

## OL 345 Assignment Four Discussion.

Online Learning: OL 345 Community Based DRR Training.

Center for Sustainable Development. <https://csd-i.org/disaster-risk-reduction-online-drr-training/>

### Assignment Four. Survey of Activities for Use before Disasters Strike

The majority of CSDi course participants seem to have flooding as the main thrust of their community's disasters. So in this course we will focus on flood related disaster preparedness, risk reduction, and recovery. Most of the steps that we will cover in the rest of this course would be similar for other kinds of disasters—and you could simply download a handbook with specific activities pertinent to your project's disasters and insert the information into these templated assignments. This is exactly what you did in the preceding courses: the courses used my example project and you simply modified my examples to fit your specific context. There are a number of very well-written and highly specific handbooks for development practitioners to use in their highly specific disaster risk reduction projects.

Flooding is pertinent to these community based adaptation related courses because climate change frequently brings extreme weather events – and therefore flooding. If your project's disaster program is related to extreme weather events – then it's very likely that one component of that program will be preparing for, reducing risk from, increasing resilience to flooding—and ways of recovering from flooded homes, businesses, infrastructure, farm fields and from livestock that have been lost.

In this assignment we're going to look at typical activities that could be done in advance of a flood—developing an early warning system and investigating mitigation activities that could reduce damage. In the next assignment we will look at activities that can be used during a flood in order to reduce the loss of life and assets.

In the following assignment, Assignment Six, you will be choosing which activities will be most appropriate for your program—and then beginning the process of developing a master DRR plan for the community. You will also be looking in A6 at consciousness-raising for community members so that they can better understand the source and consequences of disasters—and so that they can become engaged in the activities developed in the plan. Then you will look at developing teams that will become trained to manage the activities before, during, and after disaster strikes.

I'm including a field guide in this discussion in order to give you a broad overview of what we've been working on and what we will accomplish. This field guide workshop lesson plan is available for downloading from download class documents—and can be used for capacity building with your DRR subcommittee.

### Field Guide: Overview of Developing a Community Based Disaster Risk Reduction Plan

Tim Magee

It is estimated that 70% of all disasters are now related to extreme weather events. This percentage is likely to increase as climate change processes increase the unpredictability and intensity of weather events. Because of this, disaster risk reduction should become an integral part of adaptation projects. Community based disaster risk reduction (CBDRR) holds the same merit that community based adaptation does: ownership and sustainability. This field guide presents an overview of establishing a CBDRR program in a community.

#### Local Context.

**Conducting a participatory capacity and vulnerability analysis.** In OL 343 you conducted a participatory capacity and vulnerability analysis as part of developing your project. Use the same resources yet focus the assessment on hazards and disasters. Examples could be floods or extreme weather events such as hurricanes. One of the exercises in the CBDRR Field Guide is to draw a participatory map. It is useful to transfer the information from the map into a larger format and place it on a public wall where everyone in the community can see it and better understand how disasters can impact their village.

#### Sustainable Management

**Setting up a CBDRR committee.** In week 8 of OL 342 you set up a community based project management committee. You can use the same technique to set up a Community Based DRR committee. This committee will be able to work with your NGO to create long-term associations with government agencies that can support long-term DRR activities. The committee will be in charge of developing a DRR plan, and for coordinating disaster teams.

#### Planning for the Future

**Developing a DRR plan.** Developing a DRR plan will include each of the activities in the following list—and maintaining them in perpetuity. This will involve a plan for consciousness-raising among community members about DRR challenges, connecting with an early warning system, organizing teams, training teams in evacuation and search and rescue, and prioritizing mitigation strategies. The plan can include an advocacy campaign for obtaining government support.

#### Community Engagement

**Promotion to community.** Frequently community members don't have a clear picture of how and why disasters happen. They also may not know how to react when a disaster is building or is already in progress. Workshops and simple posters or how-to cards need to be developed to help them understand these concepts and to learn that there are things that they can do to reduce the risk caused by disasters, and to mitigate the severity of the disasters.

#### Organizing teams.

Based upon the results of your community's participatory capacity and vulnerability assessment, you should now have prioritized list of hazards and disasters. As part of the DRR plan the committee will prioritize preparedness activities, risk reduction activities and mitigation activities. Teams should be organized for each of the major priorities. If, for example, the type of disaster your community faces necessitates evacuation, an evacuation team should be established that develops a plan to lead an evacuation at the appropriate time—and then lead an actual evacuation if necessary.

**Early warning systems.** Traditionally, community members have not had warning of when they need to evacuate—and frequently they have left it too late. Your government's meteorological office may have the capability of, for example, in a potential flood situation, evaluating when water has reached a critical height and can announce that a flood is imminent. Communities should form partnerships with these offices and ensure that they have clear access to early warning information in case of disaster.

**Disaster mitigation.** In the context of flooding, disaster mitigation can mean actions that you perform that reduce risk or increase resilience. So for example, reforesting the deforested hillsides could allow water to percolate into the underground water system rather than run off the denuded hillsides

and cause flooding. Planting Vetiver grass along eroding riverbanks can reduce erosion. Relocating houses above floodplain can reduce loss of property and injury.

**Evacuation training.** If people need to evacuate, they need to know when to evacuate, they need to know what to do with their valuable possessions and assets, they need to know where to go where it's safe, they need to know what to take with them, and they need to know what to do when they get to shelter. Capacity building workshops led by the evacuation team can train community members in each of these—and most importantly—can lead them in practice drills.

**Search and rescue training.** Search and rescue team members learn specific techniques that are safe, and are given simple tools such as lifejackets, safe boats, inner tubes, and flashlights which give them the confidence and the capability to look for a missing person or of rescue a trapped elderly or disabled person.

### **Evaluating Capacity Building Needs for Community Members**

Evaluate results of participatory mapping of disaster risks and hazards—and select a range of appropriate disaster risk management practices. Develop an overview for committee members of disaster risk management practices including developing management, preparation and recovery for floods. Make an appointment to propose appropriate techniques to the DRR Management Committee for feedback.

### **Lesson Planning**

Prioritize which DRR technique should be introduced in the first workshop. Contact DRR expert of feedback and input

Develop a workshop lesson plan. Draw a how-to card. Arrange the date and location for the workshop with your community contact person. Arrange for supplies and tools for the workshop with your community contact person.

### **Capacity Building**

**Capacity building for disaster risk reduction and mitigation activities for community members.** There are many activities that can be done to mitigate potential disasters. Some, like mangrove plantings along river banks can reduce erosion during a flood season. The reforestation of a watershed can reduce danger from flash floods. Both are activities that communities can do over the span of time. Capacity building workshops give community members the skill sets that they need to do these activities. Other activities like relocating houses to higher ground may be outside of their purchasing power, but committee members can be trained to develop advocacy campaigns for approaching governments for support in more major investments.

### **Assignment 4 Resources**

#### **Early warning systems**

Mercy Corps: Community-Based Disaster Risk Reduction – Good Practice

<http://un.org.np/node/10601>

Manual: Local Flood Early Warning Systems

[https://www.preventionweb.net/files/29230\\_29230gizphilippineslocalfloodearlyw.pdf](https://www.preventionweb.net/files/29230_29230gizphilippineslocalfloodearlyw.pdf)

Four Elements of People Centered Early Warning Systems

[https://www.researchgate.net/figure/Four-Elements-of-People-centred-Early-Warning-Systems-Source-UN-ISDR-Platform-for-the\\_fig3\\_306028290](https://www.researchgate.net/figure/Four-Elements-of-People-centred-Early-Warning-Systems-Source-UN-ISDR-Platform-for-the_fig3_306028290)

Early Warning Systems in the context of Disaster Risk Management

[http://www.unisdr.org/2006/ppew/info-resources/docs/ELR\\_dt\\_23-25.pdf](http://www.unisdr.org/2006/ppew/info-resources/docs/ELR_dt_23-25.pdf)

Flash Flood Risk Management – the Training of Trainers Manual

[http://reliefweb.int/sites/reliefweb.int/files/resources/icimod-flash\\_flood\\_risk\\_management.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/icimod-flash_flood_risk_management.pdf)

GTZ: Manual on Flood Preparedness Program for Provincial and District Level Authorities in the Lower Mekong Basin Countries

[http://www.adpc.net/v2007/programs/dms/Publications/FEMS/Flood\\_09.pdf](http://www.adpc.net/v2007/programs/dms/Publications/FEMS/Flood_09.pdf)

#### **Mitigation**

Streambank Soil Bioengineering Approach to Erosion Control

[http://cdn.intechopen.com/pdfs/17257/InTech-Streambank\\_soil\\_bioengineering\\_approach\\_to\\_erosion\\_control.pdf](http://cdn.intechopen.com/pdfs/17257/InTech-Streambank_soil_bioengineering_approach_to_erosion_control.pdf)

Bamboo and bio-engineering interventions for mitigation of riverbank erosion

<http://www.mercycorps.org/countries/nepal/24483>

Community Based Approaches to Disaster Mitigation, Lorna P. Victoria

[https://www.preventionweb.net/files/602\\_8370.pdf](https://www.preventionweb.net/files/602_8370.pdf)

Mercy Corps: Community-Based Disaster Risk Reduction – Good Practice

<http://un.org.np/node/10601>

Good luck—I look forward to hearing about your project—please move on to Assignment Four.