

# Vulnerability and Capacity Assessment Workshop: Fieldwork

Location:	Linda Vista (La Unión) and El Meco (Ciudad Quesada), Costa Rica
Date:	2006
Sector focus:	Multi-hazard analysis, community based Vulnerability and Capacity Assessment
Spatial focus:	Community level

# **Bibliographical reference**

Vulnerability and Capacity Assessment (VCA) report from the ProVention project: Costa Rican Red Cross (CRRC), Linda Vista and El Meco case studies, included in the compilation of case studies (CD-ROM) *Análisis de vulnerabilidades y capacidades en proyectos de educación comunitaria* (VCA in community education projects), Central America and the Caribbean, Centre of Reference for Community Based Disaster Preparedness Education, International Federation of Red Cross and Red Crescent Societies (IFRC). Similar case studies undertaken by the Costa Rican Red Cross can be found in the same compilation: Bijagua (Upala), Colorado and El Pastor (Turrialba), Quebradas (Palmares) and Pueblo Nuevo (Guácimo-Limón).

All these case studies can be downloaded from: <a href="http://www.cruzroja.org/desastres/redcamp/crrec/tcomuni.htm">www.cruzroja.org/desastres/redcamp/crrec/tcomuni.htm</a>

## Abstract

This case study systematizes the fieldwork process developed by the Costa Rican Red Cross to analyze the level of community risk through the utilization of several VCA tools. This analysis is the main element of the first phase of a regional program, which aims to reduce the disaster risks faced every year by some Central American communities. The analysis forms the basis for the development of a local plan, which will identify the priority micro-projects to be implemented during the second phase of the project.

The main aim of the VCA work and the development of the compilation of case studies is to improve the disaster preparedness capacities of the communities concerned. Each case study explains the process and methodology used during the VCA. It includes an exhaustive diagnosis of the historical and socioeconomic context, followed by the outcome of the information-gathering process for which different VCA tools were used. The information is then analyzed and incorporated in a framework where hazards, vulnerabilities, and capacities are combined in order to define the existing risk to each hazard. The case study ends with a proposal for a local development plan that includes possible short- and mid-term activities or projects to be implemented by different local actors during the second phase of the program.

## **Technical description**

### Hazard/risk type

Earthquakes, landslides, floods, fires, erosion.

### Type of assessment

Multi-hazard analyses. Community based VCA focusing on field visits and the use of participatory tools.

### Community risk assessment process

### Methods used

The Costa Rican Red Cross team planned the process carefully, starting by interviewing key informants from the community and identifying important organizations. Some tools were selected from the IFRC's VCA toolbox: direct observation, secondary data, semi-structured interviews, focus groups, historical profile, historical calendar, seasonal calendar, institutional and social analysis, Venn diagrams, mapping (spatial, hazards, vulnerability and capacity maps), and actions for the transformation framework (transforming vulnerabilities into capacities).

### Was livelihood analysis used?

Not directly, but through other means like secondary data and key informant interviews, information about livelihoods within the communities was gathered and included in the context analysis.

### Was external specialist knowledge introduced?

The Reference Centre and the Sustainable Development Department of the Organization of American States (OAS) supported the process by providing training and guidance on assessment tools and training resources. The University of Costa Rica provided technical support to the analysis, reviewing the community diagnosis. Information collected by the university and through the VCA methodology used by the CRRC was also shared. To reinforce the information about health, the Ministry of Health supported the process through a specific community health diagnosis.

## **Vulnerability analysis**

The analysis of the data collected by the VCA tools is used to identify existing vulnerabilities. The information is then incorporated in a framework where hazards, vulnerabilities, and capacities are combined with a view to defining the existing risk level for each hazard.

With regard to hazards such as landslides, earthquakes, and floods, the following vulnerabilities were identified: houses built on hills with a 45° slope or in flood-prone areas; locations where access for vehicles is difficult; houses built over cesspits which can be damaged and contaminate homes with sewage; dwellings built with inappropriate construction materials; and water and sanitation systems which cannot deal with heavy rains. The analysis also highlighted the lack of community awareness and education about garbage management as an important vulnerability.

### **Capacity analysis**

### **Resources available**

The VCA assessment is part of the first phase of an IFRC, Central American National Red Cross Societies, OAS and ProVention project. It is expected that the second phase will provide the necessary funds to support some of the micro-projects identified through the VCA process. The case study underlines the following capacities and resources at community level: in Linda Vista, an aqueduct provides potable water to the entire community; electricity is available: there is a primary healthcare basic team and a developmental association which has built a community center and

organizes activities for the benefit of the community. El Meco has very few resources other than a community committee.

### Limitations to capacity

Insufficient financial resources are available to be able to respond to all the needs identified by the community. The difficult access and precarious physical conditions in one of the communities concerned also have a negative impact on that community's ability to reduce disaster risk effectively. The lack of coordination between organizations active in these communities also undermines the resilience of the community.

### Action planning and implementation

Activities are identified through a transformation matrix that shows how vulnerabilities can be transformed into capacities. Those activities constitute the basis of a local development plan where each action is linked to the organization responsible for implementing it. In most of the activities, the Costa Rican Red Cross has advocating role. Proposed CRRC activities for the next phase are, however, related to community based disaster preparedness.

### What actions were actually planned?

A more in-depth analysis was proposed through a household survey focusing on households' individual protection (physical vulnerability of households) in the most risky areas of the communities. Actions to set up a control system to avoid the construction of houses in risk areas, establish an early warning system, and elaborate an evacuation plan with the local fire station and the national emergency center were also planned. Other activities proposed include improving the sanitation system, community education on garbage management, and a public campaign to inform the population, particularly youth, of the negative effect of drug abuse.

### What actions were actually carried out?

The Costa Rican Red Cross began a process of awareness raising and training in the communities, through schools and community centers, and using four training modules (community first aid; education, organization, and community preparedness for risk reduction; protected schools; and family preparedness plan).

### Have these actions turned out to be sustainable?

Sustainability will depend on the second phase of the project and will be reflected in a new case study, which will include both the VCA process and the implementation of planned projects and actions.

### Were there any unanticipated additional benefits of the actions?

The VCA process has consolidated the role of the CRRC within the community. The VCA has had an important impact on the Costa Rican Red Cross, because it was the first time that the CRRC, by tradition a responsive organization, has worked with a developmental, risk reduction, and promotional approach. This has created a debate within the CRRC to open the Society to new kind of volunteers: social volunteers.

# Were there any unanticipated negative consequences of the actions? N.A.

#### Limitations on action/sustainability of actions

Budget restrictions and delays, which would mean the loss of momentum created by the participatory approach, could limit the implementation of the proposed actions.

### Indicators

Most of the information collected is qualitative data. Through the VCA process, qualitative indicators have been identified. It is expected that in the second phase of the project, impact indicators, both quantitative and qualitative, will be found in order to monitor the success of the experience.

Some process indicators:

- The different level of community awareness about risks before and after the VCA process.
- Formal collaborative actions before and after the VCA.
- Low-tech community risk reduction measures adopted by the community and number of local and household emergency plans developed.

### **Contextual notes**

### Existence/role of prior or contemporaneous conflicts?

There are no records of contemporaneous conflict in Costa Rica, which does not even have an army. Nevertheless, social insecurity and violence have become a real concern for national authorities, as was shown in the United Nations Development Programme's 2005 *Human Development Report in Costa Rica*, which focused on (in)security and human development in the country.

### Role of displacement/relocation

In both communities an important percentage of the population are foreigners, mainly citizens of Nicaragua, who arrived to work in the construction industry. However, records with precise numbers of migrants do not exist.

### Role of previous disaster and recovery attempts?

As both Linda Vista and El Meco were declared high-risk areas by the national emergency center, it is forbidden to build in the communities. In El Meco, the municipality has systematically denied construction permits due to existing risks. The population, however, has constructed illegal buildings and new households have settled in the community. Migration is a key factor, as migrants usually settle in areas at high risk of floods and landslides. In recent times, houses were lost to landslides and floods, but so far there have not been any victims.

# Significant historical, geographic, economic, political, or cultural issues that influenced this instance of CRA and its consequences?

Linda Vista was established in 1970. It was during the economic crisis of 1980–1981, however, that most of the families moved into the community. Linda Vista is catalogued as "marginal," due to the illegal occupation of land by families without homes. In El Meco, 80 per cent of homes are huts built with old cans, with only a hole in the ground for all sanitation. The community was formed in 1999 and has continued to grow, despite the fact that the municipality prohibits the construction of new houses.

Existing diseases and risk factors are motivated by social conditions (stress, family violence, promiscuity), environmental degradation, and socioeconomic situation (poverty, lack of access to health services) which affect the communities' vulnerability to disaster and to outbreaks of infectious and psychological diseases.

### Strategic notes

How has this practice of CRA influenced change in policy and practice at national level? N.A.

How has this practice of CRA influenced change in policy and practice at the local level? Some of the local authorities, such as in Linda Vista, have decided to institutionalize the VCA process and profile the risk awareness measures.

# How has this practice of CRA influenced the level of organization and solidarity in the locality where it was carried out?

The community understood the importance of collaboration, cooperation and information sharing. For example, a direct consequence of training courses held in schools was that some parents

provided their technical expertise (as carpenters, electricians, builders, etc.) to improve the communities' schools.

### Are the people living in this area more able to speak out on issues that concern them?

The VCA process showed the community is predisposed to participate and share experiences. The fact that there is a good level of community organization also helped.

### Less divided along class, gender, age, ethnic lines?

The participatory approach allowed the intervention of all people living in the communities in an impartial manner.

### More divided along these lines?

N.A.

# Have new civil society organizations been created directly or indirectly because of this practice of CRA?

No, they worked with existing organizations.

### Lessons learned

- During the VCA workshop, the institutional and social network analysis contributed to strengthening relations with organizations whose links with the community were weak. This strengthening was done by encouraging organizations that had close relations to act as gobetweens.
- The VCA methodology and a participatory approach allow the community to move from dayto-day problems to a wider perspective about the issues or problems affecting them, which helps them to find more sustainable alternatives.
- Collaboration and coordination between organizations and local authorities are key in a VCA process.

## Keywords

Earthquakes, landslides, floods, contamination, family violence, migration, illegal settlements, high-risk areas.

### Resource person(s)

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