



EXPERIENCE SHARING REPORT ON THE VCA (VULNERABILITY AND CAPACITY ASSESSMENT CECI (Centre for the Study of Education and International Cooperation)

October, 2011

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#### 1.1 BACKGROUND

#### 1.1.1 Introduction to the BCRD Project

"Building Community Resilience for Disasters in Uplands Areas of Vietnam, a BCDRM (Building Community Disaster Resilience Management) project, started in 2007 in Lao Cai and Kon Tum Provinces (phases 1 and 2). Currently, the project is heading towards the completion of phase 3, concentrated in the Nghe An and Kon Tum Provinces. Under the guise of CECI (Centre for the Study of International Cooperation), the project is funded by DIPECHO, and involves the cooperation of provincial, district, and commune level authorities, as well as local village leaders. The CECI BCRD project takes a community-based empowerment approach to disaster risk reduction (DRR). It achieves its goal through three chief practices: education and awareness-raising initiatives; the establishment and implementation of simple, low tech early warning systems (EWS) and communications protocol; and last but not least, through the completion of the VCA (vulnerability and capacity assessment) leading to a DRR (disaster risk reduction) plan tailor made for each village in the targeted districts.

#### 1.1.2 Context of VCA

The project since inception has focused on the geographically isolated and fragile uplands (mountainous) areas of Vietnam. Steep topography, intensive agricultural practices and lack of forest cover have all exacerbated the impact of flash flooding and landslides in the region. Additionally, climate change has heightened the area's vulnerability to natural disasters, causing more severe typhoons, tornadoes and, during the dry season, prolonged drought periods. The project sites for CECI's BCRD work are also socioeconomically vulnerable due to predominantly ethnic minority populations, high poverty rates, low literacy rates, food and water insecurity, and lack of a sophisticated public infrastructure to facilitate transportation and communications.

The Vietnamese government has formally recognized the importance and past successes of community-based approaches to disaster risk mitigation. The Central Committee for Flood and Storm Control created, in 2009, "The Implementation Plan for the National Strategy on Natural Disaster Prevention, Mitigation and Response up to 2020". CBDRM practices and strategies, along with education and awareness raising activities, form an integral part of that policy.

#### 1.1.3 Definition and Purpose of VCA

The VCA process, part of the CBDRM approach, is a tool in which local communities and their government representatives collect and analyze data in order to identify the risks and hazards that threaten their community. Vulnerability and capacity are, undoubtedly, two sides of the same coin – communities are asked to map out and delineate their weaknesses alongside their coping strategies and strengths in order to create a responsive action plan, identify community priorities and strategize ways to reduce vulnerability whilst building capacity to mitigate the effects of natural disaster.

The VCA is an important process that generates awareness raising and self-empowerment within the vulnerable communities it serves. The desired outcome of the VCA assessment process is a shared burden of responsibility between government authorities and the residents themselves. This cooperative approach results in improved capacity towards disaster prevention and preparedness as reflected in the DRR (disaster risk reduction) plan.

#### 1.2 DISTRICT PROFILES

#### Geographic

Located in the central highlands region and sharing its borders with Laos and Cambodia, the terrain of Kon Tum province is steep and mountainous. Winter is cold, with the average temperature in the coldest month (January) at 16-17 degrees C. The average temperature in the hottest month (May) is below 25 degrees C. Average annual rainfall is 2400-2800 mm, occurring chiefly during the summer months, with the wintertime susceptible to dry periods and drought. Severe and sudden flash flooding, coupled with seasonal typhoons, occasional landslides, tornadoes, and lightning strikes make the region particularly hazardous. In Kon Ray district the VCA process was undertaken in two communes (Dak Koi and Dak To Lung). The majority of the villages in these communities are located along the Dak Koi River and provincial road 677.

In the Tu Mo Rong district, the VCA process was undertaken in two communes (Dak Koi and Dak To Lung). The majority of the villages in these communities are located along the Dak To Kan and Dak Ro He Rivers and provincial roads 678 and 672 approximately 80km northeast of Kon Tum city.

During the current phase of the BCRD project (phase 3), the communes of Chau Loc, Chau Dinh and Lien Hop in the Quy Hop district were selected. Located in the northwestern area of Nghe An province, this mountainous region has a tropical climate with an average rain level of 1600 mm and an average temperature of 23.3 degrees C. The dry season occurs from November to the end of March. Often prone to typhoons and severe flash flooding during the summer and autumn, drought, landslide, thunderstorm, lightning strikes and tornadoes are also common to the region.

Although only 13 km from the city of Quy Hop, Chau Loc commune is quite isolated due to unpaved roads prone to washouts. Most villagers live along the main road 532 and close to the two streams that flow through the commune. Flooding often renders crossing the streams impossible to cross as the nine bridges throughout the commune are often damaged or submerged during the rainy season. With almost identical terrain, Lien Hop is located 23 km west of Quy Hop city. Chau Dinh, a neighboring commune, is located 2 km southeast of the city. Most of the villages within these communes are inaccessible by car and must be reached by motorbike.

#### Demographic

The population of Kon Ray district (Kon Tum province) is comprised almost exclusively of ethnic minorities. In Dak Koi commune, 97% are Se Dang with a total population of 2,166 living in 10 villages. In the Dak To Lung commune, 94% are So Ra with a total population of 1957 living in 8 villages. In Dak To Kan, Dan Ro Ong, and Van Xuoi Communes (Tu Mo Rong district, Kon Tum Province), the population is predominantly Xe Dang in all three communes (no exact percentage was available for this district). Population figures are as follows: Dak To Kan: 2,753 people in 7 villages, Dan Ro Ong: 2,932 in 9 villages, and Van Xuoi: 934 people in 6 villages.

In Chau Loc commune (Quy Hop district, Nghe An province), 85% of the population is ethnic Thai minority; the other 15% is Tho and Kinh respectively. Chau Loc has a total population of 4,999 people in 9 villages. In neighboring Lien Hop, 99% of the population is Thai; total population is 2,085 distributed across 6 villages. Chau Dinh commune is comprised of 6,265 people in 18 villages, and also features a large ethnic Thai population.







Rainy season, Lien Hop Commune, Nghe An

Evidence of Landslides, Kon Tum Project Site

Chau Loc Commune, Nghe An Province

#### Socio-Economic

In Dak Koi (Kon Ray district, Kon Tum province), 44% of the population is classified poor; 23% of the villagers in Dak To Lung are classified poor. In the Tu Mo Rong district (also Kon Tum province), Dak To Kan commune, 56.6% of the population lived in poverty: in Dan Ro Ong, the percentage is 73.5% while in Van Xuoi the total is 48%, or nearly half the population. Both of these districts feature predominantly ethnic minority populations that are economically disadvantaged. Food and water security are ongoing issues for these communities, and literacy rates are far below national standards. The per capita income is significantly below the national average, with a heavy reliance on subsistence agriculture and forestry, with very few livestock. Additionally, the frequent occurrence of natural disaster tends to obliterate any material gains the communities might obtain in terms of food security and economic wellbeing.

#### **Hazards and Disasters**

In Kon Tum province, Hurricane Ketsana (storm No. 9) in 2009 resulted in a total loss in the Kon Ray district of 26.634 million VND. For the Tu Mo Rong district, the figure is even higher, estimated at 1000 billion VND, or 1/3 of the provincial total. The main hazards in Kon Tum province are flash floods and landslides, while large scale destruction is often caused by typhoons, which analysts predict hit the region approximately every five years. Drought is estimated to occur once every two years.

For three days commencing the 24th of June, 2011, Typhoon Haima, a level 2 category storm, caused much disruption and destruction across the northern and central areas of Vietnam. Yen Bai, Quang Ninh and the Central province of Nghe An were the most severely impacted. The total death toll, as of June 26th, 2011, was 19, including 2 persons killed in a storm-related tornado strike in the city of Hai Phong; 60 others were injured during the strike. The estimated total damage caused by floods in Quy Hop is nearly 32 billion VND (Vietnamese Dong). Province-wide losses in Nghe An total in the hundreds of billions.

This storm severely impacted our project sites in the district of Quy Hop, (Nghe An province). This BCRD project area directly experienced the storm's devastation. The Chau Dinh commune was the most severely hit, requiring a partial evacuation. Two of CECI's small-scale mitigation irrigation projects, one at Lien Hop, the other at Chau Loc, were damaged by the storm. The concrete canal at Chau Loc sustained the most damage, with a 3m section now in need of repair.

It was observed that the BCRD project, in collaboration with local villagers and government authorities, had a demonstrated positive impact on lessening the effects of this particular disaster. A historical chronicle of similar disasters, along with a seasonal natural disaster calendar, was developed as part of the VCA process. Identified hazards in-

clude flash floods, floods, landslides, forest fires, typhoons, drought, severe cold, and environmental pollution, which affects the community year round. Flash floods, floods, drought and severe cold weather were predicted to occur 1-2 times a year, while typhoons were estimated to effect the communities 3 times a year. At highest risk for flooding were the two villages in Lien Hop located in the lowest lying areas. Chau Loc and Chau Dinh communes reported the same hazards with the sole addition of tornadoes.

#### Main Development Priorities Related to Disaster

The Tu Mo Rong district recognized a need to consolidate their flood prevention committee, with more attention paid to reporting procedures, and the implementation of government policy related to natural disaster prevention and relief. The community also sought to enhance EWS, (early warning systems), post hazard signs and survey residents on vulnerabilities. Infrastructure work such as river embankment fortification was prioritized. Reforestation initiatives were recognized as salient to the community, which also sought to streamline construction projects such as road upgrades, and more permanent bridges to replace infrastructure wiped out by hurricane Ketsana. It was determined that some residents living in hazardous areas needed relocation. Better water reservoir management was introduced to reduce downstream flooding, and more educational awareness initiatives were discussed. The district underscored the need for better funding from the central CCFSC and Search and Rescue for training and evacuation, and more productive coordination in general between all levels of government. The Kon Ray district project sites expressed similar concerns, with the addition of identifying a need for a communications protocol between hydrometeorological centers and the local commune authorities.

#### Pre-Existing DRR (Disaster Risk Reduction) Capacities

Both the Kon Ray and Tu Mo Rong districts (Kon Tum province) had already identified the need for a stronger and more effective storm and flood mitigation and prevention committee prior to the BCRD project launch. Additionally, adequate and reliable early warning systems (EWS) to monitor environmental conditions and a system of communication were sorely lacking for both districts. Other concerns included a weak community rescue force due to lack of training and a dearth of rescue equipment. Clearly, more awareness raising, education and training needed to be undertaken, especially with vulnerable populations such as women, children, the elderly, and residents living on or near to the rivers' flood plain. These deficits amplified the community's susceptibility to natural disasters.

For Lien Hop commune (Quy Hop district), the village leader has a unique key role in disaster mitigation, taking on membership in the local Typhoon and Flood Control Board, and assuming responsibility for communicating alerts during times of disaster. This can be challenging, as often the mobile phone system is unreliable and inaccessible, especially during the flood season when communication towers can go down without warning.

In Chau Dinh commune, the state invested in building a loudspeaker system with a base system at the town centre. However, the system fell into disuse and disrepair. Investment in upgrading and repairing the loudspeaker system was identified early on by the community as a priority.

#### 1.3 METHODOLOGY

#### 1.3.1 Training of the VCA Facilitators (ToT)

The Vulnerability and Capacity Assessment was undertaken from October to early December 2010 in Kon Tum and in November 2010 to early January 2011 in Nghe An. To build on existing experience, the BCRD project team used the VCA Manual developed by the Netherlands Red Cross and adapted the tools for use in the local context. The project teams and partners in each area selected from among the tools in this manual and made some adjustments in the tools and approaches in order to adapt it for local usage. Based on these adjustments and the experiences of conducting the VCA, BCRD will produce some brief Guidelines on VCA in Mountain areas that will be complimentary to the NLRC VCA Manual.

In Nghe An, prior to commencement of the VCA in November, 27 local trainers participated in workshops to prepare for the VCA. The workshops were lead by a Master Trainer from Nghe An Red Cross who had participated in the development of the VCA Manual. Two other Provincial Red Cross Trainers and two CECI staff also participated in the training. Trainers were provided with knowledge & skill in (1) VCA evaluation process, (2) VCA tools, (3) Analyze, combine data and (4) report writing on VCA. After participating in the two series of trainings, 24 local staff were trained in VCA skills and disaster risk management and were ready to continue to enhance their skills through VCA implementation. 24 trainers were divided into groups (each group 3-4 trainers): the first group worked with commune staff from different departments to collect information at commune level; other groups conducted field surveys, collected information and carried out assessment in villages. Agreed tools, stationary were also prepared to be ready for the evaluation.

In Kon Tum, 24 local trainers including 5 from the previous phase participated in a combined training on CBDRM and VCA. The VCA training was conducted by CECI's Capacity-building Specialist who had several years' experience in CBDRM and VCA, and one consultant with prior experience in participatory assessments. Of the 24 facilitators trained, 9 acted as lead local trainers for gathering information for the VCA with the others providing support in organizing district and commune meetings, and mobilizing the community members. This method was applied based on experiences from last year where local trainers showed different types of capacities, and it is better to assign tasks according to their skills rather than expecting that all will reach the same capacity level.

VCA and CBDRM planning was undertaken in 33 of the 36 villages covered in the three target communes of BCRD in Nghe An. In Kon Tum, the larger scoped of geographic coverage required a different approach. The VCA covered 40 villages in the 5 target communes of Kon Tum that were assessed to be the most disaster prone through collection of information from the district and commune offices and through planning sessions with commune officials and village leaders.

Local trainers were selected from the women's union, youth union, the Red Cross and government departments related to disaster, such as the Flood and Flood Preparedness Board, the Department of Education and Training, and staff of the commune health care centres. Training included representatives from all three levels of government (provincial, district and communal). Local trainees helped with evaluating and selecting vulnerable areas to focus on. Of particular importance was the mobilization of trainees who spoke the local language to assist in the assessment process. Schoolteachers and educational personnel were highly prized as trainers, as they have advanced educational degrees and experience with knowledge transfer.

#### 1.3.2 Project Coordination (Provincial, District, Commune Level Government and Village Leaders)

In order to ensure the successful implementation of the project, a selected group of stakeholders from each level of government participated in the training and subsequently performed an integral role in the VCA process. Officials whose roles already included disaster preparedness and mitigation were carefully selected. Their participation was important because the VCA process, although community-generated, requires the cooperation and investment of all levels of government in order to be successfully implemented.

After a review of the community's VCA findings, the district and commune governments create a DRR plan. Local government also plays a role in scheduling and undertaking the yearly review of the DRR plan, and uses the findings of the VCA in order to create annual action plans, craft and implement effective disaster-related government policy, draft and draft appropriate budgets. Additionally, the DRR can assist in the prioritization of large scale public works projects such as the relocation of homes and buildings in hazardous areas, the construction of dams, bridges and road, and the creation and maintenance of various EWS (early warning systems).

All Quy Hop district trainers began their VCA evaluation by meeting with the CPC (Commune People's Committee) to discuss implementation and come up with a schedule, thus insuring the support of local government from the beginning. In Chau Loc (also Quy Hop district), particular activities were initiated at the commune and district level to ensure the integration of the VCA findings into local socio-economic development plans.

At the commune level, villages were compared and contrasted in order to take the standardized DRR plans and further tailor them to each village's needs, as village was given its own DRR plan, based on the local commune-level one. Beginning with a presentation of the VCA results to the district, village representatives were selected to review the VCA, local authorities were trained, additional needs were identified and integrated into the plan, and small-scale irrigation sub-projects were selected.

#### 1.4 PROCESS

#### 1.4.1 Implementation and Development of VCA

The VCA process as outlined in the "VCA Manual for Viet Nam Red Cross Practitioners" was inevitably modified in order to make it more viable for the BCRD project sites. No single tool, no matter how effective, can apply to a country as diverse as Vietnam without some adaptation to the local context. The unique needs and socio-geographic conditions of upland areas had to be addressed by the BCRD staff and local trainers; some exercises recommended in the manual were modified and others were discarded in favor of more relevant activities. (These changes are discussed in detail at the end of the report in sections 1.6: Uplands Area Recommendations and 1.7: Theory into Practice: Lessons Learnt in the Field).

In Tu Mo Rong and Kon Ray districts (Kon Tum province), village level VCA activities included dissemination about CBDRM through trainings and meetings using supportive tools such as documentary film and illustrations of natural disasters. This was followed by the VCA assessment proper, during which villagers were divided into groups containing a cross-section of village society. A total of 297 people participated in the process in Tu Mo Rong, with a participant total of 227 in Kon Ray. For both districts, each work group was comprised of 8-15 people. Group 1 created a hazard map to assess dangers and construction works; Group 2 created a Venn diagram illustrating relationships between individuals and community groups in disaster prevention and preparedness activities. Group 3 created a

village history (i.e. statistics on property, food resources, etc.) to evaluate vulnerability and capacity. Finally, Group 4 constructed a crop calendar to assess the vulnerability and capacity of their livelihood. Then the groups reconvened and reviewed and prioritized their findings in order to present to the commune level government authorities.

The same process occurred for project sites in the Quy Hop district (Nghe An province). However, an additional data collection tool set was developed there based on discussion and consultation between CECI staff, trainers, and an outside consultant. This tool set included a focus group questionnaire to be distributed to various community subgroups (i.e. the women's union, the poor, school, hospital, etc.) as well as a secondary data checklist to guide in the collection of socio-economic and census data.

In both provinces at the commune level, the submitted village action plans and VCA findings were carefully reviewed in order to create a viable, coordinated DRR plan. Additionally, capacity building training was offered to commune officers. Sub-projects that required funding, such as the small-scale irrigation projects, were prioritized and budgeted for, and dissemination of information was organized through the appointment of key staff and the creation of a dissemination schedule.

#### 1.4.2 Action Plans

All of the CECI BCRD project sites created an action plan assigning tasks and responsibilities before, during and after a natural disaster. At the commune level, both of the targeted districts in Kon Tum province decided that the District Committee for Flood and Storm Control CFSC comprised of various governmental departments, needed to have more outreach to the community level and assigned villages to each member. These members were responsible to both gather and disseminate information for the Disaster Preparedness Plans. For Lien Hop and Chau Dinh communes (Quy Hop district), it was determined that the Cultural Department should be responsible for knowledge dissemination and awareness raising in the pre-disaster period. The Lien Hop commune also determined that all members of the CFSC should ensure they are available for response during the disaster season, and clarified the committee's reporting duties in the event of disaster (thus outlining the board's duties in the before, during and after periods). An annual simulation exercise for the purpose of professional development was organized in coordination with the District People's Committee, the CFSC and the Military Committee for the month of August.

#### 1.4.3 DRR Plans

In the BCRD project, the results of the VCA process are compiled into a DRR plan at both the village and commune level, laminated and hung in a prominent public location such as the village meeting place or the commune office's meeting room. In some instances, for example in Kon Tum province, only those villages selected for the VCA had their own DRR Plan; other villages in the commune simply relied on the commune DRR plan. The district and provincial levels of government have Disaster Preparedness Plans, which are sent to the local communes. It is important to stipulate that these plans are not based on the CBDRM process, but in undertaking the VCA and community-level planning every effort was made to ensure synergy between the commune and village DRR plans and the standard government DP plan mandated from the province level.

The DRR plan of all the BCRD project sites listed disasters in order of occurrence, accompanied by the resultant vulnerability, and the proposed solutions, and those responsible for carrying out the plan. The plans are very similar, with slight variations according to each commune's needs; for example, in Lien Hop commune, it was revealed that

that the entire Quan village needed to be relocated due to chronic flooding and a poisoned water supply caused by illegal mining activity.

Ultimately, the DRR plan functions as a simple, clear guide not only informing communities what they need to do in case of a disaster, but also contains the concrete steps that can be taken on a day-to-day basis to lessen the effects of future disasters. Perhaps the greatest indicator of the success of the BCRD project is to be found on the DRR plan for Lien Hop, which revealed a passive, laissez-faire attitudes towards natural disasters. The antidote? Awareness-raising of the importance of timely evacuation and preparation. The planned awareness-raising campaigns included activities to influence attitudes and perceptions and, promote the message that community empowerment through knowledge and capacity building is an essential part of disaster risk reduction.

In Nghe An province, the DRR plans were organized according to type of disaster, whilst the Kon Tum DRR plans organized and prioritized their DRR plan according to activity. Each approach contained the same information, but were simply organized differently. For the sake of reporting and data collection and analysis, this reporter recommends that the DRR plan become standardized across project sites. The development of a template would facilitate this process. However, it is important to note that the structure chosen for the DRR plan has little or no impact on its effectiveness. It is much more crucial to have a DRR plan that works in that locality and is meaningful and relevant to its community.

## PROJECT ANALYSIS

#### 2.1 RECOMMENDATIONS AND LESSONS LEARNT FOR VCA IN UPLAND AREAS

The following recommendations are lessons learnt in BCRD and should be taken into consideration by other INGOs, NGOs, and government bodies seeking to undertake the VCA process in the geographically and culturally unique upland areas of Vietnam.

#### 2.1.1 ANTICIPATE AND PLAN FOR THE USE OF MINORITY LANGUAGES

CCFSC (Central Committee for Floods and Storm Control) members, department of Hydrometerology staff, INGOs and VCA facilitators have all remarked on the difficulties faced in undertaking the VCA in areas with predominantly minority populations (*Question and answer session, "Community Based Disaster Risk Management" presentation at the Disaster Prevention Engineering Workshop, Danang, July 2011*). These vulnerable communities need special consideration and additional supports in order to maximize the effectiveness of the VCA process. A necessary guideline providing invaluable support, the VCA, like all tools, must be flexible and adapted when necessary for diverse audiences and contexts. The following recommendations are made in light of these special needs:

Accommodate the Language Gap Between VCA Facilitators and Villagers

Ideally, the VCA facilitator should come from the local community, and therefore naturally reflect the ethnicity and language of those for whom the VCA process is intended (*BCRDM Lessons Learnt*, *p. 19*). However, sometimes the VCA facilitators are local commune government officials, schoolteachers or other community members who come from the Kinh ethnic majority population, and as such, may have only basic understandings of the local languages. CECI recommends that any governmental body or NGO seeking to undertake a VCA process in uplands areas employ someone who speaks the language of the people to act as an assistant, providing translation services, in situations where the VCA facilitator is from outside the community. But the role of this local VCA assistant facilitator should go beyond translation; as a community representative, he or she can help put the villagers at ease and encourage more community participation.

#### Further Expand Use of Experiential Learning

Experiential ("learning by doing") exercises are an integral part of the VCA process. As the BCRD project learned, these non-literary approaches are even more significant in mountainous areas. Hosting feasts, sharing songs, orchestrating dramatic skits, and conducting quiz competitions on disaster awareness for small prizes were much appreciated by the communities we work in and made the VCA process more enjoyable. Because uplands areas communities are very poor, providing ample food and water was appreciated, as was the payment of a small per diem at the Nghe An province project sites. This provided an additional incentive for farmers to take time out from their work to participate (BCRDM Lessons Learnt, p. 20).



VCA Process, Kon Tum Project Site



 $VCA\ Meeting,\ Women's\ Union,\ Nghe\ An$ 



 $Dept.\ of\ Hydrometeorology\ Official,\ Kon\ Tum$ 

#### Further Expand Use of Visual and Oral Communication Tools

Audiovisual tools are extremely helpful in upland areas given the language barriers present. VCA facilitators found using laminated flip charts very effective at communicating information about disaster preparedness; such tools helped compensate for a lack of literacy and/or differences of language.

#### Consider Using Media to Heighten Impact

Media has proven to been very effective in our Kon Tum project area, where field staff members showed villagers video footage of a storm's impact in the region. Such depictions of hazards help remind villagers of the importance of having a DRR plan at the village level. Multimedia material can spark discussion and debate, and rural residents often enjoy the novelty of television, as many have little or no access to TV or DVDs. In a few uplands communities, however, electricity is unavailable or unreliable. For these communities, it is necessary to plan ahead and bring a

portable battery or generator or arrange to borrow one from local community members. It is also important to bear in mind that the transportation of fragile, expensive electronic equipment such as laptop computers and LCD projectors can be risky during the flood season, as sometimes facilitators are forced to wade through flooded river crossings or travel by motorbike during extremely heavy rainfall to reach their destination.

#### 2.1.2 ANTICIPATE DIFFICULTY IN IMPLEMENTING MAPPING ACTIVITIES

#### Create Site-Specific Hazard Signboards

For many mountainous communities, hazard maps have limited use. While the local commune authority might find them extremely helpful to post maps in the commune office identifying hazardous areas, safe places and evacuation routes, they are not much use to the farmers working out in the rice paddies or in the mountains. Digital maps proved problematic in some communities, as villagers had difficulty reading the maps and relating them to their own experience of their geographical environment. Digital maps were also time consuming to create and update (BCRDM Lessons Learnt, pp. 35-7). For these communities, self-created, hand-drawn hazard maps were more beneficial and meaningful (BCRDM Lessons Learnt, p. 33).

CECI also discovered that in addition to mapping exercises, posting easily understood signboards in areas prone to flash flooding, landslides or mudslides helped community members readily identify these areas as hazardous (BCRDM Lessons Learnt, p. 27). These signs are an effective way to communicate risk to the community. The site-specific signboards are very important; some signboards created by BCRD also feature a needle gauge that can be raised or lowered depending on the flooding risk for a village or commune, and so also become part of the community's EWS (early warning system) (VCA Manual, Part II, pp.38-41).

#### Transect Walk Exercise for Uplands Areas

The transect walk exercise, as described in the VCA Manual, was especially challenging for field staff to implement in collaboration with the local trainers. Nonetheless, transect walks are still an extremely effective means of gathering information especially in uplands areas.

The Red Cross manual observes that:

"[in] uplands areas a transect walk can be a challenge because of long walking distances and difficult terrain. However, in this area, the transect walk can help the facilitator to have a better understanding of the location. It is suggested to take into account local ways to describe distance, measurements, and dangers, as the community may have a different interpretation. For example, a three hours walk from the commune centre to their hamlet may be close for them." (VCA Manual, Part II, p. 43).

This observation is congruent with our experiences in mountainous areas. CECI further recommends that the villagers themselves determine the geographic boundaries of their own community. This is of special importance as often outlying areas might be considered part of the village proper. Rice paddies and crop fields, and food storage can be

located quite a distance from the cluster of homes where community members reside. Therefore, the villagers themselves should identify and draw the important routes that might benefit from a transect walk.

#### 2.3.1 PLAN FOR THE IMPACT OF MICROCLIMATES IN UPLAND AREAS

#### Recognize the Role Each Village Plays in Planning for EWS

The VCA gathers information that is important for planning Early Warning Systems as part of the resulting DRR planning. Climates in uplands areas can vary greatly from one village or hamlet to the next. For example, a village in a low-lying valley may be completely flooded during a typhoon, while a neighbouring village in the same commune might escape completely unscathed. Similarly, heavy precipitation can occur in one village area, while others nearby experience little or no rainfall. In light of this, the information on hazards and weather conditions to used for planning EWS and DRR activities must be documented at the micro level, and consider very localized hydro-meteorological conditions. For example, following an series of VCAs conducted in different phases, the EWS developed by CECI in Kon Tum province places the burden of weather monitoring and notification on multiple stakeholders, including the villagers themselves. While the Department of Hydrometeorology in the provincial capital monitors weather conditions at all times, the large variations in climate from one hamlet to the next means that the villagers themselves must share the burden of responsibility with governmental authorities. At the Nghe An province project sites, work is currently underway to identify key persons and schedule consistent monitoring of the EWS devices.

#### 2.4.1 LINK SCIENTIFIC KNOWLEDGE WITH LOCAL INDIGENOUS KNOWLEDGE

#### Honour and Work with Traditional Means of Handling Disasters

The VCA must gather information on indigenous knowledge to incorporate into DRR planning. All societies and cultures throughout all time periods have attempted to forecast the weather with the intent of reducing the impact of natural disaster. Traditional societies have thousands of years of observational experience in recognizing the early warning signs that may lead to disaster. Farmers in particular are aware of weather, given the importance of climate to their livelihood. The challenge is in determining which indigenous forms of knowledge are empirically valid, and then linking these practices to current scientific discourses such as climate change (JANI: 2009 Survey on Indigenous Knowledge, p.2).

#### Respect Indigenous Understandings of Climate Change

Regarding climate change in mountainous regions, the VCA manual advises:

"Specifically link climate change with discussion topics on daily life, livelihoods, health in focus group discussion (i.e. women's group, elderly group). Questions can be related to the trends/changes of climate, how these possibly affects community life, how local people adapt to these changes to sustain their livelihood and improve health, etc." (VCA Manual, Part I, p. 37).

This strategy, which links this scientific concept to the community's own observations of climate change over time is extremely helpful. Ideally, this discussion can go deeper, with the goal of uncovering more culturally anchored means of understanding why disasters occur. One area worth exploring is the moral and ethical dimension of natural disaster. For example, some communities may view a catastrophic flood as a form of punishment from God for sinful transgressions. Others might view the same catastrophe as the result of collective negative karma, or even perhaps caused by wrathful spirits or neglected ancestors. Alternatively, these communities may be so focused on day-to-day survival that such philosophizing never occurs, perhaps regarded as an unnecessary luxury.

Regardless of what these viewpoints might be, the best DRR plan will mirror the cultural beliefs and practices of its community. It is worthwhile to also explore the ways in which these spiritual or philosophical beliefs may help or hinder evacuation and DRR work. For example, in Christian communities, a belief in a punishing God might cause individuals to think that there is a limit to what they can do to prevent or prepare for disasters. On the other hand, by praying to an intercessory saint, community members may find additional strength and hope in the face of a calamity – an additional capacity. Therefore, understanding traditional beliefs can be of assistance in identifying the role these belief systems play in creating or hindering psychological resilience.

#### **Understand and Work with Traditional Evacuation Systems**

Clearly, any outside intervention, including the VCA, must also respect and work with culturally specific views and practices that may seem to outsiders unscientific and irrational. For example, the Xo Dang people in Kon Tum province determine their safe place for evacuation through divination. The village leader will perform a complex hand clapping sequence in order to select the correct location with the help of the spirits. Once the appropriate site is selected by divination, appropriate animal sacrifices and rituals are performed to sacralize the selected location. Understandably, the Se Dang are reluctant to change their evacuation site. It can be difficult for cultural outsiders, who might conclude logically that another site is more appropriate, to understand and accept the validity of this process. It is important that outside agencies work hard at finding ways to appreciate, understand and value these practices, and incorporate them when necessary into the final DRR plan.

Another illustrative experience concerns an evacuation and medical emergency simulation drill that occurred at the Dak Ta Lung commune in Kon Tum. A young boy participated in the drill, portraying a victim injured during a land-slide incident and in need of medical attention. Although his mother agreed to his participation, after the drill, she suffered intense fears that such activity might tempt fate and attract future bad luck. Therefore, she requested an animal sacrifice to propitiate the spirits. Her request was honoured; a pig was sacrificed, paid for by the local commune office with additional support provided by CECI.

#### Assert that Indigenous Knowledge is Worth Preserving

The VCA process stresses the importance of local cultural traditions. For example, in discussing the mapping exercise:

"The maps should point out the residences of the ethnic groups, linking with certain customs and livelihoods." (VCA Manual, Part II, p. 41).

Cultural specificities and indigenous knowledge surrounding disaster should be regarded as part of a community's cultural heritage and therefore be respected. Many traditional minority cultures worldwide are under threat due to rapid modernization. Groups seeking to undertake VCA work within rural communities may wish to investigate the work done by JANI (Joint Advocacy Initiative Network), specifically its "Survey on Indigenous Knowledge on Disaster Prevention and Adaptation to Climate Change" report (DWF October 2009).

As an example in Canada First Nations cultural practices are integrated into the social service framework. During many social service conferences, meetings and training sessions concerning the First Nations communities, elders are invited to inaugurate the event by offering prayers, blessings and performing traditional ceremonies. Similar activities could occur to launch the VCA in localities where such traditions are important. This step would assist in building ownership of the VCA and ensure an acknowledgement and integration of traditional beliefs into the resulting DRR plans.

Using the the JANI project as a template, the VCA facilitators can create a one-page fillable form whereby VCA participants can collect data on indigenous knowledge and cultural practices surrounding weather prediction and early warning systems, evacuation practices, and other facets that might call on traditional knowledge. It is particularly crucial that the VCA facilitator comprehend these indigenous concepts of resilience and capacity building in order to maximize the relevance and success of the VCA process. These cultural findings should also, of course, factor into the final DRR plan.

#### 2.5.1 KEEP THE FOCUS ON LOW TECH SOLUTIONS FOR VCA DELIVERY AND IMPLEMENTATION

#### Use Low Tech Presentation Tools For Knowledge Dissemination

Although media can be very effective in education and training, there is a serious lack of technology at the village level. Consequently, it is important to keep the focus on low tech delivery and storage solutions. Digital hazard mapping software, CD ROMs, DVDs, PowerPoint presentations, websites, and even email communication may be beyond the capacity of the uplands community the VCA facilitator is assigned to (*BCRDM Lesson Learnt*, *p. 38*). For maximum accessibility, the VCA process in uplands areas should be paper-based.

The BCRD project has had great success with educational flip charts printed on waterproof plastic material. These dissemination tools are durable and easy for the trainers to transport, use and store. Other programs such as the Red Cross could consider developing some of its materials in a similar format (i.e. poster size) for local trainers in mountain areas. We also recommend that the final products created in the VCA process, either by handwriting or drawing onto poster paper, be laminated in order to preserve the workshop materials. Posting this material can serve as a reminder to community members and also instill pride in their labours.

#### Laminate and Post the DRR Plan and Hazard Maps in Prominent Places

We recommend that the final village and commune DRR plans, along with the accompanying hazard maps, be printed on plastic or laminated to increase their durability. We also highly recommend that they be posted in a prominent location in each village, as well as in the local commune office.

# RECOMMENDATIONS FOR THE VCA IN UPLANDS AREAS

Based on these experiences, the report will first make general recommendations on how the VCA manual can be improved as a whole based on our experiences in the field. These recommendations concern identifying the target audience and tailoring the manual for this population in order to expand the manuals' usefulness. For example, in upland areas an interactive, educational, hands on approach, giving concrete examples through stories is necessary to bring meaning to the population participating in the process. In such an approach the VCA Facilitator must learn from participant reactions and adjust materials and exercises 'on the spot' or revise with each session. Our goal is to share some of these experiences of adapting and adjusting the VCA Manual content as a complementary resource for CBDRM practitioners working in Vietnam's upland areas. We also recommend some small but potentially effective changes to the VCA Manual itself for consideration in later versions.



Village elder, Nghe An Project Site



Rainy Season, Kon Tum Project Site



Community Residents, Kon Tum Project Site

#### 3.1 IDENTIFY THE TARGET AUDIENCE AND TAILOR THE MANUAL ACCORDINGLY

The VCA Manual is a comprehensive document tailored for Viet Nam Red Cross workers. It presupposes a certain degree of familiarity with DRR (Disaster Risk Reduction) concepts. It is also written at a level that requires at least a post-secondary education for comprehension. The RC is developing a pool of VCA Facilitators with the necessary background and training to prepare more local facilitators but it will take time to have sufficient skill levels across the country to reach out to all communities. In our experience, the VCA is fundamentally a community-based approach to disaster risk reduction and requires that local people not only master the process but can adapt it to their context. In upland areas, the bulk of individuals who implement the VCA process in remote target villages are district and commune level trainers who, at most, have a high school diploma. As it stands now, the manual is extremely useful to high-level DRR project staff, such as NGO field officers, who have at least some post-secondary education, and government authorities, who are at least high school graduates. However, these staff members find it necessary to relay much of the manual's content into a simpler format to the local trainers who have generally attained lower levels of education. In light of this, it may advisable to expand and revise the current VCA manual to make it more readily accessible at the local level, or to alternatively develop a second workbook tailored for the average commune-

based trainer. This is an especially salient issue as the Red Cross advises that the VCA vca must be carried out by one of their fully trained facilitators. However, there are only 100 such experts in all of Vietnam; none are located in Kon Tum province, and only one in Nghe An. Therefore, in order for the VCA process to occur widely, it is necessary the responsible government officials, Red Cross and INGOs to consider what supplemental tools are needed to disseminate the VCA process widely at the lowest level and by means that reflect the realities of different parts of Vietnam.

#### 3.1.1 Target Local Commune Level Staff and Village Trainers

In identifying the target audience for the VCA intervention, it is helpful to keep in mind that it is personnel at the commune and village level, rather than those at the district or provincial level, who have a vested interest in the VCA process. After all, their own families, relatives and friends are the ones who directly benefit from a successful VCA. Furthermore, local commune level authorities play an extensive and direct role in project implementation. The final DRR plan is in fact the responsibility of the local commune authorities, not the village-based trainers. Local commune officials also often work for various DRR projects as trainers, VCA facilitators, educators, etc. in addition to their salaried governmental position. Ultimately, the success of the VCA process rests in their hands. Therefore it would be most advisable to focus the manual on this audience, in concert with the VCA facilitators/local trainers (ToT participants).

#### 3.1.2 Use Inclusive Language

The simplest way to achieve this goal is through more inclusive language. The manual is aimed at VCA facilitators and VNRC personnel. Throughout the manual, the term "VCA facilitator" is used to refer to the person conducting the VCA. This of course is very accurate, but sometimes the local level trainers have difficulty identifying as the VCA facilitator. We suggest making the target audience very clear from the start by emphasizing in the introductory paragraph to the manual all those individuals who might find the book helpful. We also suggest including more specific commune and village-level case studies. This would illuminate the VCA process from a different perspective than that of a VNRC worker.

# 3.2 EMPHASIZE THE IMPORTANCE OF EQUAL PARTICIPATION BETWEEN MEN AND WOMEN IN THE VCA PROCESS

There are serious structural impairments that get in the way of women fully participating in the VCA process as equal cohorts to men. These include government structures, in which it is rare for a woman to hold office, to traditional ethnocultural structures within minority groups whereby the roles of men and women are highly proscribed. The VCA manual is very gender inclusive and is careful to mention the special concerns and needs of women. However, our experience is that implementing equality between men and women in the field has been difficult, as has been the inclusion and participation of vulnerable people. Although CECI's mandate aims for 50% participation by women in all projects, we have come close, but have not met that goal in our ToT activities. Perhaps additional thought and effort must be put into the recruitment of men and women to participate in the VCA process. In light of this shared goal of gender inclusivity, we would like to make a few recommendations based on our fieldwork on how to expand and enhance the participation of women in disaster risk reduction work.

#### 3.2.1 Include Topics and Stories that Highlight Women's Roles

The use of female case studies, including interviews with female VCA facilitators and local trainers may assist in the effort to engage more female VCA facilitators. For example, it has been the experience of CECI BCRD staff that the majority of first aid training participants are women. The first aid courses are also, by and large, taught by female elementary teachers from the local village or hamlet (*BCDRM Lessons learnt*, *p. 23*). Therefore, we recommend that the VCA training process draw on photos or pictures of women administering first aid as a way to demonstrate women's contributions to DRR. Such examples could eventually be incorporated into a later version of the Manual to depict VCA as a woman friendly process.

## 3.3 COMBINE PART C THE VCA MANUAL AND THE TRAINING MATERIALS FOUND ON THE CD INTO A PRINTED EDUCATIONAL WORKBOOK

Because the VCA is an action-oriented process that is focused on concrete outcomes, it is essential to employ highly practical language and tools. We recommend the VNRC consider putting special effort into developing Part C: Practical Guide for Conducting a VCA" into a detailed workbook that includes some of the materials found on the CD. This printed document would present the VCA process broken down into small steps would increase the effectiveness and relevance of the VCA manual beyond a simple reference tool, particularly for the local trainers. By adding more illustrations and diagrams, forms, chapter reviews, and discussion points, the VCA manual would become easier to use, particularly for the local trainers. The following suggestions are made with the intent of increasing the hands on, interactive, "how to" approach that is already present in the manual.



Women, Chau Loc Commune, Nghe An



VCA Data Collection Process, Nghe An



VCA Community Meeting, Kon Tum

#### 3.3.1 Expand the Use of Visual Communication and Learning Tools

The manual currently stresses the importance of participatory community-based approaches to the assessment process; indeed, this is one of the manual's greatest strengths. The manual also highlights the importance of using visual communication tools as a means of knowledge dissemination and gathering. Allowing participants to express themselves through tactile experiences such as drawing is particularly helpful for community members who are not literate. This visual approach to communication is congruent with lessons learnt in CECI's BCRD project implementation in uplands areas (*BCDRM Lessons Learnt*, *p. 17-19*). The current VCA book includes many helpful diagrams and photographs. Perhaps this approach could be expanded upon, adding more illustrations and diagrams to support and explain VCA concepts depicting images from different parts of the country. One example where an illustration

would be particularly helpful, in our view, is in clarifying the problem tree exercise, one of the VCA's analysis and development tools (VCA Manual, Part II, pp. 51-2). Adding a tree illustration better explains the tree metaphor to the manual's readers.

#### 3.3.2 Increase the Use of Experiential Learning Exercises

The present manual does recognize the importance of experiential forms of learning during the VCA assessment process, and suggests that VCA facilitators should engage in these activities. "Learning by doing" is an excellent creative approach that has been found to be successful by various technical experts in CBDRM. Interactive dialogues and debates, group work, evacuation drills and disaster simulations, dramatic skits and even song and dance can increase knowledge retention in participants, strengthen community and make the learning process dynamic and enjoyable (Garcia, Lolita Caparas, JICA Project Expert Team, "Community Based Disaster Risk Management" presentation at the Disaster Prevention Engineering Workshop, Danang, July 2011). Therefore, it may be useful for the VNRC to consider increasing the use of experiential exercises when engaged in training VCA facilitators, perhaps directly incorporating a few of these activities into the VCA workbook. We also recommend interviewing trainers and incorporating one or more examples of how they used experiential learning (i.e. evacuation drill, village-wide feast) as a case study.

#### 3.3.3 Add Fillable Forms to accompany the Tables

Much of the data collected by the VCA facilitators is formulated into tables (i.e. the action plan). Some examples currently in the manual include a seasonal calendar. In our experience, the VCA facilitator must create and fill in forms to compile information gathered from the village community before completing the tables. Adding these forms as additional tools would ease the preparation time for Facilitators and give a clearer picture of the information to be documented.

#### 3.3.4 Expand on the Transect Walk Exercise

The current explanation on the transect walk exercise was difficult for our village-based trainers to understand (*VCA Manual, Part II, p.41-43*). In our implementation, we communicated that the transect walk is simply a walk through the village during which the participant(s) observe(s) everything passed by, noting it down on a sheet of paper. This information is then used to create a map – essentially a cross-section diagram of the community environs. The community is requested by the facilitator to draw in the hazardous areas and the safe places on this diagram.

This exercise can be a catalyst for discussions amongst the villagers. Questions raised can include "Where are the dangerous places?" "Where are our safe places?" "How do we get to the safe places?" "Are they easily accessible?" "Are there any barriers to prevent us from reaching these places?"

#### 3.3.5 Expand on Venn Diagram Exercise

A Venn diagram is a diagram that uses overlapping circles to visually represent the commonalities amongst sets of information – in other words, it depicts the shared relationship between things. Because the VCA facilitator lacks

experience with Venn diagram mapping, they need some concrete examples of simple Venn diagrams, along with a step-by-step how to exercise (VCA Manual, Part II, p. 49).

#### 3.3.6 Expand on Problem Tree Example by Adding a Solution Tree

Problem trees are very effective learning tools and assist in the analysis of not only problems, but also solutions. The other side of a problem is its solution. Expanding this exercise to include mapping out possible solutions to endemic problems, assists in empowering the community to formulate doable, concrete activities to address the problems exacerbating their vulnerability. This balances out the negativity of the problem with the positivity of a solution.

Additionally, the current problem tree as explained in the manual mentions the tree's roots and trunk but does not continue on to discuss the branches or leaves. It would be helpful to fully elaborate upon it in the example presented, and also incorporate an actual illustration of a tree in order to fully map out the metaphor (*VCA Manual, Part II, pp. 51-2*).

#### 3.3.7 Incorporate Self-Assessment Tools Into the Guide

We also recommend brief quizzes and some open-ended discussion questions at the end of each section to test the facilitator's understanding of the material presented. While the training materials present on the CD include a section for the participants to self-reflect on their learning, a more comprehensive exam at the end of the manual, with an answer key provided, may be a useful self-assessment tool. In our experience, knowledge retention was improved through small informal competitions involving quizzes and prizes. Interactive approaches help learners by increasing their engagement with the materials. These approaches can also be fun; a quiz offered during the training seminar in which the contestants are organized into teams, for example, encourages social engagement and collaboration.

#### 3.3.8 Stress the Importance of Reiteration or Repetition in Learning

In our experience, for uplands areas, CBDRM approaches present a dramatically different way of preparing for and managing disasters. Lasting change happens in small increments, gradually over time. Communities often find the process very challenging and need a tremendous amount of encouragement and support to successfully complete the VCA process. First, it is necessary to raise awareness of the importance of CBDRM through participatory grassroots activities, and education.

Secondly, this new found knowledge must be put into action. Changing habitual behaviours takes considerable time and requires much patience. Reiteration is required in order to instill long lasting changes in perception leading to new behaviours. Repeated community meetings and assemblies helped the VCA process, along with the full-time support provided by CECI field staff (*BCRDM Lessons Learnt*, *p.20*). Periodic check-ins to insure that the project is on target, and providing the VCA facilitator and village trainer with a contact person who they can turn to if they require additional assistance helps insure project completion and success.

Messages need to be repeated to "ensure that key messages and training techniques" are not forgotten:

"In Kon Tum province, after having suffered the consequences of Typhoon Ketsana (Storm no. 9, 2009), the key awareness-raising technique that was of most value was the simulation drill, which occurs at regular intervals in the community." (BCRDM Lessons Learnt, p.20).

Many of these concepts are new to the communities involved. Any long-term, successful DRR plan will have to take into consideration the difficulty involved in changing habitual behaviour patterns. The only way to successfully implement such shifts in behaviour is through awareness followed by sufficient social support. Giving local facilitators the opportunity to revisit, relearn and revise their understandings of VCA will ensure more effective interactions with the community. It also trains them in how to adjust their approach to ensure understanding at the village level.

#### 3.4 INCREASE MENTORING, INTERNING AND COLLABORATIVE ACTIVITIES

As an elaboration of this "learning by doing " approach, we recommend that the VCA ToT (Training of the Trainers) workshop be extended by offering additional mentoring, interning and collaborative experiences to the participants as they undertake the process. We found that this step greatly increases the confidence level of the trainers, build capacity and ultimately ensure a higher quality end product. One recommendation from field staff has been to expand the VCA training from this current model to a full five days, with the final two days focused on offering additional mentoring, interning and collaborative experiences to the trainees. CECI has found that undertaking practicums where trainees jointly undertake the VCA process in a few villages and then debrief will greatly increase the confidence level of the trainers, build capacity and ultimately ensure a higher quality end product.

#### 3.4.1 End the Training Workshop with Some Practical Field Experience

After completing the VCA training, some practical field experience would be of benefit to the participants. BCRD had VCA workshop delegates subdivide into groups and travel to a nearby village in order to conduct the VCA assessment in a nearby village, preferably under the guidance of a mentor who has had previous experience. This serves to completes the process in one village and at the same time increase the facilitators' skills.

#### 3.4.2 Pair up Trainers to Jointly Conduct VCAs in Multiple Locations

After completing the VCA training, the final day should be devoted to practical field experience. VCA workshop delegates can subdivide into groups and travel to a nearby village in order to conduct a model VCA assessment, preferably under the guidance of a experienced mentor. This will consolidate the newly trained facilitator's skills, in addition to providing a village with a VCA assessment.

#### 3.5 EXPAND THE USE OF DRR (DISASTER RISK REDUCTION) CASE STUDIES

#### 3.5.1 Interview Trainers About Their Experiences with VCA

The manual currently includes photographic examples of hazard maps and other examples created in the field by various trainers in collaboration with their community. It would be helpful to expand upon this source of information

by including some case studies in each section. These case studies would illustrate hurdles and creative solutions to real world problems encountered by VCA facilitators in past projects. For example, a village trainer who has constructed a hazard map with the help of his community could be interviewed and quoted. He or she could talk about the process from his perspective and maybe offer some hints and suggestions. The trainer could also perhaps share some of the problems encountered in the particular activity, and the ways in which he or she overcame such difficulties. An illustrative image of the trainer and the map could be reproduced in the book to accompany the case study. Alternatively, a training video could be created containing such supplementary materials in the interest of keeping the manual brief, pithy and to the point.

#### 3.5.2 Incorporate Motivational Strategies for the Trainers

The manual already outlines in effective ways the importance of disaster risk reduction. We used images with simple text on laminated flip charts to engage villagers and demonstrate why they should care about the VCA process. These flip charts depict images that reflect the ethnicity and surroundings of the participants. Preparing such accompanying material show village participants how they can survive a disaster through proper preparation and planning, and mitigate losses (survive from a disaster, protect themselves and their loved ones, and save their homes, livestock and possessions). It prompts them to reflect on the situation they face in order to better contribute to the VCA discussions.

#### 3.5.3 Provide Examples of Successful Disaster Mitigation From Real Life

Including concrete examples of successful disaster mitigation in Vietnam serves to inspire those receiving the VCA training to take the process very seriously and also prove, beyond a doubt, the effectiveness of such training. For example, there was a marked reduction in loss of life and property in Kon Tum province during Hurricane Ketsana, which was attributed in large part to the BCRD work sponsored by CECI. The disaster simulation drills and EWS (early warning systems) alerting the community when to evacuate were viewed by the community as responsible for the lessened impact of the storm (*BCRDM Lessons Learnt, p.20*). This example then becomes a case study to share with other communes and villages in the area who also experienced the storm. Clipping news stories or sharing examples from other parts of the country can provide real life examples that assist participants in thinking through strategies relevant to their areas.

In conclusion, inspiring stories told from a first person perspective can serve to better motivate the VCA facilitators to perform to their utmost capacity. This may be best situated in a video supplement to the training manual.

#### 3.6 THE VCA AND THE DRR (DISASTER RISK REDUCTION) PLAN

#### 3.6.1 Emphasize That the VCA Process Ends with a DRR Plan

The BCRD project observed during recent community assessment interviews that although local communes, and the villages that comprised them, would go through and complete the VCA process, some had difficulty creating the final DRR plan. Although it is already stated in the manual, we believe that some additional elaboration is needed. The manual should state more clearly that the VCA process ends only with a finished product – the DRR plan. In the

Nghe An province intervention, staff observed that most of the local communes completed part of the plan, as well as the sub-projects list concerning irrigation, but did not complete the DRR plan itself. It would be helpful to reproduce in the manual an example of a village level DRR plans to concretize this final step in the VCA process.

#### 3.6.2 Mention that the DRR Plan must be Reviewed at the Commune Level Every Year

Vietnam is at present experiencing rapid development resulting in radical changes to its infrastructure. New bridges are being built, roads are raised, and new irrigation systems, dams and reservoirs are under construction. In addition, populations ebb and flow, climate change impacts become worsened, and assets can increase or decrease within a set time period (*Garcia, Lolita Caparas, JICA Project Expert Team, "Community Based Disaster Risk Management"* presentation at the Disaster Prevention Engineering Workshop, Danang, July 2011).

#### 3.6.3 Recognize the Local Commune Government's Responsibility for DRR

Although the VCA is facilitated by various persons (i.e. Red Cross Personnel, local trainers, local government representatives, etc.) ultimately it is the local commune authorities who create, finalize and implement the DRR plan based on recommendations provided by the VCA. It may be helpful for the VCA manual to address this by keeping the importance of local levels of government in mind when determining the manual's target audience.

#### 3.7 CONSOLIDATE AND STANDARDIZE SECONDARY DATA COLLECTION

In order for the VCA process to be evidence-based and therefore effective, certain statistical and factual information about the locality must be compiled, reviewed and analyzed. This includes demographic, historical, socio-economic, public works and environmental data, mostly gathered from the commune level. The current VCA Manual already provides detailed information regarding what secondary data is necessary for the VCA process (*VCA Manual, Part II, pp. 62-3*). The following recommendations are designed to strengthen and standardize the secondary data collection process component of the VCA.

#### 3.7.1 Determine What Purpose Secondary Data Will Serve

Our experience in preparing VCA facilitators has shown that instructions on secondary data collection need to make a clear linkage between the type of information to gather and what purpose it serves. Gathering the data can be time intensive in remote areas, require travel to different localities, and involve manual tabulations of commune or village records. As time may be an issue, it is also important to verify what information is more readily available and what takes time to gather in order to estimate the level of effort. This review can involve Facilitators in prioritizing what is essential information and what may be a lesser priority or harder to obtain. As a result they have a clearer picture of the feasibility of this task and more commitment to completeness and accuracy.

#### 3.7.2 Recognize that Uniform Data Collection Results in Uniform DRR Plans

Uniform data collection could potentially result in more uniform DRR plans from one village and/or commune to the next. This is important in order to ensure all citizens are equally protected from natural disaster and would also help identify any discrepancies or gaps in service from one village/commune to the next.

#### 3.7.3 Create a Secondary Data Form and Checklist Sheet

The secondary data form should be simple table. Include an example of a completed secondary data form from a village or commune to clearly illustrate what information needs to be collected and how to fill in the form.

The checklist to accompany the form will help the VCA facilitator identify where information can be obtained. For example, state on the checklist that census data is needed, and that the data will come from the Minister of Labour, War Invalids and Social Affairs, at the district commune level.

#### 3.7.4 Alternatively, Provide These Documents to the VCA Facilitators Directly

More effective than creating a checklist is to provide the local trainers with these documents during the VCA training process. This saves time and money in terms of personnel hours, and would provide additional support for the VCA trainers, who may find the task of data collection a challenge.

#### 3.7.5 Highlight the importance of budgeting VCAs and planning

The VCA process requires resources for training materials, transportation, local trainer and participant costs. We recommend that some guidance be given to the VCA Facilitators (specifically the government staff members who receive VCA training) in budgeting and logistics associated with undertaking the VCA process in different localities to ensure that sufficient resources are available to reach even the most remote areas.

#### 3.8 RECOGNIZE THAT THE VCA PROCESS IS FUNDAMENTALLY VILLAGE-BASED

#### 3.8.1 Sub-Divide the VCA Process Along Village Lines

The VCA is a village-centered, micro level activity and should therefore be organized accordingly. When subdividing the commune into smaller groups, we recommend that the VCA facilitator avoid combining two or more villages into a unit for the VCA. In rural Vietnam, villages are quite independent of each other, and the distances between one village to the next serves to reinforce this autonomy. Often, rural residents of one village are not acquainted with the individuals who live in the neighbouring villages, and visit the other villages rarely. As a result, they do not know much about their neighbours and may find it difficult to provide accurate or helpful input towards the VCA process of another village. In our experience, the DRR plan must ultimately be custom made for each and every village. We therefore recommend that the VCA process begin and end with a village focus.

The subdivision of the VCA into four or five areas per commune is somewhat arbitrary; for districts with more than five villages, this means that one or more villages will be lumped in with another. Each village should, ideally, be treated as its own entity. The reasons for this are manifold: first, each village will have its own evacuation route;

similarly, hazard areas and safe places are also village-specific. Demographics, vulnerabilities and capacities, even culture and ethnicity can vary greatly from one village to the next, especially in upland areas. Although combining villages for the sake of expediency is helpful, particularly under time and budget constraints, we recommend that this be avoided whenever possible in order to provide maximum accuracy and effectiveness in the VCA process.

### **CONCLUSION**

Uplands areas must be given special consideration, and present additional challenges to the VCA process. CECI proposes that the VCA manual should include case studies and examples from across Vietnam in order to illustrate VCA success stories. We also recommend that additional supports and plans be implemented in order to accommodate minority languages in the mountainous regions. Some of the core VCA activities, such as hazard mapping, may need to be modified for success in these remote areas. The core values of the VCA already affirm grassroots participation and community empowerment. We further recommend that the VCA link scientific knowledge with indigenous knowledge in order to create an environment that honours and preserves indigenous cultural practices within the VCA framework.

It is crucial that the theories concerning CBDRM make it into practice. Some lessons learnt by CECI during its history of BCRD project implementation include employing a reiterative approach to facilitate knowledge dissemination, and the importance of having a reserve of trained facilitators in place to remedy staff turnover and fluctuations in availability.

The lessons on how to apply theory to action are always evolving and each use of a standardized tool will create new lessons on how to improve it. No tool or manual can be continually updated – training is an interactive process and will always be adjusted in the interface between `teacher` and `learner`. In our view, sharing our experiences in conducting a VCA and applying a high quality manual - which in itself was developed through practice and drawing on experiences of diverse agencies - contributes to an ongoing process of learning and improving the overall CBDRM process in Vietnam.

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