

# **Compendium of Case Studies – Guidance Notes**

# Community Risk Assessments, Disaster Preparedness and Mitigation Plan (DPMP)

**Location:** Sahatakoly village, Brickaville District,

Toamasina Province

**Date:** 2004

**Sector focus:** Agricultural production & marketing,

geographical access to services, clean water supply, environmental health

**Spatial focus:** Three hamlets constituting a village of 305

families (1174 people)

# Bibliographical reference

Catholic Relief Services, *Plan d'Action Communautaire pour la Réduction des Risques des Catastrophes*, Tananarive, CRS, 2004 (and project annexes).

#### **Abstract**

Catholic Relief Services in Madagascar engaged in a two-phase process in the central eastern coastal region of the island nation. First, working with local officials and survey data, the communities most affected by floods and cyclones were identified. Secondly, detailed VCA and action planning was carried out in the village of Sahatakoly. That process began with educational activities and discussion leading to the election of a project committee. Focus group based work generated community maps, a seasonal calendar, and community diagnosis of major problems related to cyclone and flooding: destruction of crops, contamination of water supply and resulting diarrhea, isolation from agricultural markets, health services, and post-primary schooling.

These problems were priorities by villages, and detailed action planning was carried out. The plan distinguished between projects the villagers could undertake by themselves and projects that were perceived to require outside resources. Construction of canoes and a certain amount of rehabilitation of drainage works fell into the first category; whilst additional drainage rehabilitation and construction of a dam on the local river and three wells were considered to require external inputs. The project achieved agreement that all adults would work on the first sort of project each Thursday.

# **Technical description**

Hazard/risk type: River flooding, cyclone, diarrhoeal disease

Type of assessment: Community vulnerability and capacity assessment, action planning.

#### **CRA** process

**Preliminaries:** first, village selection process involving local government officials and survey of the situation in the central eastern coastal region of Madagascar and then preparation discussions and education in the chosen village to ensure local ownership of and commitment to the process. *CRA Process:* Community diagnosis, action planning and work plan construction. Some of this work was accomplished with focus groups, and some by village plenary meetings.

**Methods used:** Committee formation, community mapping, seasonal calendar, problem tree analysis, brainstorming solutions, prioritization of solutions, action and work plan.

Was livelihood analysis used? Not explicitly. Analysis of vulnerabilities and capacities took place at the village level, not household level. However, to the extent that loss of crops and livestock in floods and cyclones were a prime focus as well as interruption in agricultural marketing, at least one aspect of livelihood analysis was taken into account. Preliminary scoping revealed that livelihoods were primarily based on rice, maize and cassava cultivation, as well as fishing and animal husbandry; however, the relative importance of details of each was not provided in documentation.

Was external specialist knowledge introduced? Not for canal clearing and canoe building, but there was specialist knowledge introduced in planning the dam.

## **Vulnerability analysis**

Vulnerability was conceptualized as a characteristic of the whole village, and it was further seen as insufficient capacity to cope with excess water due to flood and cyclones. Furthermore, coping was narrowly defined in terms of water management, "mastery of water." No other form of coping (e.g. savings/ insurance fund, training of village health worker to provide assistance even when village is isolated, etc.) do not seem to have been considered.

#### Capacity analysis

**The Project Itself:** Required trained CRS staff, hence financial support from CRS. *Capacity analysis:* Capacity analysis is not explicit in the documentation. By implication, capacity was defined narrowly in demographic and technical terms as numbers of adult villagers potentially available for manual labor and their personal hand tools. There is no discussion of local knowledge, specialist skills (carpentry, masonry, etc.) existent in the village. As regards construction of canoes, it is unclear whether this required specialist knowledge.

**Resources available:** Locally available natural resources (wood for canoes); hand tools; labor power.

**Limitations to Capacity:** Deforestation would limit the availability of trees for canoes, seasonal labor profile in agriculture and fishing would limit the availability of adult villagers to execute the action plan. Over the two year planning horizon, the small committee (six people) might find their responsibilities a burden.

#### Action planning and implementation

What actions were actually planned? Construction of two canoes; rehabilitation of 2 km of drainage canal.

**Were all actions actually carried out?** Yes. Well construction, rehabilitation of the canal, and canoe construction are finished. The dam is not yet constructed.

**Have these actions turned out to be sustainable?** Maintenance is explicitly written into the action plans as well as creation of rules for the use and repair of the canoes.

Were there any unanticipated additional benefits of the actions? The reaction of the population after the project was unforeseen success. The team noticed more initiative in the village such as a weekly clearing up of rubbish.

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

**Limitations on action/sustainability of actions:** Technical assistance and finance for the larger elements (e.g. dam).

#### **Indicators**

There are no explicit indicators of accomplishments or success in the documentation; however, by implication, the number and percentage of adult villagers taking part in the action plan over its life time would be a key indicator. The length of drainage canal cleaned and repaired, the number of canoes constructed, and the number of cases of diarrhea would also be indicators. In the case of the last mentioned, baseline data would be required (not provided in the documentation).

#### Contextual notes

**Existence/** role of prior or contemporaneous conflict? The team noticed that because of the high cost of living, there was strong socio-economic differentiation in the village. This gap made it difficult to mobilize people.

Role of displacement/relocation? No.

**Role of prior disaster & prior recovery attempts?** There had been failed projects in the past that undermined villagers' belief that change could take place.

Significant historical, geographic, economic, political, or cultural issues that influenced this instance of CRA and its consequences? High population density, isolation, and socio-economic differentiation make this a difficult village setting for a CRA project. Prior project failures and a culture that expects centralized decision making compound the problem of motivation for change.

#### Strategic notes

How has this practice of CRA influenced change in policy and practice at the national level? None noted.

How has this practice of CRA influenced change in policy and practice at local level? The villagers are more responsive to local government initiatives.

How has this practice of CRA influenced the level of organization and solidarity in the locality where it was carried out? Yes because the project involved developing local leadership responsible for organization of work such as canal rehabilitation and handling project funds. The ability of the village to organize itself has improved.

Less divided along class, gender, age, ethnic lines? N/A

More divided along these lines? N/A.

Are the people living in this area more able to speak out on issues that concern them? In project focus groups care was taken to encourage women and people from all socio-economic groups to speak. However, decision making is still centralized in the hands of local leaders.

Have new civil society organizations been created directly or indirectly because of this practice of CRA? A committee for village safety continues to work.

#### **Lessons learned**

- CRA can result in positive action even under difficult circumstances (poverty, socioeconomic differentiation, isolation, history of failed projects)
- Even ambitious and long range action plans (e.g. the dam) are possible if smaller, concrete steps encourage the continuance of local enthusiasm (e.g. construction of canoes for evacuation in times of flood, clearing the drainage canal).

# **Keywords**

Flood, cyclone, drainage, transportation, water supply, diarrhoeal disease.

## Resource person(s)

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