BioOne COMPLETE

Integrated Disaster Reduction: The Approach Developed by the Swiss Agency for Development and Cooperation

Author: Stoessel, Franz

Source: Mountain Research and Development, 24(1) : 76-77

Published By: International Mountain Society

URL: https://doi.org/10.1659/0276-4741(2004)024[0076:IDRTAD]2.0.CO;2

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Downloaded From: https://complete.bioone.org/journals/Mountain-Research-and-Development on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

Integrated Disaster Reduction: The Approach Developed by the Swiss Agency for Development and Cooperation

DEZA
DDC
DSC
SDC
COSUDE

Natural disasters claim thousands of lives and cause billions of dollars of damage annually, and current trends show that they are on the increase. Although they may occur anywhere, they affect mountain regions and their populations more severely, as these regions and populations are exposed to many types of disasters such as rockslides, floods, avalanches, earthquakes and volcanoes.

A shift in focus

A great deal has been done in recent decades to improve emergency relief following natural disasters. *Integrated disaster reduction*, in addition to relief, primarily involves prevention of natural disasters. For SDC, prevention is an important component in both development cooperation and humanitarian aid. It is a long-term activity that demands coordinated cooperation among various actors. In future, SDC will have to focus more closely on the following aims in disaster reduction:

- Programs and projects will be conceived in such a way that they are not affected by natural disasters;
- Partners will be supported in such a way that they are in a position to reduce the occurrence of natural disasters and deal with disasters on their own;
- Programs and projects concerned with disaster reduction will be based on an integrated approach (integrated disaster reduction).

Disaster reduction includes all temporary and permanent measures that aim to prevent the threat of damage or minimize the impacts of a damaging event. To qualify for a "disaster-proof label," all SDC programs must come to terms with the question of what measures they can take to prevent investments from being damaged by natural disasters such as storms, earthquakes, floods, etc. In cases of investments in reconstruction following a natural disaster, the question of attaining added value arises. This is the case, for example, when school buildings are reconstructed in such a way that they can also be used as shelters in the wake of a typhoon.

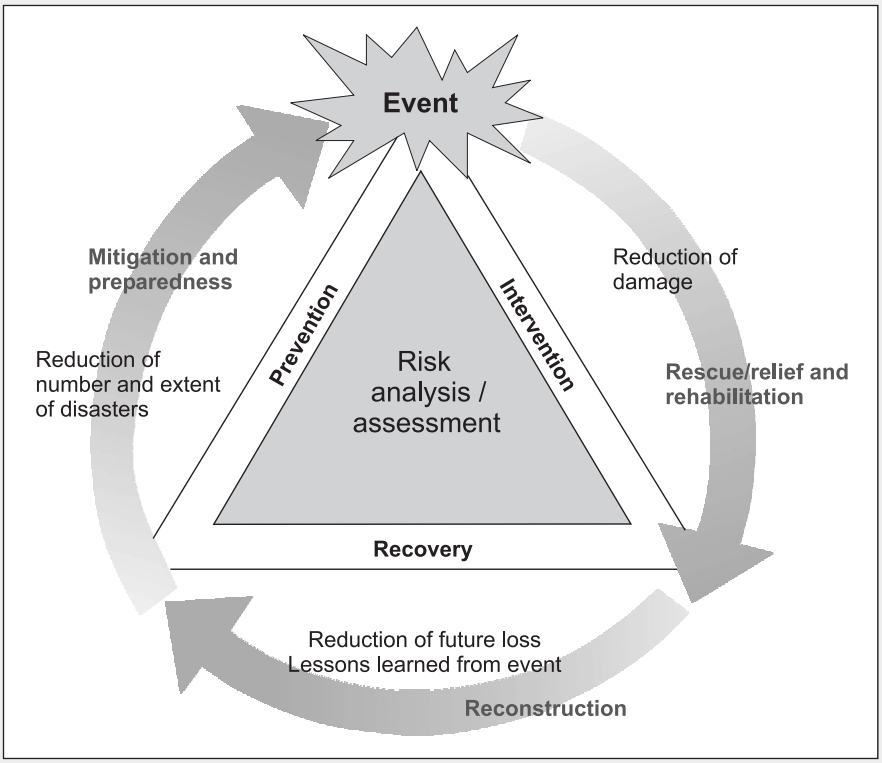


FIGURE 1 Integrated disaster reduction: a continuum of prevention, intervention and recovery.

In a context where sustainable development is the overall aim, disaster reduction is a continuous process in which measures concerned with prevention, intervention, and recovery are equally integrated.

For SDC, *risk assessment* is the basis of decision-making for every type of involvement in disaster reduction. It indicates the possible threat of natural disasters, evaluates the potential for damage, and measures existing risk perception and coping mechanisms (including legislation). Risk assessment must also be concerned with processes such as climate change, deforestation and desertification, as well as their impacts. The following questions are important in relation to assessing risk in SDC programs and projects in areas where natural disasters may occur:

- Which natural disasters occur where, and with what frequency and severity (scenarios)?
- How is physical, economic and social vulnerability of the community affected?
- What is the existing level of risk perception?
- What risk reduction measures are feasible? How is traditional local knowledge put to good use?
- Which coping mechanisms are already available for dealing with disaster?

Identification of different types of threat and risk, as well as information about lack of protection and

Downloaded From: https://complete.bioone.org/journals/Mountain-Research-and-Development on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use

acceptable risk, are among the important outcomes of analysis based on these questions.

Prevention and preparedness

Work related to disaster prevention is of medium- to long-term duration and is a component of sustainable development in a given region. For SDC, **prevention** is concerned with two fundamental aims: 1) **Protecting people from risk and keeping natural disasters at bay (prevention in the narrower sense of mitigation)**, and 2) **Being prepared for the worst (preparedness)**. SDC accordingly supports measures that help to:

- *Prevent the occurrence of certain processes* (eg, through afforestation and soil conservation)
- *Reduce the impacts of certain processes* (eg, by constructing dams for flood control)
- *Avoid endangered zones* (eg, by implementing land-use planning regulations in flood-prone areas)
- *Reduce physical, economic and social vulnerability* (eg, by reinforcing structures in earthquake-prone areas, taking measures to generate income, and strengthening social networks).

Development of monitoring and alarm systems and formulation of preparedness plans are additional key elements of successful prevention. Also necessary are institution building, supplying the personnel and equipment for crisis management teams, military service, and civil protection.

Awareness of the risks of natural disasters and demands for assistance in relation to disaster reduction have increased in recent years. SDC supports many projects in this area on the basis of its know-how and diverse experience. In regions with a high likelihood of natural disasters where the population is very vulnerable, SDC will have to give increased attention to disaster prevention in its development projects.

Response

Response to natural disasters involves implementation of preparedness plans, ie all planned measures that can be put into effect in the event of an alarm and/or during the course of a crisis. Evacuation of people and property from the endangered area (prior to the event) reduces the time of exposure. On the other hand, evacuation of people from the disaster area, construction of temporary structures for shelter, and rapid refurbishment of damaged infrastructure prevents or reduces subsequent damage.

SDC has specific resources available for humanitarian aid in the event of disaster. They include Swiss Rescue, which is specialized in locating and rescuing earthquake victims; rapid responses team to support local authorities (medical aid, infrastructure, transport and communication, etc.); and specialists who support the United Nations Disaster Assessment and Coordination Team.

Recovery

The goal of **recovery** is restoration of the status quo ante. Experience shows that awareness of disaster reduction is greatest immediately following a disaster, which was very clear in the case of Hurricane Mitch. Hence SDC sees this phase as a window of opportunity for better adapting structures and facilities to the prevailing threats and risks. In addition, this window of opportunity must also be used for awareness building at different political levels. Consequently, SDC believes that both the lessons learned from disaster events and fundamental know-how gained from prevention strategies must be given serious consideration and taken into account when undertaking reconstruction. With a view to solidarity, it is important to discuss new risk sharing mechanisms (eg insurance) in this phase. In areas affected by the threat of natural disaster, prevention work must begin once again during the reconstruction phase at the latest, as the next event may be just around the corner!

Partnership through international collaboration

Given the complexity of this issue, cooperation at the international level is imperative. The different aspects of disaster reduction in the areas of advocacy, awareness building and know-how transfer are being dealt with by many international institutions. SDC supports these international institutions and initiatives and makes it possible for its partner countries to participate in them.

Together with local partners, SDC initiated various prevention projects in Central America immediately after Hurricane Mitch. Flood management in the summer of 2002 in Saxony, Chechnya and Slovakia led to close support of local officials responsible for flood prevention. Additional larger-scale prevention projects are currently underway in Central Asia and the southern Caucasus. A major prevention program was implemented in Turkey following the earthquakes that struck in the area around Izmit in 1999.

SDC will continue to be committed to integrated disaster reduction as the best long-term approach within the framework of development and humanitarian aid.

Franz Stoessel
Natural Resources Division, Swiss Agency for Development and Cooperation (SDC), Freiburgstrasse 130, 3003 Berne, Switzerland.
Franz.Stoessel@deza.admin.ch

Downloaded From: https://complete.bioone.org/journals/Mountain-Research-and-Development on 28 Mar 2024
Terms of Use: https://complete.bioone.org/terms-of-use