are the main issues that need addressing over the next few years:

- *Develop a long term strategy within CMDRR, with enhanced focus on climate change adaptation*
- *Develop strategies for work with the most marginalised groups (particularly pastoralists, indigenous groups (and dalit), urban slum dwellers and the rural landless)*
- *Learning from the CMDRR and climate change adaptation approaches of partners*
- *Strengthening our lobbying on the links between gender and DRR and climate change adaptation*
- *Piloting the use of DRR in fragile countries*
- *Further integration of emergency aid packages within the DRR programme*
- *Capacity building of partners in managing emergency aid situations*
- *Mainstreaming DRR within other Cordaid programs relating to health, economic and urban development*
- *Strengthen the cooperation between communities and local government/enterprises for local fundraising for DRR, joint linking and learning and lobby towards the government*

Lilongwe Declaration

We, the participants of the first Global conference on learning and sharing on Community Managed Disaster Risk Reduction (CMDRR) and Climate Change Adaptation in Lilongwe, Malawi, June 8th – 12th, 2009

Acknowledge that the effects of climate change and disaster risk are the most urgent human security, ecological and development challenges of our time—exacerbating poverty, food insecurity, forced migration, the spread of HIV/AIDS and conflict;

Emphasise that the major cause of climate change includes unsustainable patterns of development, oppressive power structures and consumerist lifestyles;

Note the global ignorance on the issue of climate change and its impacts and lack of appreciation to community managed disaster risk reduction as a strategy in addressing impacts and effects of climate change and disaster risks;

Underscore that communities are vital learning agents of change, holders of indigenous practices, knowledge and skills, and can be powerful drivers of their own development and resilience;

Recognise that CMDRR is a crucial element of climate change adaptation and mitigation, and human induced hazards. CMDRR is development, with hazard as the focus and disaster risk as the entry point, when communities are motivated for change;

Highlight the importance of inclusion of the most at risk and marginalised groups, providing a platform for both genders;

Assert that all nations and every individual have a moral obligation to reverse the effects of climate change. We all need to be better stewards, to take responsibility to transform current practices and lifestyles towards environmentally sound actions;

We hereby declare that Climate change and disasters are results of unsustainable patterns of development, thus all processes addressing climate change and disaster impact must begin and end with people. The impact of climate change is global, and cuts across all sectors, regardless of gender, culture, economic or political position; but it must be recognised that the impact is greatest on the poor, the most at risk, and the marginalised. Therefore a global plan of action to address climate change and disaster risk must be undertaken using community managed disaster risk reduction as the strategy.

Climate change and disaster risk must be understood as a development issue and concerted efforts are required by all stakeholders to ensure that climate change adaptation and mitigation, and disaster risk reduction measures are gender responsive, built upon indigenous knowledge systems, revitalise lost practices and respond to gaps to increase capacities towards resilience.

Building resilient communities means ensuring access to basic services which guarantee the right to safety by reducing disaster risk. It means awareness through community managed disaster risk assessment, analysis and implementation of disaster risk reduction measures.

All development actors have a critical role to play in;

- Recognising and building upon community's voices, knowledge and expertise, such as early warning systems. This will accelerate the momentum of local and sustainable disaster risk reduction measures, through systematic documentation, advocacy, action and good practice;
- Promoting, facilitating, developing and implementing awareness campaigns, education and training programs on the causes, effects and long term forecasting of climate change and disaster risk; enabling communities to be aware of policies and innovation in climate adaptation and risk reduction measures;
- Linking resources to facilitate knowledge management and transfer, research, documentation and capacity building;
- Recognising that action must start immediately, although adequate time and resources to enable communities to lead resilience building are essential; there are no quick fixes. Funding appropriate and environmentally sound technologies and supporting community initiatives in sustainable use of natural resources;
- Recognising that climate change adaptation and resilience strategies require diversified approaches in social protection; in livelihoods and income generation, saving and insurance, simple technologies such as rain water harvesting;
- Developing a favourable policy framework for immediate action.

Networking at all levels is essential; communities must engage with governments and other stakeholders to work together to develop solutions. There is a critical need for joint efforts.

All actors are accountable and must work towards maintaining transparency in reducing disaster risk and climate change, and the devastation it is causing on natural environments.

Highlighting the importance of strategic national action plans under the Hyogo Framework for Action 2005 - 2015 to better protect our societies and economies from current and future hazards;

We declare our full commitment to contribute to these goals and to cooperate with each other and all relevant stakeholders-including UN bodies, national governments, regional inter-governmental bodies, parliamentarians, international donor communities, multinational and corporate institutions, universities and research institutions, the private and financial sector, civil society, indigenous peoples, academia, faith-based institutions, religious and influential leaders, and individuals-with the intent to carry this declaration forward to all meetings through which decisions on climate change, disaster risk reduction are made, including UNFCCC COP-15 (Copenhagen), the Second Session of the Global Platform for Disaster Risk Reduction and beyond.

“Seeing that injustice is done and not combating it, makes us equally responsible”
José Martí, Cuban Poet

June 12th 2009
Lilongwe, Malawi



Signing of the Lilongwe Declaration

Participants of the Global Conference on community managed disaster risk reduction

Africa - Regional

Regional Horn of Africa

Ton Haverkort
Regional DRR Coordinator

Mohamed Hussein Abdullahi
Community Leader

Africa - Ethiopia

Acord

Woldehanena Kinfe
Pastoral programme coordinator

Africa - Malawi

Cadecom Malawi

Carsterns Mulume
National office secretary

Cordaid Ethiopia office

Moges Bekele Bedacho
PMU Ethiopia programme officer

Cadecom Malawi Mangochi diocese

Fotina Imani
DRR coordinator

Farm Africa

Wondwossen Chanyalew
South Omo Project Officer

Dedza Diocese

Mrs. Bernadetta Kaliyati
*DRR community member /
Kalindiza Village*

SSD

Wilisa Mohammed Aden
*DRR chair person (Community
representative)*

Mzuzu Diocese

Mr. Justin Pelesoni Chakwera
*DRR community member / Chikwembani
Village*

Africa - Kenya

Cordaid Kenya office

Mohamed Dida
Programme Coordinator

Africa - Uganda

Caritas Gulu

John Bosco Aludi Komaketch
Caritas Gulu Director

PISP

Umuro Roba Godana
Programme Coordinator

District Disaster Management Commission

Simon Omvia Drileonzia
DDMC Coordinator for Katakwi district

Racida

Mohamoud Isack Duale
Programme Coordinator

MADEFO

Jackson Adome Angella
Community elder

SSD Moroto

Grace Namer
Emergencies coordinator

Africa - Zambia

Caritas Livingstone

Martin Sampa
Diocesan director

Christine Mutemwa

Mwandi Community - Livingstone

Caritas Lusaka

Golden Mwiinga
Mumbwa Community - Lusaka

Caritas Zambia national office

Annette Malulu
Food Security Program Officer

Asia - Bangladesh

Action for Disability and Development

Md. Mozammel Haque

Caritas Bangladesh

Akhila D'Rozario
*Director Disaster Management and
Development*

Concern Universal

Jahangir Alam

YPSA

Khaleda Begum

Asia - India

Ask (Capacity Building Division)

Munish Kaushik
Assistant Manager and Team Leader

Ask (Evaluation and Studies Division)

Bindiya Rawat
Assistant Manager and Team Leader

Unnati

Bhanuprasad Mistry
Programme Manager DRR

Kiritkumar Parmar

Programme Executive DRR

Asia - Indonesia

Bina Swadaya

Ika Sari

Cordaid Indonesia office

Anat Prag
Cordaid Liaison Officer Yogyakarta

Insist

Saleh Abdullah

Primari

Dr. Imade Linggawijaya

Central America

Acua – Regional

César Erazo Cruz

Asprode – Regional

Arnulfo Ayala Rodriguez
Director

Caritas Santa Rosa – Honduras

Norma Mariela Cruz
Programme Officer

Caritas Chalatenango – El Salvador
Padre Boanerges Chinchilla
Director

Humanitarian Productions – Mexico
Fernando Manriquez
Film maker

Europe
Participants CORDAID – Netherlands
Rene Grotenhuis
Cordaid Director and CIDSE President

Sasja Kamil
Teamleader and climate coordinator

Margot Loof
Organisator and Project Officer Uganda, Malawi, Zambia

Marlou Geurts
Organisator and Project Officer India, Bangladesh

Inge Leuverink
Project Officer Indonesia

Gijs Aarts
Project Officer Horn of Africa

Jeannette Hamersma
Project Officer Central America

Marije Broekhuijsen
Climate policy officer / documenting

Mark Walter
Communication / climate team

Valerie Kierkels
Press officer climate & CMDRR

Albert de Haan
Teamleader humanitarian aid

Global
International DRR evaluation team
John Cosgrave

Cordaid global CMDRR advisor
Rusty Binas
Global Advisor on Disaster Risk Reduction

Participants of the CIDSE & Caritas Climate Change Conference

Ansa - Brazil
Carlos Garcia

Cafod - UK
Rob Rees
Pan-Africa Advocacy Coordinator

Caritas Africa – Africa
Sr. Aine Hughes
Member of the Caritas Africa Working Group on Climate Change

Caritas India – India
Fr Frederick D'Souza
Assistant Director

Caritas Internationalis – Italy
Christine Campeau
Environment Justice Assistant

CIDSE secretariat, Brussels – Belgium
Astrid Schwietering
Campaign & Programme Officer

Cordaid Kenya office – Kenya
Safia Abdi Dima
Member of Climate Coalition Kenya and advocacy climate change/DRR

Janet Mangera
Executive Secretary

EMG – South Africa
Taryn Perreira
Researcher

INADES – Burkina Faso
Ibrahim Ouedraogo

Indigo Development and Change - South Africa
Bettina Koelle
Director

Jesuit Centre for Theological Reflection – Zambia
John Mweshi

Manos Unidas – Spain
Marco Gordillo
Campaigns Coordinator

Gadea Gomez

PELUM – Tanzania
Donati Alex Senzia
Advocacy officer

SECAM – Africa
Firmin Adjahossou
Member of the Caritas Africa Working Group on Climate Change

Cordaid partners in community managed disaster risk reduction and climate change adaptation

Africa - Ethiopia

Acord – Agency for Cooperation in Research & Development

Addis Abeba
acord.eth@ethionet.et
www.acordinternational.org/index.php/base/ethiopia

AFD – Action for Development

Addis Abeba
afd@ethionet.et
www.afd.org.et

Eparda – Ethiopian Pastoralist Research and Development Association

Addis Abeba
eparda@ethionet.et
www.eparda.org.et/index.htm

Farm Africa

Addis Abeba
Farm.ethiopia@ethionet.et
www.farmafrica.org.uk

Gama Gofa Cath Church

Arba Minch
liddpaa@ethionet.et

Jeccdo – Jerusalem Children and Community Development Organization

Addis Abeba
jeccdo@ethionet.et
www.jeccdoethiopia.org

PMU – Project Monitoring Unit

Addis Abeba
cordaid@ethionet.et

SSD – Support for Sustainable Development

Addis Abeba
ssd@ethionet.et

SOS Sahel

Addis Abeba
sos.sahel@ethionet.et
www.sahel.org.uk/ethiopia.html

Africa - Kenya

CIFA – Community Initiatives Facilitation and Assistance

Marsabit
ibrahim@cifa.org
http://cifakenya.org/

CODES – Community Organization for

Development Support
Maralal
codes@wananchi.com

ICIPE – African Insect Science for Food and Health

Nairobi
sraina@icipe.org
www.icipe.org

MID-P – Merti Integrated Development – Programme

Lsiolo
shandejillo@yahoo.com

PISP – Pastoralist Integrated Support Programme

Marsabit
uroba@pisp.org
www.pisp.org

PMU – Project Monitoring Unit

Cordaid Field Office Nairobi
mdicor@cordaid.net
m.dida@cordaidke.org

Racida – Rural Agency for Community Development and Assistance

Mandera
Racidamandera@yahoo.com
http://racida.org/index.html

VSF Germany – Vétérinaires Sans Frontières

Nairobi
jenet@vsfg.org
duehnen@vsfg.org
www.vsfg.org

Africa - Malawi

ECM – Episcopal Conference of Malawi

Lilongwe
ecm@ecmmw.org
http://episcopalconferencemalawi.wordpress.com/

Cadecom National Office

Lilongwe
carsterns@yahoo.com
http://episcopalconferencemalawi.wordpress.com/commissions/cadecom/

Africa - Uganda

Caritas Gulu

Gulu
Aludikjb@yahoo.co.uk

Caritas Kotido

Kotido
jameswole@gmail.com

KADP – Karamoja Agro-pastoral Development Programme

Moroto

MADEFO – Matheniko Development Forum

Moroto
petereachia@yahoo.com

SOCADIDO

Soroti
http://socadido.org/

SSD-Moroto

Moroto
ssddirector@ssdworld.org.ug
www.ssdworld.org.ug

TPO-Uganda – Transcultural Psychosocial Organisation

Kampala
ponyango@tpouga.org
www.tpoug.org

Africa - Zambia

Caritas Zambia National Office Including Caritas Livingstone and Caritas Lusaka

Lusaka
www.ccjdp.org.zm

Caritas Chipata

Chipata

Asia - Bangladesh

ADD - Action for Disability and Development

Dhaka
www.add.org.uk/bangladesh.asp

Caritas Bangladesh

Dhaka
www.caritasbd.org

CUB – Concern Universal Bangladesh

Dhaka
www.concernuniversal.org

DAM - Dhaka Ahsania Mission

Dhaka
dambgd@bdonline.com
www.ahsaniamission.org

FFH - Fight For Hunger

Chittagong

Friendship Bangladesh

Dhaka
ed@friendship-bd.org
http://friendship-bd.org/

INDAB – Integrated Development Association of Bangladesh

Barisal
http://idfbd.org/

PDIM – Participatory Development Initiatives of the Masses

Dhaka

PGUK – Palligana Unnayan Kendra

Upazial Bakergonj, Barisal
pguko4@yahoo.com

POPI – People's Oriented Program Implementation

Dhaka
www.popidream.org

RDRS – Rangpur Dinajpur Rural Service

Dhaka
www.rdrsbangla.net

VARD – Voluntary Association for Rural Development

Dhaka
www.vardbd.com

Asia - India**All India Disaster Mitigation Institute**

Ahmedabad
dmi@icenet.co.in
www.aidmi.org/index.asp

ASK – Association for Stimulating Knowhow

Gurgaon New Delhi
khilesh@askindia.org
akhan@askindia.org
http://askindia.org

Caritas India

New Delhi
caritasb@citechco.net
www.caritasindia.org

Centre for Development Research and Training

Orissa
bipin@ximb.ac.in
www.ximb.ac.in/cenderet

Dalit Watch – Nari Gunjan

Padna, Bihar

HelpAge India

New Dehli
mathew.cherian@helppageindia.org
venash.datta@helppageindia.org
www.helppageindia.org

Kalvi Kendra

Villupuram Dist. Tamil Nadu
kalvikendra@yahoo.com
http://kalvikendra.org/index.htm

Rural Uplift Centre

Nagercoil Tamil Nadu

UNNATI

Ahmedabad
psu_unnati@unnati.org
www.unnati.org

West Bengal Voluntary Health Institute

Calcutta, West Bengal
dpcwbvha@vsnl.net

Asia - Indonesia**AMAN – Asian Moslem Action Network**

Jakarta Selatan
amanindonesia@yahoo.com
http://amanindonesia.org/

Bina Swadaya Foundation

Jakarta Pusat
bswadaya@cbn.net.id
www.ukdw.ac.id/pspp/

Catholic Relief Services

Jakarta Selatan
ysuryani@id.seapro.crs.org
www.crs.org

INSIST – Indonesian Society for Social Transformation

Yogyakarta
press@insist.or.id
www.insist.or.id

Karina

Jakarta Pusat
karina@kawali.org
www.pkr-kwi.or.id/

Perdhaki

Jakarta
perdhaki@cbn.net.id
perdhaki@perdhaki.org

PRIMARI

Nabire, Papua
primaripapua@yahoo.co.id

PSPP – Pusat Studi dan Pengembangan Perdamaian (Center for the Study and Promotion of Peace)

Jogjakarta
pspp@ukdw.ac.id
www.ukdw.ac.id/pspp/

Yayasan Pusaka Indonesia

Sumatra Utara
pusaka@indosat.net.id
www.pusakaindonesia.or.id

Central America - El Salvador**ACUA – Asociación Comunitaria Unida por el Agua y la Agricultura**

Municipio de Zaragoza, Departamento de La Libertad
asociacionacua@gmail.com
www.acuav.org

Asprode

San Salvador
asprode@navegante.com.sv

Cáritas Chalatenango

Municipio Nueva Concepción,
Departamento de Chalatenango
caritaschalatenango@navegante.com.sv
www.caritaselsalvador.org/Paginas/
Pagina_2_3.htm

UNES – Unidad Ecológica Salvadoreña

San Salvador
www.unes.org.sv

Central America - Honduras**Cáritas Santa Rosa de Copán**

Santa Rosa de Copán
caritas@sdnhon.org.hn

Central America - Mexico**Humanitarian Productions**

México D.F.
www.humanitarianproductions.com



Film: The dove, the duck and the camel. Building resilient communities to climate change

This film shows the stories of three communities, one in Central America, one in Bangladesh and one in Ethiopia. These communities have analysed their own disaster risk and have taken actions to strengthen their resilience. This film shows these communities' experiences and how the process is supported by Cordaid's partners.

CMDRR activities in Central America focus on reducing environmental degradation in the community surroundings and adopting measures that help communities adapt to climate change. Communities have been trained in using video cameras so they can record the risks and vulnerabilities from their own perspective and use this as a way of telling their story to government or companies.

The Caritas Bangladesh CMDRR programme prioritises protecting people from cyclones. Cyclone shelters have been built and the communities are better prepared for possible hazards, and know what to do before, during and after a cyclone to increase their chances of survival and minimise the impact on their livelihoods.

In Ethiopia, drought is a constant factor facing many communities. Traditional ways of living are in danger. Cordaid's interventions are based on the principle of Drought Cycle Management, which includes providing training on disaster risk reduction. Communities have adapted their livelihoods by changing cattle for camels, and rainwater harvesting techniques have improved the availability of water.

Cordaid and its partners work together with communities that are vulnerable to climate change and disaster risk. This publication shows the challenges these communities face and their positive experiences in using community managed disaster risk reduction to build resilience to these risks.

The stories in this publication are the result of five years of experiences in ten countries worldwide. They form the basis of the Lilongwe Declaration which was signed by community leaders, partners and Cordaid. A future agenda is presented for all those working in community managed disaster risk reduction who hope to build a more resilient future!



Lutherse Burgwal 10
2512 CB The Hague
The Netherlands

t 0031 70 3136300
f 0031 70 3136301

www.cordaid.nl

cordaid@cordaid.nl

P.O. BOX 16440
2500 BK The Hague
The Netherlands