# Disaster risk reduction: a call to action

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## Disasters and their impact: an approximation to the reality

Natural phenomena such as earthquakes, hurricanes, tidal waves, volcanic eruptions, landslides, drought and other events of greater or lesser magnitude have always been present on our planet. They are the consequences of dynamic changes in an earth that is in perpetual motion. Through the history of mankind, many such events have caused damage with disastrous consequences for the local population and their means of subsistence. Most cultures, however, learn how to live alongside, know and respect natural threats and the laws of nature, thus allowing great civilizations to grow up in harmony and balance with the environment and their own surroundings.

The international community began the new millennium by feeling encouraged that although the magnitude, recurrence and number of people affected by disasters due to natural phenomena had increased in the last decades, the number of fatalities had fallen. Sadly, just one year later, the world found itself facing a desperate situation and the heartening picture built up during previous decades proved to be but a temporary respite. The Asian tsunami and earthquake in December 2004, the hurricanes in the Caribbean and the Gulf of Mexico in 2005 and the earthquakes in Pakistan at the end of the same year were just some of the major world events that revealed the vulnerability and fragility of our societies before the horrified eyes of the world and the powerlessness of the international community (despite all our huge resources and scientific and technical advances). This lesson left us with a balance of hundreds of thousands of dead, wounded and missing; millions of homeless people – with their economies and means of subsistence destroyed.

SOURCE: DR. PEDRO BASABE - UN/ISDR

*Phreatic-volcanic explosion of the Guagua Pichincha, Quito, Ecuador, October 1999*

We estimate that over recent decades, 250 million people per year on average have been affected at various times. More than 58,000 lives and more than 67 billion dollars (USD) have been lost as a result of disasters caused by natural threats. In 1990, 90 million people suffered the impact of disasters compared to 255 million in 2003. Between 1990 and 2003, a total of 3.4 billion human beings on our planet suffered the consequences of disasters[1].

[1] D. Guha-Sapir, D. Hargitt, P. Hoyois, *Thirty Years of Natural Disasters 1974-2003: the Numbers*, CRED/UCL Presses, 2004.

Nearly 75% of the world population live in areas that have been struck by disaster at least once between 1990 and 2000. Every day, an average of 184 people die due to catastrophes in various parts of the world and over the past two decades, more than 1.5 million people have lost their lives as a consequence of these disasters. Only 11% of the world population exposed to natural threats live in countries with a low Human Development Index (HDI) yet these account for 54% of deaths, while countries with a high HDI are home to 15% of the population but the mortality rate is just 1.8%2.

These alarming figures beg the question: *is the world progressing inexorably towards forms of development that generate and increase the risk of disasters or is it possible to halt and reverse the current process?* The forecasts are not very comforting. According to United Nations forecasts, it is estimated that losses due to disasters will rise to 300 billion USD and 100 thousand lives per year by 2050[3].

The numbers paint a bleak picture and are only the tip of an iceberg, since they do not reflect the true impact of disasters and their consequences in terms of the physical and mental health of the affected target groups; in terms of economies, means of subsistence and production by the local population; in terms of families that lose their breadwinner or in terms of countries with a low HDI, which have little or almost no possibility of recovering after a disaster. Neither do these figures consider the impact of so-called minor disasters that can drastically increase the above statistics.

## Disasters are a consequence of development and risk accumulation

At this stage of mankind's history and development, with our high level of scientific and technical knowledge, when we possess unimaginable technological resources that have taken man to space, when communications are immediate and time forecasting and threat awareness technology is better than ever before, we may well ask ourselves how it is possible that the world is going backwards at such an alarming rate that we cannot even protect the life of our citizens - when we should be progressing in the direction of greater risk reduction. We must start to answer this question by considering whether the development model can continue at its current rate and guarantee a more sustainable planet given the current rate of decline in natural resources and generation of vulnerable areas, or if we need to seriously question current development practices.

Disaster risk is a cumulative process that combines natural, socio-natural and man-made threats with human actions that create conditions of vulnerability. The vulnerability of a society determines its level of susceptibility to a threat being potentially disruptive and causing one or many minor disasters with damage to the community and affected people.

Disasters are the outcome of a complex mix of actions linked to economic, social, cultural, environmental and political-administrative factors that are determined by inadequate development processes, structural adjustment programmes and economic investment projects which do not consider the social or environmental cost of their actions. The situation is worsened by the unfair distribution of wealth and opportunities, deficient settlement patterns in high-risk areas (mainly involving the most vulnerable target groups), unbridled urban growth with no proper planning, continuous environmental degradation, poor ability to manage and reduce the risk of disasters by authorities and communities, lack of human, technical and material resources in affected societies, etc.

Although it is certain that the impact of disasters is greater in poor countries, especially those with a low Human Development Index, the responsibility for risk reduction and also generation does not lie just at local or national level – it also lies at supranational and even global level, as is the case with global economic policies, global warming of the Earth, climate change, desertification and environmental degradation. The repercussions of many of these measures are felt far from the area where the decisions were taken or where the

[2] UNDP – Bureau for Crisis Prevention and Recovery, *Reducing Disaster Risk: a Challenge for Development*, UNDP, 2004.
[3] A. Lavell, *Local Risk Management. Ideas and Notions Relating Concept and Practice*, CEPREDENAC/UNDP, 2003.

actions were carried out, affecting, in the first instance, developing countries or target groups at the greatest risk of economic and social exclusion. **Risk reduction is everybody's responsibility and, due to ethics and the basic principles of humanism and solidarity, is mainly the mission of those who possess the necessary knowledge, resources and instruments and have the best opportunities to conduct the fight against disasters.**

The above problems are exacerbated by a series of myths or misconceptions that make a society even more likely to be vulnerable to disastrous situations. Even experts assert that *disasters are natural*, that *population growth generates risks*, that a *society cannot deal with the consequences of a disaster on its own and requires external aid*, that the *disaster period only lasts a couple of weeks and things quickly return to normal*, to mention but a few. Reality, local experiences, the wisdom of communities and scientific knowledge has shown us that most disasters may be avoided and are not natural, even though the threat may be natural. Disasters are caused by the vulnerability factors that we ourselves generate together with the threats, lack of ability and poor risk management. Deficient development often reinforces the danger or constitutes new threats.

People are not killed by earthquakes or the wind of a hurricane but by physical constructions or secondary factors that are not necessarily related to the threat. People are not the problem but the solution and the main resource available to developing countries. It has been shown that the local community and the people in the area are the main line of defence and the basis for reconstruction in an emergency situation. In 1998, when Hurricane Mitch hit Central America, it was the local communities in affected countries that rose to the occasion and dealt with the emergency and even with the reconstruction process. In places where disaster reduction strategies are implemented, a better response is achieved and the reconstruction process is more efficient. Dozens of examples in Africa, Asia or Latin America support this statement.

In any case, outside aid is not always sufficient or is not necessarily adapted to the true needs of a country or area following a disaster and more closely reflect what the financial institutions have to offer than the needs of those affected. Generally, conditions are imposed that the country is not in a position to comply with or the aid schemes do not allow for the forecasting and generation of new risks. This increases the level of debt and economic dependency still more, which can even lead to conditions of greater vulnerability.

The deficient development processes that enhance and exacerbate the impact of threats are compounded by the fact that actions taken by the international community and countries to reduce disasters are mainly focused on response and continue to be dominated by humanitarian aid and emergency management and not on prevention. In many situations, this attitude

Many people living in subsistence economies do not have the means to allow them to live without contributing to the depletion of local natural resources and thus giving rise to vulnerability factors in their areas. Unfortunately this is the source of survival for approximately one third of the world population[4]. Depletion of the means of survival of less favoured people is not, however, the greatest problem: in an attempt to generate short-term financial gain and income, states, international financial institutions and major international corporations promote development megaprojects or projects such as hydroelectric dams, roads, natural resource exploitation (forestry, water, mining, fishing, etc.), town developments in low or high river basins, etc., that do not consider and include risk factors or allow for the generation of new vulnerabilities and threats. Such projects therefore contribute to the generation of high risk indices that endanger the ecological balance of affected areas and also the survival of the local inhabitants, especially those that live in the original villages, which is where most natural resources are conserved.

By the deforestation of the native tropical woodland to plant exogenous species or for stock rearing, by cutting down or reducing mangrove swamps to rear shrimps or other species, by flooding great swathes of land for reservoirs, by building over extensive fertile areas and covering them with asphalt or concrete, we are eliminating and reducing the natural defences that ecosystems use as windbreaks, to calm waves, keep back water, prevent erosion and thus prevent human, economic and environmental disasters. **A basic principle of any social process is that economic growth cannot come at any price or be valued more highly than sustainable human development, the environment and people's lives.**

[4] Source: UNEP, 2000, as quoted in the document: *Disasters and Human Settlements. Situation in the Caribbean Basin*, UN-HABITAT, 2002.

can increase the causes of vulnerability if we do not act in a planned manner in conjunction with the local authorities and communities and focus on sustainable development. Emergency actions and humanitarian aid are generally more visible and quantifiable in the short term and, in some way, they serve to assuage guilty consciences, show results, provide greater visibility and gain credibility following a disaster. Aid for development is not increasing on a global scale, but humanitarian aid has grown significantly[5].

Lengthy periods elapse between the *end of humanitarian aid* and the start of reconstruction activities (processing of plans and projects, resource management, negotiations, etc.). During this time, the local people are left with little or no support for recovery and must make do as best they can, without the appropriate resources and capabilities. During this time lag, new disaster risk scenarios may arise, adding to the risks that were present before the disaster. In some cases, long-term reconstruction never takes place or is delayed due to a death of implementation and preparation capabilities after the emergency stage.[6]

## The international community is becoming aware

Despite everything I have said previously, the picture is not entirely gloomy and glimmers of light are beginning to be seen in the struggle against disasters. The international community is increasingly beginning to gain new awareness of the direct effects of disasters on development and also the effects of development systems on disaster risk generation.

We are very gradually changing our habits of acting only in emergencies and ceasing to see disasters as random, fortuitous events but rather as a process of risk accumulation that must be considered and incorporated in all actions involved in the development of a country or area. The disasters themselves have acted as triggers to make the international community sit up and take action to reduce their effect. At present, major disaster risk management processes are taking place on a local, national and supranational level in the Americas, Asia, Africa and even in Europe.

The United Nations (UN) proclaimed the decade of 1990-1999 the **International Decade for Natural Disaster Reduction** (IDNDR), which allowed us to make significant progress in gaining awareness of and promoting a culture of prevention. Major achievements were made in the setting up of national disaster reduction systems and in raising awareness at national and international level within national governments, local governments and also in civil society. Non-governmental organizations, research centres, universities, municipal promotion institutions, local governments, etc., have been increasingly involved in the area.

At the end of the past decade, the **International Strategy for Disaster Reduction** (UN/ISDR) was proclaimed to keep up the good work begun by the IDNDR and to respond to system needs for a permanent world framework to coordinate and promote disaster risk reduction. The UN also declared a need for the ISDR to incorporate local, national and regional development processes with the aim of seeking greater sustainability in future actions.

At the same time, various system organizations such as the **United Nations Development Programme** (UNDP), the **UN Environment Programme** (UNEP), the **International Labour Organization** (ILO), amongst others, promote programmes and projects designed to reduce risk in the most vulnerable countries and populations of the world.

A set of international instruments such as Agenda 21, the Convention on Climate Change and the Kyoto Protocol, the Johannesburg Declaration and its Plan of Implementation for Sustainable Development, the Convention to Combat Desertification and Drought, the Millennium Declaration and the Millennium Development Goals, are important instruments approved and ratified by the majority of UN member states and may become excellent tools for progress in disaster risk reduction and in sustainable development.

[5] D. Guha-Sapir, D. Hargitt, P. Hoyois, *Thirty Years of Natural Disasters 1974-2003: the Numbers*, CRED/UCL Presses, 2004.
[6] Delnet Programme, *Specialization in Sustainable Local Development and Disaster Risk Reduction - Theoretical Framework*, Delnet ITC/ILO, 2006.

These instruments are complemented by the **Hyogo Framework for Action 2005-2015, Building the Resilience of Nations and Communities to Disasters,** adopted at the **World Conference on Disaster Reduction** (WCDR) in January 2005. This tool, which is supported by nations throughout the world and has been ratified by the United Nations General Assembly, serves as a starting and reference point for national and local policies and processes designed to reduce the risk of disasters[7].

## Challenges for the future: a call to action

Understanding that disaster risk is determined by a pre-existing situation, in which the human factor plays a part, allows us to become aware of the need to seek development strategies based on disaster risk reduction processes aimed at sustainability. To do this, we must set out a twofold objective: reduce existing vulnerability (built up by historical process through the implementation of unsustainable development practices) and promote processes that prevent conditions arising that could give rise to new risk scenarios in the future. We must act on the structural development causes that generate the risk and not only on their symptoms, as has been the predominant tendency in the past.

A wide-ranging consciousness-raising process has allowed us to make progress to the extent that communities and societies can call on the necessary tools, agreements, strategies and above all, an international framework for action and consensus (the Hyogo Framework for Action) that allows us to promote a culture of prevention and make progress in reducing the risk of disasters with a view to sustainable human development. It is now the responsibility of states, international organizations, the UN System and all actors involved to apply the measures, strategies and recommendations that they themselves have proposed, signed and ratified. The necessary bases and tools have already been established and there can be no more excuses for dragging our feet. Risk reduction cannot continue to be a matter of reacting to emergencies but must become a matter of development.

The states, the international community and the key actors must trust in and promote to a much greater extent a reinforcement in local capabilities and the participation of all sectors. They must enhance the use of endogenous resources in countries, areas and communities and base disaster risk reduction strategies on the local situation, treating the environment, the natural habitat and people as the main resources for carrying these processes forward.

International financial institutions, states and donor organizations must assume responsibility for allowing for a risk component in all projects to reduce current risk and also to prevent the generation of new vulnerabilities and threats. During the post-disaster reconstruction stage, the actions implemented should not place affected communities or countries into debt but should consider interest-free loans for economic and social development that are adapted to the true situation in countries and not based solely on offers of cooperation and subject to conditions that those affected cannot meet.

One new and great challenge that is gaining ground is to develop new economic, credit and loan policies that will give states incentives to invest in disaster prevention and reduction. These could include the reduction of foreign debt, the provision of interest-free loans and the implementation of local economic development projects aiming to reduce poverty, etc. At the same time, we must promote policies to penalise projects or actions that deplete the environment and generate risk. A "environmental or disaster tax" could be applied to activities that generate risk, pollute the environment and deplete natural resources. These resources could be invested in an attempt to reverse the negative consequences of unsustainable actions and be managed at the local level to fulfill a twofold objective: reduce disaster risk and create job opportunities in the territories.

Transnational corporations and companies that are not properly regulated in such countries must establish minimum ethical standards and criteria to halt the decline in natural resources and environmental pollution and the destruction of the means of subsistence of the people who inhabit the affected areas, particularly in the

[7] For more information on the Hyogo Framework for Action, see section IV of this review, in the chapter on international organizations.

original villages whose very existence is under threat and fundamental rights are violated.

The struggle against disasters means a serious, ethical and moral commitment since the lives and means of subsistence of major sectors of the world population hangs in the balance. This is the responsibility of all actors who play a part in risk reduction and/or generation. We will make little progress in risk reduction and sustainable development without any firm commitment by states to include risk reduction as a public and development policy in economic, social, cultural and environmental sectors, with proper administration, monitoring mechanisms and true decentralization and allocation of competences and resources to the local environment (which is the place actually affected by the decisions, measures and disaster risks).

Experience tells us that the key to preventing, alleviating and, in the best possible scenario, avoiding the impact of disasters is to: reduce the risk before it arises in the first instance; guarantee a good preparation if a potential destructive event occurs; and ensure rapid, effective and appropriate reconstruction after the emergency phase.

Reconstruction may be considered a window of opportunity and one of the best times to introduce the topic of disaster risk reduction in the planning of sustainable development while also promoting proactive and permanent strategies that allow the building of safer societies. Reconstruction must focus on reinforcing the capabilities of key actors in local development and in the affected communities but also on improving quality of life, reducing poverty, creating sources of dignified employment and safe economic development, and also guaranteeing a higher level of safety in the future for assets, means of subsistence and particularly people's lives.

However impossible this may seem, no effort is too big if its aim is to prevent human catastrophes and guarantee greater harmony between people, society and the environment.*A society is safe when it learns to live with itself as well as to live with the Earth. Disaster risk reduction strategies will be successful when governments and the general public understand that disasters are much more than a chance event, that they constitute a lack of readiness on their part and reveal their own negligence"*[8]. ■

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