



**Euro-Latin American Parliamentary Assembly
Assemblée Parlementaire Euro-Latino Américaine
Asamblea Parlamentaria Euro-Latinoamericana
Assembleia Parlamentar Euro-Latino-Americana**



**Committee on Social Affairs, Human Exchanges, the Environment,
Education and Culture**

11.10.2010

WORKING DOCUMENT

Prevention of natural disasters

EP co-rapporteur: Edite Estrela (S&D)

Within less than two months of each other in 2010, two powerful earthquakes hit Haiti, in January, and Chile, in February. The comparison of their respective social and economic impact needs to be made with extreme caution, given the multiplicity of factors involved. These include: seismic energy released; location of epicentre vis-à-vis surface; type and composition of subsoil; and, above all, human factors, including the proximity of populated areas and the quality of construction in the regions concerned.

The Chilean earthquake was one of the most powerful ever recorded. It was compounded by the tsunami that hit parts of the Chilean coast immediately after, giving rise to waves in the order of ten metres high. This earthquake released 500 times more seismic energy than that in Haiti. Nonetheless, the divergence in the impact felt in the two countries could not be greater. It is estimated that 220 000 people died in Haiti, as against a figure for Chile of less than 500. Much the same applies to the number of homes destroyed: half a million in Chile as opposed to approximately three times that figure in Haiti. In other words Chile, despite the strength of the earthquake, succeeded in containing the human losses.

This success may be attributed in part to the application of stricter legislation in the construction sector and to the existence of efficient emergency services, as well as greater experience in dealing with natural disasters. While the majority of Chileans have witnessed at least one earthquake in their lives, Port-au-Prince had not been hit by an earthquake for 250 years. The conclusion is that much still needs to be done in the area of the prevention of, preparation for and response to natural disasters, with a view to reducing risks and containing the impact on communities, infrastructures and the environment.

The risks associated with natural disasters increase with vulnerability to them. This, in its turn, arises from a number of factors: deficiencies in institutional mechanisms, e.g.: lack of a proper warning and awareness-raising system for risks; absence of suitable urban planning; degradation of natural ecosystems; and the current trend, expected to continue in the future, of ever more frequent extreme meteorological phenomena in the wake of climate change.

The reduction of vulnerability to natural disasters is a vital requisite for sustainable development and is closely bound up with policies for poverty reduction, food security and climate change. Natural disasters can undo many of the achievements of social and economic development, especially in poorer regions which tend to suffer more from their effects.

Latin America has been recurrently affected by extreme natural climactic and geological phenomena, such as hurricanes, drought, earthquakes, tsunamis, landslides and volcanic eruptions. The increasing vulnerability to these phenomena calls for closer coordination at both private and public levels, locally, regionally and internationally. Europe too, albeit to a lesser extent, has suffered from some of the same phenomena, in the form of drought, fires, floods, storms, and, at times, volcanic eruptions. Recent years have seen recurrent drought and forest fires in regions of southern Europe, accentuating the desertification of numerous regions and affecting agriculture, stockbreeding and forests. Equally, the countries of central, eastern and northern Europe have suffered from severe flooding, affecting the lives of thousands of households and damaging their homes and possessions as well as public infrastructures.

Increased disaster risks are the result of the interaction of social, physical and environmental vulnerabilities. Uncontrolled urban development in risk zones, demographic change, competition for scarce resources and climate change have contributed to rising vulnerability. The combination of all these factors leads to an increasing risk of natural disasters which threatens economic and social development: over the last two decades some 200 million people each year have been affected by such disasters.

At international level, the risk of natural disasters has been an object of concern. However, and despite growing recognition of the crucial need to reinforce the mechanisms for risk reduction and response capacity, risk management and reduction remain a global challenge.

A degree of consensus has been reached on the need for the systematic integration of risk reduction into the planning, definition and implementation of development policies. This recognition has been furthered by various players in the field of international cooperation, both bilateral and regional, as also in the context of public/private vertical partnerships. It is now clear that poverty reduction, governance and sustainable development contribute to risk reduction, as objectives which reciprocally support each other and can generate significant synergies. Every effort needs to be made in preventing and managing present and future risks, by developing the requisite capacities at local and national level. The principles of this approach are crucial for the achievement of the Millennium Development Goals by 2015.

Recent years have seen a considerable number of major multilateral declarations on the need to combine efforts with a view to risk reduction both locally and nationally.¹ However, the biggest challenge concerns the capacity to ensure the systematic integration of considerations relating to risk prevention and reduction and rapid response and recovery capacity within the framework of development policy.

The need for a more proactive approach to informing, motivating and involving the public in risk reduction strategies at local level has been recognised. Concern also exists over the small share of the development budget allocated to risk prevention at local, national, regional and international levels. It may be that more pressing needs are tending to block the implementation of natural disaster risk prevention measures. Nonetheless, the existing resources could be used more effectively, in tandem with the dissemination of best practice.

Among the areas where a substantial contribution can be made to risk reduction are:² governance, especially in the organisational, legal and political spheres; risk identification, assessment and monitoring and early warning systems; information and education; limitation of risk factors; and preparation for effective response and recovery.

¹ Among these, the most significant international initiative leading to a global approach is, certainly, the Yokohama Strategy, together with the subsequent Hyogo Action Plan. The Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, together with its Plan of Action ('Yokohama Strategy'), adopted in 1994, constitute an important guide for the reduction of risks and the impact of natural disasters.

² 'Hyogo Framework for Action 2005-2015'. International Strategy for Disaster Reduction. UNISDR.

The UN Conference on Disaster Reduction held in Hyogo (Japan) established the objective of 'the substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries'. A number of criteria were identified for achieving this goal: firstly, the more effective integration of disaster risk issues into policy for sustainable development and planning and programming at all levels, with particular emphasis on disaster prevention, preparation, mitigation and vulnerability reduction; secondly, the development and reinforcement of institutions, mechanisms and capacities at all levels, especially locally, with a view to a more effective contribution to building resilience to natural disasters; and, finally, the systematic incorporation of a risk reduction approach into the definition and implementation of emergency action and response, recovery and reconstruction programmes in the areas affected.

It is generally recognised that the main responsibility for defining development strategies lies with individual countries; it is hoped that they will adopt strategies to promote natural disaster risk reduction and protect people, infrastructures and the environment. Meanwhile, the international community has an important role to play here, in the context of today's growing interdependence. Closer regional and international cooperation is essential for risk reduction and the mitigation of the impact of natural disasters.

Practical means of promoting such cooperation could include: transfer of know-how and technology; exchange of experiences and best practices; compilation of information on risks; appropriate support for strengthening governance, awareness-raising and capacity-building at all levels, with a view to improving developing countries' resilience to natural disasters; and financial assistance for reducing existing and preventing future risks.

Various activities could be promoted and developed by governments and by regional and international bodies, with a view to consolidating a community-based risk reduction approach, the aim being to prioritise such actions in the context of the global agenda.¹

First: *ensure that risk reduction is a local and national priority with a solid institutional basis for its implementation.* If there is to be more commitment and more consensus over risk reduction measures at national level, it is essential to reinforce risk management capacity. This capacity, in its turn, can only be acquired by developing policies, laws and institutions that can define, build on and evaluate the progress made, using quantifiable indicators.

Second: *identify, evaluate and monitor disaster risks and improve early warning systems.* To this end, greater involvement will be needed on the part of all, and it will be necessary to raise public awareness with regard to risks and physical, social and environmental vulnerability, in such a way that the measures needed can be taken. Know-how, innovation and training can be channelled into the creation of a culture of prevention and preparation at all levels.

Third: *reduce risk factors.* Social, economic and environmental change, as well as changes in soil use or natural hazards arising from hydrological or geological events, need to be taken into account when defining and implementing prevention policies and when natural disasters occur.

¹ Ibid.

Fourth and last: *reinforce preparedness for an effective response to natural disasters at all levels*. The role of communities and authorities and of individuals who happen to be in risk areas when a natural disaster happens is not to be neglected. Preparedness, rapid response capacity and the release of suitable equipment are key prerequisites if such players are to be able to make full use of their capacities should the need arise.

According to the World Bank's technical recommendations¹, investment in the prevention of specific risks needs to be made so as to reduce the impact of extreme hydrometeorological events while simultaneously boosting adaptation capacities. Heatwaves, tsunamis, forest fires and floods can be monitored and their adverse effects mitigated by means of early warning systems. Risk reduction measures could include, for instance, contingency management plans, the construction of flood and storm protection infrastructures, or the development of drought-resistant crops.

Similarly, it is vital to reinforce the technical capacities of the emergency services. It is essential to ensure effective emergency information and communication services, as well as the availability of equipment and instruments enabling rapid response. In addition, the development of insurance systems and a risk-aware approach can also play a key role in reducing rebuilding costs and their budget impact.

At regional level, Latin America has developed a significant degree of cooperation, within the Organisation of American States (OAS). The Inter-American Committee on Natural Disaster Reduction (IACNDR) is responsible for coordinating and implementing the Inter-American Strategic Plan for Policy on Vulnerability Reduction, Risk Management and Disaster Response (IASP), which embodies the Hyogo Action Plan in the regional context. 'Most efforts at field level remain in the sphere of preparation, response and assistance'; meanwhile, 'little progress has been observed in reducing vulnerability or the underlying causes of risks in the context of development processes'.² Nonetheless, important steps have been made in implementing the Hyogo Action Plan in the region.

In Latin America, it is considered that 'subregions can play an important role in influencing national policies and practices, while the region offers the means to enable sovereign states to take part in south-south cooperation initiatives'.³ Through specialised agencies, risk reduction is promoted in all areas of governance, thanks to the bodies set up by the various subregional organisations. As a result, different coordination initiatives have been created at that level, including the Andean Committee for Disaster Prevention and Assistance (CAPRADE), the Centre for Natural Disaster Prevention in Central America (CEPREDENAC), and the Caribbean Disaster Emergency Response Agency (CDERA). A proposal on legislative action and coordination is now under discussion in the OAS.

¹ 'Disaster Risk Management and Climate Change Adaptation in Europe and Central Asia'. 2010. Global Facility for Disaster Reduction and Recovery. World Bank.

² 'Assessment of Progress in the Implementation of the Hyogo Framework for Action: A Regional Perspective from the Americas'. 2009. OAS and UNISDR.

³ Ibid.

In the case of the EU, a resolution¹ adopted by the EP in September 2010 calls for a holistic approach and for suitable financing for disaster prevention. That text also recognises the vital role of forests in preserving the environment and preventing natural disasters. Advocating a 'Community approach', it further calls for efforts to counter regional inequalities in terms of capacity to protect the public. Also proposed are an EU disaster insurance scheme and a compensation scheme for farmers, as means of responding to the risks of disasters and consequent income losses.

In this connection, Parliament believes that certain forms of prevention measure should receive priority support from the EU. These include: preparation and revision of safety regulations governing construction and land use; correction of risk-prone situations; restoration of riverbeds and clearing and reorganisation activities in forest areas; reforestation and protection and defence initiatives for the coastline; and maintenance work and safety monitoring for large-scale infrastructures such as dams, fuel conduits and communications arteries.

Finally, and in view of the importance of forests and their relation to drought, fires and desertification, Parliament reiterates its earlier appeal to the Commission to submit legislation, on similar lines to that already in place for floods, on forest protection and fire prevention, and to promote the adoption of Union policies on water shortage and adaptation to climate change.

¹ European Parliament resolution of 21 September 2010 on the Commission communication 'A Community approach on the prevention of natural and man-made disasters' (2009/2151(INI)).