

DISASTER RISK REDUCTION

From inevitability to overcoming ability



Simulation exercise in a school of Madagascar, Tamatave district

The Centre for Research on the Epidemiology of Disasters (CRED) registered an annual average of 397 natural disasters from 2000 to 2007, compared to a hundred per year during the 60s'. Each year, these events affected about 230 million people and killed 67,000; the assessment of their yearly economy burden amounts to 82 billion US dollars. Losses due to natural disasters mostly concentrate in developing countries. The impact of those disasters on poor populations is significant; 85% of the population exposed to earthquakes, tropical hurricane, floods, or drought, are living in countries with a poor or average human development Index.

During the 20th century, natural disasters showed an evolution towards an acceleration of frequency and danger. This rising trend does not only result from an increasing number of natural hazards, it also relates to worsening factors that originate in human deeds. Moreover, the 2007 report of the Intergovernmental Panel on Climate Change (IPCC) shows that the climate variation would probably strengthen within the coming years, which would entail the increasing intensity and frequency of high-impact events. Climate change is a global major challenge with a significant and lasting impact upon human welfare, development, and therefore upon the way of approaching the reduction of hazards relating to natural disasters.



**“ACT NOW
TO SAVE TOMORROW”**

It is obvious today that the risk of natural disaster is closely related to human development processes.

Not only the risks are increasing, but they are also diversifying and combining one with another. Poverty and inequalities are generating an increasing pressure on environment. It is a simple equation: the populations' poverty makes them vulnerable to natural disasters; thus and conversely, reducing their vulnerability is a factor to reduce their poverty. The lack of governance, the weakening of the States, poor planning for regional development, missing standards, fast and uncontrolled settlement, deterioration of the environment and natural structures (mangroves, coral reefs), lack of preparedness and anticipative measures: all of these are aggravating factors to the populations' vulnerability, thus, they worsen the consequences of disasters.

Those risks are not inevitable; one can manage and reduce them. Each time a school or a health centre crumbles after an earthquake, each time floods are damaging a road or a bridge, a benefit of development vanishes.

Such observations are leading to the obvious and necessary set up of measures to reduce the hazards relating to natural disasters. Reducing the populations' vulnerability to natural hazards means increasing their resilience.

When acting for the reduction of natural disaster risks, one shall consider these elements and look for opportunities to establish better overcoming abilities, to reduce permanently the exposure to hazards, thus to reduce the vulnerability of the populations and assets.

Red Cross / Red Crescent expertise

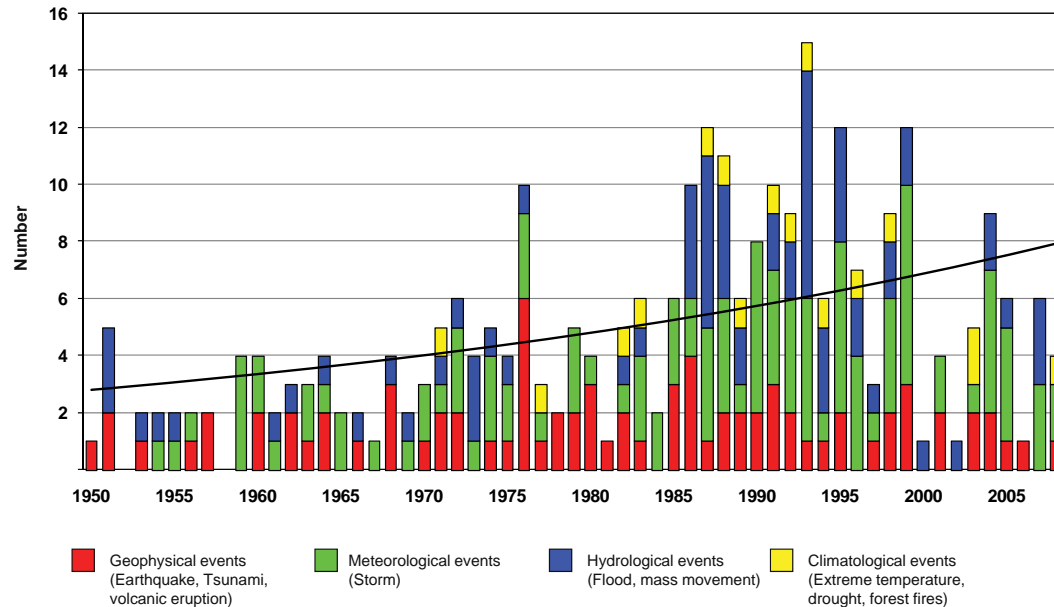
The strategy of the French Red Cross is part of the Hyogo Framework for Action that has been adopted during the World Conference on Disaster Reduction, held in January 2005; it also relies on the 2020 Strategy of the International Federation of Red Cross and Red Crescent Societies. The first objective of this strategy targets the necessity of disaster preparedness, while the second objective aims at working on reducing disaster risk and tackling climate change.

The French Red Cross approach, which we describe hereafter, is shared in all its projects and is a token of their relevancy :

- Participatory Approach in project elaboration and implementation, including the involvement of the National Society and of the targeted communities, through the implementation of the VCA method (Vulnerability and Capacity Assessment). VCA relies on information gathering on the vulnerability to hazards of a selected community, in order to adopt measures that would reduce its vulnerability and increase its overcoming ability.
- Community Approach, in order to help and to protect the communities facing hazards. These methodologies are called “Community-Based Disaster Preparedness” or “Community-Based Disaster Risk Reduction.” Through these methodologies, various tools (risk mapping, emergency plans, dissemination tools...) or microprojects (dikes, canal cleaning, dry walls, development of refuge areas...) are implemented among the community, in order to allow a lower vulnerability, and a better preparedness and organisation to face the threatening hazards.
- Sustainability: in order to guarantee the sustainability of the results, the projects are developing tools which are already familiar to the communities to guarantee that they can be adopted. In a similar way, construction work will preferably use local techniques and materials, in order to guarantee that the communities will reproduce them, facilitate the maintenance, and respect the local environment.
- Strengthening local capacities: all these projects contribute to strengthen the capacities of the National Society, local authorities, and local organisations involved in disaster preparedness; the goal is that after the completion of the projects, these structures will be able to go on with the work initiated within the FRC operation frame.

Great natural disasters 1950 - 2008

Number of events with trend



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As at January 2009

Objectives and actions to implement

Disaster Reduction encompasses all activities that are implemented during the pre-disaster phase and known as prevention, preparedness and mitigation (reducing the impact of a disaster). This concept also refers a global approach aiming at encouraging the inclusion of risk reduction measures at each stage of disaster management and also in regular development activities.

The objective is to reduce vulnerability and reinforce the capacities of anticipation, adaptation, overcoming and resilience after a disaster.

This operational frame defines the collaboration and support of the French Red Cross to National Societies, in order to:

- Reinforce the safety of their communities as well as their resilience towards disasters;
- Contribute to reinforce the capacities of National Societies, to ensure that they are prepared in a better way and able to response better to disasters.

This frame also determines the Red Cross intervention choices, related to the needs of the beneficiary populations. Despite their shortcomings in terms of action means, these communities should not only be

regarded as the victims of catastrophic events, but also as the field players who are trying, through various initiatives and strategies, to reduce their own physical, social and economical vulnerability.

Within this frame, the French Red Cross sets itself the following four main objectives:

1. Reinforce institutional capabilities for disaster preparedness and local disaster management

Institutional players in disaster management shall be reinforced in order to allow them to fulfil the mandate they are entrusted with. Either towards local authorities, disaster management agencies, or the national Red Cross/ Red Crescent Society, the French Red Cross through its projects is contributing to develop their competences, know-how and resources, in order to allow them to participate to a coordinated system for disaster management, in which each institution would properly play its role.

Implemented activities are as follow:

- Disaster management training (prevention, preparedness and response) and first aid, for local players;
- Creation and training of local committees for disaster preparedness and emergency response;
- Communication/response equipments endowment (emergency kits, first aid kits, etc).

2. Setting up local systems and tools for disaster management

The tools developed for or with the communities aim at, either mitigating the impact of a disaster through the development and testing of early warning systems, or featuring the hazards, the communities' vulnerability and their response capacities through mapping tools. They also aim at organising the local response in case of emergency through the design of emergency and contingency plans.

Thus, related activities are:

- Community risk mapping ;
- Community organisation in case of alert and evacuation;
- Simulation exercises;
- Elaboration of emergency and contingency plans;
- Setting up alert and communication systems.

3. Building work and reinforcement of basic services at a community level

The work implemented within the projects' frame is aiming at two different objectives:

- 1) Building works aimed at supporting basic services and infrastructures which have been identified as vulnerable during the elaboration of emergency plans. These building works aim at avoiding any rupture of the community organisation, and at guaranteeing access to basic services in case a disaster happens.
- 2) Building works, aimed at reducing the physical vulnerability of the communities, the impact of a hazard to come, and thus at protecting the population and their belongings. The identification of these buildings appears as a priority decided by the community following the VCA participatory approach (Vulnerability and Capacity Assessment). If possible, they would be built through community participation with local techniques and materials. Therefore the community itself would be able to reproduce these techniques without external help, and the building works would have a pedagogic effect.

Activities related to this objective are as follow:

- Improvement of collectives infrastructures : schools, health centres, communication ways, temporary shelters, storage facilities;
- Setting up refuge areas and evacuation ways ;
- Construction of dikes, dry walls, mangrove planting;
- Draining and irrigation works.

4. Improving knowledge, local strategies and community abilities to be prepared and to react in case of a disaster

Understanding and knowing one's environment, the hazards to be prepared for, the ways to face them, the protection means, contributes to increase the populations' resilience. In its projects, the French Red Cross contributes to mass information and to education on hazards in order to develop a "hazard culture" aiming at changing behaviours and practices. It also participates in the socialisation of valuable experiences and disseminates lessons learnt through appropriate medias (journals, magazines).

Some possible activities :

- Awareness campaigns towards the population about the means to prepare and protect oneself; children education (acting, songs, radio ads ...);
- Creation of information, education, and communication tools (IEC);
- Training of target groups about hazards: journalists, health workers, teachers ;
- Organisation / Participation to workshops to exchange valuable experiences, and elaborate tools for capitalization



Development of a refuge area in case the Galeras volcano would erupt, Colombia

Our main Achievements

The French Red Cross has been running disaster preparedness projects for more than 10 years. Up to now, about thirty projects had been implemented for an amount of 25 million Euros. The French Red Cross implements projects benefiting to the most vulnerable communities affected by natural disasters. They are often remote communities, lacking external help, and they shall know how to protect themselves from threatening hazards, and how to act for their own survival through mutual aid .



Workshop for Community Risk Mapping in Tanzania

In Colombia, the French Red Cross set up an early-warning system in case of an eruption of the Nevado Del Huila volcano; this system allows all communities in vulnerable areas to evacuate. In Haiti, local disaster committees were created, trained and received equipments in the communities exposed to floods in Bas-Artibonite area; these committees are actors in raising awareness , conveying preparedness messages, and are also able to bring assistance in case of emergency. In Laos, the French Red Cross performed evaluations of vulnerabilities and capacities that lead to the creation of volunteer units for disaster preparedness, the purchasing of emergency and communication equipments (loudspeakers and megaphones), the implementation of community mapping and the elaboration of emergency plans.

Climate Change

Climate change already started to affect the world poorest and most vulnerable communities. Its effects may increase the intensity and frequency of climate shocks. In the medium and long term, the consequences could be influenced by international mitigation efforts. The impact of climate change upon the activities of the Red Cross-Red Crescent Movement is shown in two aspects: these effects are mostly hurting the populations who are the usual main beneficiaries of the Red Cross activities (populations of poor countries, vulnerable, lacking response abilities); and the increasing climate hazards will increase the needs for emergency aid, rehabilitation... Therefore, the support of the Red Cross will be more and more needed.

In 2002, the Dutch Red Cross and the International Federation created the Red Cross/Red Crescent Centre on Climate Change and Disaster Preparedness, which mission is to help National Societies, as well as other concerned players, to understand and face the risks related to climate change, especially in projects aiming at the reduction of disaster hazards. Since then, the Movement committed to a better integration of the climate hazards management in its strategies and action plans. End of 2009, during the Conference on Climate Change in Copenhagen, the Secretariat of the Federation had the status of Observer and advocated for the improvement of adaptation mechanisms (any measure aiming at reducing vulnerability towards climate change).

Red Cross/Red Crescent Climate centre,
www.climatecentre.org
 UN Framework Convention on climate change,
<http://unfccc.int/2860.php>

Our Partners

The French Red Cross participates in working and reflection groups about disaster preparedness issues:

- “Disaster Prevention” Working group : lead by the Ministry of Foreign and European Affairs, its mission is namely to work out the French strategy related to disaster prevention in developing countries, and to propose means of action.
- The group known as “Disaster Preparedness-Risk Reduction”, in which the International Federation participates, as well as partner national societies, aims at exchanging and sharing valuable practices, and at supporting the Federation for the setting up of their strategy related to disaster risk reduction.



Risk Education in Myanmar Village

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»» To Know More !

- FRC Bibliography
 - Film « Act today to save tomorrow »
 - CD-rom « Disaster risk reduction »
 - Website : www.autoprotectionducitoyen.org
 - www.croix-rouge.fr

■ Websites

CatNat, news and resources watch about natural hazards: <http://www.catnat.net/>

ISDR, International strategy for disaster reduction : <http://www.unisdr.org/>

CRED, International disaster database : <http://www.emdat.be/>

PreventionWeb, information for risk reduction professionals: <http://www.preventionweb.net/english/>