

# Local Risk Management and Disaster Preparedness in the **ANDEAN REGION**

PRELIMINARY VERSION



Systematization of best practices  
and lesson learned

**BOLIVIA**

**COLOMBIA**

**ECUADOR**

**PERÚ**

**VENEZUELA**

## Local Risk Management and Disaster Preparedness in the Andean Region

### Systematization of best practices and lesson learned

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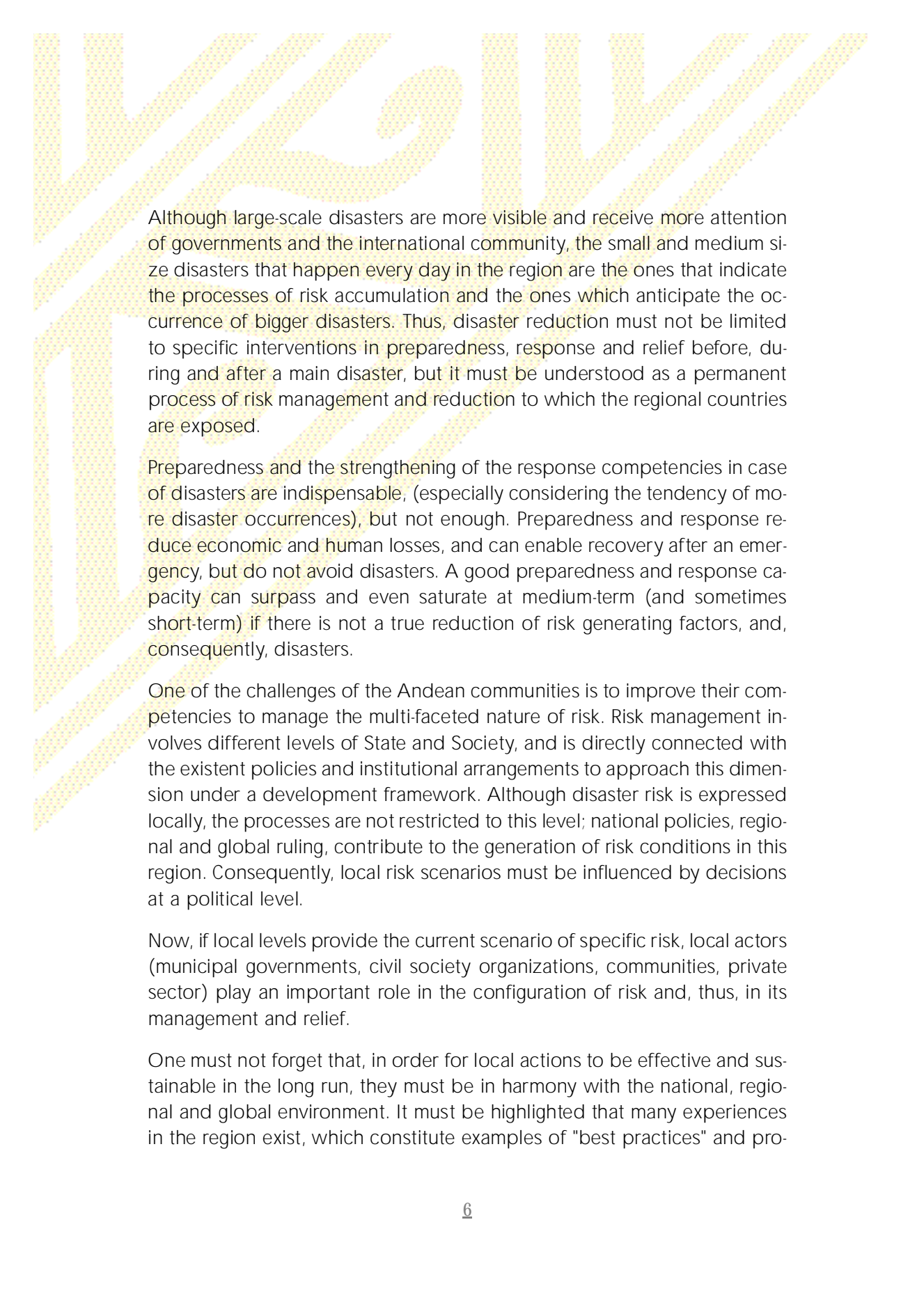


# Introduction

**T**he Andean Community, conformed by Bolivia, Colombia, Ecuador, Peru and Venezuela has more than 113 million people in a territory of 4.710.000 Km<sup>2</sup>. The continuous disasters of different impact that occur in the region are indicators of a high and increasing risk, created by the interaction between geophysical and climatic phenomena, and the range of explicit vulnerability of the Andean societies.

The region is exposed to natural threats such as volcanic eruptions, earthquakes, tsunamis and hurricanes. However, the most frequent disasters are associated with socio-natural threats, where factors such as environmental degradation magnify the frequency and intensity of flooding, land slides, drought and forest fires. The increasing vulnerability of the Andean region towards these threats is concentrated in those social and economic sectors with less access to resources and in the population inhabiting risk areas under precarious and unsafe life conditions.

The risk accumulation process is linked with the dominant development patterns in the region that favor the degradation of eco-systems, proliferation of human settlements in risk areas (due to lack of urban planning), inadequate infrastructure design and construction, high economic dependency, poverty, political instability, among others.



Although large-scale disasters are more visible and receive more attention of governments and the international community, the small and medium size disasters that happen every day in the region are the ones that indicate the processes of risk accumulation and the ones which anticipate the occurrence of bigger disasters. Thus, disaster reduction must not be limited to specific interventions in preparedness, response and relief before, during and after a main disaster, but it must be understood as a permanent process of risk management and reduction to which the regional countries are exposed.

Preparedness and the strengthening of the response competencies in case of disasters are indispensable, (especially considering the tendency of more disaster occurrences), but not enough. Preparedness and response reduce economic and human losses, and can enable recovery after an emergency, but do not avoid disasters. A good preparedness and response capacity can surpass and even saturate at medium-term (and sometimes short-term) if there is not a true reduction of risk generating factors, and, consequently, disasters.

One of the challenges of the Andean communities is to improve their competencies to manage the multi-faceted nature of risk. Risk management involves different levels of State and Society, and is directly connected with the existent policies and institutional arrangements to approach this dimension under a development framework. Although disaster risk is expressed locally, the processes are not restricted to this level; national policies, regional and global ruling, contribute to the generation of risk conditions in this region. Consequently, local risk scenarios must be influenced by decisions at a political level.

Now, if local levels provide the current scenario of specific risk, local actors (municipal governments, civil society organizations, communities, private sector) play an important role in the configuration of risk and, thus, in its management and relief.

One must not forget that, in order for local actions to be effective and sustainable in the long run, they must be in harmony with the national, regional and global environment. It must be highlighted that many experiences in the region exist, which constitute examples of "best practices" and pro-



vide tools that can be applied in different situations, showing how the strengthening of local abilities can favor or increase the security of socially vulnerable groups.

Despite the variety of experiences, until now there has been no promotion of systematization processes that allow the evaluation of achievements and accomplishments on the subject, as well as rescuing lessons learned that can be replicated and adapted to other contexts.

In view of this reality, the Bureau for Crisis Prevention and Relief (BCPR) of the United Nations Development Program (UNDP) takes the task of promoting the Regional Project "Systematization and Dissemination of Best Practices in Disaster Relief and Local Risk Management in the Andean Region" with the purpose of making it available to the different regional, national, and local actors linked with the issue. This project is also of great interest to the Disaster Preparedness Program of the Humanitarian Aid Department of the European Community (DIPECHO), who promoted the idea and, together with the BCPR-UNDP provided the financial support for its execution. The project has been formulated and is being executed by UNDP within the framework of DIPECHO's Third Plan of Action.

The current regional project that started in May, 2004, has achieved the compilation of approximately 60 experiences in the Andean Community. Fifteen have been selected as "case studies", three experiences per country, in order to systematize them through a participative process involving regional, national and local actors. The case studies are the basis for extracting lessons, systematizing processes and interventions, and recovering best practices that help to improve future interventions in disaster preparedness issues, and also producing knowledge as a basis for developing policies, strategies, programs and tools for Local Risk Management (LRM).

The selection criteria for cases have been:

- Experiences promoted or supported by local actors (municipalities, NGO's, communitarian organizations), including initiatives supported by UNDP and DIPECHO.
- Traditional experiences of local risk management based on local know-

ledge.

- Sustainable experiences, easy to be replicated, low-cost, with appropriate technology and culturally sensitive.

In the compilation are included initiatives that reduce or control disaster risk through:

- Strengthening of local competencies to face possible disasters.
- Improvement of the organizational capacity through disaster preparedness actions in at community level.
- Strengthening of links between communities and national levels of disaster relief.
- Favoring of real-time access to appropriate information about threats and establishing communitarian systems of early warning.
- Control the exposure of society to physical phenomena through retentive structures (barriers, terraces, channels, walls, etc.) or other measures such as territorial zoning with a preventive focus.
- Use of traditional and local knowledge for risk management.
- Reducing future risk through normative control and incorporating disaster risk in development interventions.

After compiling the experiences, the parameters used to identify best practices in local risk management processes have been:

- Participation and empowering of populations at risk and their organizations through permanent institutional mechanisms.
- Integration processes with social actors at different territorial levels and from different sectors.
- Mainstreaming and integrality
- Looks for sustainability and to establish a close relationship between development and its management.
- It is a social process and not a product.

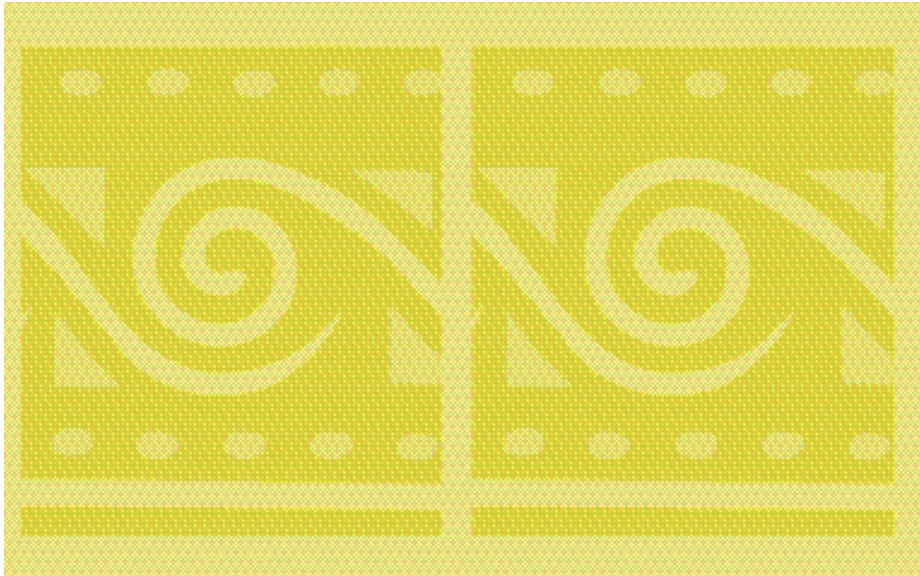
The recovery and acquisition of the information was done in three stages.



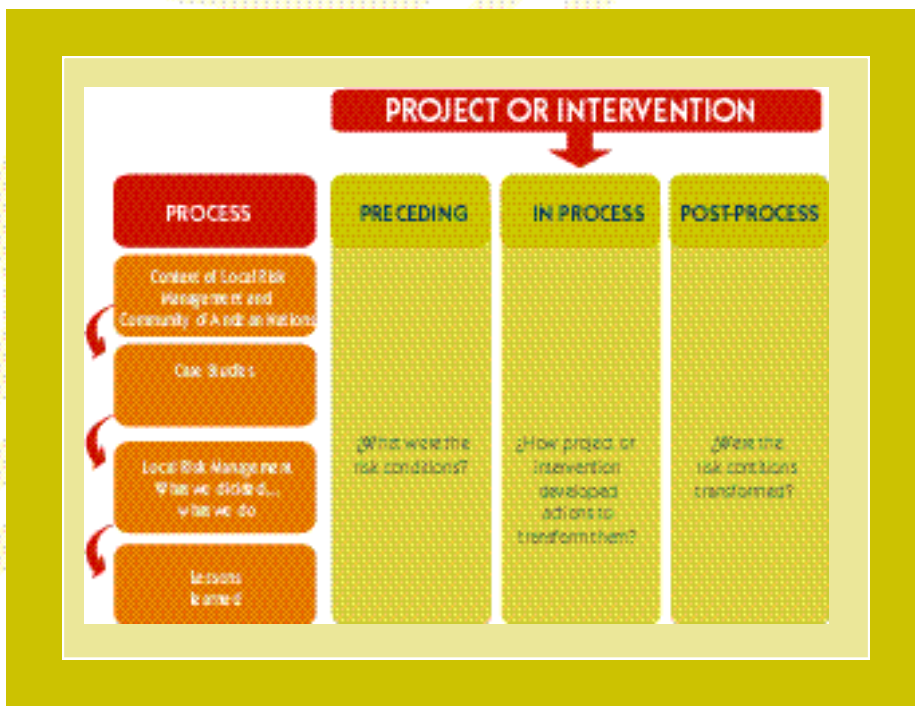
First, the review of documentation generated by the projects and other related institutions. Second, in-situ interviews were carried out, which allowed direct access to the particular experience of the actors. Third, and last of this first phase of the project, promoting in each country, national and local workshops for the information validation and systematization with participation of the actors linked to the project. All this work was possible thanks to the national systematization team assigned to the project in each country.

Through the execution of five National Workshops and six Local Workshops for Experience Exchange in the five Andean countries, we could identify key actors linked to local risk management issues, and extract lessons learned from the experiences compiled in these countries. Besides, it is necessary to highlight the promotion of alliances and coordination established with the different regional, national and local actors, which allowed creating workgroups in each country, committed to communicating the accomplishments and defeats of the experiences developed in the region.

The work presented here tries to contribute with the task of "reading and interpreting" the process by analyzing cases through a series of key ques-



tions: how was the situation and the context before the intervention?; What circumstances promoted the intervention and what was it?; What is left after the intervention? Thus, the structure of this document has the following logical content:



The Project wants to select and analyze experiences through their incidence in the risk generating causes. We intend to achieve that the results of the analysis contributes to strengthen the knowledge and competence of the actors that participate in local development processes to transform these risk conditions. We look forward to making an effort that contributes to transforming social, economic and environmental causes of disasters, as well as promoting the strengthening of local competences in risk management, which are articulated by national policies and correspond with the social, cultural, and economic reality of each country, guaranteeing its sustained development.

The main audience of this document is a series of regional, national and lo-


cal actors that promote risk management initiatives at a local level. These are:

- Regional Organizations: Andean Commission for Disaster Prevention and Relief (CAPRADE) and the General Secretariat of the Andean Community (SG-CAN).
- National Organizations: Central Government, sector Ministries, national risk management systems, inter-institutional teams for risk prevention, private sector, international cooperation agencies, international and national financial institutions, international and national NGO's that work with disaster risk reduction of and local development.
- Local Organizations: Municipal Governments, association of municipalities, decentralized organizations of national systems, communitarian organizations, neighborhood associations, etc.

This first product presented here will be attached to a public document, which will be of interest and useful for local development agents and, especially, for decision makers with direct or indirect incidence in local development processes, at different levels (central government, sector ministries, municipal governments, communitarian associations, private sector, NGO's, international cooperation agencies, financial institutions, etc.). This document compiles a set of proposals (methodologies, instruments, tools, etc.), and best practices referenced through case studies around disaster preparedness, emergency relief, recovery, rehabilitation, reconstruction, prevention and/or relief; all under a risk management focus.

The central team responsible for the elaboration of this document included Ángeles Arenas, Regional Advisor of the Bureau for Crisis Prevention and Relief (BCPR) of the United Nations Development Program (UNDP); Sandra Zúñiga Briceño, Coordinator of the Regional Project "Systematization and Dissemination of Best Practices in Disaster Relief and Local Risk Management in the Andean Region", Linda Zilbert and Gustavo Wilchez-Chaux, international systematization agents in charge of elaborating this document.

At the same time we counted with the fundamental support of national systematization teams who carried out the compilation and systematization of the case studies in each country. They are: Marco Antonio Rodrí-



guez, Bolivia; Lina Beatriz Franco, Colombia; Alfredo Ponce, Ecuador; Orlando Chuquisengo, Perú; and Wilfredo Samanamú, Venezuela.



# The Andean Community and Risk Management

## Agreement points... and disagreements

The countries in the Andean Community (CAN) have several similarities and show common characteristics regarding not only geographic proximity, but natural resources, common cultural history, and great similarities related to their long history of disasters. In most cases, their territory and society currently present high levels of risk which endanger any investment of intervention efforts carried out for the development of these countries.

Although we found many similarities in the history of disaster occurrences, not necessarily the same reality applies in regard to the state of development and comprehension, project development (analyzing how and what to do), investment and political commitment to the reduction and management of risk.





We questioned ourselves to what extent, in many cases; the "new" term is being utilized only to label the same conventional practices, focused almost exclusively in responding to an emergency situation and/or disaster, and trying only to quickly overcome the crisis without considering the conditions that led, undoubtedly, to that situation. Or, on the contrary, regional examples exist of how risk management can be used to provide solutions to the

"unsolved problems of development".

A brief comparative analysis of the situation in the Andean Community provides the following general conclusions:

All the Andean countries have approached disaster management from an institutional perspective, mainly in terms of response. The preparedness efforts are sporadic and are usually not oriented to



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working in a multi-threat analysis. Even though there are incipient efforts, most government sectors have not yet incorporated risk management in their development programs and the agencies specialized in disasters have concentrated their efforts in emergency management. This means that, in practice, the governments in the region have failed to stop the risk accumulation processes and to address the risk conditions of the environment appropriately.

- **Colombia** and **Bolivia** present a series of national progress in areas such as national politics and concrete experiences of local management.
- In **Colombia**, progress started many years ago. This, added to other improvements in environmental management and its incorporation in national and regional development programs, make this country a reference in Latin-America.

The eruption of the Nevado del Ruiz volcano in 1985 and the mud flood that destroyed the city of Armero, causing the death of more than 20.000 peo-

ple, is a significant milestone for risk management in Colombia. The national government in cooperation with the UNDP, undertook the task of creating a National System for Disaster Prevention and Relief, which was established by the Law 46 in 1988, ruled by the law 919 of 1989. Since then, in a process that has had many achievements and setbacks, the System has been consolidated and transformed, with a tendency to decentralize risk management at a local and regional level. Especially, we can mention the effort made by the country in incorporating the subject in regulatory plans of soil usage.

Since its creation, and especially in the last decade, many disasters have occurred in Colombia (earthquake of Atrato Medio in 1992, earthquake of Páez in 1994, earthquake of the Coffee Axis in 1999, multiple floodings that became disasters, the latest in 2004) and at least two cases of re-settlement (San Cayetano in Cundinamarca and Herrán in the north of Santander), where the role of the different levels in

the System (national, regional and local) have been variable. In the cases of the earthquakes that occurred in Paez and the Coffee Axis, new institutions were created to manage the disasters. In the first case, the NASA KIWE Corporation was integrated into the system and in the second case, the FOREC, Fondo para la Reconstrucción y el Desarrollo Social del Eje Cafetero (Fund for the Reconstruction and Social Development of the Coffee Axis), replaced it completely.

- In **Bolivia**, in the last 10 years, significant changes have occurred in the addressing and connotation of disasters. This coincided with several milestones that were determinant for these changes: first, the earthquake in Bolivia in May 1998 that seriously affected the communities of Totorá, Aiquile and Mizque, in the so-called "cono sur cochabambino" (Southern Cone of Cochabamba); second, the effects of "El Niño" over the agricultural zone of Bolivia; and, third, the hailstorm and the consequent flooding that affected La Paz city in February 2002.

These disasters motivated the Bolivian Government, with the support of UNDP, to put their best efforts towards: 1) the execution of the project "Support to the national civil defense system in the emergency relief activities for El Niño", and 2) the creation of the National System for Disaster Reduction and Relief in Bolivia – SISRADE, leading to the Law 2140/2002.

During several years, the Ministry of Sustainable Development was in charge of risk management (actions linked to development and definition of public policies), while the Civil Defense System, a vice-ministry of the Ministry of Defense, was in charge of the operational aspects of disaster management and relief. A new law was established later: LOPE, (law that reformed the executive branch of public power), which introduced a great deal of institutional confusion, transferring to the Civil Defense attributions that formerly belonged to the Ministry of Sustainable Development, without eliminating the responsibility for the latter.

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Currently, a process of institutional coordination is starting around a credit of the IADB (with the support of the GTZ), aimed at the institutional strengthening in the area of risk management. From here on, it is expected to clarify conceptually and operationally the existing confusions, which practically constitute a major vulnerability of the country and a major obstacle to achieve appropriate risk management.

Two other projects supported by UNDP allowed Bolivia to advance towards real risk management: one oriented to the creation of a Local Risk Management System in the La Paz municipality, whose executor is the local city government, and another one that pursues the same objective in the department of La Paz, whose executing organization is the Prefecture<sup>1</sup>.

- **Venezuela** is another special case, rather intermediate, regarding the achievements and advancement in the area risk mana-

gement issues. A strong subject in Venezuela in the past years is the study of seismic dangers and threats, with the development and encouragement of several studies of seismic microzonification and structural design of seismic-resistant buildings, centered always around a group of scientific research organizations (FUNVISIS) or universities.

In the past years, parallel with the disasters that occurred in Vargas in 1999, great concern and interest in risk management issues are noted, understanding these issues in their integral dimension. Important achievements have been made, especially in scientific-academic, research circles, and also in some public sectors: Ministry of Science and Technology (MCT), Ministry of Planning and Development (MPD), Ministry of the Environment and Natural Resources (MARN), Ministry of Education, Culture and Sports (MECD), etc. The main concern shifted from earthquakes to

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<sup>1</sup> Project BOL/03/004 executed by the prefecture of the department of La Paz, and part of this systematization.

flooding and hailstorms, however, despite these important achievements and institutional development, we cannot assure that a Risk Management culture exists in the whole Venezuelan society, in their institutions, in its policies, and in the general public.

It is recognized that the disaster in Vargas was a milestone in Venezuela and in the changes of risk management issues. That episode enabled a process of reflection about the practice, to re-think strategies and intervention forms that lead to revert the current risk conditions and can generate –though slowly- some transformations that commit all the actors. Within some ongoing initiatives, we dare to list: the Organic Law Proposal for Risk Management that is currently being revised at the National Assembly; the National Plan for Risk Prevention and Relief, the Inter-ministry Commission for Risk Management; the VENEHEMET Program, the Program for the Modernization of the National Hydro-meteorology Measuring and Forecasting System; the

future creation of the National Institute for Hydro-meteorology Forecast and Alert; the Avila Project lead by the MARN through the IGVSb, where risk zones are defined in the dejection cones of many canyons in Vargas; the project of PREVENE (financed by COSUDE) that consisted in the high technology transfer of geo-hydrodynamic phenomena issues, such as the torrential rains that occurred in Vargas.

On the other hand, new conditions were given or created for a group of projects and proposals originated from international and/or national organizations such as: the definition of a Community Base Line for the Follow-up of Social Vulnerability in Venezuela (UNDP and the United Nations System); the Proposal for the Reconstruction and Recovery of Disasters and Strengthening of Risk Management Competences in Venezuela (worked by the BCPR/UNDP), the existence of the Risk Relief Commission (COMIR) led by the Faculty of Architecture of the UCV. Also, policies linked to

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planning, territorial organization, housing and construction were defined, such as: the Environmental Protection and Recovery Area (APRA), which is a Plan for Management and Regulation of Protected Areas; the Plan for Territorial Zoning of the Estate of Vargas (POTEV), the CAMEBA Project (neighborhood improvement in Caracas), etc.

- **Ecuador** and **Perú** are two countries that currently reflect the lowest advance in risk management issues. It doesn't seem that these countries have linked and committed risk management to institutional and social development actors besides their Civil Defense Institutions, which due to their nature and functions seem to be the only ones really interested in risk management; or in the case of scientific-technical institutions that through many years had a key role in the characterization and analysis of threats and/or dangers related to natural phenomena. In the last years, in both countries, change processes have been occurring related

to the conformation of sector and/or national commissions in risk management issues, and there appears to be a need for promoting changes in the respective legal and normative frameworks.

- In **Ecuador**, the Civil Defense, created in 1960, is the official organization in charge of addressing these issues. Since 1964 the National Security Law replaced the previous version and created a National System of Civil Defense. In 1973, the Civil Defense broadened its field of action to disaster prevention and relief. With this objective the National Directorate was created, an operative instance in charge of training the population and assistance when affected by an adverse event. All these facts have shaped the structure and the reach of the current Civil Defense.

In 1997, in view of the imminent arrival of El Niño, a National State of Emergency was declared, which led to the creation of the Coordinating Unit of the Emergency Plan to face El Niño (CO-

PEFEN). Currently, COPEFEN works directly with sectional organizations and other government entities that require support and financing for Risk Management, regardless of the affected sector. Its basic functions are to analyze the projects presented by the co-executors (municipalities, provincial counsels, ministries, among other public entities) in their technical, cost, and environmental aspects, approve those that meet the conditions stated in international finance agreements, transfer resources and audit the executed works.

Among other related institutions there is also the Executive Corporation for the Re-construction of El Niño Affected Zones, CORPECUADOR, an native entity that is in charge of approving a Master Plan of Works of mandatory execution, approved in September 1999 and that is currently operational. Regarding risk information, the country counts with

technical-scientific institutions such as INAMHI, INOCAR, the Geophysical Institute of the National Polytechnic School, National Geology Directorate of the Ministry for Mining and Energy, as well as other entities linked to universities that produce high scientific level information about physical and social phenomena, which can become a threat to settlements or productive sectors. However, the level of coordination between these entities and with other entities linked to development is limited. Therefore the application of the information to risk reduction plans is still weak<sup>2</sup>.

In 1999, the National Office for Planning (ODEPLAN) was established, currently re-named to SENPLADES. It has the responsibility of defining the direction of public investment in the country as well as to supervise the planning for disaster risk reduction. From this institution was promoted the creation of the National

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2 Mission Report. UNDP-Ecuador, Bureau for Crisis Prevention and Recovery (BCPR), Disaster reduction Unit (DRU), Office for the Coordination of Humanitarian Affairs (OCHA). April 2004.



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Committee<sup>3</sup> of sectoral groups for Risk Prevention, with the purpose of establishing the basis for a national plan for prevention and risk reduction.

Currently, there are three recent projects for the creation of a national system for risk management. The proposals coincide with the analysis of the problem and recognizing risk management as a permanent State policy that requires an articulation between different entities that need to be inter-sectoral and decentralized, but differ in the scope and the instances proposed for the articulation of the system. However, in the country there are elements that could make part of a national risk management system and there is also true motivation by the different actors to reach a consensus and step forward to establishing the system<sup>4</sup>.

- In **Perú**, the Civil defense is also the institution legally responsible for risk management in the country. Since the Huaraz earthquake in 1970, a Civil Defense System known at that time as SI-DECI (1972) was established. This institution was replaced in 1991 by SINADECI or National System of Civil Defense, denomination that currently holds. The SENADECI is an integral part of the National Defense System, presided directly by the President of the country. In 1987, the National Institute of Civil Defense (INDECI) was created as a public entity with native administration and budget, being the central organization, rector and conductor of the National System of Civil Defense in Perú. As part of its main responsibilities, INDECI is in charge of organizing the population, coordination, planning and control of Civil Defense activities in the country.

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3 The National Committee for Risk Prevention conformed by SENPLADES, the Ministry of the Environment, the Navy Oceanographic Institute (INOCAR), the national Institute for Meteorology and Hydrology (INAMHI), the Geophysical Institute of the National Polytechnic School, The National Civil Defense Directorate, The Association of Municipalities of Ecuador (AME), the Consortium of Provincial Councils (CONCOPE), the Ministry of Foreign Affairs, COPEFEN and CORPECUADOR.

4 Idem.

Today, Perú is the scenario of multiple local and community processes, as well as national processes that explicitly or implicitly are translated as risk management.

On one hand, the INDECI created a Multi-sector Commission for Disaster Prevention and Relief in August 2002; on the other hand, the Presidency of the Ministry Council (PCM) has created a Multi-sector Commission for Risk Reduction in Development in June 2002. Their parallel existence generates a duplica-

tion of efforts and competencies, in an environment of noticeable institutional tension.

In the northern part of Perú, in the Piura Department, a working commission for risk management has been created, including local NGO's and led by the German Technical Cooperation Service (GTZ). In the southern part of the country, other risk management processes are being promoted based on the GTZ work, and also ITDG and OXFAM of America.



## Case Studies

The 15 "case studies" that support the gathering and evidencing of lessons learned are proposals, initiatives and practical experiences promoted through projects sponsored by DIPECHO (one project per country) or the UNDP (one project per country), as well as experiences originated natively from the initiatives of the same communities and their organizations, or local authorities (also one per country), to which we have given the name of native experiences.



# Bolivia<sup>5</sup>

## Strengthening of institutional competence in risk management in the department of La Paz: Chima Case

-Supported by UNDP-



This Project had as a specific objective the consolidation of competences in risk management issues of the Prefecture of the Department of La Paz, Municipal Government of Tipuani. During six months (June to December 2003), this project took actions aimed at addressing the emergency situation generated by a strong landslide that affected the city of Chima. It also facilitated the institutionalization of the Emergency Operations Committee by a resolution of the Prefecture, and the generation of regulations and operational manuals. It is important to mention that the project is still functioning and that, at the moment of writing this report, shows significant progress such as, for example, incorporating risk

<sup>5</sup> The aspects relating to the "case studies" for BOLIVIA are based on the systematization efforts carried out by MARCO ANTONIO RODRIGUEZ. The reflections and results from the Exchange Workshop (Bogotá, 15 & 16 October, 2004) with participation of specialists and people in charge of the systematization of the project were also taken into account.

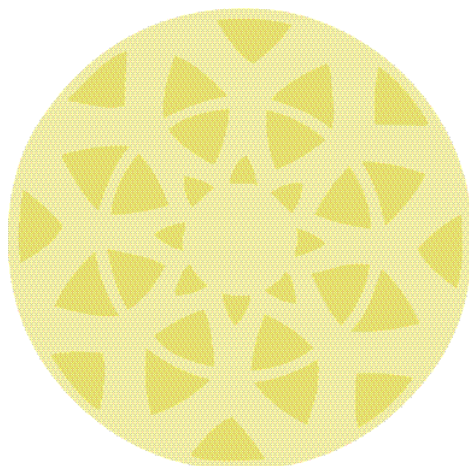


## Case Studies

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management in development plans of various municipalities that are part of the Department of La Paz and into the commitment of authorities and other municipal actors in the subject.

Within the most significant achievements are: the creation of an entity in charge of risk management in the Prefecture of La Paz, and the municipal government of Tipuani; having facilitated the establishment of a group of alliances with different actors and links with other similar projects at different levels.



### **Strengthening of local competences for natural disaster prevention in northernmost of Potosi.** -Supported by DIPECHO-

The area of influence of the Project includes the municipality of Caripuyo in the Alonso Ibáñez Province, and the municipalities of Arampampa and Acasio, in the General Bilbao Province. The Project implemented by Medicus Mundi (MM) - Bolivia, through a local counterpart, was executed in 13 months, starting July 1st 2002 and ended July 31<sup>st</sup> 2003.

This proposal was structured based on the "lessons learned during the first phase of the project in the municipality of Caripuyo<sup>6</sup> (DIPECHO 1)". In this way, the project analyzed in this paper, developed a group of strengthening actions, mainly: training to authorities and community leaders in elaboration

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6 MEDICUS MUNDI-DIPECHO; Project DIPECHO 2000-2001: "Strengthening of the local capacities for disaster prevention in the northernmost border of Potosi"



of project profiles and prevention projects that included a relief component related with the execution of demonstrative works.

The project also included some achievements in education (formal and alternative), with training aimed at local NGO technicians, municipal government, civil society, students, and population of the northern region of Potosi. Finally, one of the most important products was the elaboration of a study of cultural perception in natural risk and gender relations<sup>7</sup>.

## SUKA KOLLUS

-NATIVE  
Experience-  
-Project PROSUKO-

For Bolivia, we selected as "native experience" the SUKA KOLLUS project, as we consider that it not only addresses "immediate" processes of risk management, but it re-assumes remarkably the flow of processes and strategies of territorial appropriation which started in the pre-Columbian era, when what we call "risk management" was an integral part of culture, not only in their technological and material expressions, but in their symbolic expressions that cannot be separated from the former.

7 Study coordinated with the Risk Management and Food Security Project in the San Pedro River (PGRSAP) of the German Technical Cooperation, GTZ.



## Case Studies



This native experience is framed in the PROSUKO Program (SUKA KOLLUS Program) that is being developed in the highlands of Bolivia since 1992, and is supported financially by the Swiss Development Cooperation (COSUDE). The Program, as such, has as an objective to recuperate, research and disseminate sustainable agriculture practices from the time of the Tiwanacu empire, a period before the Incas. In ancient times, the SUKA KOLLUS

(earth rows) worked when flooding occurred because these channels or rows allowed the water to flow without affecting the cultivations, which diminished the risk in flooding periods.

Through what are called in the Project as "yapuchiris engineers", a community knowledge management process takes place on how to use a modern technique or technology, without affecting the tradi-

tional knowledge conservation. They work identifying bio-indicators, from experiences of the elders (low nest, dry year, looking at the flowers, cloud structure) and systematizing them. The community pays them a salary at the end of the harvest, while they develop a farmer-to-farmer training system.

This way, the Project is not limited to the technical aspects of this form of cultivation in ridged fields and channels, but it tries to recover values and social practices that formed part of the context in which the SUKA KOLLUS were developed, that in its essence, to be a collective activity: the cultural tradition of intense community work.

The SUKA KOLLUS are born in a social organization based on solidarity and reciprocity, not only among human beings, but between them and the Earth; they constitute therefore expressions of

a culture of coexistence with nature, according to which, as in other context affirmed by Democritus "wealth is not having much, but needing little"

The high profitability of this cultural practice has provided the communities participating in the project of an endogenous tool to face the market challenges; to reduce their vulnerability toward the globalization threats, strengthening at the same time their identity and their feeling of belonging to the territory.

Due to its characteristics of recovery, cultural and traditional revalorization, the PROSUKO Program which was started from an initiative promoted and financed by international cooperation, we have considered SUKA KOLLUS as a valid native experience of the Bolivian society and, therefore, representative of the Andean Community as well.



# Colombia<sup>8</sup>

## Disaster prevention and relief component of the strategy of alliances for territorial programs for peace and development

-Supported by UNDP-



This Project is born under the cooperation framework of BCPR/UNDP, which intends to ensure that all the development actions promoted by UNDP in cooperation with the Colombian Government and other national, regional and local counterparts, contribute to diminish risks associated with the armed conflict in the country, reducing its impact and enabling the recovery of the affected areas and societies. One of the lines of action is the area of Risk Management and Natural Disasters, considering that the relationships between the risk accumulation processes in a disaster and the armed conflict are complex, and a process (of the armed conflict) may aggra-

<sup>8</sup> The aspects referring to the "case studies" from COLOMBIA are based upon the systematization efforts carried out by LINA BEATRIZ FRANCO. The reflections and results from the Exchange Workshop (Bogotá, 15 & 16 October, 2004) with participation of specialists and people in charge of the systematization of the project were also taken into account.





## Case Studies

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vate or transform the conditions of the other (risk conditions), because both take place in the same territory.

This initiative has the objective of consolidating, maintaining and strengthening the organizational structure of the National System for Disaster Prevention and Relief (SNPAD) at a territorial level in the armed conflict zone; allowing the municipalities to respond effectively in case of disasters, the reduction of risks and disaster prevention through the formulation of Local Emergency and Contingency Plans (PLEC's) and the formulation of a medium and long-term initiative that satisfies the immediate needs and which establishes a link with the Municipal Development Plan.

The Project started a few months ago, with a preliminary stage (Preliminary

Assistance) of 8 months starting October 1st, 2003, followed by a two year period of the project's duration.

This Project seeks to consolidate a process that started in the country years ago, simply because in a society deeply affected by an armed conflict, it is inevitable that society develops strategies that allow them to build –or at least try to build– "normality" in the middle of a war.

In this Project, two processes that the UNDP has been supporting in Colombia for many decades coincide: the institutional and community strengthening for risk management (that include, among other achievements, the creation of the National System for Disaster Attention and Relief) and the search of coexistence and governance in different scenarios of the conflict affecting the country.

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## **Strengthening of the local competences in prevention and reduction of natural disasters in six municipalities of the Quindío department**

**-Supported by DIPECHO-**

On January 25th, 1999, at 13:19 local time, the coffee-producing region of Colombia was severely shaken by an earthquake, with a magnitude above 6 grades in the modified Mercalli scale, which produced great destruction in the area and close to 1.200 deaths.

After this experience, the Coffee Axis has become an appropriate space for the development and implementation of intervention models for emergency and disaster relief, and became the ideal scenario for the integral application of concepts related to risk management, the process of rehabilitation and reconstruction of areas affected by the event.

Within the group of interventions and organizations that participated and formed part of the reconstruction process of the Coffee Axis, is the Comitato Internazionale per lo Sviluppo dei Popoli (CISP), an European NGO selected to execute this initiative. The execution period ran from May 2001 to March 2002.

The Project to be applied in municipalities of the department of Quindío established as objectives: a) To support and strengthen the competences of local administrations in activities of prevention, management and risk reduction; b) Strengthening of the institutional competences of the entities that are part of the Local Disaster Prevention and Attention Committees (CLOPAD) for an effective response in case of emergencies; c) Defining specific lines of action at an institutional level that allow articulating a response to an emergency, and optimize the available resources of the municipalities.

This initiative produced a series of achievements in areas of institutional strengthening, among them: training of social actors, elabora-





tion of risk proximity maps in the 6 municipalities; emergency plans and operational maps for the municipalities; incorporation of the subject in education, educational and informational material, including a radio program that is still being transmitted in the department's capital.

## Guardians of the mountain side

-NATIVE

Experience-

-Municipio de Manizales-

This initiative is promoted and Developed by the Municipality of Manizales. As an immediate "trigger event" of this specific strategy, we can identify various events as well as extraordinary and catastrophic

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phenomena that affected the city of Manizales in 2003. The first of them occurred between the 18th and the 19th of March. Intense raining registered during those days produced the occurrence of more than 100 landslides in the city. This precipitation, according to calculations made by the National University of Colombia Sede Manizales, has a period of return close to 150 years (it is probable to happen once during that period), in other words, an annual probability of occurrence of 0.7%. Landslides are common in this part of the country, caused by high slopes and the settlements of and increasing number of communities, that completely alter the relationship between soil, vegetation and water (rain, superficial and subterranean), and that saturate and overflow the load capa-

city in these same mountain sides.

This initiative of "institutional" character, has the objective of incorporating the communities that inhabit mountain side areas in the city of Manizales, in risk management activities promoted by the municipal administration, and, more specifically, it transforms the maintenance of the infrastructure built to stabilize the hill sides in an alternative source of income for women head of household within the same communities. This strategy is framed in long-term processes that have been formally supported during many city administrations in order to reduce the risk of land sliding in the area. This is a city that literally, grows perched on the mountain sides in conditions, which in theory, would seem impossible.



# Ecuador<sup>9</sup>

## Emergency project in favor of populations at risk due to the ash fall from El Reventador volcano -Napo and Sucumbios- provinces - Ecuador -Supported by UNDP-



After remaining for approximately 26 years without any major volcanic activity, El Reventador volcano, one of the most active volcanoes in continental Ecuador, started a new eruption cycle on Sunday, November 3rd 2002. Thus, this project was part of a global program for addressing the same issue developed in the Cayambe county, Province of Pichincha, in the counties of El Chaco and Quijos, Province of Napo, and in the county of Gonzalo Pizarro, Province of Sucumbios. It was developed in a year, financed by the UNDP and executed following a primary emergency project at the same places, with funds from the Humanitarian Aid Department of the European Com-

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9 The aspects referring to the "case studies" from ECUADOR are based upon the systematization efforts carried out by ALFREDO PONCE. The reflections and results from the Exchange Workshop (Bogotá, 15 & 16 October, 2004) with participation of specialists and people in charge of the systematization of the project were also taken into account.



## Case Studies

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mission (ECHO). Its administration included parts of the Antisana, Cayambe Coca ecological reserves, and the biosphere reserve of Sumaco, and are part of the bio-reserve relief zone of El Cónдор<sup>10</sup>.

A small percentage of various indigenous ethnic groups and communes of local natives exist there. In these communities, internal social conflicts are notorious, as well as a strong gender inequality in the productive tasks. The responsibilities assigned to both men and women do not correspond to a proportional participation of both groups in decision taking.

The project main objectives are: 1) To improve the communities competence to overcome the ash fall, reducing the effects/impacts of the Reventador volcano eruption, 2) To improve the response capacity to face future disasters through technological alternatives; and 3) To improve the preparation and response capacity of the communities and the central emergency coordination level, reducing the effects of

possible eruptions and other natural events such as the Reventador volcano.

Among the main achievements generated by this initiative, we can highlight: the creation of "protection systems" or "cultivation coverage with "tents" or "greenhouse-type" plastics, and the creation of family, school, and community orchards; training and disaster prevention on agricultural and veterinarian issues; building of communal and school warehouses for poultry and "cuy" (guinea pig) breeding; rehabilitation of horse stables; rehabilitation and improvement of health centers, educational centers, fresh water systems; didactic material production for training; updating of contingency plans, etc.

Also, the work team of the project enabled the coordination with local actors and national and international organizations that worked in the project's area of influence, achieving the most efficient application of actions and resources in this zone.

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<sup>10</sup> This area is of strategic importance as it is crossed by the Trans-Ecuadorian oil pipeline which carries oil from the Amazon region to the coastal city of Esmeraldas in the north of the country. The Heavy Crude Pipeline also crosses through the area, as well as the main project: "Papallacta" which provides water to the Metropolitan District of Quito.



## Strengthening of local and Civil Defense competencies in disaster preparedness

-Supported by DIPECHO-

The area of application for this project, financed by ECHO/DIPECHO, is a group of counties and/or municipalities in the Provinces of Napo and Orellana. The project was executed by ALISEI, an Italian NGO, created in 1998 from the unification of two existing associations: NUOVA FRONTIERA and CIDIS, between March and December, 2000.

The objective of the project was to organize, improve and strengthen the local Civil Defense institutions in the Provinces of Napo and Orellana, providing better information to the public in order to reduce natural and man-provoked risks, through: staff and health units organization; training of local leaders and health personnel of the Civil Defense and Emergencies, in order to provide support and orientation to

the public in case of disasters; implement campaigns aimed at population of both provinces to increase the dissemination of knowledge about risk and prevention.

Among the achievements of this intervention we can highlight: 60 short training courses (for health-sector personnel, authorities, Civil Defense volunteers, school teachers, rescue brigades and communities); rehabilitation of a health center building, two hospitals, temporary shelters, and province, county, and parish Civil Defense offices; provide equipment for the Civil Defense offices and rescue teams; delivery of medical kits; elaboration of risk maps, equipment and material to generate a database of risks and disasters, etc; preparation and measurement of educational spots and radio messages, some of which were translated to the Kichwa language. The results of the study and the maps are dramatic, and demonstrate that, in the near future, depending on the "will" and behavior of the Coca River, there is a probability of the river to cross and divide the existing city.





## Re-vegetation Project of the Esmeraldas city slopes

-NATIVE  
Experience-

This initiative for restoration of natural ground coverage or re-vegetation of slopes in Esmeraldas, comes as a response to the landslides and flooding caused by El Niño in 1998 that caused the des-

truction of housing and streets, and risked the oil industry, water supply, and communication infrastructure in the Province. It was executed through an agreement between Petroecuador, the Municipality of Esmeraldas and Fundación Natura. The importance of this experience, that we consider NATIVE, is that it emerged as a Municipal initiative, in consortium or association with an NGO and an oil company, and, where great citizen

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participation was achieved, recovering ancient community work such as the "mingas". It also motivated the involvement of other local and national actors.

In the re-vegetation project participants included neighborhood and high school student organizations, trained in the settlement and care for tree nurseries, seeding and maintenance of plants. With neighborhood members of these slopes, 40 "mingas" were established for plant cultivation. With the collaboration of the Esmeraldas Marina, the sowing of 130.000 "vetiver" plants in the so-called "Terrazas de Balao" was achieved. There is a group of youth interested in continuing their training and working for their community.

A bio-engineering technique was used, through the cultivation of "vetiver", a plant of Hindu-origin, which has the capacity of forming natural barriers. With them, land sliding and erosion control was achieved, and, at the same time, a recovery of green spaces for the city, that help to improve the quality of air, highly contaminated by the crude-oil refinery.

The main purpose of this initiative that started in October 2002, and with a pilot duration estimated for one year (October 2003), was to reduce the risk affecting the population, as well as the basic infrastructure of the city, especially the water supply tanks, oil industry infrastructure, rain-water collectors, and high tension cables. For the



strategy they used technical and communicational tools such as the sowing of fruit, ornamental, and forest trees in level curves; social-organizational strengthening through the participative formulation of Neighborhood Emergency and Development Plans, formation of neighborhood emergency committees to face and prevent natural disasters; training in community communication techniques for youth, women, teachers and community leaders; communication workshops; production of educational material; and the publicity of the

projects both inside the neighborhoods as well as outside for the knowledge of the public opinion.

Among the main achievements we can highlight: 1) re-vegetation of 4 micro-basins. It was the juvenile groups from the neighborhoods close to the slopes the ones that participated in the sowing and maintenance of the plants; 2) organization of the Dialogue Table with the participation of different actors of the municipality and the civil society, who agreed on community problems, among them, the forma-

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tion of the Mountain Side Environmental Management Committee; 3) a training program in environmental care to prevent disasters directed at the inhabitants of the neighborhoods close to the hill sides; 4) formulation of neighborhood plans approved by authorities and by the community; 5) implementation of communication campaigns for risk prevention in mountain sides; 6) exchange visits of community leaders to the Municipality of the Metropolitan District of Quito, to learn about the actions developed to

protect neighborhoods located along the slope of the Pichincha mountain, and organizing the community for the execution of protection infrastructure.





# Perú<sup>11</sup>

## Rehabilitation of the affected zones of Arequipa and Tacán – Earthquake 2001

-Supported by UNDP-



This project emerged from the need of addressing the rehabilitation of housing affected by a strong earthquake that occurred in the southern region of the country. After the disaster in 2001, the Italian government approved a resource donation for the reconstruction of the affected zone. In January 2002 a Mission was developed, formed by UNDP, with the aim of evaluating locations and establishing a support proposal to the reconstruction process.

To initiate the reconstruction project, the UNDP delegated the process to three different institutions: 1) NGO's linked to the Italian Cooperation in charge of the rehabilitation of three educational centers; 2) National Service for Construction Trai-

<sup>11</sup> The aspects referring to the "case studies" from PERU are based upon the systematization efforts carried out by ORLANDO CHUQUISENGO. The reflections and results from the Exchange Workshop (Bogotá, 15 & 16 October, 2004) with participation of specialists and people in charge of the systematization of the project were also taken into account.





## Case Studies

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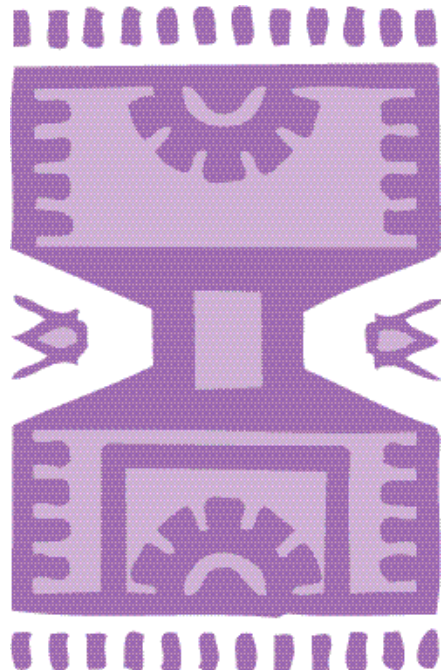
ning and Research (SENCICO) that is in charge of the construction of 95 houses using the reinforced adobe construction system, in the Arequipa Department; and, 3) Intermediate Technology Development Group (ITDG), International NGO based in Lima, capital of the country, hired for the reconstruction of 92 houses in the Tacna Department, using the construction system of construction reinforced with concrete blocks.

In this case study we made a closer review and analysis of the intervention of the ITDG, as we could not find much information regarding the development of the projects by the other executors.

The objective of the project executed by ITDG is the reconstruction of houses of people affected by the earthquake, corresponding to extreme-poverty and high vulnerability families using concrete blocks as the material and technology adequate for the area; generating construction skills by training the beneficiary population.

Among the obtained achievements we can highlight: the reconstruction of houses in collaboration with

the affected population, under the auto-construction methodology. For this, the project trained the population in the production of the construction components (cinder blocks and clay roof tiles) and in construction methods, training sessions in risk management were also provided. Finally, the experience was systematized in order to promote its exchange and dissemination at the national and international level.



## **Development of local competencies for disaster response and mitigation in communities vulnerable to earthquakes in the Moquegua, Torata and Samegua districts**

**-Supported by DIPECHO-**

The project, developed in the Moquegua Department in the south of the country, was executed by the Center for Disaster Research and Prevention PREDES and OXFAM-Great Britain, with the support of Humanitarian Aid Department of the European Commission – ECHO. It surfaces with the purpose of attending the population of the 3 districts of the Mariscal Nieto Province, which were affected by the earthquake on June 23<sup>rd</sup>, 2001.

This initiative's main objective was to contribute to the improvement of physical safety conditions in vulnerable communities, strengthening the local competencies to reduce seismic vulnerability of the populations through risk studies,

proposals for soil usage plans, training and elaboration of emergency plans in the districts.

The project had a local-level articulation, which allowed the strengthening of Civil Defense District Committees, helping them in their planning efforts, over the basis of the instruments which were developed, among others: 1) Studies of risks and vulnerability; 2) Training activities aimed at local actors, including young volunteers that were called JOVOS; 3) Elaboration of emergency and prevention plans; 4) Promotion of disaster prevention work with young volunteers between the ages of 14 and 22 (JOVO); 5) Technical assistance and demonstration works of prevention and relief such as: current control dikes, slope stabilization and construction of seismic-resistant modules; 6) Formulations of norms and municipal orders that incorporate security criteria in the soil usage; and, 7) Development of communication and awareness activities, linking some activities with social communicators and journalists of the city of Moquegua.



## Urban Self-managed Community - Huaycán -NATIVE Experience-

Twenty years ago, on July 15th, 1984, inhabitants of marginal areas and neighborhoods of Lima<sup>12</sup>, the capital of Perú, in a joint effort and

in agreement with the municipality of Lima, they proceeded to the take-over or invasion of abandoned plots of land in the eastern part of the city with the purpose of promoting and developing a **Special Program for the Progressive Urban Habilitation known as Huaycán**. It is located 16.5 kilometers east of the city of Lima, in the Ate

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<sup>12</sup> Initially, 6 Marginal Human Settlements and 17 Cooperatives and/or Associations of Housing and Settlers participated in the invasion, which in an organized fashion went into the canyon in order to give it life and dynamics to this new city.

Vitarte district, in the slope of the canyon of the same name and right hand side of the Rimac river. It has an approximate extension of 442 hectares.

The Huaycán Special Project (PEH), was named by the Municipality, and consisted on the planned take-over of land plots, promoted and coordinated together with the provincial municipality, in its search for addressing the housing demands of vast poor sectors of the capital and as a way to offer a planned alternative of habilitation as a solution to the well known and frequent land take-overs for settlement purposes in marginal areas of the city that do not present adequate conditions for housing<sup>13</sup>.

They were initially organized through the Management Committee for Human Settlement of Huaycán, forum of co-administration integrated by representatives of each social organization, representatives of the Metropolitan Municipality of Lima and the District Municipality of Vitarte. The organization was later named Association of Inhabitants

of the Huaycán Canyon, and finally became the Association of Inhabitants of the Self-managed Urban Community of Huaycán.

There are some key elements that lead us to identify this experience as one of the case studies for our systematization, but the most important was trying to create a new way of organizing to convert an abandoned zone, in the slopes of the Huaycán Canyon, into an integral part of the urban environment of the city, in order to achieve the basic conditions for living suitable for human beings.

The first key element is, that the land plots occupied by take-overs, were those that presented inhabitation and insecurity conditions because they were abandoned terrains located in canyons in danger of "huaycos" or land sliding, or by a river. Huaycán is exactly located at the end of three canyons, and the importance of this experience was that for its habilitation and the urban design of the settlement, they performed all the geologic and geo-morphologic studies required

13 This important proposal for land habilitation, as an alternative to invasion and spontaneous occupation of plots of land, was promoted by the Municipality, represented by the Mayor, Alfonso Barrantes Lingán.



to determine the threats and to locate the areas exposed to threats. With these criteria in mind, the settlement was defined, leaving the canals unoccupied to serve as main streets and avenues and to also function as exhaust routes.

The use of alternative and appropriate low-cost technology was promoted for the construction of houses and community buildings, and, at the same time, much care was taken in establishing safety criteria for the construction process, providing technical assistance and training to the self-builders. Progressive proposals were also worked and applied in the habilitation process (housing construction, provision of water and sewage services, urban residues elimination, electricity, etc.), guaranteeing security criteria that these construction by stages demanded. Besides, it was defined as urgent to work with community leaders and the population as a whole so that they could appropriate the technical proposals, discuss them, and generate consciousness and responsibility in the care, and commitment in leading and supporting these proposals and their implementation.

The second key aspect is the urban zoning proposal that favored and supported communitarian organization. Each family group, in numbers of 60, formed a Community Housing Unit (UCV), a multi-family group or condominium for jointly addressing and developing their neighborhood. The influence area for each unit is less than one hectare and each family possess a 90 m<sup>2</sup> individual property, sharing with the other associates the responsibilities for care, protection and maintenance of the common areas and community services, including the Community House of the UCV. Each UCV, represented by its directive board, is legally recognized by the Municipality and represent its interest at the zonal assembly that groups a certain number of UCV's, which in some cases is of 19 or 23.

Regarding the third aspect, starting in the 80's, this eastern zone of Lima continued growing by the forced migrations, caused mainly by the political violence of that time, especially in the southern-central part of the country. Huaycán, therefore, was formed by a high percentage of people who fled from the violence zone and located themselves in

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family groups from the same region, which rapidly helped them in their adaptation and in overcoming the difficulties of that time due to the lack of basic services, and in strengthening the communitarian life-style, and keeping community work to achieve these objectives.

The fourth aspect, is that even though the area is not considered as active for the risk of flooding, some years ago, a series of huaycos, or torrential mud slides and land slides occurred, affecting many families in Huaycán. This allows us to see that after 20 years, the initial safety proposals were maintained, after the population spontaneously conditioned and transformed their territory for living.

Currently Huaycán occupies a territory of approximately 442 hectares, it has a population of more than 150.000 inhabitants, where a major percentage is considered to live in extreme poverty conditions. It is composed by approximately 300 UCV's, 3 industrial parks, agricultural and live-stock zones (pork, beef, minor poultry, in the high zone of the canyon), close to 2.000 lots in the commercial zone, service centers (with assistance centers, primary and high-schools, community or neighborhood services, Huaycán Municipal Agency (decentralized office of the Ate Municipality), a court house, culture and youth center, etc.





# Venezuela<sup>14</sup>

## Project to support the emergency in Venezuela -Supported by UNDP-



In the second half of December, 1999, Venezuela suffered one of the greatest catastrophes in its history. During this month, in the coastal zone of the country, extraordinary rainfalls were registered in the north of the country, being the State of Vargas, one of the most affected. To a lower extent but no less critical, the following places were also affected: Federal District of Caracas, The States of Miranda, Carabobo, Yaracuy, Falcón, and, more to the west, Zulia and Táchira. In December of that year, the country was flooded by 10 days of continuous rainfall, which caused torrential soil avalanches (flows of water loaded with heavy sedimentation) and land slides. This disaster caused the death of thousands of people, the exact number is still unknown, ranging between 10.000 and 20.000 killed and more than 5.000 missing, 100.000 people directly or indi-

14 The aspects referring to the "case studies" from VENEZUELA are based upon the systematization efforts carried out by WILFREDO SAMANAMÚ DÍAZ. The reflections and results from the Exchange Workshop (Bogotá, 15 & 16 October, 2004) with participation of specialists and people in charge of the systematization of the project were also taken into account.



## Case Studies

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rectly affected by the disaster. The damage and material loss is estimated to reach more than 3 billion dollars<sup>15</sup>.

This situation motivated the collaboration of the Italian Government, which provided considerable financial resources to be managed through the UNDP to perform emergency and relief actions in the affected populations. In January 2000, a Mission of Italian experts, together with a Transitional Reconstruction Mission of the UNDP-ERD<sup>16</sup>, identified priority areas and emergency and relief projects, some of them where effective through Italian NGO's. The Italian experts Mission advanced coordinating with the Venezuelan Government, with the UNDP office in Venezuela and the Italian NGO's present in the country, about the possible cooperation modalities. As a result of this, the projects to be implemented were defined, among them, supporting the recovery of basic utilities infrastructure located mainly in the State of Miranda, choosing tree

heavily-affected Municipalities<sup>17</sup>: Páez, Pedro Gual and Acevedo.

The Project's main objectives were: contributing to the rehabilitation of basic social infrastructure, re-establishing damaged social services destroyed by the catastrophe; besides promoting projects and processes that while improving the socio-economic wellbeing of the population, reduce the risk and prevent the populations of suffering similar events in the future. For this, the project developed two phases: 1) First Phase or Rapid Impact Phase (6 months duration): attending the urgent needs in environmental cleaning issues, provision of drinking water, health, education and psycho-social and community attention; and, 2) Second Phase or Transition to development Phase (approximately 12 months, September 2000 - September 2001): consensus building and participation in sustained development, investment in educational infrastructure and human capital training, economic recovery (productivity, transformation and competitiveness)

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15 Source: ECLAC according to data from CONAVI and OCEI.

16 Currently BCPR, Bureau for Crisis Prevention and Recovery.

17 The selection of this proposal was based on the recommendations of the strategy regarding the transition from emergency to recovery and rehabilitation; a work presented by the Experts Mission from UNDP-ERD (BCPR).

and promotion of investments (commercialization and credit).

The intervention methodology was based on the following managerial lines: establishing a Project or Program Frame Document with the final goal of improving the life-standard of the beneficiaries and grouping the sum of projects of cross-cutting impact; evaluation of project proposals together with local, regional and national authorities; agreements with NGO's and implementing organizations, after rea-

ching consensus regarding activities and budgets; supervision and monitoring of activities in the intervention area; closing of the project with the delivery of works to the authorities and affected communities; visibility actions regarding publications and articles by the UNDP.

This reconstruction experience was based and executed on 24 projects implemented through 16 organizations.







## **Program for disaster prevention in communities and institutional strengthening in response to disasters** -Supported by DIPECHO-

This Project's intervention area consists of 6 Venezuelan States, 6 Municipalities and 60 Communities. The Falcón State in the Municipalities of Chichiriviche; Carabobo in the Municipality of Valencia; Vargas in the Municipality of Vargas; in the Caracas Federal District; in Anzoátegui in the Municipality of Barcelona; and in the State of Sucre. This project was executed by the Spanish Red Cross, and the Venezuelan Red Cross (VRC) as counterpart.

The Project's main objective is to reduce the vulnerability of the communities located in regions with high-risk of earthquakes, strengthening community's capacity for

emergency response, through the conformation of immediate response brigades; conformation of women network and school brigades; communitarian training and training aimed at schools.

Among the Project main achievements we can highlight: strengthening of volunteer work and delivery of emergency equipment to Municipalities; strengthening of communities through population training in first-aid issues, earthquake prevention and management of temporary shelters; organization of the population in immediate response groups and women networks; delivery to each community 10 first-aid kits and one medical kit per school. The total number of trained people in the different courses was: 1.670 people in first-aid, 1.423 in earthquake prevention, and 1.109 in temporary shelter management, including the total number of teachers also trained.



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## CATUCHE social consortium

### -NATIVE experience-

This initiative is promoted and developed directly by the community. The Consortium Catuche is a group created by the community to be responsible for the design, coordination, management, control and leading of the execution of all the physical facilities, development and control of open accounts, producing new forms and methods of communitarian organization within the civil society. The Catuche neighborhood is located in Caracas, capital of the country, in the Municipality of El Libertador, next to the river with the same name.

Catuche as a town was consolidated in 1958 as a marginal neighborhood in the upper part of the modern Caracas, and urbanized from the Trinidad bridge to the river mouth called la Yerbera. One must mention that Caracas grew and configured together with its growth, risk conditions, especially in the marginal zones called "ba-

rrios". For example, in this capital city up to 14 brick-and-mortar houses are still built every month in high risk terrains, due to the instability of its soil. Therefore, the importance of knowing the communitarian organization experience that, since 1993, decided to respond to its marginal situation in the urban city of Caracas and the risk of being built at the river margin that carries its name. In coordination with the municipality of El Libertador, they are doing the voluntary relocation of 32 families that were settled within risk areas, through a substitution housing program.

By the end of 1993 the CATUCHE community decided to organize themselves as the **Catuche social consortium**, leaving the management process and the responsibility in the hands of the civil organizations, within an open and flexible organization that coordinates and negotiates with the different development agents.

They counted on intermediate organizations, academic and professional institutions proposed by the local Government. This type of project, creating a new, useful and in-



novative use of space, intends to become a development model of the city. So, Catuche started with an environmental problem due to the maintenance of the river and was the source of a long transformation process, where all the dimensions were articulated, in the urban, social as well as the economic; this allows continuity and concern of constant development.

For instance, in the December 1999 tragedy, Catuche responded to the emergency in an organized manner, reducing costs and impacts of the event, and putting all the systems or units to work: "... In Catuche there were 12 deaths and this was due to negligence. Because during these years there has been consciousness of the danger and risk of living at the edge of the river and people were trained. Afterwards, since there was a social network, there was immediate mobilization of the neighbors, with megaphones, ropes, and even the thieves took their guns out to get people out of their homes. A coincidence of wills and not simple spontaneity..." (Interview with father José Virtuoso, taken from the internet).

After the 1999 disaster upon the community's own initiative and interest, hard work was carried out for: doing the hydrological and soil studies, the relocation of 34 families who lost their houses, the reconstruction of substitute housing for the affected families, legal counseling regarding property rights for the houses, elaboration of urban treatment for water control, river sanitation and improvement of the Catuche river, training programs and risk awareness seminars, etc.

Eleven years after, the Social Consortium Catuche keeps on working for its community in new urbanization projects and the construction of service facilities, following their development plans; being recognized by the UN as one of the top 100 experiences and/or best practices of low income housing.

This experience illustrates the problem of urban-marginal settlements, showing an effective way of reducing illegal settlements and their physical risks, by having the community as a main actor of this process. The organizational effort developed to change the "barrios" zone, which occupies the margins

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of the Catuche canyon, in an integral part of the environment and/or urban continuity, with the objective providing appropriate habitability conditions; makes this, to

our judgment, native community experience to be considered and suitable for being our third Venezuelan case study.

In the following section, we will analyze, under a risk management focus this array of proposals (methodologies, instruments, tools, techniques, etc) and referenced practices through the case studies related to disaster preparedness, emergency relief, recovery, rehabilitation, reconstruction, prevention and/or mitigation, etc. We hope that this group of select experiences allows the construction of a meaningful mosaic representing the diversity and heterogeneity of the region.

We will see how there is not a single formula for intervention but a wide variety of options, as we mention below: integral and participative assessments of risk issues; methods for risk analysis and risk scenarios, including the traditional forms resulting from the threat and vulnerability maps; threat indexes, vulnerability indexes, risk indexes; VTCO analysis (Vulnerabilities-Threats-competences-opportunities); local plans for risk management, local emergency plans, early warning systems; techniques for assessing the dimension of local development plans with risk consideration (territorial zoning, construction regulations, production diversification, environmental management for sustainability, etc.

We have also tried to select intervention cases in different environments ranging from rural settings to urban and metropolitan settings. Similarly, the experiences vary in terms of organizational complexity or interaction among them; diversity in terms of density of external

organizations present in the area, and different economic levels of the populations in each area, from the poorest to the most affluent.

In spite of the differences there is a series of lessons learned and common elements in the different approaches to the risk issues, which we highlight in detail below.



# From Theory to Practice

What we say... What we do

## Risk management seen at the light of local experiences

To talk about Risk Management is to understand that there is an evolution in risk and disaster issues; a new dimension –vision, focus or paradigm- that conducts (and forces) the search for solutions that will necessarily lead to their reduction.





**To talk about Risk Management** used to mean and it still means to look at disasters and different ways and forms of intervention, promoted until now, with a critical look regarding the impact occurred in dozens of years working in "responding" to these events. It also means, recognizing and revaluing the enormity of the efforts performed to this date; efforts of the communities and populations such as the ones performed by many organiza-

tions and institutions –local, national, and international– governmental or non-governmental. These last, generally promoted by non-governmental organizations (NGO's) that in their actions link as one of its issues the disaster component (or risk), or those promoted by "specialized actors" in the issues (organizations of humanitarian help, civil protection and/or civil defense, scientific institutions, etc.)

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**To talk about Risk Management** implies that in order to achieve the sustainability of the actions, interventions shouldn't just address disasters' consequences, but fundamentally their causes. Risk generation is complex, with the intervention of a great variety of actors related to development processes. That is why it is necessary to approach the risk issue through the very same actors that take part in its generation, instead of being limited to focal actions that discharge the responsibility of risk management on specialized institutions that have very little if any relation to development processes.

**To talk about Risk Management** is also, in view of the practice –and the different initiatives that are being implemented by communities, organizations, institutions and sectors– the re-discovery and validation of theory and conceptual issues; to be able to prove and demonstrate through lessons learned and best (and not so good) practices that these initiatives (projects or interventions), produce the hypothesis or associated affirmations of Risk Management.

Since it was first introduced, the term Local Risk Management has been strongly used among the different social actors in the region, as well as the idea of Local Risk Management, that was first developed by LA RED starting in 1996. However, the use of these two notions with academic and practical purposes has been highly diverse. It is with worry that we see that it has lost its conceptual integrity and its use denotes a great variety of interpretations, both on its meaning and content.

In the last years, the term Risk Management has been used as a "cliché", to refer to any initiative or project dealing with disaster issues, although in the practice or intervention they are always carried out with the same short-term criteria and specific action, such as those conventionally applied for many years. By changing the name (from disaster prevention to risk management), we cannot ensure a change in the form of intervention. On the contrary, it is necessary to change the specific way of intervening, for another that allows changing or transforming the existing risk conditions... that is true Risk management.

This way, with this systematization process, the idea is to get to know –from that big universe of actions, interventions, projects and investments– in what way processes which can be really framed under Local Risk Management Processes have been generated or supported. For this, we will take some fundamentally theoretical affirmations as simple "hypothesis to be proved" in light (lecture or analysis) of the group of experiences; these hy-

pothesis will be unique and common to the whole. However, it is possible that in each case, some particularities will be defined that account for a "special or particular hypothesis" from each country or context.

Let's look at some of the hypothesis or affirmations about **Risk Management** that from the selected case studies, we will try to "read", proof, validate or –if the case requires– reject or adjust.

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### **RISK MANAGEMENT as a new vision on disaster issues, and, at the same time, as a new intervention focus in the development perspective**

All the countries of the Andean Community, with no exception, present high probabilities of occurrence and reoccurrence of disasters. The presence and accumulation of threats and the high levels of vulnerability of its societies generate multiple risk scenarios, part of each reality, of their populations or their local conditions. These risk scenarios, when not addressed or transformed, have a high probability of being hopelessly and conti-

nuously affected by disaster occurrence.

Under this perspective, "risks" are the center of attention, and therefore, of intervention, and as consequence, disasters are understood as effects or materialization (or update) of the pre-existing risk conditions. This thought forces us to think about promoting or developing actions (projects or proposals) that lead to the "transforma-

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tion" of those conditions, or, likewise, actions aimed at reducing risk in our societies. It forces the reconstruction processes, after a disaster occurrence, to be framed into a risk management strategy as a fundamental factor for the improvement of quality of life, and, therefore, the Sustained Human Development.

It becomes necessary to think and establish some agreements before the intervention. To think about the need of assuming Risk Management as a new vision in disaster issues, and, at the same time, as a new focus of intervention in development perspective. For this, it is important to assume the aspects of prevention, relief, reconstruction, preparedness and management of emergencies and disasters as intrinsic aspects of the integral focus of this concept.

All the selected case studies keep a close relation with some disaster situation: due to its occurrence or to avoid or understand how to act when they happen or because they were –in their history and currently– affected by some disaster.

Most of the initiatives, 9 of the total selected cases, appeared after the "disaster" occurred. Regarding these "disasters" there is a wide variety of characteristics, and we can classify them as "great" disasters, according to conventional criteria to classify these kinds of events. Within this category is the landslide that occurred in 1999 in Venezuela. Other "medium" disasters are those affecting one territorial unit that exceeds the local (for example, a region of the country), such as the earthquakes in the Coffee Axis in Colombia (1999) and the southern region of Perú (2001), and the eruption of El Reventador in Ecuador (2002). Others, according to the conventional classification, can be called "minor" disasters or local disaster due to the area affected: landslides in the Catuche neighborhood in 1994 in Venezuela, the hill side avalanche in Bolivia that affected the Chima community in 2003; the flooding that regularly affects the agricultural production of the Bolivian Highlands; the many landslides of Manizales in 2003; and/or the landslide and flooding caused by El Niño in Esmeraldas, Ecuador, 1998.

## CASE STUDIES RELATIONSHIP BY COUNTRY

INTERVENTION DUE TO... / OR INTERVENTION OF TYPE...	BOLIVIA	COLOMBIA
Landslides	UNDP (Landslide of PUKALOMA hill, march 30, 2003)	NATIVE (More than 100 landslides in march 18 and 19, 2003)
Floodings	NATIVE (Reduction of flood risk in the Bolivia highlands)	
El Niño (FEN)		
Earthquakes		DIPECHO (Earthquake in the coffee axis in January 25, 1999)
Volcanic Eruption		
Political Violence		UNDP (Work Local Risk management in areas of armed conflict)
Preventive	DIPECHO (Communities in high slope and high erosion areas vulnerable to land slides)	





ECUADOR	PERÚ	VENEZUELA
		UNDP (December 1999)
		NATIVE (Landslide caused by torrential rains in 1994)
NATIVE (Land slides and flooding as a consequence of El Niño (FEN) 1998)		
	UNDP / DIPECHO (Southern part of the country. July 23, 2001)	
UNDP (Start of the eruption cycle. January 3, 2008)		
DIPECHO (Training actions and first response teams)	NATIVE (After 20 years it is affected by mud slides)	DIPECHO (earthquake related actions)

Of the remaining cases, 4 experiences could be referred to as "preventive interventions" which were promoted by ECHO/DIPECHO and became the continuation of previous projects. For example: the project applied in the north of Potosi in Bolivia, or the continuation of work with their partners or counterparts, such as the case of the project implemented by ALISEI in Ecuador, or the Spanish Red Cross in Venezuela. The other is an NATIVE experience of progressive habilitation and planning of terrains to provide housing to low-income sectors in Perú.

In the case of Colombia, the Project promoted by UNDP tries to favor the development of work and intervention in local risk management, in areas or territories with an armed conflict.

It is frequently said and asserted that "disasters are an opportunity for development", but when the time of "what to do" comes, it is mistakenly said that reconstruction seeks to restore the conditions previous to the disaster. Such an assertion only makes sense when it is taken into consideration to develop

integral proposals that lead to the reduction of the conditions or degrees of risk.

- The experience "Project to support the Venezuelan Emergency", showed an interesting reconstruction proposal in this sense. In the State of Miranda, with support from the Italian cooperation, it was proposed to carry out an integral intervention, to be deployed in two phases. The first phase consisted in emergency relief with specific proposals such as psycho/social attention. The second phase consisted on the strategic proposal of intervening in a same territory with the vision of achieving integral reconstruction without dispersing intervention or resources. For this purpose, UNDP issued an open call to Italian NGO's to present a variety of projects that contribute to the recuperation and reconstruction of the State of Miranda such as projects for the reconstruction and rehabilitation of school and health facilities, rehabilitation of water, sewage and environmental sanitation systems, promotion of local development, industrial and econo-

mic reactivation and socioeconomic rehabilitation etc.

The interconnectedness of the projects was attempted to ensure through an intervention methodology that was based on: 1) The formulation of a Framework Document to which all projects ascribed, 2) Establishment of agreements with NGO's, 3) Follow-up and monitoring of the implementation and implementation progress, 4) Final assessment, 5) Delivery of results to the authorities of the state. The process was successful as 24 projects were executed; the methodology interesting as an integral reconstruction strategy.

This experience could have been successful if there had been better interconnectedness of the proposals with local actors, and more importantly if a Risk Management focus had been observed by all the implementing entities.

- The experience "Rehabilitation of the affected zones of Arequipa and Tacan – earthquake 2001" in Perú focused on the reconstruction of housing and school facilities in selected areas. The reconstruction was

undertaken by two organizations, one NGO and one national organization. For construction and for avoiding the construction deficiencies existing before the disaster, a main element which was observed was the application of seismic-resistant construction technology (reinforced adobe and the usage of blocks and concrete). The modality implemented was "self-construction", involving and training beneficiary families in the construction of their own housing.

It has basically been a constructive project with short effective implementation time (3 months). This defines its limitations and weaknesses at the moment of developing a local risk-management proposal:

- During the process, the population was involved in the construction aspects, but not in the risk and disaster issues. Opportunities were thus wasted for the transformation of behaviors and practices. The opportunity to deliver seismic-resistant housing does not guarantee that with the passing of time the conditions will remain the same

if the beneficiary is not aware or does not have the knowledge about how he contributes to generate risk conditions.

- On the other hand, the positive aspects of using seismic-resistant technology are undermined when other problems and threats to which the population is exposed are not analyzed. For example, the affected area is located close to the sea and the reconstruction project was implemented maintaining the same place and space for the houses without considering the high seismicity of the area and its propensity for the occurrence of sea surges and tsunamis.
- Another important initiative worth mentioning due to its integral approach which does not originate from the occurrence of a disaster is the experience "Comunidad Urbana Autogestionaria HUAYCÁN" (Self-managed Urban Community, HUAYCÁN) in Perú. This proposal of low income urban occupancy was promoted and executed by organized groups of the population who lacked housing and the possibilities to access it

though the formal market, in coordination with the Municipality of Lima, who tried to generate and promote viable solutions for low-income housing.

An organized, planned and progressive "land take-over" took place in order to habilitate the land and make it suitable for living, even though the plots of land of Huaycán were located in the lower part of the convergence of three dry canyons which had been active thousands of years ago. This agreement of occupation-planning permitted to design in this land a proposal of settlement or urbanization which had as a central element, the execution of the necessary studies (geological, morphological, soil capacity, etc) which allowed to have a characterization of the possible risks and to detect the exposed areas. Therefore, the design of the Communal Housing Units (Unidades Comunales de Vivienda. UCV's), respected the stream channels, leaving them free for use as streets, avenues, with the required inclination and dimensions (more than 25 meters). Similarly, it was proposed to maintain a

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progressive occupation scheme of the slopes, promoting the use of occupancy terraces or platforms, respecting the level curves of the land.

The strong organization and the joint work of technicians with the municipality and with the organized population made it possible to transform the proposal into a human settlement

during the first years. Unfortunately the subsequent weakness of the organization (division and rupture), the loss of that tripartite joint work and the lack of a regulatory institution, resulted in that future occupation in the areas reserved for growth and expansion did not observe the coherence of the initial proposal.

## 2

### **RISK MANAGEMENT requires knowledge and a mandatory connection with reality and with the processes which are thereby present and developed...**

Both in institutional practice as well as in territorial management, the intention of perfecting the actions, "specializing" or "seeking excellence" there has been a progressive disconnection between those who "live and those who plan and execute", between "two who approach particular aspects but from different development fields", between "community levels and local levels, and between those and the national levels", etc. The more advances we make in methods and

techniques, the more we become sectorized and specialized. Nevertheless we continue intervening in similar territories with the same problems and the same population. That has to encourage, all the more, the search for solutions that respond to the reality, starting from existing solutions and connecting the different processes among them.

It is important to see the capacity of the experiences and/or projects



and to connect with other institutional or communitarian processes which are underway; the capacity to see the problems or general context in order to be able to draft a proposal that responds to the issue of interest (risk management), but at the same time, the specific and current context or the local or national processes. Also, the capacity to interact with the group of local, national and international actors.

In other words, no more proposals or interventions whose design and formulation is "laboratory based" or "independent", but rather, to encourage the development of experiences or projects that are integrated since their inception and that are connected to institutional or communitarian, planned or spontaneous processes, in progress or in conceptualization phase, seeking to build and strengthen capacities in the issue of risk management. As one of the women who participated in the reflection processes of these experiences points out, "solutions must arise from the needs of the communities".

In general, case studies - some more, some less - can be situated with-

in processes led by the communities and the authorities of the places where they take place. In some cases, the connection with long term processes is intentional and explicit. In others it occurs simply because it would be impossible to carry out a project disconnected from reality. What is important, is to see to what extent these projects, more than generating new processes (or temporary parallel processes), strengthen processes already promoted by the same communities, by the local actors and/or in joint effort with other localities, private or national instances, etc. And whether or not they fall within wider processes, which can contribute to solving national-level problems.

- In the project "Strengthening of the institutional capacity for risk management in the department of La Paz" in Bolivia, the goal of strengthening the capacity of the prefecture of the department of La Paz, is part of a much larger institutional strengthening process for risk management in that country. That process started years ago and has had its ups and downs, and has involved local and national actors.

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In this case, it is of special interest to note the ties between the project for strengthening the capacity for risk management at the city administration of La Paz, and the project that we are hereby studying which has the same objective but for a wider territorial scope: The prefecture of the department of La Paz, of which the municipality is a part of. When in a process parallel to this, we analyze the municipal system for risk management of the La Paz municipality, we find as one of its weaknesses that whereas it is evident that many objectives of the project are being achieved inside of the municipality boundaries, the neighboring municipalities did not have similar institutional and social tools. The city of La Paz is surrounded by municipalities such as El Alto which present high conditions of vulnerability which can easily become threats for La Paz.

Complimentary projects such as this one allow defining an intervention in the area of risk management with a city-region focus.

- The project “strengthening of the local capacity in prevention and reduction of natural disasters in six municipalities of the department of Quindio” arises after a series of processes which were started by the FOREC (Fund For the Reconstruction and Development of the Coffee Axis, created by the government after the earthquake that affected that Colombian region on January 25, 1999). Those processes had left their mark in the six municipalities where they were implemented in regards to risk management initiatives, which for different reasons run the risk of being lost after the FOREC was liquidated.

The project produced a series of results in regards to institutional strengthening, social actors training, incorporation of the issue into education, development of maps, and other tools for management and production of education and information material (including a radio program which is still broadcast in the capital city of the department). All those actions gave

continuity to the processes, which otherwise would have been left to die. In this task an ally was found in the Regional native Corporation of Quindio (CRQ) a public institution in charge of managing natural resources in that region of the country.

- The project “Disaster Prevention and Relief component in the strategy of the alliances for territorial programs for peace and development” in Colombia, aiming at strengthening the capacity of communal and institutional actors for leading risk management in areas of armed conflict, tends to consolidate processes which are underway in the country from several years back. This is explained by the fact that in a society laden with armed conflict, it is inevitable that society develops strategies that allow it to build – or at least try to build–, a “normality” in the middle of war.

What is important about this initiative is that it contributes to the understanding that the issues – problem or solution – of disasters and risk, are integrated into the dynamics, the day to

day, of the territories or populations and that they are an intrinsic part of their development processes.

- The experience “Re-vegetation project of the Esmeraldas city slopes” in Ecuador is an initiative that is born out of the concern and the demand of the community which experiences serious problems of land sliding due to instability of the land they occupy. The population occupied territory which belonged to a refinery by taking over or invading” the land. For this reason, their demands were focused on promoting reforestation and actions for disaster prevention.

What is interesting about this experience is that community demands were listened to and addressed by local organizations – The Civil Defense among them – the local authority, one NGO (Fundacion Natura) and it was financed by the environmental division of Petroecuador.

- The experience “Consorcio Social CATUCHE” in Venezuela goes along the same path as the experience noted from Esmeral-

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das in Ecuador. The low income neighborhood of Catuche developed in 1958 was progressively populated along the shores of the Catuche river. The second aspect that the neighborhood organization undertakes as a task (after addressing the problem of violence and improvement of peaceful coexistence) was the environmental and risk problem which affect the community when torrential rains occurs as it happened in 1994 when the families living close to the river were affected. The lack of sanitation systems and the protection of the housing became an issue of interest and a priority for the population and the community organizations. In the agreement reached with municipality of El Libertador, the voluntary relocation of 32 families by providing substitute housing was promoted and implemented.

This is one of the few experiences where the relocation of houses and population arises from the demand and awareness of the affected population, and it is the local institutions who accompany the solutions in a participative and consensual process.

- The project “Strengthening of the local Civil Defense competencies in Disaster Preparedness” in Ecuador was born from the initiative and the formulation from an external NGO. The project was focused on the promotion and development of training activities for civil defense volunteers, firemen and the community. Training was also provided by the Emergency Operation Committees (COE's) and basic emergency equipment was provided. Nevertheless, it was insisted upon the creation of the COE's, based on the agreements that there should exist between municipalities and Civil Defense. Unfortunately, this did not work in all cases.

This project suffered a series of changes and modifications which put its execution and its fulfillment at risk: First, at the moment of submitting the project to the donor the proposal focused its intervention in the province of Napo, but during the approval and the start of the application Napo was divided in two provinces, the province of Napo and province of Orellana. A second element was the

fact that the proposal was initially submitted by an NGO, but at the moment of application it merged with another NGO becoming one single organization called ALISEI. A third element was that in the short life span of the project there were two project coordinators.

In regard to the national and local context, during the nine months of the application of the project other important events occurred: constant changes of the Civil Defense authorities (four coordinators), two Presidents of the country, devaluation of the currency as a step towards dollarization and uprisings from indigenous groups). There were many changes and events that coincided with this project and there was not enough flexibility to make pertinent changes at the adequate moments. In spite of all that, the results of the project were fulfilled and possibly the proposed actions. However, upon completion of the project its sustainability has not been optimal. For example, the project worked better in the province of Napo, whereas in the province of

Orellana none of the actions worked.

Another aspect which illustrates the low integration with the reality of the target communities is the fact that in one of the areas of intervention, there was a serious contamination problem due to the leakage of contaminated waters with heavy metals produced by Texaco into rivers and aquifers. These were badly sealed oil wells which filtered into the waters phreatic levels, plus the contamination caused by the evacuation of toxic fumes through the oil well chimneys. Statistics that illustrate the impact of this occurrence in the population show that from 2500 inhabitants which were part of that community there are currently only 800 remaining due to migration or the death of the population as a consequence of the oil industry contamination. Moreover, 80 percent of the survivors have cancer. Nevertheless, the project worked or tried to work as it was initially conceived, without consideration of addressing this serious problem of contamination that affects this community as part of its actions.

# 3

## RISK MANAGEMENT as a long term PROCESS and not was a specific, short term PRODUCT

As we already now, there are a series of actions and interventions which have been developed in the area of prevention, mitigation, reconstruction, preparedness and disaster relief, which throughout the years have required an important and significant investment of resources and efforts from a group of actors (populations, organizations and institutions).

In spite of the importance of these issues, it is regretful to see that all the efforts are totally dispersed, with experiences that are isolated one from the other and actions which have been specific interventions for the most part – in response to disasters which have occurred – lacking long term vision. There hasn't been the intention of either going beyond the intended product or result (be it housing, equipment replacement, re-vegetation or restoration of the ground cover of mountain slopes etc.) without considering to what extent that result meets the real capacities

and what other could be carried out to ensure that the investment made is not lost once the project is finished. In summary, ensuring a connection with the daily life, with the needs of the populations and therefore with the solutions as part of a continuous process of local risk management. All of those have been determining factors of the low sustainability of these efforts throughout time, and the low ownership on the part of the beneficiaries or those committed with these initiatives.

What capacity do the initiatives have for generating long term processes beyond the time limits and the delimitating objectives of the project or punctual intervention. In these cases, those experiences which we have detected as NATIVE are the ones that illustrate clearly this assertion as it is in those cases that the connection between the case studies and the longer term processes which take place in the same scenarios is more evident,



and the experiences which were studied help to consolidate.

In regard to the projects supported by UNDP and DIPECHO, in several of the case studies, one of the main problems is that they are executed by foreign organizations (NGO's, in some cases European, without headquarters in the country) which have an ad-hoc presence in the territory of application, only during the project. To the latter we should add the weak connection to the local counterparts, both national and local; as well as serious problems for accessing and or transferring information to third parties. This causes that once the project is finished, the concrete results also end as well as the whole experience. In spite of this practice which is somewhat generalized, there are also other experiences ( as well as local institutions with higher commitment) which have transcended beyond the project and the specific results that were expected.

- The case from Colombia, known as "Guardianas de la Ladera" (Guardians of the Mountain Side) aims to incorporate communities living in mountain slope

areas in the city of Manizales, in risk management activities promoted by the municipal administration. More specifically, this initiative transforms the maintenance of infrastructure for stabilizing mountain slope areas in an alternate source of income for the women head of household in the same communities. This strategy falls within long term processes which have received formal backing from the different administrations of the city and seeks to reduce the risk of land sliding in a city which literally, grows perched on the mountain slopes in conditions which would seem, in theory, impossible.

- The Peruvian experience "Self-managed Urban Community, HUAYCÁN" is about a proposal of building the city by the inhabitants, in agreement with the local authorities respecting or not respecting the norms, regarding planning and urbanization, but addressing each problem as a challenge to be met. One of those challenges and concerns was to respect the initial urban proposal which was based on preserving stream channels and

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keeping canyons which carry mud or rain unobstructed. Notwithstanding that positive aspect, a concern arises with respect to the disorganized and spontaneous occupation of the hill slopes which occurred during the last years. That occupation was not addressed or directed by the authorities, or by the neighborhood leaders, which has created risk conditions in some sectors of the settlement; Risk which materialized in the land slides occurred some years ago which affected part of the population.

- The Venezuelan experience “CATUCHE Social Consortium”, similarly to HUAYCÁN, is an experience aiming for the construction of the city led and directed by the protagonists: the population, and at certain stages, by the municipal authorities or some sectoral institutions or organizations. The implementation of prevention, mitigation or preparedness measures does not respond to the situation at hand, but rather they are the product of an awareness process of the population in view of the laws of their housing

which is a problem that received opportune attention from the neighborhood organization and the municipality for the relocation of the affected families. This illustrates how the organization has included as a top priority and concern to maintain constant interventions for reducing their risk levels.

- The Colombian project “Disaster Prevention and Relief component of the Strategy of Alliances for Territorial programs for Peace and Development” from its inception appeared as a proposal with characteristics of a process. However, it is an experience that is just starting which has awakened the interest from many municipalities as well as local and regional disaster prevention and relief committees, because the areas have numerous disaster occurrences as well as displaced populations which required necessarily the intervention of municipal authorities rescue organizations.
- The project “Program for Disaster Prevention in Communities and Institutional Strengthening in Response to Disasters” in Ve-

nezuela, is an example of a case where interventions are conceived more as specific products which do not generate process beyond the project itself. This was basically a training project where the counterparts were the Venezuelan Red Cross and some schools from selected communities. However, the project is developed in a moment of high sensibility towards the issue of disasters (after the land slides of 1999). The structure, organizational proposal and the method applied did not allow for the proposal to be long term. The intention was simply to apply and carry out a specific number of training workshops which did not follow a strategy for continuity or follow-up and much less a strategy for replication and commitment from the national counterparts or the beneficiaries of the training sessions. This project accomplished an emergency role, specific results and quantitative accomplishments of the number of workshops and the number of attendants for each one.

- The project “Strengthening of local competences for natural disaster prevention in the northernmost region of Potosí” in Bolivia, considered a set of actions through which it was sought to guarantee the continuity of the processes beyond the formal conclusion of the project: The training of local actors, building consensus among different actors and social sectors, the incorporation of the “risk management” dimension within the regular school programs and the strengthening of existing local administration structures. In spite of those efforts, the problem of the short term vision affected the achievement and consolidation of the processes, uncovering some weaknesses in regard to the possible follow-up of the educational and the functioning of the early warning system, even though a large part of the equipment had already been acquired through the project.
- The project “Strengthening of local Civil Defense competencies in disaster preparedness” in Ecuador, developed some ac-

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tions that make it possible to achieve continuity of the local process, such as: creation of their risk map for the city of Puerto Francisco de Orellana, and its application as a planning instrument for the municipality; provision of computers to the provincial and county level Civil Defense offices for gathering disaster related information; training and conformation of new volunteer groups from the com-

munity and neighboring areas, which were given basic equipment and committed themselves to assist in facing events which could occur in the future. On the other hand, the commitment acquired by the institutions who participated in the specific course through the attendance of their permanent staff, reinforces the sustainability and institutional support beyond the turnover of authorities.

## 4

**In order to understand the progress made in regards to risk management it must be possible to recognize the proportion between the endogenous and the external aspects in every process...**

Each country, each context, each territory, presents a series of conditions which are characteristic of their organization and socio-political system, which in turn represent capacities and opportunities adequate for the development of proposals and actions carried out in them. This innate condition or characteristic may be a factor that favors sustainability and/or continuity for the processes to be developed.

What is necessary to identify and highlight in the systemization of case studies is what the real situation was of the selected "local environment" before the intervention (risk issues, capacities, culture and practices, etc.) and after the intervention (experience or project) what is the current situation. This same logic could be summarized in two questions:

- 1) ¿What is the specificity of the context as far as the basic capacities of the projects or intervention (characterization, capacities, conditions)?
- 2) ¿What is the contribution of the project?
  - In the Colombian project “Strengthening of the local competences in prevention and reduction of natural disasters in six municipalities of the Quindío department” the achievements were based upon the existing capacities of the local actors: the municipal interest towards the issue of risks and disaster, institutional coordination and commitment for the development of the process, active participation and commitment from the communities, local capacity for the development of scientific - technical studies, existing norms in the country for the inclusion of the risk issues into territorial zoning plans. An important contribution of the NGO in charge of executing the project was a methodology for intervention based on the determination of homogeneous geographical areas, which was adapted and adopted by the local actors and counterparts, the generation of communication processes based on radio programs, didactic charts, training workshops for children, etc.
  - The project “Strengthening of local and Civil Defense competencies in disaster preparedness” in Ecuador, was developed upon local capacities and the work previously carried out by the Civil Defense and the community organization. The project contributed with trainings for Civil Defense volunteers and members of the fire department and rescue teams; awareness and conformation of the COE's; the provision of basic emergency and relief equipment; the creation and strengthening of a local fire department due to the frequent fires in the area; the implementation of radio campaigns; and, the inclusion of the disaster prevention plan in the municipal development plan.
  - The project “Project to support the Venezuelan Emergency” in Venezuela, was based upon the commitment and the agreement with the government of the sta-

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te of Miranda which favored the execution of the project. It is important to take into consideration that the national government's established criteria for reconstruction is to "not build or rebuild in risk areas". The executors involved in the project contributed with their proposals and projects in the areas of socio-economic rehabilitation, industrial and agricultural reactivation, education and health equipment rehabilitation, improvement of the environmental

and sanitation conditions, etc. However, the existence of a monitoring and administrative control system was noticeable. There was not equal commitment with the follow up of the project and its integration and ownership from the local counterparts and direct beneficiaries. This can be deduced from the sustainability problems which currently affect the actions and proposals executed within the project.

5

**RISK MANAGEMENT** seeks to recover, value, revalue, systematize, create awareness and shed light on the set of strategies which are natural, authentic and native and which are applied and developed by the communities in the area of risks and disasters (projects, proposals, practices, initiatives, interventions, etc.). Those initiatives are usually isolated, dispersed and not recognized.

The purpose of such rescue and recognition is, especially when there is external intervention or if it is promoted by a particular project (UNDP or DIPECHO case), to identify to what extent the proposals,

actions and products of the experience have drawn or observed the local knowledge and practice. The intervention (experience or project) is rather directed or aimed at rescuing, adapting, reorienting or



improving (if need be) those practices and actions of the local agents.

The importance of those interventions lies in their effort to rescue the local experience and praxis, strengthening them with the new contributions and knowledge (scientific, methodological, technological), exchanges, technical advice, with the purpose of contributing to the reduction of disaster risk.

- The experience "SUKA KOLLUS" selected in Bolivia, is framed not only within "immediate" risk management processes, but seeks to re-adopt, in admirable fashion, the set of processes and strategies of territorial ownership dating back to pre-Columbian times, when what we now call "risk management" was an integral part of the culture, not only in their technological and material expressions, but also in their symbolic expressions which were an intrinsic part of the former.

Since 1992, this initiative which is being developed in the Bolivian highlands has the main objective of recovering, researching and disseminating sustain-

able cultivation practices dating back to the Tiwanacu Empire, before the Incas. The recovery is not limited to the strictly technical aspects of this cultivation method using artificial terraces or raised beds, but it also intends to recover the values and social practices which were part of the context in which the SUKA KOLLUS were developed, which in essence are a collective activity themselves. The SUKA KOLLUS emerge from a social organization based upon solidarity and reciprocity, not only among human beings but also among those and the Earth; hence the fact that they constitute expressions of a culture based upon coexistence with nature, according to which, as in a different context Democritus asserted: "richness does not consist on having many things, but on needing little".

This experience is recognized by its contribution for achieving an "archaeology of memory", but it also projects itself to the future. Through what the project calls "yapuchiris engineers", which are community leaders in charge of identifying and disse-

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minating the lessons learned among the members of the community and in other communities, the dialogues of ignorance and the dialogues of wisdom are materialized. They allow for better use of the best recovered traditional knowledge together with the best aspects of modern technology.

The high profitability of this cultural practice has given the communities participating in the project and endogenous tool for facing the challenges of the market; for reducing their vulnerability towards the threats of globalization, at the same time that it strengthens their identity and the feeling of belonging to the territory.

- The Ecuadorian initiative "Re-vegetation project for the Esmeraldas city slopes" is born from the concern of the community which, seeing itself affected constantly by the occurrence of rains and land sliding, undertakes the task of reforesting the mountain slopes. For this purpose, they develop and use simple technologies which are improved with support from an NGO which promotes the use and the

diversification of other alternatives for production and reforestation with grass imported from Africa. A mixed re-vegetation technique was developed, integrating the knowledge of the community with external technical support.

- Another Ecuadorian project "Emergency project in favor of populations at risk due to the ash fall from El Reventador Volcano –Napo and Sucumbios Provinces", on the other hand shows two types of practices totally different from each other: one good practice and another which could be qualified as a not-desirable practice.

A negative aspect, which in many cases and projects tends to be used as practice and which was also applied at the start of the intervention is that an existing project which was created in order to respond to the specific situation of the Tungurahua volcano was tried or applied to another community, without variations and following the same methods and results as if they were following the same formula for different realities and situations. A consequence

of this practice which consists on "application of recipe projects" without putting them in contexts or connecting them to reality, can be found in the fact that although the project was able to strengthen the capacities of the community in regard to volcanic risks through higher awareness and knowledge of the issue, the proposed objective of improving the populations quality of life through training on agricultural techniques for improving cultivation practices, construction of water reservoirs etc, some of those new conditions made the community more vulnerable to the occurrence of land sliding in the area.

This experience also demonstrates, on the other hand, a positive aspect which has been the respect of cultural characteristics and customs of the population such as community identity and community based work, based on "Mingas".

- The case study "Rehabilitation of the affected zones of Arequipa and Tacán – Earthquake 2001" in Perú, focused on the reconstruction of housing. For the

implementation of the reconstruction two organizations were appointed; one of them is a national institution called SENSICO, and the other was an NGO. In the case of SENSICO the reconstruction of the edifications was done using construction technology native to the area and with much cultural tradition. However, the safety component which was lacking in the destroyed housing was added. For this purposes the beneficiaries and the self builders were trained on the use of reinforced adobe for the construction of units; an educational process which was mostly hands on.

- In the Colombian initiative "Guardians of the Mountain Slope" we also find examples on how popular or spontaneous strategies can be recuperated and qualified by using modern technology, in order to face crisis situations. It is noticeable how communities institutionalize, take advantage of and improve the communal knowledge in order to adapt to hostile conditions of the environment.

# 6

**RISK MANAGEMENT means NOT IMPOSSING, confirming or consolidating impositive and /or foreign relationships which promote domination, dependence, gender inequity, etc.**

Currently, it is possible to assert that a large part of the initiatives in the region regarding local management is generated externally. That is to say, that it is not a product stemming from the demands of local social actors, but rather the result of offers from external agents such as NGO's, government organizations, international agencies, etc. In consequence, the decisions about areas or zones for intervention is the result of primary decisions from those same actors and they respond to their own rationales. There is enough evidence that shows how external organizations choose according to their own criteria, or in many other cases under "pressure" of different kinds. Thus, in the region there are dozens, if not hundreds of localities that are left outside of the circuit of external actors, and others which have a surplus of project offerings<sup>18</sup>.

This demand which is born from external stimuli – external agents, but also from an external vision strange to the local reality – has generated in many cases, as a consequence, some "vices" in the practice or forms of intervening and developing the experience (project or proposals). In light of the experiences which have been developed, we can see how many foreign techniques or technologies (many times not adequate) have been – not promoted – but rather imposed and in many cases have generated a dependence relationship in terms of maintenance and re-supplying. In other cases, this has caused changes, alterations and "even denial" of cultural patterns or aspects which are traditional and adequate to the social and natural environment.

<sup>18</sup> Document "A Guide on Good Practices derived from the parameters of Local Risk Management", drafted by Allan Lavel within the Project for the Systematization of Local Risk Management Experiences in Central America, implemented by the CEPREDENAC and BCPR-UNDP.

Some examples of this phenomenon can be found in the hydro-meteorological networks and warning systems, use of software and systems or equipment which are not compatible or can not be supplied locally or at country level, replacement with housing which does not respond to cultural patterns in regard to design and use of materials, agricultural practices not compatible or not adequate for the environment, etc.

Other aspects which illustrate these patterns of imposition are the application of formats and types of training, education or organization which do not correspond or fit the local customs, organization, or language. It can also be seen when external actors execute and apply experiences within the framework of the interventions, without the support, or even without consulting the local actors. These are just some of the observations which can be pointed out after the experience in the issue of disasters throughout these years.

- The project "Emergency project in favor of populations at risk due to the ash fall from El Reven-

tador volcano – Napo and Sucumbios provinces" was not born as a project integrated to the local dynamics and did not necessarily promote coordination channels or mechanisms with local actors and counterparts. On the contrary, independent Emergency Operation Committees (COE's) were organized in every county, without coordination between them. Upon the basis of the first lessons learned and in order to optimize resources, the project team implemented a coordination effort with local actors as well as with national and international organizations which were acting in the area of influence of the project, being able to achieve the efficient application of actions and the resources in the area.

The lack of coordination between the COE's can be seen in many aspects. One of the most critical is the low sustainability of the processes generated by the project. Additionally, weaknesses were also evident at the time of joint execution of specific emergency actions. One

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example was the shipment of a truck carrying food for 4,500 families, to an area where only 120 families resided, and when in reality the total number of affected families reached 450. Even a long time after the event, one could still find the delivered products (as emergency supplies) being sold in neighboring communities.

There were many actions implemented and applied as a project: internet-based evaluations were carried out without visiting or keeping records on site, models not adequate and not applicable for the area were applied, interruption of governmental projects was caused (as in the case of the PRAGUAS initiative which had been in place for a year in the region and was affected by the implementation of this initiative). One of the reasons found for this, somewhat unfitting intervention, is that these types of projects are adjudicated to organizations which do not work in the area.

- The Peruvian experience "Development of local competencies for disaster response and mitigation in communities vulnerable to earthquakes in the Moquegua, Torata and Samegua districts" applied and demonstrated as an implementation strategy the involvement and training of young volunteers (JOVOS) in order to integrate them to the disaster relief work. They were trained in first aid, emergency drills, etc; and they also worked in the process of gathering information. Moreover, they were allowed to use an office temporarily for carrying out their work.

Once the project was over, the youth started to lose support and recognition by the community, which surely they had when the project was in implementation phase. By the end of the project, they were marginalized for their lack of experience and their youth, which ended in their loss of office space.

The problem was that promoting involvement of juvenile committees or clubs as commu-



nity volunteers, which is a widespread practice in the urban setting, can not be applied in the same fashion, in areas which are smaller and more closed. This dynamic was "imposed by the organization" which did not even foresee the insertion of the young volunteers in the municipality, Civil Defense or other local institutions.

- The project " Program for Disaster Prevention in Communities and Institutional Strengthening in Response to Disasters" implemented in Venezuela is also an example of a project conceived by an NGO, in this case international. In spite of the numerous and important training actions which were performed and promoted, the weakness stems from the "erroneous idea" that "outside, those who know it think, in order to apply inside those who know, and without replicating". A clear example of this, was the delivery of training actions in regards to seismic activity and earthquakes only a few days after the Vargas tragedy in 1999, when the popula-

tion was totally concerned with the probable occurrence of land sliding and floodings.

- In the Colombian initiative "Guardians of the Mountain slope" we see how in order to survive, the extremely high risk conditions the communities living in the mountain slopes have developed informal and spontaneous risk management strategies throughout generations. Those strategies are known in Medellin, another Colombian city with similar conditions in its hillsides, as "mountain-urbanism". The fact that in spite of the catastrophic events which affect these communities periodically they are able to carry on with their daily lives, is proof that such communities are filled with "spontaneous experts" in risk management.

The project "Guardians of the Mountain slope" gathers under a single umbrella the formal strategies of municipal administrations, with the informal strategies of the communities at risk; both originating from much longer term processes and which

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will have to be prolonged in the future as the "marriage" between the communities and the hillsides can not be dissolved.

The sustainability of the strategy itself as it has been proposed in the "Guardians of the Mountain slope" (which includes an economic compensation by the municipality to the mothers head of family who perform conservation tasks) will depend on different factors such as the political disposition of the authority in charge and the availability of

resources. It is not possible to predict at this time if the communities will continue executing these type of activities (which benefit the same community) the moment that for one reason or another payments are interrupted. One thing is certain: the learning originating from these types of processes generate new tools that strengthen the capacity of the communities which inhabit risk areas in order to continue living in spite of the "annihilating evidences".

## 6a) Gender Equality

Some reflections regarding the issue<sup>19</sup>:

**Gender focus** is a work tool that allows us to identify, visualize and analyze the existing inequalities between men and women as a consequence of the different value, prestige and power that are implicit in the identities and roles which have been assigned to each one. The objective of using that tool is precisely to try to eliminate inequalities so that men and women can have the same possibilities for exercising their right to health, employment and participation in civil-political life, etc.

The application of gender focus in a specific project or program implies clear recognition that there are disadvantages of inequalities between men and women and the such project should contribute to eliminating them<sup>20</sup>. Therefore, applying gender focus does not necessarily mean carrying out activities with women, or ensuring that women participate in the activities of the program. It also means to be aware of the existing inequalities and to contribute to eliminate the behavioral models and the stereotypes which determine a situation of disadvantage for women – and for men – with the aim of influencing in the conformation of more just and egalitarian gender relations.

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19 Text taken from the document "Characterization of the gender situation in the area of intervention of PREDERES and Action Plan" prepared by the consultant M. Visitación Cañizal Fernández within the framework of the program "Disaster Prevention and Social Reconstruction in the State of Vargas. PREDERES" financed by Venezuela and the European Community.

20 Mesa de Género (2002): Instrumentos operativos para incorporar el enfoque de género en los proyectos financiados y cofinanciados por la Comisión Europea en Guatemala. Oficina de la Comisión Europea en Guatemala.

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The aforementioned statements will be important at the moment of analyzing and delving into the experiences or case studies in the issue of local risk management to be systematized (LRM).

When we talk about local experiences, these take place in a territory where relationships between society and nature are established and therefore it is also there that the inequalities or unequal power relationships between men and women can be visualized. Those relationships will be visible and will be determining factors both in the configuration of the risk conditions as well as in the risk management and in the issues concerning vulnerabilities or weaknesses capacities, skills and opportunities.

If we consider the hypothesis that risk management means NOT to promote unequal relationships or gender inequality, then we will have to try to prove to what extent and in what measure, in the development and implementation of the experience it has been taken into consideration the visualization, identification and analysis of those differences and power relationships between men and women.

- The initiative "Guardians of the Mountain slope" implemented in Manizales, Colombia, aimed from its inception to involve and benefit directly the women of the community. The objective of improving environmental sustainability and employment for the vulnerable population benefited the women heads of family who were directly involved with the project and received employment opportunities. The criteria for selecting the group of women participants were: to live in a risk area, to be women head of household, and to be of legal age. This initiative is born, supported and financed by the municipality and corporation for the development of Caldas.

The women participants from the experience are hired by the municipality and receive all the legal employment benefits. The municipality, from its perspective, has achieved a solution which not only means higher participation and work with the community, but also represents savings in respect to maintenance of the mountain slope areas.

On their side, the Guardians carry-out several actions that benefit the community such as cleaning the hill sides and constantly monitoring the progress of the implementation so that, in case a problem is detected, it can be communicated timely to the authorities in charge. They have also received training courses delivered by the Red Cross, and at the same time, they educate the population, having become innate educators who also exchange information with others.

- The Venezuelan experience "Program for Disaster Prevention in Communities and Institutional Strengthening in Response to Disasters" carries out specific training actions in regards to seismic issues. However, from the inception of the project it was proposed to generate and promote women's networks, and to give priority to women attendance in the training courses. The training workshops which were carried out (in areas such as first aid, earthquake prevention and temporary shelter ma-

nagement), were attended by an estimate of 2184 women and 860 men.

- The project "Rehabilitation of the affected zones of Arequipa and Tacán – Earthquake 2001" implemented in the southern region of Perú for reconstructing destroyed housing was addressed by two organizations. ITDG (an NGO) adopted as one of the criteria for housing beneficiaries that the individuals participating in the reconstruction process be a woman head of household.
- The Ecuadorian experience "Revegetation Project of the Esmeraldas city slopes" has an important gender equality component. It involves women in the reforestation process. Women were also beneficiaries of the training and were active participants in the process of formulating community plans. Also, within the framework of the project implementation, the Permanent Women's Forum was promoted as a mechanism for organization and grouping.

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Even though we highlight these four cases, regrettably the majority of the identified projects lack the will – as well as the interest and the awareness – for mainstreaming and working with a focus of gender equality in the functioning of community organizations and institutions.

7

**RISK MANAGEMENT involves a group of actions conducive to promoting, facilitating and strengthening consensus building processes (consensual and agreed inter-sectoral and inter-institutional actions and coordination), transformation and change (decision-making processes and political processes)... to influence in the policies and decisions regarding development.**

Just as we recognize that risk is a product of the vulnerability conditions present in our societies as well as from the threats to which they are exposed; similarly there is an explicit recognition of the fact that the current risk conditions in our cities and countries are the result of risk configuration or cons-

truction processes consolidated throughout time, and consequent with the applied models or "the transformation and change processes, sometimes wrongfully or euphemistically called development"<sup>21</sup>.

This recognition of the causes of risk leads to a change of attitude.

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21 Document "A Guide on Good Practices derived from the parameters of Local Risk Management", drafted by Allan Lavell within the Project for the Systematization of Local Risk Management Experiences in Central America, implemented by the CEPREDENAC and BCPR-UNDP..



From now on, when we think of solutions or alternate risk management or risk reduction alternatives, we should make sure they are responses that go beyond the simple reactive actions, or the massive application of specific activities tending to solve a particular issue, or the territorial delimitation and the territorial actors involved. The solutions should require a series of correlations: 1) they should integrate to "daily aspects" of the local population or environments; 2) they should have an integral dimension for the intervention, this means that although the activity may be specific (for example, a warning network, or training in emergency relief issues) the way the strategy should be applied has to be –or try to be – integrated to the organizational and operative praxis of the community; 3) they should facilitate the integration of the "risk factor" as an inherent aspect of development; 4) they should promote and facilitate processes for exchange, consensus building or articulation in the local scope or in a wider scope, by integrating or connecting themselves to other territorial levels.

- In the Colombian experience "Disaster Prevention and Relief Component of the Strategy of Alliances for Territorial Programs for Peace and Development", two processes coincide: institutional and communal strengthening for risk management, and the search for coexistence and sustainability in different scenarios of the conflict that affects the country.

The project illustrates a reality not only specific to Colombia, but present throughout Latin America and the Caribbean, and in what is called the "third world" in general (including the "third world" pockets which can be found within developed countries) the areas which tend to have a higher risk level due to anthropic, natural or socio-natural causes tend to coincide with the areas with the lowest governance levels, the areas with higher presence of conflicts which in some cases even become armed conflicts.

We could almost assert that two phenomena which are characteristic of marginalized areas are:

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high risk levels and lack of governability.

The authorities in charge of risk management in areas laden with armed conflict in Colombia, have been forced through the years (especially during the last decade when the conflicts have worsened) to develop "informal", or sometimes "silent" strategies for accomplishing their responsibility, especially the responsibility of bringing protection to the population from natural or socio-natural phenomena. Those same authorities and institutions have been careful in order to avoid getting involved in the problems stemming from the armed conflict, which are the responsibility of other authorities. Although they do not intend to be "neutral"<sup>22</sup> towards the armed actors, any apparent affiliation or association in favor of any of those groups could

put their work in danger, as well as their lives and integrity<sup>23</sup>.

The project we selected as a case study, just started being implemented a few months ago and is contributing to shedding light, systematizing, formalizing and legitimizing many of those strategies which "silently" or spontaneously have come to help those in charge of promoting risk management in areas of armed conflict. This is allowing them to make use in a more efficient manner of the risk management opportunities as a space and opportunity to build coexistence and governability.

In Colombia, as well as in other parts of the world, it has been demonstrated that when being subject to a common threat, the different actors of a conflict start to find elements which eventually may lead to constructive dialogue. What is indeed

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22 The concept of "neutrality" is equivocal and those of us who work in risk management cannot be "neutral actors", as if we were beyond the reality of the conflict. It is, however, a different issue to develop strategies which do not endanger people, on one hand; and on the other hand, that allow for the creation of common interest spaces and common concerns, which may facilitate the gathering of different parties in the conflict based on which it can be attempted to build governance.

23 Curiously, at this moment a law proposal is being discussed in Canada, which places under a same authority the prevention of disasters caused by natural threats, the fight against terrorism and other responsibilities as heterogeneous as the prevention of child abuse through the Internet.

true is that risk management opens doors and facilitates the access to areas and people who are out of reach under any other flag.

A space that allows one to carry out work in the area of governability is risk management, as it is an impartial issue in regards to the armed conflict and would allow entering a territory with a neutral position in order to try through this effort, to recover the governability of the area.

In spite of being a process which is just starting, it is interesting to see the interest the issue has generated in the regional and local committees. Other municipalities, aside from the ones already involved have started to join the experience.

- The Colombian initiative "Guardians of the Mountain Slope" is an experience adopted, promoted and financed by the municipality and the Corporation for the Development of Caldas. The fact that this initiative is a municipal proposal that on one hand allows to lower costs for maintenance and control of the hill si-

des and on the other, calls on the community to be part of the solution and at the same time benefits several women heads of household with employment, reaffirms its transcendence and conforms that it should be disseminated to other municipalities.

This experience has transcended and has become imprinted into municipal policy – it is part of the municipal development plan and the territorial zoning plans.

- The Ecuadorian experience "Re-vegetation Project of the Esmeraldas city slopes" is an important initiative to highlight because it is born upon the request of the community, but the search for solutions to the landslide and soil instability is addressed by an NGO, the local authorities and an oil producing company. It demonstrates that it is possible to make oneself heard and to generate a concerted action for the search of possible solutions.
- The project "Emergency Project in favor of populations at risk due to the ash fall from El Reven-

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tador volcano – Napo and Sucumbios Provinces" in Ecuador contemplated from the beginning of its execution the need to have a close coordination and support for the municipalities and their different UMDS<sup>24</sup>, as a medium and long term sustainability strategy for the projects and activities implemented. It was also important to have close cooperation with governmental and non-governmental organizations involved in similar actions and with presence in the area, aside from the active participation of the community and its leaders in each and every one of the processes that were part of the project implementation.

The initiative of involving the higher local instances who undertook the responsibility of coordinating with the project's production and infrastructure com-

ponents was key for the success of the project management. This allowed not only for better planning of activities, but it also facilitated to keep close contact with municipal, Parrish and communal authorities in order to solve eventual obstacles or problems. As a participative strategy, the community was encouraged to work in "mingas"<sup>25</sup>, with the delivery of food in exchange for work, which was done by the World Food Programme (WFP) in coordination with the municipal government and the Civil Defense Organization.

Important support was received from the Spanish foundation "Ayuda en Accion" which contributed with the construction of the stables for the livestock and contributed with the veterinary communal medical kits. The NGO Pakarina contributed with the donation of seeds

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24 Technical instances in charge of directing, coordinating and promoting socio-economic and environmental development processes; becoming the communication bridge between municipal development policies and the needs of the population, as well as the technical team in the supporting entities.

25 Kichwa term used to refer to communal work. For example, if somebody in the community needs to build a house, he or she calls the other members of the community and they build it with their joint effort. They only receive food and drinks during the construction in return. When someone else in the community needs help, everyone is mandated to participate in that minga.

for orchards and material for agricultural training. The protection and rehabilitation of potable water systems and communal centers was done with support (workforce) of the community and in this case, funds from the foundation REPSOL/YPF were integrated. This allowed to increase not only the number of beneficiaries but also the support for health and education centers. Assistance was also received from PAHO/WHO with training material in health and water issues and the support from OCHA for the delivery of community first aid kits for use in cases of emergency, as an add-on to the original project. Additional funds from ECORAE and with didactic material was also received from UNICEF and OCHA.

- The main activities of the project "Development of local competencies for disaster response and mitigation in communities vulnerable to earthquakes in the Moquegua, Torata and Samegua districts" in Perú were the creation of risk maps, prevention and emergency plans, and institutional strengthening.

The target group for institutional strengthening were the technicians from the city administration who received the support from specialized technicians for carrying out training activities and to follow up on the process of elaboration of risk and exposition maps. Other issues where they worked consisted on soil usage plans, prevention and emergency plans (contained within the prevention plans), always trying to incorporate them into municipal emergency plans.

- The Bolivian experience "Strengthening of institutional competence in risk management in the Department of La Paz" which was executed by the Prefecture of La Paz who is also now responsible for maintaining the continuity of the processes, is mainly an institutional initiative, but with local application as it intends to become part of the municipal risk planning. This way, the work already being carried out by the municipality of La Paz in the area of local risk management is strengthened and connected; such work had already started to show results by the time of the start of the

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project. This project is an interesting case because it has the foundation of an existing juridical norm which helped the Prefecture to support and address the proposals.

The project's goal was to strengthen the capacity of the Prefecture in the area of risk management and development by building the legal capacity for making viable the creation of a risk management unit. Although for that purpose it would also be necessary to create other legal and juridical instruments.

This experience can also be replicated (after adapting it to the specific context and circumstances) in other municipalities, etc.

- The project "SUKA KOLLUS" in Bolivia, has a central component of recovering ancient practices which can permit the reduction of the risk level and flooding. One aspect which should be taken into consideration is that the traditional social organization of the Andes is a strength in itself, but it also represents a weakness. The strength relies on the fact that two strong values are present:

solidarity and reciprocity, and therefore the value of wealth does not represent or have the same economic connotation for its inhabitants (which at the same time could be a debilitating factor). One weakness which can be found is that farming communities live and coexist, many times, at the margins of national political structures and policies.

Whereas the experience is rich in itself, it also has an important weakness which is the degree of dependence from the PRO-SUKO project which receives financing from the Swiss Cooperation Agency (COSUDE). Such dependence, the deep-rooted regionalism existing in these highland areas, and the lack of interconnectedness with regional or public institutions or with other organizations, make it difficult to replicate this type of experiences or to disseminate massively to other communities of the region.

- In a similar fashion the strength of the Venezuelan experience "CATUCHE Social Consortium" lies in its organizational capacity and its legitimacy and high level



of representation, before its own population and before national and local authorities. It has the capacity of advocating for the community, the respect for their own goals, and for negotiating agreements with national organizations. That capacity has allowed the Consortium to receive economic resources from abroad for the purchase of the land where the buildings for the affected people were built. For that reason also, it has received the recognition from international organizations at international level which have chosen this experience as one of the best habitat practices at an international level.

All the organizational capacity and recognition is limited, in part, by the extremely closed characteristics of the environment, a possible consequence of unmet promises and disappointments from expectations generated by third parties, or from the extreme reservation they have before the possibility (many times erroneous) of suffering an invasion from NGO's or other public or private institutions which are not part of their

organization. This is an experience which is important to make public, disseminate and which has many things to be shared. It can also be a great contribution for the definition of public strategies, proposals and policies in connection with other local driving forces: the municipality.

- Similarly to the aforementioned experience, the Peruvian experience "Self-managed Urban Community Huaycán" finds the basis for its richness and capacity in the strength of the communal organization, in the application and promotion of community participation mechanisms and its capacity for negotiating with municipalities and national-level organizations. The joint effort between local professionals and technicians with the neighborhood leaders for contributing to local development and the creation and implementation of proposals for the habilitation of land plots, housing and services, was an achievement in terms of decision-making and the definition of local urban planning.

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During the last years as a consequence of the crumbling of neighborhood organizational structures and the government actions for trying to disrupt those organizations, that community, as well as many others, was affected by problems related to parallel structures and low cohesion among leaders or neighborhood delegates and the population. Another distorting factor which occurred – most of the time unintentionally, was the presence, or "invasion from many NGO's which tried to take advantage of the weak organization in order to promote unarticulated work in the area.

As a community or neighborhood organization, this community presents the same problem as the "Catuche Social Consortium" in Venezuela. It is a rather closed community and therefore has limited channels for sharing, exchanging and participating in the local-level decision making.

It is equally an experience which is possible to be replicated, disseminated and promo-

ted. Even more so, after its urban proposal incorporated risk reduction variables as one of the baseline studies or characterizations.

- The Colombian initiative "Guardians of the Mountain Slope" shows how the lessons derived from this project were used by the city of Armenia, in the department of Quindio, for strengthening its own capacity for risk management. This is thus, an exceptional situation: a capital city from a department is learning lessons taught by peripheral municipalities. Event though Armenia was the city most affected by the earthquake from January 25, 1999, and the fact that its municipal government's capacity for risk management was strengthened as a consequence of the reconstruction efforts, when the municipal administration changed, those processes faced the risk of perishing. A new administration took the "forgotten" processes and took advantage of the results from the DIPECHO project and put them in motion once again.



**The ensemble of social actors has or has had some participation (or responsibility) in the configuration of risk conditions..... and therefore has equal participation and responsibility in the transformation of those conditions.... In other words, in Risk Management**

The interrelation, ownership and participation of local actors guarantee the sustainability of the processes generated and undertaken, beyond the projects or actions, as a way to achieve Local Risk Management becomes part of the integral local development.

Local participation means the socialization of the intervention process. This entails that external actors who promote projects or initiatives incorporate as active participants the subjects facing the risk at local level, the development actors, and the decision-making subjects at the same levels; aside from those external actors which by the nature of their interventions, have incidence in the configuration and the reduction of risk at local levels. Participation

should not be limited to the professional or technical staff from government organizations or formal organizations from the political realm, but it should also encompass civil society, popular and religious organizations, as well as others who are influential in the locality. The wider the participation, the higher the opportunities for reaching ownership and sustainability<sup>26</sup>.

On another hand, the ownership of the management by the local actors is perhaps the most defining aspect of the process as a procedure. Ownership, and in consequence, the basis for the sustainability of the management process are based on the active participation of the civil society and local policy representations. Neverthe-

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26 Document "A Guide on Good Practices derived from the parameters of Local Risk Management", drafted by Allan Lavell within the Project for the Systematization of Local Risk Management Experiences in Central America, implemented by the CEPREDENAC and BCPR-UNDP.

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less, that can only be achieved to the extent that management is subject to some form of institutionalization or organization with the intention of being permanent or to be inserted into the structure of the local organization<sup>27</sup>.

- The project "Guardians of the Mountain Slope", implemented in Manizales, Colombia, is a project that is born from the need and the initiative of the local actors. They identified their problems and proposed solutions which were appropriate and adequate for their reality, in benefit of the sustainability of its development.

The project gathers under a same goal the formal strategies of municipal administration, with the informal strategies of the communities at risk. Both stemming from much longer-term processes which will have to be extended into the future to the extent that "the marriage" between the communities and the mountain slopes cannot be dissolved.

However, if the strategy itself, as it has been proposed in "Guardians of the Mountain Slope" (which contemplates an economic compensation by the municipality for the mothers head of household who execute conservation tasks) remains or not, will depend upon several factors such as the political disposition of the authority and the availability of resources. It is not possible to ascertain in this moment if the communities would continue or not executing those tasks (which benefit the community itself) the moment that, for one reason or another, payments are interrupted. What we can be sure of is that mutual learning as a consequence of these processes lead to the creation of new tools which strengthen the capacity of the communities that inhabit risk areas, in spite of the "annihilating evidences".

- The Venezuelan experience "Cautuche Social Consortium" is an example of how the issue of risks and disasters has been felt by the community. In the same

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27 Idem

way that the community felt the need to get organized in view of the increasing violence and delinquency and the gang confrontations (1993), now they are once again getting organized in view of their concern for the river and for sanitation. In this process and in those circumstances, the support received by neighborhood associations and by the mayor was a determining factor.

As the organization did not meet all the juridical requirements for an organization, the capturing of economic resources was coordinated with an NGO and the work was aimed directly at improving the conditions of the neighborhood.

In 1999, approximately 600 houses were destroyed and not many deaths were registered as the organization was in charge of leading the evacuation. In view of that situation, the community undertook the responsibility of providing a solution by providing housing for the affected families. They became the Catucho Consortium, which has a technical command instance

in charge of verifying the technical proposal from the public ministries and organizations. They also organized training sessions in disaster prevention and they fought for obtaining the permits for developing a housing project in the area. The proposal was finally accepted by the government and they received the financing for implementing the housing project.

This experience illustrates the advantages of the populations and organizations when they adopt responsibly the issue of risks, and therefore commit themselves to providing sustainability to the search and promotion of actions throughout time.

- The Bolivian initiative "SUKA KOLLUS" is centered on community organization and abundant traditions. The project is able to strengthen community based organizations based on a collective fund for seed improvement. Besides the traditional practice, the project entailed the creation of the YAPUCHIRIS, a practice which is adopted naturally by the highland peoples. They work on the identification of in-

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dicators regarding community observation and registration of signs inherited from their ancestors about the possibility of rain ahead. They observe birds, where they build their nests, if they do it in high parts of trees or medium or low heights. They also observe the flowers, the rain, the fox's hole, etc.

- The same way that we point out positive experiences from which we can extract "good practices" we find, for example, the Venezuelan experience which after having visited the

area in 1999, we can see that unfortunately nothing remains of the project; not even in the areas with better organization. Similarly, in other Venezuelan projects, when looking at the implemented projects we found that the training component only reached a low percentage of the population. Another Peruvian experience also mentions that the housing reconstruction projects have included few efforts for connecting or promoting the participation of the direct beneficiaries and the rest of the population.







# Lessons Learned

## Reflections in light of the case studies

In this stage, the information to gather consist mostly of perceptions or reflections, individual or collective, to show the lessons learned as a consequence of the process or experience, or the lessons that we should highlight and learn, in order to disseminate to many other actors and experiences.



A final question which leads to this section and we would like to mention is:

**¿Are the relationships between the communities and their surroundings more sustainable as a consequence of the studied processes?**

Although the true impact of these processes in terms of "harmonizing" the dynamics of nature with the dynamics of the participating

communities will only be known in the long term (and even though the time frame for the studied processes varies between only a few months – as in the case of the project in armed conflict areas; between 12 and 18 months – as in the case of the projects of "rehabilitation and reconstruction" supported in "response" or as a "consequence" of a disaster' or initiatives lasting between 2 and 5 years – as in the case of the reconstruction

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project implemented in Venezuela; or a dozen years as in the case of the SUKA KOLLUS in general we can conclude that yes, there are indeed "evidences" which indicate that as a result of these processes the communities are making progress in terms of coexistence with their surrounding environment.

This assertion is even more visible when we recognize the NATIVE initiatives which go beyond the rigid deadlines and results which are common characteristics of developments projects and are also a part of our work. We see that in the case of the "Guardians of the Mountain Side", "CATUCHE Social Consortium" and the 'Self-Managed Community HUAYCÁN" they are examples recovered of the typical life in our countries, our rural and urban communities.

In general the disaster moments or occurrences which affected each one of the experiences mentioned generated, not a project, but a process that involves the population in recognizing that their territory presents risk conditions, until recreating or generating strategies which provide better safety, or in the worst case, to coexist with the situation, but being aware.

The scope of the evidence is also varied, depending on the participating actors: the prefecture of the department of La Paz now has a system for understanding better, the complex risks that affect the people and to act accordingly (at least to the extent that it is possible). In the city of Manizales, land slides are reduced and the life span of the infrastructure for risk prevention and mitigation. At the same time, the relationship between the community and the municipality is improved which contributes to reducing the economic vulnerability of the marginalized families. In the north of Potosí, as well as in the Quindío, the capacity for understanding the dynamics of the environment are improving; educational material is being produced for disseminating the lessons learned and local organizations in charge of the continued promotion of risk management in the municipalities are strengthened. In the armed conflict areas in Colombia the projects contribute to reducing the feeling of uncertainty of the civilian population and to take advantage of the risk management contributions for the recovery of the disrupted governance.

Following the same lead, the Venezuelan Red Cross now has training tools which allows them to replicate and carry out new training workshops in the states of Carabobo and Falcon. In the state of Miranda, the reconstruction was carried out, which allowed for the recovery and rehabilitation of schools and health centers, the execution of recovery strategies in the areas of agriculture and industry, activities for psycho-social rehabilitation for affected families, etc.

In the southern region of Perú, there are new housing units which were built using adequate and low cost technologies. The local technicians now have risk area maps, the population has emergency and prevention plans, and a brigade of young volunteers are trained in first aid and emergency drill exercises.

In the province of Napo, Ecuador, the organization has been strengthened with the creation of the COE's; the population has a better knowledge of the existing risks and they have emergency community plans. In Esmeraldas, the community's own initiative, led to the reforestation on the unstable hill sides and they now have their own community plans for the area.

The population of Catuche and Huaycán, on their end, have achieved (the first ones) the partial relocation of the families affected by the disasters of 1994 and 1999; and (the second ones), the canals of the existing canyons are used as vehicle routes as a preventive measure in case of disaster occurrence. It is also perceived that the population is incorporating into their day to day living a better understanding and awareness regarding the existing risk conditions and the need to do something about them.

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## Some of the lessons learned...

- 1 It isn't only Colombia, but in Latin America and the Caribbean, and in what is called the "third world" in general (including the "third world" pockets which can be found within developed countries) the areas which tend to have a higher risk level due to anthropic, natural or socio-natural causes tend to coincide with the areas with the lowest governance levels, the areas with higher presence of conflicts which in some cases even become armed conflicts. We could almost assert that two phenomena which are characteristic of marginalized areas are: high risk levels and lack of governability.

Hence the importance of using efficiently the opportunities that risk management entails as a space for building coexistence and governance. Both in Colombia as well as in other parts of the world it has been shown that when being subject to a common threat, the different actors of a conflict start to find ele-

ments which eventually may lead to constructive dialogue. What is indeed true is that risk management opens doors and facilitates the access to areas and people who are out of reach under any other flag.

- 2 A series of strategies exist, which have been developed, in a "spontaneous" and, as we have said, "silent" fashion, to which those in charge of promoting risk management in armed conflict areas have had to resource to. The fact that those strategies may contribute or not to the sustainability of the processes will depend upon different factors.
- 3 The strengthening of local capacities is a risk management strategy which seeks to reduce vulnerabilities and to improve the response capacity within the risk scenarios which result complex and invisible to the eyes of national systems which are mostly centralized and have scarce resources.
- 4 The lack of political predisposition for undertaking risk management as a State responsibility at the regional or local level (a



result, at the same time, of the rulers' ignorance regarding the complex causes of risks and disasters); the loss of institutional memory (in the state institutions, in implementing agencies and in the same financing agencies as well), and the loss of community memory (the pressure from other urgencies" or priorities<sup>28</sup> (and the incapacity for identifying the potential contributions for risk management for solving those "urgencies"); the lack of recognition by the communities that risk management is a right and an expression of the right to live and the right to protection by the State, etc.

- 5 It was not possible to achieve the commitment and predisposition on the side of local authorities from municipalities for adopting risk management as an institutional policy in the context of development.
- 6 The time frame of the project is short; in order to achieve higher

efficiency of the actions and so that they are articulated within viable development processes it is necessary to connect them to integral development strategies within the institution implementing the project.

- 7 The processes of local risk management that promote participation, capacity strengthening and decision making are experiences that may serve for the elaboration of national public policies.
- 8 In order to improve sustainability and replicability of the actions it is important to find strategic allies in the area who work in risk reduction.
- 9 It is necessary to keep in mind the own needs, priorities and perceptions of the population in relation to natural risks in order to incorporate them within more viable risk management interventions.

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<sup>28</sup> In this case, for example, a DIPECHO III Project which had been planned for continuing with the previous ones was not carried out because the organization MEDICUS MUNDI moved to the south of Potosi in order to assist other communities affected by another emergency.

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- 10 There is a lack of coordination and knowledge between institutions and organizations with competencies and experience in risk management and disaster prevention.
  - 11 The fragility of the national policy institutions in charge of disaster prevention affects negatively, as it creates a lack of definition and confusion.
  - 12 The actions carried out for disaster prevention are undeniably integrated within a vision of integral development which seeks to reduce the patterns of inequality and exclusion.
  - 13 The community does not always collaborate where the intervention of the project or experience has been minimal.
  - 14 It is the responsibility of the State and local governments, as responsible for harmonious urban development, to use well defined policies for the construction of housing, with long term regulations in order to bring security to investors and adequate financing with wider population coverage.
  - 15 The project or initiative should become a motivational tool for the social organizations, which leads to the discussion of the issues as well as the search for solutions.
  - 16 The changes in the electoral-political situations can many times generate interruptions or somehow impact the execution of the interventions, because they tend to bring changes of authorities or staff.
  - 17 The development of all those local practices on their own do not constitute a guarantee for the continuity of the processes, because governmental changes and the high turnover rate of staff demonstrate that if the processes do not involve the authorities and the commitment of resources for their sustainability, by the end of the project the information and the recommendations can be lost due to inadequate administration.
  - 18 A determining factor is to ensure the connection of the experiences with the day to day realities and the needs of the com-

## Lessons Learned

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munities, and therefore, with their solutions, as part of the continuous process for local risk management, in order to achieve sustainability of those efforts throughout time and the ownership and commitment of the communities with those initiatives.

19 Local organizations demand higher control of resources through social auditing applied to the implementing organization by the donors, as well as a better socialization of the resources and activities upon the project's completion.



# Learning From the Lessons

## Andean Strategy for Disaster Prevention and Relief (EAPAD)

We think and we are sure that the current document LOCAL RISK MANAGEMENT AND DISASTER PREPAREDNESS IN THE ANDEAN REGION – Lessons learned and systematization of good practices, is an important contribution for the processes which have been generated in the region. There is a history of many years of working in the issue of disasters and a long history of disasters that our countries live and have lived. For this reason we need to try to read and interpret how and in what ways our strategies and practices stem from the reflections and analysis of our previous experiences, but always taking an extra step in the task of disaster reduction.



The systematization of the lessons learned regarding the past and the current risk management and disaster preparedness actions becomes a necessity. The identification of best practices will allow to advance in the improvement and strengthening of capacities, by generating better proposals, more viable and with the clear objectives of not only getting prepared for the next emergency, but also progressively reducing the risk conditions that we live and coexist with.

Notwithstanding, the efforts and initiatives like the ones presented herein, or the ones summarized in this document have to transcend beyond their own experience.

Greater articulation is required with the processes that are being generated in each one of the countries involved, or better yet, in the regional arena, with proposals and initiatives that are being supported and that arise in the future.

In Venezuela, for example, there has been work done in regards to the preparation of an Organic Law Proposal for Risk management which is currently being discussed and debated by the National Assembly of Venezuela, and is awaiting approval.

We mention that initiative because we think it is important to review part of the document text "Exposition of Reasons" which accompa-

nies the law proposal. In such document, the high risk of the country and the responsibility of the State in the configuration of those conditions is pointed out and recognized. It is thus, mentioned that the State should adopt a more comprehensive and integral vision of the problem, and therefore that the search for solutions means the incorporation of the risk variable within the political agenda and the development of the country. In other words, that risk management becomes state policy and that it is managed by the President of the Country.

Moreover, what is interesting regarding the Law proposal is that it proposes the establishment of directive principles for guiding National Policies at all levels, guaranteeing the sustainable development in risk prevention and mitigation aspects, in permanent preparedness, and disaster and emergency relief as well as in the rehabilitation and reconstruction of the regions and localities affected by those events. In other words, it proposes the incorporation of risk management and planning for national development (territorial zoning, investment plans, control and penalties for risk

generating activities, support to educational processes, etc.) as well as promoting research in the area of risk and the strengthening of institutional and civilian capacities in risk management.

Venezuela illustrates, in one way or another, the trends and changes that are occurring in the region regarding the concern, interest and dimensions that the issue of disaster reduction starts to generate in the region.

For this purpose we have decided to annex to this document a regional initiative of great relevance in these times of changes and construction of a new dimension in this regard: the Andean Strategy for Disaster Prevention and Relief (EAPAD).





## Andean Strategy for Disaster Prevention and Relief -EAPAD-

### Formulation, approval and implementation process

Bolivia, Colombia, Ecuador, Perú and Venezuela are the members of the Andean Community and they are moving forward in a subregional integration process which is developed in multiple dimensions with the participation of important subregional organizations which come together in the **Andean Integration System (AIS)**. The Andean presidential Council and the Foreign Affairs Minister Andean Council are the highest political figures in the subregion. The Andean Community's Secretariat has a central role in the follow-up and development of the decisions and the political commitments.

The issue of disaster prevention and relief has been institutionalized in the agenda of the Andean

Community and are evidenced in important achievements where the creation of the **Andean Committee for Disaster Prevention and Relief (CAPRADE)**<sup>29</sup> stands out. It is an advisory institution for the SIA which aims at contributing to the reduction of risk and the reduction of the impact from natural and anthropic disasters through the coordination and promotion of policies, strategies and plans, as well as the promotion of activities in regards to disaster prevention and relief.

Within this context the United Nations Development Program (UNDP), through the Bureau for Crisis Prevention and Recovery (BCPR) and the representations of the UNDP in the countries of the subregion have supported the Andean Community Secretariat and CAPRADE in the formulation, discussion and approval of the **Andean Strategy for Disaster Prevention and Relief**, as the directive mechanism for policies, plans, programs and actions which are required to undertake in the subregion in order to achieve its goals.

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29 El CAPRADE se crea mediante la Decisión 529 del 2001 del Consejo Andino de Ministros de Relaciones Exteriores.

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The Andean Strategy for Disaster Prevention and Relief was approved in the city of Quito, Ecuador, in June 15, 2004 during the III Meeting of the Andean Committee for Disaster Prevention and Relief (CAPRADE). Later on, the strategy was also approved by the Andean Council of Foreign Affairs Ministers on July 10, 2004, during the Third Ordinary meeting which also took place in the city of Quito, Ecuador.

Its approval is an important step in the subregional efforts for addressing jointly an institutional evolution process for the development of public policies and capacities for disaster prevention and relief.

The Andean Strategy for Disaster Prevention and Relief (EAPAD) is framed within the purpose of seeking the countries' development under a perspective of sustainability; observing the recognized principles and global commitments acquired at the World Summit on Sustainable Development, in Rio de Janeiro (1992); the First World Summit for Disaster Reduction, Yokohama 1995; Kyoto Conference 1997; Quebec Summit 2001; the content of Agenda 21 and reconfirmed at the Johannesburg Summit in September 2002.

## The formulation of the strategy

...More than just a product it is and it was a process

The formulation of the Strategy was supported by the entities which in every country represent the CAPRADE: the Ministries of Foreign Affairs, the entities responsible for planning for development and the Civil Defense and/or Civil Protection institutions (in the case of Colombia the National Directorate for Disaster Prevention and Relief from the Ministry of the Interior also participates). This way, CAPRADE represents not only the processes of planning for development but also the emergency relief processes.

The formulation of the Andean Strategy is the result of the joint effort between entities which are traditionally connected to disaster prevention and relief along with others that are just getting involved in the issue. The Strategy has been built based on a wide participation and national discussion process through meetings and workshops.

The process involved around 500 staff members and 282 entities of the five countries in the subregion, as well as national planning institutions, Civil Defense and Protection institutions, Ministries of Foreign Affairs, entities of scientific knowledge and universities, regional and local governments, operational, communitarian and international organizations and a large number of technicians and directors from ministries and sectoral entities related to housing, water, sanitation, transportation, roads, agriculture and health. This reflects the potential and the interest that sectoral entities have regarding the issue.

Follow-up and guidance for the formulation process was received from numerous United Nations Organizations, international cooperation agencies and Andean Community entities such as the Andean Foment Corporation has been valuable.

## Its objectives...

The Andean Strategy for Disaster Prevention and Relief will seek to contribute to the reduction of risk and the impact of disasters in order to support the sustainable development in all countries of the Andean subregion, through institutional strengthening and the establishment of common policies, strategies, programs and subprograms for all countries; the exchange of experiences, the creation of networks and the continuous improvement of mutual cooperation in disaster situations.

Considering that the five countries share common risks, it is suggested that integration can help improve capacities in key areas such as the risk knowledge, planning for development, risk management, preparedness for crisis situations and for risks in border areas, river beds or common interest areas.

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An important characteristic of the strategy lies in the promotion of work agendas for development sectors which have traditionally been isolated from risk issues even though they are important actors. That is the case of the roads sector, agriculture, energy, water and sanitation, as well as those which are traditionally associated with risk issues such as health, territorial zoning and housing.

Another important characteristic of the Strategy is its effort for articulating subregional and international agendas, especially with the social and environmental agendas, and with border development policies in areas where there are points in common.

## Sectorial Strategies

The Andean Strategy understands that the challenge of disaster prevention and relief is a multidimensional responsibility which requires inter-sector, inter-disciplinary and inter-territorial responses. Disaster Prevention and Relief requires that the entities in charge of development be responsible for undertaking the incorporation of the issue in the planning and management of their own sector, in accordance to disaster prevention and relief national policies in each country.

The Strategy contains a series of strategic, common as well as specific guidelines for the agricultural, water and sanitation, housing, roads and transportation, energy, mining and industry, tourism, commerce and education sectors.

The common sectoral guidelines for every sector are mainly related to risk analysis and the identification of disaster risks, the formulation of policy guidelines and methodologies for incorporating them into the sectoral plans for expansion and maintenance, the development of institutional thematic networks, their application into training programs for technicians and professionals and the strengthening of risk information, communication, and monitoring systems.

In regards to the specific strategic guidelines, the Strategy points out sensible and transcendental issues for each sector. For example, the dissemination of insurance policies and the support to sectoral participation in risk reduction for the agriculture sector, the design of methodologies for managing water supply basins, the harmonization of technical norms for construction of safe housing, the development of management plans for the health sector that articulate environmental variables with risk factors, the homogenization of norms for safety guidelines for roads and the promotion of contingency plans for hydrocarbons spills, among others.

## Thematic Axes

In order to achieve the goals of the Strategy, five thematic axes were defined. They are initial programs and subprograms which respond to action guidelines in line with the main needs and weaknesses which were diagnosed for the subregion. They are:

1. Strengthening of the institutions and the capacities at subregional, national and local level;
2. Development of information and research;
3. Risk monitoring and evaluation
4. Awareness raising and promotion of a "disaster prevention and relief" social participation culture;
5. Mutual assistance in disaster situations.

The thematic axes as well as their programs and subprograms are articulated among each other, they are inter-dependent and not necessarily sequential. It is understood that disaster reduction will be the result of adequate processes of

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planning for development. These planning processes require access to applicable scientific information, pertinent technical models and information systems for the analysis and decision making by the planners. Similarly, in order to have viable development of planning processes as well as the generation of information, it is necessary to have sound public policies.

Adequate disaster relief requires preparedness processes based on risk monitoring and evaluation and inter-institutional response agreements. Disaster preparedness, like disaster reduction requires information and communication systems and public policies that provide the juridical, technical and financial support which this phase of the process requires.

Similarly, a basic condition for reaching the commitment of public figures, communities and individuals in regard to disaster reductions issues, is the development of an adequate institutional, political and public culture in regards to disaster prevention and relief.

### **Thematic Axis 1**

Strengthening of institutions and capacities at national, local and sub-regional level. One of the main commitments contemplated in this axis is the design and implementation of and Andean System for Disaster Prevention and Relief, which is a group of institutional, sectoral and thematic networks, as well as, programs, plans and actions developed for carrying out the Strategy. The System will be based on the creation of coordination, communication, and subregional cooperation mechanisms between actors which share interests, observing sustainability and organizational autonomy criteria.

Another set of commitments included in this thematic axis are the commitments from the countries for promoting and strengthening permanent disaster prevention and relief institutional schemes; the strengthening of institutions responsible for planning, operations and risk knowledge; the incorporation of knowledge and disaster reduction criteria into policies, laws,



planning schemes and sectoral or territorial norms; and the empowerment of municipalities or localities in these issues.

### **Thematic Axis 2**

Information, Research and Development. The production and use of information regarding risks is a fundamental input for decision making in planning processes and for the development of a disaster prevention culture.

The development of information systems, the conformation of research networks, the transfer of experiences and a coherent systematization which allow wider access to data and information on the issue are essential organizational tools for disaster reduction in the XXI century.

Another basic component of the axis is the production and exchange of action models, especially juridical norms, methodologies and techniques for common reference as well as the development of specialized research in the subregion.

### **Thematic Axis 3**

Identification, assessment and risk monitoring, early warning and specific plans. The assessment and monitoring of threats and risks, the dissemination of forecasts and the management of warning systems are all basic tools for the execution of preparedness for emergency and contingency plans. The programs and subprograms will undertake the creation and continuous improvement of warning systems and the strengthening of planning processes for emergencies.

### **Thematic Axis 4**

The Promotion of a Culture of Prevention and Social Participation. It is essential to promote and strengthen a culture of prevention among the population and the socialization of the knowledge with other sectors of society, emphasizing on the most vulnerable groups.

A central pillar of this thematic axis is to promote and encourage social actors involved with science, technology and education systems to adopt a proactive role in the production of information about th-

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reats, vulnerabilities and risks, and to ensure the transfer of information to educational and scientific communities, to the public and private sector, and to the planning and decision-making processes as well as to the population at large.

The Strategy promotes the incorporation of risk reduction into citizen culture, promoting training processes in elementary and high schools; the improvement of the institutional culture by developing training systems appropriately designed and organized, as well as public information strategies that make efficient use of the transforming effect of the media.

It is a policy of the subregion to look for the implementation of mechanisms that facilitate the intervention of the community in disaster prevention and relief, as well as non governmental organizations, and an increasingly active participation of individuals, for the adoption of a responsible and active role in the safety conditions at personal, family or community level.

## Thematic Axis 5

Mutual Assistance for Disaster Situations. Mutual assistance in case of disaster is an axis which should become the tool for Andean Countries, for facing emergency or disaster situations that occur in one or more countries and which cannot be addressed or resolved in its entirety by one country and which therefore require the solidarity and humanitarian collaboration from Andean Countries and the international community.

This thematic axis promotes the establishment of a technical and normative framework in the countries of the subregion in order to make possible the channeling of mutual assistance in case of disasters and the functioning of subregional operation networks for emergencies and disasters.

Proposal for the publication, launching and elaboration of the EA-PAD's Strategic Plan.

The UNDP participated and supported the IV CAPRADE Meeting which took place in Lima, on Sep-

tember 13 and 14, 2004. It was agreed that the General Secretariat of the Andean Community would promote a dissemination strategy in each of the member countries through the work to be organized at the @-CAN site for the knowledge of the participants. For this purpose, the member countries would have the support from the UNDP. It was also agreed to have a launching event in every country of the subregion for the Andean Strategy for Disaster Prevention and Relief (EAPAD). The main goal of the launching event is to encourage political and technical actors from national public and private institutions, as well as international organizations who are interested in the is-

sue, to know the strategy and adopt commitments for its development, for the fulfillment of its mandate and for the implementation of its programs and subprograms.

Finally, it was agreed to elaborate the Andean Strategy Action Plan, which hereon will be known as the Strategic Plan, to be formulated by the General Secretariat of the Andean Community, with the presidency of CAPRADE and support from the UNDP as well as with the active participation of national entities which have been participating in the formulation processes of formulation of the Strategy, and from cooperating organizations.

Risk management involves different levels of State and Society and has a direct link with the existence of global, regional, and national policies addressing this issue within the framework of the development processes.

One must not forget that in order for local actions to be effective and sustainable in the long run, they must be in harmony with the national, regional and global environment. It must be highlighted that many experiences in the region exist, which constitute examples of 'best practices' and provide tools that can be applied in different situations, showing how the strengthening of local abilities can favor or increase the security of socially vulnerable groups. Despite the variety of experiences, until now there has been no promotion of systematization processes that permit the evaluation of achievements and advancements on the subject, as well as the rescuing of lessons learned that can be replicated and adapted to other contexts.

In view of this reality, the Bureau for Crisis Prevention and Relief (BCPR) of the United Nations Development Program (UNDP) takes the task of promoting the Regional Project "Systematization and Dissemination of Best Practices in Disaster Relief and Local Risk Management in the Andean Region" with the purpose of making it available to the different regional, national, and local actors linked with the issue. This project is also of great interest of the Disaster Preparedness Program of the Humanitarian Aid Department of the European Community (DIPECHO), who promoted the idea and, together with the BCPR/UNDP provided the financial support for its execution. The project has been formulated and is being executed by UNDP within the framework of DIPECHO's Third Plan of Action.

The current regional project that started in May, 2004, has achieved the compilation of an estimated 60 experiences in the Andean Community. Fifteen have been selected as "case studies", three experiences per country, in order to systematize them through a participative process involving regional, national and local actors. The case studies are the basis for extracting lessons, systematizing processes and interventions, and recovering best practices that help improve future interventions in disaster preparedness issues, and also produce knowledge as a basis for developing policies, strategies, programs and tools for Local Risk Management (LRM).