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Implementing

# the Hyogo Framework for Action in Europe:

## Advances and Challenges

*REPORT for the period 2007-2009*

ISDR

International Strategy for  
Disaster Reduction

DKKV  
Deutsches Komitee Katastrophenvorsorge e.V.  
German Committee for Disaster Reduction  
with the International Strategy for Disaster Reduction (ISDR)

EUROPA  
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## Preface

The Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters emphasizes the need to monitor and review progress in disaster risk reduction to both document the gradual implementation of the framework and also to feed into informed disaster risk reduction planning and programming at national, sub-regional and regional levels.

Responsibilities for monitoring the HFA are assigned mainly to governments, but they are also identified for regional organizations and institutions, international organizations and partners in the International Strategy for Disaster Reduction (ISDR) system, and the United Nations International Strategy for Disaster Reduction Secretariat (UNISDR).

The main objective of this report is to identify key trends in terms of progress made and challenges faced at both national and regional levels through the implementation of the HFA in Europe between 2007 and 2009.

It is important to recognize that this review includes elements based on reports received from countries and regional organizations that responded to the HFA monitoring requirements by providing national reports and information on regional bodies. Those countries that have not responded or have yet to respond remain unrepresented.

While in some countries consultation exercises were conducted as part of the review process, the reports are self-assessments by national authorities prepared by the designated HFA Focal Points.

## Acknowledgements

UNISDR, in collaboration with the Council of Europe (EUR-OPA Major Hazards Agreement) and the German Committee for Disaster Reduction (DKKV), gratefully acknowledges those countries and regional organizations of Europe that have reported on the implementation of the HFA.

The countries are: Armenia, Bulgaria, Croatia, Czech Republic, FYR of Macedonia, France, Germany, Hungary, Italy, Montenegro, Norway, Serbia, Slovenia, Sweden, Switzerland, Turkey, and the United Kingdom. Particular thanks are addressed to the HFA Focal Points of these countries, which facilitated, coordinated and presented the reports.

The regional organizations and initiatives are: the Council of Europe (EUR-OPA Major Hazards Agreement), the European Commission (EC), the Central European Disaster Prevention Forum (CEUDIP), the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE), the Regional Cooperation Council for South Eastern Europe (RCC SEE) and a European Network of National Platforms<sup>1</sup>.

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The development of this document was guided by Ms. Paola Albrito (UNISDR) in collaboration with Mr. Eladio Fernandez Galiano and Mr. Francesc Pla (EUR-OPA), and Mr. Karl Otto Zentel (DKKV).

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<sup>1</sup> This network includes the following National Platforms and players: German Committee for Disaster Reduction (DKKV), l'Association Française pour la Prévention des Catastrophes Naturelles (AFPCN), Swiss National Platform for Natural Hazards (PLANAT) and the Czech Republic National Platform. The name of this network might be updated.

<sup>2</sup> The Global Facility for Disaster Reduction and Recovery (GFDRR) is a partnership of Australia, Canada, Denmark, the European Commission, Finland, France, Germany, Italy, Japan, Luxembourg, Norway, Spain, Sweden, Switzerland, the United Kingdom, the United Nations International Strategy for Disaster Reduction, the USAID Office of U.S. Foreign Disaster Assistance, and the World Bank. GFDRR's mandate is to help developing countries reduce their vulnerability to natural hazards

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## Acronyms and Abbreviations

<b>AA</b>	Auswärtiges Amt (German Ministry of Foreign Affairs)
<b>ACPDR</b>	Administration for Civil Protection and Disaster Relief (Slovenia)
<b>APD</b>	French Agency for Development
<b>BBK</b>	Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (German Federal Office of Civil Protection and Disaster Assistance)
<b>BMI</b>	Bundesministerium des Inneren (German Ministry of Interior)
<b>BMZ</b>	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)
<b>CCRIF</b>	Caribbean Catastrophe Risk Insurance Facility
<b>CEUDIP</b>	Central European Disaster Prevention Forum
<b>CMEPC</b>	Civil Military Emergency Planning Council for SEE
<b>CRR</b>	Community Risk Register
<b>CoE</b>	Council of Europe
<b>DASK</b>	(Turkish) Compulsory Earthquake Insurance Pool
<b>DG</b>	Directorate General
<b>DG Dev</b>	Directorate General Development (of the European Commission)
<b>DKKV</b>	Deutsches Komitee Katastrophenvorsorge e.V. (German Committee for Disaster Reduction)
<b>DLR</b>	Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center)
<b>DPP</b>	Disaster Preparedness and Prevention
<b>DPPI SEE</b>	Disaster Preparedness and Prevention Initiative for South Eastern Europe
<b>DRR</b>	Disaster Risk Reduction
<b>DRRI</b>	Disaster Risk Reduction Initiative
<b>DSB</b>	Direktoratet for samfunnssikkerhet og beredskap (Norwegian Directorate for Civil Protection and Emergency Planning)
<b>EC</b>	European Commission
<b>ECHO</b>	DG Humanitarian Aid (European Commission)
<b>EENA</b>	European Emergency Number Association
<b>EU</b>	European Union
<b>EUR-OPA</b>	Council of Europe European and Mediterranean Major Hazards Agreement
<b>EWS</b>	Early Warning Systems
<b>FP7</b>	Seventh Framework Programme
<b>GFZ</b>	Deutsches GeoForschungsZentrum (German Research Centre for Geosciences)
<b>GITEWS</b>	German Indonesian Tsunami Early Warning System
<b>GMES</b>	Global Monitoring for Environment and Security
<b>GTZ</b>	Gesellschaft für Technische Zusammenarbeit (Germany)
<b>HFA</b>	Hyogo Framework (for Action) 2005-2015: Building the resilience of nations and communities to disasters

<b>IDNDR</b>	International Decade for Natural Disaster Reduction
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>ISDR</b>	International Strategy for Disaster Reduction
<b>LRF</b>	Local Resilience Forum
<b>LRRD</b>	Linking Relief and Development
<b>NATO</b>	North Atlantic Treaty Organisation
<b>NGO</b>	Non-governmental organization
<b>NP</b>	National Platform
<b>PPEW</b>	Platform for the Promotion of Early Warning
<b>PPRD MED</b>	Euro-Med Programme for the Prevention, Preparedness and Response to Natural and Man-made Disasters
<b>RCC SEE</b>	Regional Cooperation Council of South East Europe
<b>SAMRISK</b>	Societal Security and Risks (NO Research Programme)
<b>SEE</b>	South Eastern Europe
<b>SEEDRMAP</b>	South Eastern Europe Disaster Risk Mitigation and Adaptation Programme
<b>TOR</b>	Terms of Reference
<b>TUB TAK</b>	The Scientific and Technological Research Council of Turkey
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNISDR</b>	United Nations International Strategy for Disaster Reduction Secretariat
<b>UN OCHA</b>	United Nations Office for the Coordination of Humanitarian Affairs
<b>UNU-EHS</b>	United Nations University, Institute for Environment and Human Security
<b>WB</b>	World Bank
<b>WCDR</b>	World Conference on Disaster Reduction, Kobe & Hyogo / Japan, 2005
<b>WMO</b>	World Meteorological Organisation



# Executive Summary

## Background

In January 2005, at the World Conference on Disaster Reduction, 168 countries adopted the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters as an ambitious programme of action to significantly reduce disaster risk<sup>3</sup>.

Monitoring and reporting on progress is an essential feature of the HFA. Responsibility for monitoring and reporting is assigned mainly to governments, with specific requirements including the preparation of national baseline assessments, periodic summaries and reviews of progress, and reports on risk reduction progress in other policy frameworks such as Millennium Development Goals. Other requirements include contributing to regional assessments<sup>4</sup>. Reporting responsibilities are also identified for regional organizations and institutions, international organizations, and UNISDR and the ISDR system.

In line with the HFA monitoring and reporting process, reports were prepared for the first session of the Global Platform for disaster risk reduction, which took place in Geneva, Switzerland, in May 2007 and covered the period 2005-2006. The aim was to update all stakeholders on the progress made since the last major reporting exercise associated with the January 2005 World Conference on Disaster Reduction. The reports (available on the PreventionWeb website: <http://www.preventionweb.net/english/hyogo/GP>) identified trends and patterns in disasters and global disaster risk, mainly gathered from recent global and regional reports, and progress made by countries and organizations to reduce risks and to implement the HFA.

To continue the HFA monitoring and reporting process UNISDR initiated a systematic process

with a request on reporting issued in January 2007 to the nationally-nominated HFA focal points (and to the Permanent Missions to the United Nations in Geneva), accompanied by guidelines for reporting on progress on the implementation of the HFA. As a follow-up, in order to systematize existing data and assessments, and reviews of progress at the national level, an on-line monitoring and reviewing tool – the ‘HFA Monitor’ – was made available to countries.

An abstract of this report supported the preparation of the ‘Global Assessment Report’ (from September to December 2008). The report, coordinated by UNISDR, aims to address a major global stock-taking on trends in disaster occurrence and risks and progress on disaster risk reduction. It will be launched in May 2009.

It should be noted that many governments are already concerned about the burden of monitoring and reporting for the numerous international conventions and agreements to which they are party, while acknowledging that the process can assist countries to identify clearly gaps and challenges that need to be addressed. Current efforts to institute a systematic common reporting process on disaster risk reduction, with an annual cycle of reporting requests and accessible electronic databases of information, will help to simplify and reduce the demands. Nevertheless, further continued study and dialogue will be needed to ensure cost-effectiveness and sustainability of reporting at national, regional and international levels<sup>5</sup>.

## Objectives

The main objective of this report is to provide an update on achievements, advances and key trends in the implementation of the HFA at national and regional levels in Europe from 2007-2009, as identified by the partners.

3 Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters: <http://www.unisdr.org/hfa>

4 Reporting on Disaster Risks and Progress in Risk Reduction, UNISDR/GP/2007/2, <http://www.preventionweb.net/globalplatform>

5 Reporting on Disaster Risks and Progress in Risk Reduction, UNISDR/GP/2007/2, <http://www.preventionweb.net/globalplatform>

The following added values in the monitoring of progress have been identified<sup>6</sup>:

- to monitor progress on achievements, build resilience to disasters, and identify gaps and necessary resources related to programmes and initiatives;
- to foster closer collaboration and cooperation among national actors and among/with regional organizations;
- to stimulate exchanges and activities with international entities;
- to enhance visibility of countries within the global arena;
- to share good practices/lessons learned among national actors and with other countries that might be undertaking similar initiatives; and
- to access the ‘rolling’ possibility of the HFA Monitor on-line reporting tool.

Given that States have the primary responsibility for implementing measures to reduce disaster risk and for monitoring and reporting on their progress, the ISDR system and UNISDR are focusing on assisting national efforts towards these ends, in addition to the task of collating information for international purposes.

## Methodology

The present study is based on a review of reports provided by regional and national actors via the monitoring tool HFA Monitor, which was designed and coordinated by UNISDR and is hosted online at PreventionWeb. Other information and reports have also been consulted, made available via sources including the UNISDR website and from ISDR system partners and other actors<sup>7</sup>. In view of the fact that the information available covers only some countries in the Europe region, this report provides only a partial and hence indicative account of the progress being made.

Of the 34 national<sup>8</sup> authorities/HFA Focal Points included in the HFA Monitor tool for Europe, a total of 17 have reported, 16 of which used the on-line monitor facility. The countries which used the on-line monitor were: Armenia, Bulgaria, Croatia, Czech Republic, FYR of Macedonia, France, Germany, Italy, Montenegro, Norway, Serbia, Slovenia, Sweden, Switzerland, Turkey and United Kingdom. The seventeenth country to report, Hungary, responded using a different format. Several countries and partners agreed to provide reports at a later date.

Regional organizations and initiatives that provided information are: the Council of Europe (EUROPA Major Hazards Agreement), the European Commission, the Central European Disaster Prevention Forum, the Disaster Preparedness and Prevention Initiative for South Eastern Europe, the Regional Cooperation Council for South Eastern Europe and a European Network of National Platforms<sup>9</sup>.

The report provides key insights into how disaster risk reduction is currently conceived and practiced by national authorities implementing the HFA. It analyses the progress made in reducing disaster risk in Europe as reported by national authorities (or other entities agreed at national level) and identifies obstacles and challenges that need to be overcome.

The report is based on the three ‘Strategic Goals’ and five ‘Priorities for Action’ of the HFA and includes an identification of good practice and achievements, as well as an analysis of gaps and suggestions for ways forward, through an in-depth review of the experiences of the countries which responded.

Such assessments can reveal gaps in resource use and capacities and identify untapped potentials.

The levels of progress developed by UNISDR for the HFA Monitor, which are applied in all five HFA

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6 Meeting of European National Platforms and HFA focal points for disaster risk reduction, 24/25 April 2008, <http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1896>

7 See Annex I for a full list of actors.

8 As of March 2009, 3 countries out of 34 were still pending official communication of their appointment as HFA Focal Points to UNISDR, but because in practice they exist and are operating they are considered in this report.

9 Please refer to footnote 1

Priorities, enable a self-assessment of the extent to which policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives. The levels of progress are:

- 1 – Minor progress with few signs of forward action in plans or policy.
- 2 – Some progress but without systematic policy and/or institutional commitment.
- 3 – Institutional commitment attained but achievements are neither comprehensive nor substantial.
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources.
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels.

Insights into progress made on key ‘cross-cutting’ issues, such as gender equity, social justice and governance, are highlighted where they have been mentioned in national or other reports.

## Findings

The report finds that many governments and organizations have recognized the need to raise the priority of disaster risk reduction and are directly responding to the expectations and directions of the HFA. Evidence of this in Europe includes the fact that National Platforms<sup>10</sup> for disaster risk reduction have been established in eleven countries, and five other countries (Georgia, Monaco, Norway, Poland and Turkey) are on the point of establishing them. Furthermore, 34 countries have established official Hyogo Framework Focal Points.

In terms of the specific indicators of progress, country reports show that a large majority of reporting countries have attained institutional commitment or substantial achievements in ensuring that disaster risk reduction is a national and local priority with a strong institutional

Figure A: National Platforms and Focal Points established in Europe

National Platforms		Focal Points	
Bulgaria Czech Republic France Germany Hungary	Italy FYR of Macedonia Russian Federation Spain Sweden Switzerland	Albania Armenia Austria Bosnia & Herzegovina Bulgaria Croatia Czech Republic Denmark Finland France Georgia Germany Greece Hungary Iceland Italy FYR of Macedonia	Malta Moldova Monaco Montenegro Norway Poland Portugal Romania Russian Federation Serbia Slovenia Spain Sweden Switzerland Turkey Ukraine United Kingdom
Countries in final stages of developing NPs or pending official communication to UNISDR			
Georgia Monaco Norway Poland Turkey			

10 For information on National Platforms in Europe and guidelines on their establishment please visit the following website: <http://www.UNISDR.org/europe/eu-nplatform/np-guidelines.html>

basis for implementation, but with recognised limitation in capacities and resources. In most countries disaster risk reduction is a cross-sectoral topic and therefore no sole law exists for its regulation. Rather, the elements of disaster risk reduction are integrated in national legislations at all levels.

A large majority of countries report substantial or comprehensive achievement in risk assessment, although national legislation defining responsibilities at all levels varies significantly.

While substantial achievement has been attained in developing and putting in place systems to monitor, archive and disseminate data on key hazards and vulnerabilities, there are recognized limitations in capacities and resources. The main obstacle in this area is scarce financial resources. These systems are costly, which is a limiting factor.

Often the supply of data is still heterogeneous as different institutions participate with their own methods, while there is still plenty of room for standardization of data and improvements in coordination of data sharing.

Reports indicate that there is substantial or comprehensive achievement towards building a culture of safety and resilience through the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities. A large amount of information is available through websites and publications. On-line tools and databases have been created to record past events and hazard and risk assessments are being used at all levels (national through municipal). Events are analyzed in detail and the results are used for adapting priorities for action.

However, the extent to which school curricula, education materials and relevant training include disaster risk reduction and recovery concepts and practices varies significantly among countries, which leads to the conclusion that there is much still to be done in this area.

In almost half of the countries institutional commitment has been attained in the way in which sector development planning and programmes address disaster risks related to changing social, economic and environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change. However, it is stressed that achievements are neither comprehensive nor substantial. Furthermore, there is significant difference in the way social development policies and plans are being implemented to reduce the vulnerability of populations most at risk. Implementation seems to vary according to the level of national development.

Knowledge on the environment and sustainable development is high among politicians, authorities, organizations and the public, but natural hazard knowledge and awareness is still much lower, especially among the public.

Procedures to assess the disaster risk impacts of major development projects, especially infrastructure, are only partly in place.

Reports indicate that preparedness mechanisms and capacity-building measures at national, regional and international level have been strengthened in comparison with previous years, although the extent to which the disaster risk reduction perspectives are integrated is not yet clear.

Insurance is identified as an important tool to establish financial reserves and reconstruction mechanisms. The evaluation of risk accumulation and the establishment of reserves are the most important duties of insurance companies and enterprises. Yet, many countries are of the opinion that much work needs to be done in this sector to attain satisfactory levels.

On a regional level, EU Member States in their development cooperation programmes and projects are pursuing a coherent and complementary approach to disaster risk reduction at all levels. This includes the creation of basic conditions and the capacity building necessary for the respective levels to meet their appropriate responsibilities.

Nevertheless, it emerges that there is a need to cooperate regionally and internationally to assess and monitor regional and trans-boundary risks, exchange standardized information and accessible standardized data on regional disaster risks, impacts and losses, and provide early warnings. This need, in addition to bilateral agreements between countries, has led to the establishment of several regional organizations and networks in Europe, including DPPI SEE, RCC SEE, CEUDIP and CMEPC.

The majority of countries report improved cooperation with neighbouring countries and relatively well established regional and trans-boundary cooperation, with substantial or comprehensive achievement attained over the last few years.

## Conclusions

Although the general recognition of the importance of disaster risk reduction at policy level is undisputable, there nevertheless remains a lack of understanding of the concept when it comes to specific issues such as the implementation of legal frameworks and the updating of existing legislation with new concepts. The cross-cutting nature of disaster risk reduction makes coordination at national and other levels a challenge.

Concrete and active strategies for disaster risk reduction rely on different institutions, each with its own legal framework, and this necessitates the establishment of specific sectoral strategies to be coherently implemented and coordinated at national level. In this context the development of National Platforms facilitates a more efficient application of disaster risk reduction, although despite the recognition and priority given to the establishment and/or development of National Platforms, there will need to be more commitment from governments to achieve this.

The way National Platforms are linked or integrated into national governmental systems determines the way they can influence national decision-making processes. National Platforms which are governmental based with a high level of coordination have a direct influence on these

processes, whereas civil society structures have to focus on advocacy and lobbying activities to create the necessary momentum.

Governments often entrust the task of facilitating the establishment of National Platforms to HFA Focal Points. In many cases the Focal Points are the civil protection organizations, which traditionally have a more focused mandate on preparedness and response. An understanding of the multi-sectoral dimension of disaster risk reduction is essential to provide the HFA Focal Points with the necessary knowledge to ensure the successful development of the National Platforms' structures and activities.

The contradictory interests between different groups and organizations, together with scarce financial resources at the local or regional level, are hindering some urgent risk reduction measures. Furthermore, the rapid migration from rural to urban areas and the concentration of populations are increasing the vulnerability of certain societies, while available resources often do not follow the same trends.

Due to limited resources and the low priority frequently given to the management of natural hazards, existing knowledge of risks is often not used at local level and risk analysis, such as through the use of stability or flood maps, is often not visible in municipal programmes. To achieve the appropriate level of attention for natural hazards and disaster risk reduction in 'competition' with the many other urgent and important tasks represents a significant challenge.

Moreover, although there is a large amount of risk reduction information available, the task remains to promote a common understanding and an awareness of responsibilities, probabilities and possibilities among potential actors.

Increasing the awareness of school children is one way to facilitate the creation of disaster resilient communities for the future. The lack of integration of the disaster risk reduction concept into school curricula is a major deficiency, and the slow rate of progress of incorporating this message is of particular concern.

Despite a reduction in economic vulnerability in recent years among many European countries, challenges remain due to the frequently complex interdependency of cross-border activities, especially in the energy sector. Significant differences in levels of economic development in Europe and neighbouring countries can intensify this pressure. It should be noted that economic considerations often overrule safety and security parameters.

At the operational level the main constraints on the effectiveness of disaster preparedness are the shortage of financial and technical capacities, particularly communication systems, and the need for adequately-trained personnel. This situation is often compounded by the general decline in the numbers of volunteers, due to demographic changes, in those countries which have significant voluntary sectors.

## Recommendations

Based on the experiences reported by the national, sub-regional and regional actors via the HFA Monitor tool, and with reference to other information made available through UNISDR and ISDR partners and other actors, the report makes the following recommendations:

### National level

- The implementation of disaster risk reduction related legal provisions and national policies as an inter-disciplinary approach should be further pursued.
- National policies for disaster risk reduction and management should not only be in place but also appropriately implemented and sufficiently integrated into sectoral policies and national development plans.
- Cooperation at all levels, both horizontally and vertically, and between research programmes and projects should be further promoted. Links between natural, societal and economic research with actors and institutions in disaster risk reduction are essential. Currently, climate change is the main focus of many activities while other areas must be further developed and integrated in all sectors.
- Capacity building at local level: to raise awareness among and empower local- and community-level organizations, volunteer groups and other active members of civil society to participate in disaster risk reduction decision-making, planning and implementation and to improve vertical coordination is of the utmost importance. Studies and reports to highlight the economic impact of disaster risk reduction at municipal level would mobilize interest groups and other concerned people to put peer pressure on local governments.
- To harness the potential of National Platforms in Europe to advance disaster risk reduction it is important that governments increase their appreciation and support for the establishment and enhanced performance of National Platforms. Furthermore, within the context of a network of National Platforms, efforts and exchanges should be consolidated to facilitate the establishment of a regional platform on disaster risk reduction to further stimulate a high-level political debate.
- Improved access to information on disaster risk assessment and reduction measures and implementation of initiated inter-disciplinary research linking science and practice are key to further development.
- The private sector should be encouraged to practice and contribute to risk reduction and strengthen public-private sector partnerships.
- Better coordination of the information flow in warnings related to disasters among various ministers and government offices at national levels and further

efforts towards the clarification of terms and definitions, roles and responsibilities are required. Archive systems may also be used as a good platform for sharing disaster-related documents (lessons learned). They can be used as knowledge portals including a full spectrum of educational materials and become a one-stop-shop for users from academic institutions, practitioners and the private sector.

- A more intensive promotion of disaster risk-related themes is necessary at the level of school education. An update of existing programmes with new developments, such as climate change, is required.
- Upgrading of emergency management systems with integrated information systems and geographical information analysis should be promoted with local governments, despite the frequently insufficient financial resources and shortage of experts at local level.

## Regional level

- In the sub-regional and regional arrangements partners should encourage disaster risk reduction to be put high on all agendas.
- Development cooperation programmes and projects abroad are still financed mainly through emergency aid, which is not sufficient for a comprehensive integration of disaster risk reduction. Consequently, the inclusion of independent disaster risk reduction funds within technical cooperation projects would be a major achievement.
- Standardization of data gathering and usage is an important factor and should be promoted at all levels along with enhanced approaches for multi-risk analyses (including cost-benefit analyses)

through enhanced research at all levels. Climate change risks should be integrated into risk analyses.

- Continued integration of disaster risk reduction in the respective sector strategies at national and international level, and in particular in developing countries with international donor support, is crucial. Public aid mechanisms and regulations, in particular policy relevant to insurance, to facilitate relocations to safer areas would be useful. More disaster risk reduction standards have to be considered in the case of recovery.





# 1

**HFA  
implementation  
at national level**

## 1. HFA implementation at national level

This chapter examines the achievements, advances and key trends in the implementation of the Hyogo Framework for Action at national level by presenting an overview of the responses provided by the individual partners to the requests for information regarding progress towards each of the three HFA Strategic Goals and five HFA Priorities for Action.

### 1.1. Strategic Goals

With the adoption of the HFA by 168 countries in 2005, the following three strategic goals were outlined to guide activities on disaster risk reduction and recovery across all levels:

1. The more effective **integration of disaster risk considerations into sustainable development policies, planning and programming at all levels**, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.
2. The **development and strengthening of institutions, mechanisms and capacities at all levels**, in particular at the community level, that can systematically contribute to building resilience to hazards.
3. The **systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes** in the reconstruction of affected communities.

### Level of progress

At the national level the strategic goal statements generally illustrate the ways in which countries are working towards the more effective and systematic integration of disaster risk reduction into policies, programmes and planning.

The main strategic goal described is to anchor the principle of a culture of risk and safety, instead of a mere defence against hazards. There is a broad-based dialogue to strengthen risk awareness and a clarification of responsibilities at all levels.

It is recognised that sustainability is to be achieved by jointly considering safety, environmental and socio-economic aspects in any scenario of excessive risk and with strengthened capacities at all levels of societies to build resilience towards potential disasters. In this context, most countries refer to climate change adaptation as one of the most important strategic challenges we face today.

This will involve the development of a more focused approach to climate change risk assessment to help set priorities for adaptation programmes, and to ensure that other policies reflect potential risks and opportunities and set a baseline against which progress can be measured.

Efforts are ongoing to strengthen institutions that are integrated into the emergency management systems through enhanced coordination and through the increased use of modern technologies in all phases of the disaster management cycle.

Particular regard is given to the need to improve the capacities of local communities to effectively deal with disaster risk reduction issues and to develop resilience. Key to this is the provision of the means and knowledge necessary for community mobilization, community-based disaster mitigation, and necessary structures and hardware for disaster preparedness.

On a regional and international level, some countries are particularly active to stress the need for streamlining and coordination of European Union (EU) and United Nations initiatives in the area of disaster risk reduction.

In terms of constraints, it emerges from the reports that strategies for disaster risk reduction are generally still reliant on several institutions, each with its own legal framework. This necessitates the need for specific sectoral strategies and efforts to strengthen institutions and capacities for disaster risk reduction. In this respect, the benefits of establishing or further developing National Platforms for disaster risk reduction to coherently implement and coordinate such strategies at the national level are clearly recognized and prioritized, although this will need more commitment from governments.

## 1.2. Priorities for Action

Responses to each of the priorities are addressed in terms of the individual indicators of progress. Where appropriate, progress is identified, along with any constraints and recommendations.

The indicators of progress developed by UNISDR in the HFA on-line tool, which are applied in all five HFA priorities, enable a qualitative self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives. Indicators are assessed using the following graduated five-point scale:

1. Minor progress with few signs of forward action in plans or policy.
2. Some progress but without systematic policy and/or institutional commitment.
3. Institutional commitment attained but achievements are neither comprehensive nor substantial.
4. Substantial achievement attained but with recognized limitations in capacities and resources.
5. Comprehensive achievement with sustained commitment and capacities at all levels.

The resulting values of each of the indicators of progress convert the qualitative self-assessments presented by each of the partners into quantitative values.

### 1.2.1. Priority for Action 1:

*Ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.*

Countries that develop policy, legislative and institutional frameworks for disaster risk reduction and are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for engagement in and compliance with disaster risk reduction measures across all sectors of society.

HFA Priority for Action 1 has four 'core indicators' on which progress and challenges on implementation can be monitored and reviewed:

1. National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels;
2. Dedicated and adequate resources are available to implement disaster risk reduction activities at all administrative levels;
3. Community participation and decentralization are ensured through the delegation of authority and resources to local levels; and
4. A national multi-sectoral platform for disaster risk reduction is functioning.

Assessing such elements can reveal gaps in resources and capacities that were previously underutilised or untapped.

## Overview of achievements, challenges and recommendations

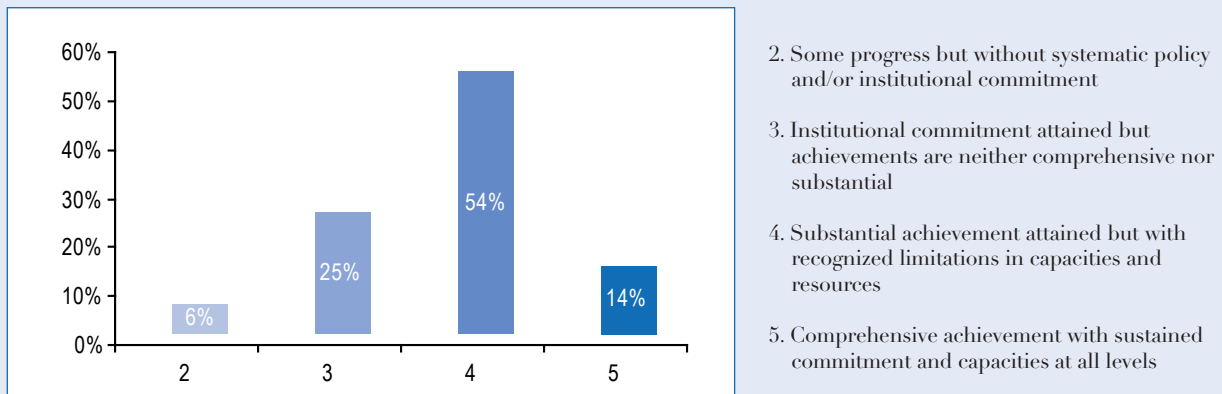
There appears to have been substantial progress in ensuring that disaster risk reduction is both a national and a local priority among the countries that responded using the HFA on-line monitor, with 68 per cent reporting either substantial or comprehensive achievement in this area and a further 25 per cent reporting institutional commitment.

Progress is especially strong in the degree to which national policies and legal frameworks exist with decentralized responsibilities and capacities, with some 87.5 per cent of countries reporting substantial or comprehensive achievement in this area. Contextual challenges identified involve the implementation and update of legal frameworks, the coordination of different levels and the cross-cutting nature of disaster risk reduction. Financial resource limitations are identified as a constraint.

It emerges from the reports that there is a need to ensure that national policies for disaster risk reduction are appropriately implemented and sufficiently integrated into sectoral policies and national development plans.

There is substantial progress in the degree to which resources are made available to administrative levels for disaster risk reduction, with 73 per cent of countries reporting substantial or comprehensive

Figure 1: HFA Priority 1 – Overall levels of progress for the period 2007-2009.<sup>11</sup>



achievement in this area. Remaining financial and human resource constraints mainly involve local and regional levels.

There is slightly less progress in the delegation of authority and resources to local levels, with 62.5 per cent of countries reporting substantial or comprehensive achievement in this area. It is evident from the reports that further local-level capacity building is needed to raise awareness and empower communities to participate in disaster risk reduction decision-making, planning and implementation.

In terms of the progress countries are making to establish national multi-sectoral platforms the results are less conclusive, with just 50 per cent of countries reporting substantial or comprehensive achievement. The key contextual challenge encountered by national authorities involves the fact that governments often entrust the task of facilitating the establishment of National Platforms to HFA Focal Points. In many cases the Focal Points are the civil protection organizations, which traditionally have a more focused mandate on preparedness and response. The challenge is to provide the HFA Focal Points with the necessary knowledge to facilitate their understanding of the multi-sectoral dimension of disaster risk reduction.

## Specific achievements, challenges and recommendations based on indicators

**Indicator 1:** *National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.*

A country's constitution, laws and governmental system provide the basis to develop plans and institutional arrangements for all areas of disaster risk reduction. In most countries disaster risk reduction is a cross-sectoral topic and therefore no sole law exists for its regulation. Instead, the elements of disaster risk reduction are integrated in national legislations at all levels<sup>12</sup>.

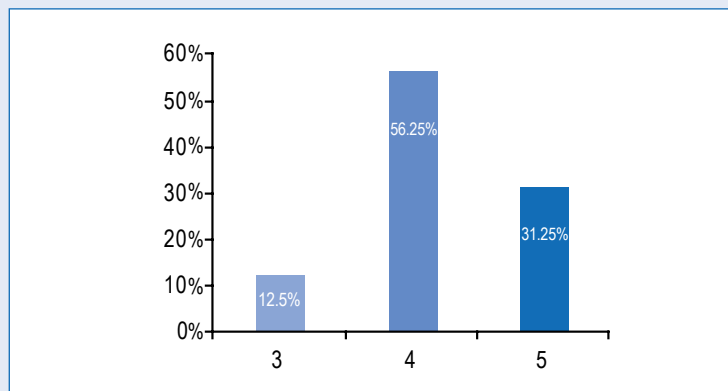
Self-assessed levels of progress of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives show that the majority, 56.25 per cent, of reporting countries are of the opinion that substantial achievement has been attained, but with recognized limitations in capacities and resources. Some 31.25 per cent report comprehensive achievement with sustained commitment and capacities at all levels and 12.5 per cent report institutional commitment, but the achievements are neither comprehensive nor substantial.

It is worth noting that EUR-OPA emphasized the necessary institutional basis to support disaster

<sup>11</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation

<sup>12</sup> See HFA Monitor on line, [www.preventionweb.net](http://www.preventionweb.net)

Figure 2: HFA Priority 1 **Indicator 1** – Percentage of countries achieving levels of progress 1-5



Out of 16<sup>13</sup> countries: 2 are level 3 (12.5%); 9 are level 4 (56.25%); 5 are level 5 (31.25%).

3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

risk reduction by bringing together the ‘knowledge holders’ (scientists) and the users of such knowledge (authorities) in two workshops in 2008 (one devoted to public authorities facing radiological risks and the other to the governance of natural risks)<sup>14</sup>.

The key contextual challenges encountered by the countries/national authorities and partner agencies involved:

- Implementation of legal frameworks and updating of existing legislation with new concepts;
- Coordination of the different levels and the cross-cutting nature of disaster risk reduction;
- More financial resources and further efforts needed to ensure decentralized capacities;
- Lack of understanding of disaster risk reduction at policy level; and
- Contradictory interests between different groups and organizations (e.g. in the development of water-front areas, residents wish to live close to rivers, lakes and ocean shorelines despite the higher risk of flooding).

Two recommendations emerge from the reports. Firstly, there is a need to ensure that national policies for disaster risk reduction are not only in place but are also appropriately implemented and

### Good Practice

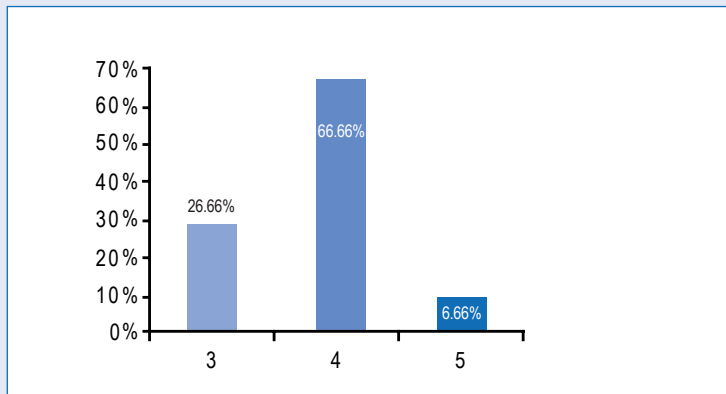
Network of Memorandums – *Former Yugoslav Republic of Macedonia*

The Macedonian Crisis Management Centre (CMC), the municipalities and the City of Skopje established a network of memorandums that will enable closer cooperation in the fields of: (1) assistance for prevention and early response to risks and hazards by local authorities; (2) creation of common standard operational procedures for information sharing, communication and measures; (3) risk assessment; (4) establishment of a universal methodology for risk assessment; (5) defining the local needs for human and material resources; (6) planning the necessities for material and technical equipment; and (7) financial resources. The CMCs plan on improving the mechanisms and capacities at all levels through a network of all relevant stakeholders in the crisis management system.

<sup>13</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

<sup>14</sup> See Annex II for the List of main events organized by or in collaboration with European National Platforms and HFA Focal from January 2008 to February 2009. For further information and other events in Europe see: <http://www.unisdr.org/europe/events/index.php>

Figure 3: HFA Priority 1 **Indicator 2** – Percentage of countries achieving levels of progress 1-5



Out of 15<sup>16</sup> countries: 4 are level 3 (26.66%); 10 are level 4 (66.66%); 1 is level 5 (6.66%).

- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

sufficiently integrated into sectoral policies and national development plans. Secondly, in the sub-regional arrangements partners should encourage disaster risk reduction to be put high on all agendas (political and technical etc.).

**Indicator 2:** *Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.*

Dedicated resources refer to funds that are allocated specifically for disaster risk reduction actions. Resource allocation that embeds disaster risk reduction into an institution’s day-to-day business is necessary. When risk is considered in development investment decisions and in the design of projects, the cost of disaster risk reduction is lower<sup>15</sup>.

Self-assessed levels of progress of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives shows that the majority, 66.66 per cent, of reporting countries are of the opinion that substantial achievement has been attained but with recognized limitations in capacities and resources.

Constraints and limitations are mainly at local and regional levels, including a lack of both financial and human resources. Furthermore, the rapid migration from rural to urban areas and the concentration of populations is increasing the vulnerability of

societies, but available resources often do not follow the same trends.

On a national scale it is recommended that cooperation at all levels is further promoted, both horizontally and vertically. It is also essential to encourage further links between research institutions and actors and organizations involved with disaster risk reduction.

Currently, climate change is the main focus of many activities while other areas must be further developed and integrated in all sectors.

### Good Practice

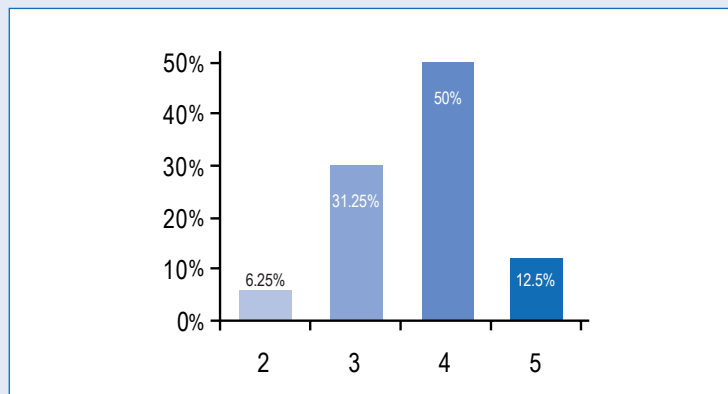
Public Research Grant Committee –  
*Turkey*

The Scientific and Technological Research Council of Turkey (TUB TAK) initiated the Public Research Grant Committee programme to fund projects after 2004 proposed by governmental units in joint collaboration with universities, research institutes, the private sector and NGOs. Those projects aiming at disaster risk reduction are highly promoted and favoured when funding.

15 See HFA Monitor on-line, [www.preventionweb.net](http://www.preventionweb.net)

16 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 4: HFA Priority 1 *Indicator 3* – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>17</sup> countries: 1 is level 2 (6.25%); 5 are level 3 (31.25%); 8 are level 4 (50%); 2 are level 5 (12.5%).

At the sub-regional and international level the implementation of disaster risk reduction concepts and programmes for disaster mitigation and disaster preparedness is a matter of resources. Development cooperation programmes and projects abroad are still financed mainly through emergency aid, which is not sufficient for a comprehensive integration of disaster risk reduction. Incorporating independent disaster risk reduction funds within technical cooperation projects would be a major achievement.

**Indicator 3:** *Community participation and decentralization are ensured through the delegation of authority and resources to local levels.*

Such action calls for the promotion of community participation in disaster risk reduction through the adoption of policies relevant to the local level, promotion of knowledge networks, strategic management of volunteer resources, attribution of roles and responsibilities, and the delegation and provision of authority and resources at local levels.

Of the 16 countries that responded, 6.25 per cent report some progress but without systematic policy and/or institutional commitment; 31.25 per cent report that institutional commitment has been attained but achievements are neither comprehensive nor substantial; 50 per cent report that substantial achievement has been attained but with recognized limitations in capacities and resources; and 12.5 per cent report that

comprehensive achievement has been attained with sustained commitment and capacities at all levels.

It emerges that municipalities and local governments have been given more tasks and responsibilities for disaster risk reduction and most of the mitigation, preparedness, planning and recovery efforts have been transferred to this level. They are responsible for the functioning of key public services – such as local infrastructure, care for the elderly and other vulnerable populations, health services and information to the public – and their coordination during emergencies. They are also responsible for preventive planning and disaster management within their territorial borders.

Risk and vulnerability analysis, physical planning, emergency plans and exercises are the cornerstones of disaster risk reduction at the local level. However, a survey carried out in 2007 by the Norwegian Secretariat for Climate Change Adaptation among Norwegian municipalities shows that there is strong concern, but lack of knowledge, about climate change and climate change adaptation. Several municipalities requested information about how climate change may affect disaster risks locally.

To discuss the issue of local governance and disaster risk reduction EUR-OPA organized an international workshop in collaboration with Turkish authorities in October 2008 entitled ‘For a new governance of natural risks’. The workshop

17 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

## Good Practice

### Roles and responsibilities – *Slovenia*

Roles and responsibilities of local and national levels are defined in the Act on Protection against Natural and Other Disasters. In the period 2006–2008, both levels carried out their tasks according to the annual programmes. The following are three practical examples of the involvement of the different levels:

1. On the basis of risk and threat assessments, regions, local communities and enterprises must adopt emergency response plans, which have to be in compliance with national emergency response plans. In the period 2006–2008, local communities and enterprises prepared or updated most mandatory emergency response plans.
2. Both levels are also linked through development and research work that, although conducted at national level, involves both national and local levels. Examples include research projects in 2007 in which the major emphasis was on information support for fire prevention and extinguishing in the karst and mountainous areas.
3. Local enterprises and other organizations, including NGOs and institutions, are also included in national education and training activities. One example of this cooperation is the involvement of the aforementioned in annual national exercises. Each year, an exercise is organized in a different region and the scenario involves regional and local threats. In 2007 an exercise on ‘fires in the natural environment’ was organized in the Karst area, while in 2008 the scenario of the exercise included a nuclear accident and was to be carried out in the region of the only Slovene nuclear power plant, Krsko.

took place in Istanbul with the objective of encouraging public authorities and populations in areas at risk to reinforce their capacity to anticipate and respond to disasters caused by the impact of natural hazards<sup>18</sup>.

It is apparent from the reports that further capacity building at local level is needed to raise awareness and empower community-level organizations, volunteer groups and other active members of civil society to participate in disaster risk reduction decision-making, planning and implementation and to improve vertical coordination. Studies and reports to highlight economic impacts of disaster risk reduction at municipal level would mobilize interest groups and other concerned people to put peer pressure on local governments.

## Good Practice

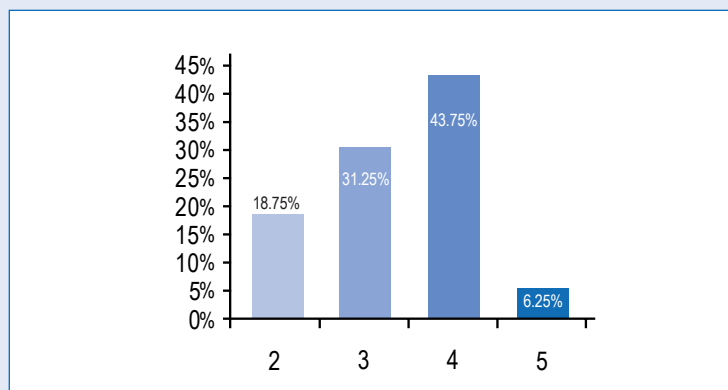
### Development aid – *France*

At an international level, decentralized cooperation projects are led by different collective entities in different sectors, particularly in the field of civil protection. Examples include the programme ‘Art Gold Caribbean’ between Guadeloupe, Aquitaine, Brittany and United Nations Development Programme (UNDP); cooperation Vendée/Antananarivo; and flood protection cooperation between Paris and Prague. Since 2007, the French Agency for Development (APD) has contributed to the establishment of insurance against natural hazards disasters hazards in the Caribbean through the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which enables participating states to insure against the risks of losses caused by natural hazards.

18 To find out more see : [http://www.coe.int/t/dg4/majorhazards/activities/Istanbul2008\\_en.asp](http://www.coe.int/t/dg4/majorhazards/activities/Istanbul2008_en.asp)



Figure 5: HFA Priority 1 *Indicator 4* – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>22</sup> countries: 3 are level 2 (18.75%); 5 are level 3 (31.25%); 7 are level 4 (43.75%); 1 is level 5 (6.25%).

On an international level, EU Member States in their development cooperation programmes and projects do appear to be pursuing a coherent and complementary approach to disaster risk reduction on all levels, partly due to the European Consensus on Humanitarian Aid<sup>19</sup>. This includes the creation of basic conditions and the capacity building necessary for the respective levels to meet their appropriate responsibilities.

*Indicator 4: A multi-sectoral National Platform for disaster risk reduction is functioning.*

A multisectoral National Platform for disaster risk reduction can be defined as a nationally owned and led mechanism adopting the structure of a forum or committee that facilitates the interaction of key development players around the national disaster risk reduction agenda and serves as an advocate for adopting disaster risk reduction measures at all levels.

Within the EU, eight governments have informed the UNISDR of the existence of an officially designated National Platform<sup>20</sup> to date. They are: Bulgaria, Czech Republic, France, Germany, Hungary, Italy, Spain and Sweden. A further three non-EU countries have also established National Platforms: FYR of Macedonia, Russia and Switzerland.

In total, the following 34 European countries have nominated Focal Points for disaster risk reduction: Albania, Austria, Bosnia & Herzegovina, Armenia, Bulgaria, Croatia, Czech Republic, Denmark, Finland, FYR of Macedonia, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Malta, Moldova, Monaco, Montenegro, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and United Kingdom.

Two of the National Platforms, those of the Czech Republic and Germany, are NGOs. All others are governmental bodies. The French system applies a twin structure with a governmental entity and an NGO working together. In Switzerland, a strong civil society component is integrated into the governmental system.

The way National Platforms are linked or integrated into the governmental system of their country determines the way they can influence national decision-making processes. National Platforms which are part of the political system can directly influence such decision-making processes. Civil society structures, on the other hand, have to focus on advocacy and lobbying activities to create the necessary momentum<sup>21</sup>.

19 EU Consensus on Humanitarian Aid (2008), [www.preventionweb.net/files/2967\\_euroconsensus.pdf](http://www.preventionweb.net/files/2967_euroconsensus.pdf)

20 To find out more on National Platforms and HFA focal Points in Europe see: <http://www.unUNISDR.org/europe/eu-publications/DRR-in-europe.pdf>

21 See Disaster risk reduction in Europe: Overview of European National Platforms, Hyogo Framework for Action focal points and regional organizations/institutions, Updated version of Report on Implementation of the Hyogo Framework for Action: Europe UNISDR/GP/2007/Inf.6

22 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

EUR-OPA has strongly supported the creation of National Platforms as a way to better coordinate actions among multiple stakeholders. Two European meetings of National Platforms and Focal Points were co-organised with UNISDR in 2007 and 2008 and support for setting up such National Platforms in the interested Member States has been proposed.

Figure 4 shows how partner countries assessed the development and functioning of the national multi-sectoral platforms for disaster risk reduction.

The key contextual challenge encountered by national authorities and partner agencies is that governments often, due to international obligations, entrust the task of facilitating the establishment of National Platforms to their respective civil protection organizations. Traditionally, they deal more frequently with preparedness for response and often do not possess full competence for the coordination of all multidisciplinary disaster risk reduction issues, which can cause a lack of awareness and thereby poor functionality and accessibility.

Prevention is nowadays considered one of the main pillars to sustainable development. It is one of the focal themes of the EC, which issued a communication on a Community approach to the prevention of disasters caused by natural or technological hazards on 23 February 2009, along with the publication of a Communication on an EU strategy for supporting disaster risk reduction in developing countries.

A conference on disaster risk reduction held in November 2008 in Paris, in the context of the French Presidency of the EU, addressed the question of whether experience and collective memory could benefit the Member States of the EU, representing over 450 million people, as well as their neighbours. It also discussed the potential components of a European and regional culture on disaster risk management

in the context of the new climate change challenges and the cooperation among European States and their National Platforms and national Focal Points for disaster risk reduction within the wider framework of the HFA<sup>23</sup>.

In terms of recommendations, it emerges that National Platforms in Europe are becoming more actively engaged in events, such as workshops, meetings and conferences, organized by partner National Platforms. Further achievements could be made by making the common agenda of the European National Platforms more prominent within political processes.

Furthermore, in order to use the potential of National Platforms in Europe to advance disaster risk reduction it is important that governments and civil society increase their support for the establishment and performance of such platforms. The consolidation of efforts and exchanges among National Platforms, within the context of a network of platforms, should facilitate the establishment of a regional platform on disaster risk reduction stimulating a high level political debate.

Improved access to information on disaster risk assessment and reduction measures and implementation of initiated inter-disciplinary research linking science and practice are keys for further development. Further achievements could be gained by encouraging the private sector to practice and contribute to risk reduction and by strengthening public-private sector partnerships.

## 1.2.2. Priority for Action 2:

*Identify, assess and monitor disaster risks and enhance early warning.*

The starting point for reducing disaster risk and for promoting a culture of disaster resilience

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23 See <http://www.risq-ue2008.fr/>

lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long term, followed by action taken on the basis of that knowledge.

HFA Priority for Action 2 has four ‘core indicators’ through which progress on implementation can be monitored and reviewed and challenges identified:

1. National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors;
2. Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities;
3. Early-warning systems are in place for all major hazards, with outreach to communities; and
4. National and local risk assessments take account of regional/transboundary risks, with a view to regional cooperation on risk reduction.

## **Overview of achievements, challenges and recommendations**

The reports suggest that over the past two years there has been substantial progress made in ensuring that disaster risks are identified, monitored and assessed and early warnings issued. Some 70 per cent of countries report either substantial or comprehensive achievement in this area and a further 23 per cent report institutional commitment has been attained.

In terms of the progress countries have made in making available risk assessments based on hazard and vulnerability data, some 69 per cent of countries report substantial or comprehensive achievements. However, it is apparent from the reports that risks related to natural hazards are not always visible in risk and vulnerability analyses and existing

knowledge is not always used at municipal level.

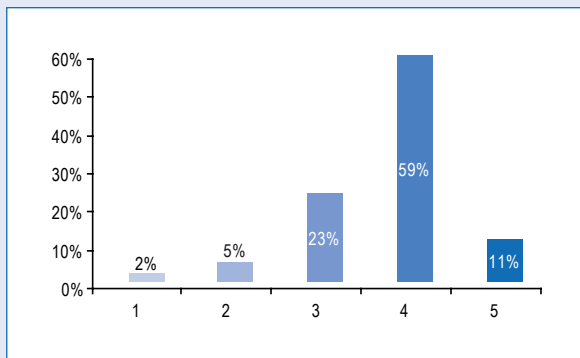
It is recognised that if standardization of data gathering and usage is promoted at all levels it could contribute to rapid response to disasters and help minimize disaster-related loss of life.

There is substantial progress in the way systems have been put in place to monitor, archive and disseminate data on key hazards and vulnerabilities, with 75 per cent of countries reporting substantial or comprehensive achievement in this area. Nevertheless, it is recognized that improvements are needed to the amount, quality and accessibility of data as well as vulnerability evaluation techniques. Furthermore, although systems are generally in place for large regions, deficits nevertheless exist for remote and smaller areas.

There has been less progress made in the establishment of warning systems for all major hazards, with just 63 per cent of countries reporting substantial or comprehensive achievement in this area. Scarce financial resources are identified as the main obstacle in this field, particularly in developing countries.

Substantial progress has been made in ensuring that risk assessments take account of regional or transboundary risks, with 75 per cent of countries reporting substantial or comprehensive achievement in this area, although issues in the political sphere remain a challenge and can create obstacles to regional cooperation.

Figure 6: HFA Priority 2 – Overall level of progress<sup>24</sup> for the period 2007-2009



1. Minor progress with few signs of forward action in plans or policy
2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

## Specific achievements, challenges and recommendations based on indicators

**Indicator 1:** *National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.*

National risk assessments allow decision-makers and communities to understand the country's exposure to various hazards and its social, economic, environmental and physical vulnerabilities and to take effective action to reduce disasters and environmental risks.

Most self-assessed countries report significant progress in this area, with some 68.75 per cent describing their achievement in the field of risk assessment as substantial or comprehensive. However, national legislations that are defining responsibilities – on a national, regional and local level – vary significantly and implementation even more so.

## Good Practice

### National Risk Register – *United Kingdom*

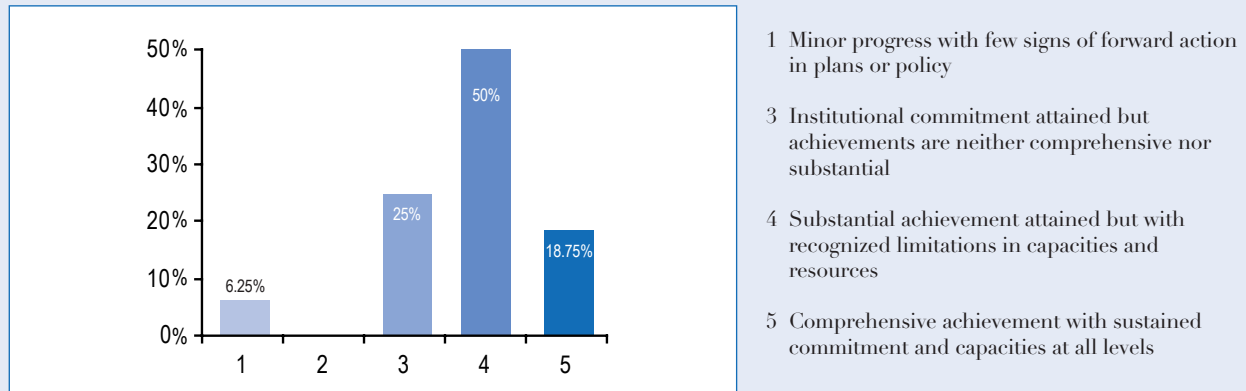
The UK Government has published a National Risk Register, which is designed to increase awareness of individuals and organizations for risks facing the UK, including details of how the Government and emergency services prepare for emergencies. The Government advocates a six-step risk assessment process, which is widely recognized as being good practice. The steps can be split into three phases:

- 1) Contextualisation, which involves defining the nature and scope of the risk and agreeing how the risk management process will be undertaken.
- 2) Risk evaluation, which covers the identification of those threats and hazards that present significant risks, analysis of their likelihood and impacts, and the combination of these values to produce overall risk scores.
- 3) Risk treatment, which involves deciding which risks are unacceptably high, developing plans and strategies to mitigate these risks, and then testing the plans and any associated capabilities.

Risk assessment should drive a standard emergency planning process, informing emergency plans (and Business Continuity plans), which are then tested through auditing and validation exercises. Regular updating of the risk assessment in turn leads to a revision of plans and further testing. The risk assessment should also respond quickly to changes in the risk environment. This means that the process should be iterative and contain risk monitoring and updating mechanisms. The Civil Contingencies Act places a risk assessment duty on all Category 1 responders to maintain and update their

<sup>24</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 7: HFA Priority 2 *Indicator 1* – Percentage of countries achieving levels of progress 1-5



- 1 Minor progress with few signs of forward action in plans or policy
- 3 Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4 Substantial achievement attained but with recognized limitations in capacities and resources
- 5 Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>25</sup> countries: 1 is level 1 (6.25%); 4 are level 3 (25%); 8 are level 4 (50%); 3 are level 5 (18.75%).

emergency plans and to perform the civil protection duties under the Act. As part of the Local Resilience Forum (LRF) process, Category 1 responders must co-operate with each other in maintaining the Community Risk Register (CRR). The CRR provides an agreed position on the risks affecting a local area and on the planning and resourcing priorities required to prepare for those risks. On the LRF, regional risk assessments are built, and consistency and co-ordination with central guidance is provided by the Government regarding the risks facing the UK as a whole. Risk likelihood is assessed for a five-year period so that the risk assessment will support strategic planning for the medium term, informing decisions about capability development. The UK Government has a national risk assessment capability, which identifies risks to the UK as a whole over a one-year period, while assessing their likelihood and impact. This forms the basis for decisions about emergency preparedness and about capability planning.

Economic and other indicators of national development appear to be factors in the levels of progress made towards the development of risk assessments. For example, Switzerland, which is one of the most economically developed countries, is already working towards the national application of an advanced system. It aims to have geological and hydrological hazard maps and assessments covering the whole country by 2011, and have them applied in land-use planning, especially for construction permit deliveries by municipalities.

The German insurance industry has sophisticated and detailed methods for risk assessment, including the NATural Hazards Assessment Network of the Munich Re Group. The German scientific landscape and other actors, such as the Germany Agency for Technical Cooperation (GTZ), have also begun implementing these methods with international partners, such as the German Indonesian Tsunami Early Warning System.

Several challenges and constraints emerge from the reports. It is apparent that risks related to natural hazards are not always visible in risk and vulnerability analyses. Existing knowledge, such as stability and general flood maps, is not always used at municipal level due to low priority and limited resources.

Much attention is paid to climate change, risks and vulnerability at the national level. However, regional and local levels are not yet fully prepared and

25 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

equipped to address the issues with the same level of attention. Furthermore, data at local and regional levels is often lacking.

In terms of international co-operation, the technical solutions for early-warning systems often ignore the communication lines to those communities most affected by the disasters. German agencies suggest that this issue needs more attention from donor agencies and political decision makers. United Nations University – Institute for Environment and Human Security is currently preparing a report on vulnerability indicators together with the Federal Office of Civil Protection and Disaster Assistance and the German Aerospace Center<sup>26</sup>.

In terms of recommendations, it is recognised that standardization of data gathering and usage is an important factor and should be promoted at all levels. This could contribute to rapid response to disasters and minimize disaster-related loss of life.

Multi-stakeholder participation among the relevant institutions emerges as a key factor in preparation of national level risk and vulnerability mapping and data collection.

**Indicator 2:** *Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.*

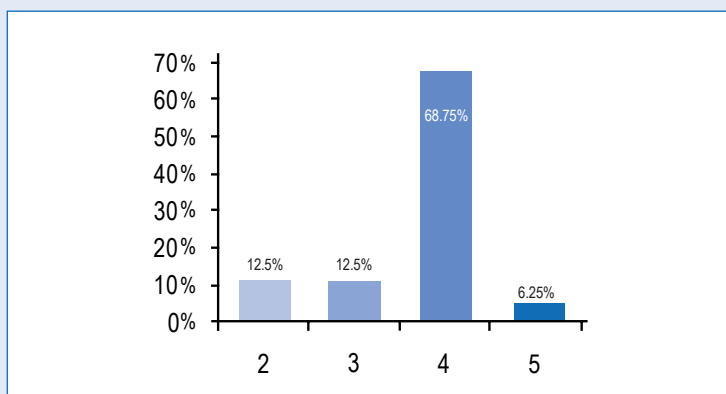
## Good Practice

The National Vulnerability and Emergency Preparedness Report – *Norway*

At the national level the Norwegian Directorate for Civil Protection and Emergency Planning (DSB) conducts and publicizes each year ‘The National Vulnerability and Emergency Preparedness Report’. Over the last four years, 96 per cent of municipalities have conducted local risk and vulnerability analyses.

Analyses and investigative studies are vital activities to gain an overview of which preventive measures should be given priority. The project ‘Protection of society’ of the Norwegian Defense Research Establishment and DSB’s annual National Vulnerability and Emergency Preparedness Report are such examples. The analyses are cross-sectoral and identify vulnerabilities in society in general and in the different sectors.

Figure 8: HFA Priority 2 **Indicator 2** – Percentage of countries achieving levels of progress 1-5



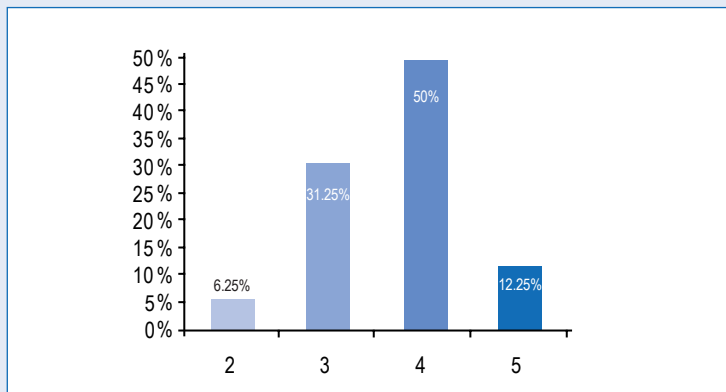
Out of 16<sup>27</sup> countries: 2 are level 2 (12.5%); 2 are level 3 (12.5%); 11 are level 4 (68.75%); 1 is level 5 (6.25%).

2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

26 See Deutsches Zentrum fuer Luft-und Raumfahrt (DLR) <http://www.dlr.de>

27 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 9: HFA Priority 2 *Indicator 3* – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>28</sup> countries: 1 is level 2 (6.25%); 5 are level 3 (31.25%); 8 are level 4 (50%); 2 are level 5 (12.5%).

Data collection and dissemination processes allow decision-makers and the public to understand a country's exposure to various hazards and its social, economic, environmental and physical vulnerabilities. Such information, disseminated in an appropriate and timely manner, allows communities to take effective action to reduce risk.

Some 68.75 per cent of countries report substantial achievement but with recognized limitations in capacities and resources in this area, with one country reporting comprehensive achievement with sustained commitment and capacities at all levels.

In terms of challenges and constraints, although systems are generally in place for large regions, such as river basins, deficits nevertheless exist for smaller areas, such as small watersheds, and remote regions. Experience has shown that even where standardization and notification procedures have been established there are issues involving the timing and quality of information from smaller municipalities due to difficulties they often have in recruiting skilled personnel and acquiring technical resources.

There is a particular issue with archiving information in developing countries. Data storage systems have an important role in the establishment of disaster awareness and there tends to be differences among institutions in the way such data is maintained. Putting all those differently-formatted datasets into one single database and their mutual integration takes time.

Furthermore, the data on vulnerabilities tends to be mainly on a project basis and is limited to the project areas.

One further issue that emerges from the reports is that there is insufficient common understanding or appraisal of impacts, such as which losses to take into consideration.

It is important to improve the amount, quality and accessibility of data as well as vulnerability evaluation techniques.

**Indicator 3:** *Early warning systems are in place for all major hazards, with outreach to communities.*

Assessing capacity of the four elements of early warning (risk knowledge, monitoring and warning services, dissemination and communication, and response capabilities) is essential to empowering individuals and communities threatened by hazards to act in time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and the environment, and loss of livelihoods.

Most European countries report that early-warning systems are well in place, with 62.5 per cent reporting substantial or comprehensive achievement. However, there is a particular issue with countries in the UNISDR broader geographical coverage of Europe and neighbouring states.

28 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation

## Good Practice

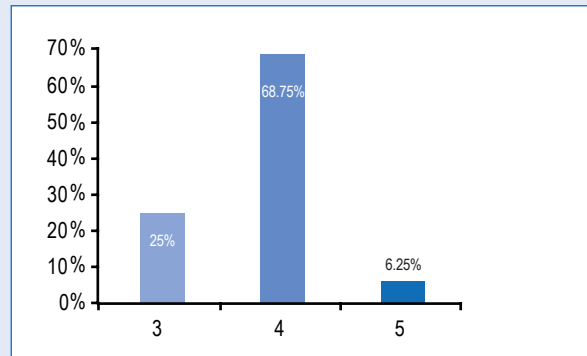
### Early-warning systems – Germany

The German GFZ Helmholtz Centre in Potsdam is engaged in different early-warning systems worldwide, including the German Indonesian Tsunami Early Warning System and the earthquake information service GEOFON. The GEOFON Global Seismic Monitor works as an ongoing information platform and early-warning system that informs stakeholders in real-time after an earthquake. The Federal Foreign Office (AA) and the Federal Ministry for Economic Cooperation and Development (BMZ) support the development and extension of early-warning systems worldwide through the international cooperation enterprise GTZ, InWEnt, local partner organizations and also in public private partnerships. These people-centred early-warning systems aim to accumulate data through communities, analyze them centrally and disseminate the warnings back through the local authorities. In addition, the AA supports the Platform for the Promotion of Early Warning (PPEW) of UNISDR, which resides in Bonn. In 2006 the German Government hosted the Third International Early Warning Conference in Bonn, which resulted in a checklist of actions and a catalogue of early-warning projects.

The main obstacle in this area is scarce financial resources. Because of the high cost of these systems, developing countries in particular struggle to find the resources necessary for their implementation; often there are several other priorities limiting stretched budgets.

**Indicator 4:** *National and local risk assessments take account of regional/transboundary risks, with a view to regional cooperation on risk reduction.*

Figure 10: HFA Priority 2 **Indicator 4** – Percentage of countries achieving levels of progress 1-5



3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>29</sup> countries: 4 are level 3 (25%); 11 are level 4 (68.75%); 1 is level 5 (6.25%).

This action refers to the need to cooperate regionally and internationally to assess and monitor regional and transboundary risks, exchange information and provide early warnings through appropriate arrangements. This implies having standardised and accessible information and data on regional disaster risks, impacts and losses.

The majority of countries report substantial or comprehensive achievements in this area, with relatively well established regional and trans-boundary cooperation.

At the regional and sub-regional level there have been various efforts aimed at enhancing regional cooperation on risk reduction. Among them, the signing of a memorandum of understanding on the institutional framework of the Disaster Preparedness and Prevention Initiative for

29 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.



South Eastern Europe in 2007/8<sup>29</sup> was an important step forward in order to improve disaster preparedness, prevention and response capabilities and co-ordination.

The DPPI has been conceived as an activity that seeks to provide a framework for South Eastern European nations to strengthen capabilities in preventing and responding to disasters caused by natural or technological hazards. It also brings together donor countries and international governmental and non-governmental organizations to coordinate ongoing activities and identify unmet needs in order to improve the efficiency of national disaster management systems within the regional cooperation framework. In June 2008 DPPI SEE concluded its legal, administrative and financial cooperation with the Stability Pact for South Eastern Europe.

Within the EU, regional flood management cooperation has continued to develop. Moreover, improvements to the weather forecasting and warning systems have been enhanced through increased international cooperation through such entities as the Global Monitoring for Environment and Security (GMES) and the World Meteorological Organization (WMO).

Remaining challenges include how to overcome issues in the political sphere, which can create obstacles to regional cooperation, and the danger that too many agreements and joint projects in the same region can create duplication and unproductive use of limited resources, both human and financial.

There remains a need to continue the regular exchange of information on risk and threat assessments, perform training exercises and provide early warnings through appropriate arrangements on a bilateral basis and within regional mechanisms. Attention must be paid to avoid duplication and to use synergies in the coordination of projects and activities.

Furthermore, there is a need for more, and more detailed, information at local and regional level

regarding climate change scenarios and expected changes and deviations in extreme weather events.

### 1.2.3. Priority for Action 3:

*Use knowledge, innovation and education to build a culture of safety and resilience at all levels.*

Disasters can be substantially reduced if people are well informed and motivated towards a culture of disaster prevention and resilience, which in turn requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities.

HFA Priority for Action 3 has four ‘core indicators’ through which progress on implementation can be monitored and reviewed and challenges identified:

1. Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc.);
2. School curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices;
3. Research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened; and
4. Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

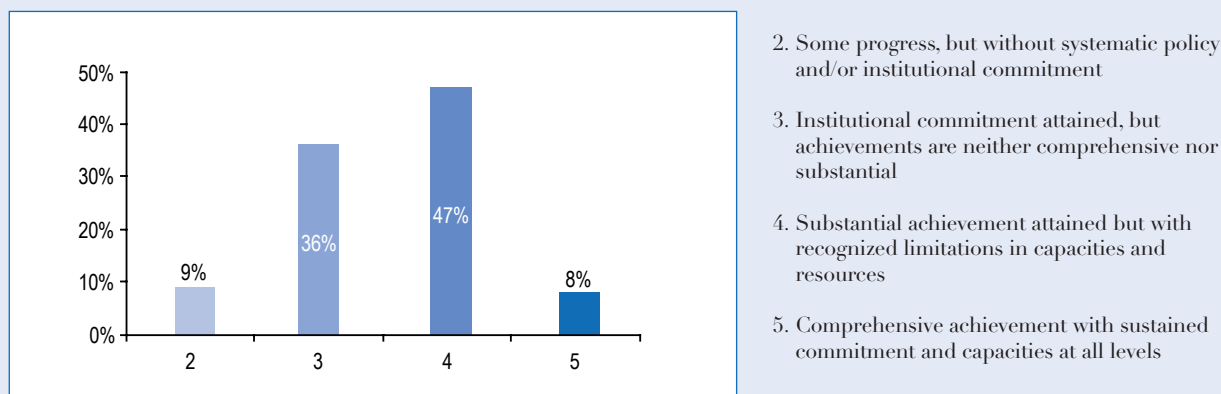
## Overview of achievements, challenges and recommendations

Progress in the use of knowledge, innovation and education to build a culture of safety and resilience has been less substantial than progress made towards Priorities for Action 1 and 2, with only 55 per cent of countries reporting substantial or comprehensive progress in this area. Furthermore, there is significant variation in

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29 For more information see [www.dppi.info](http://www.dppi.info)

Figure 11: HFA Priority 3 – Overall level of progress<sup>31</sup> for the period 2007-2009



2. Some progress, but without systematic policy and/or institutional commitment
3. Institutional commitment attained, but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

the extent to which the policies, programmes and initiatives are considered sustainable in achieving the indicated risk reduction objectives.

However, in terms of the ways in which relevant information on disasters is being made available there appears to be significant progress, with 75 per cent of countries reporting substantial or comprehensive achievement. A large amount of information is already available and on-line tools and databases have been created, although the task remains to achieve a common understanding among all actors.

It is recognised that the better coordination of information flow and warnings related to disasters at national level could enhance effectiveness, while archive systems could offer good platforms for sharing disaster-related documents.

The levels of progress of the extent to which school curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices show significant variation, with only 44 per cent of countries reporting substantial or comprehensive progress in this area.

It is clear from the reports that a more intensive promotion of disaster risk-related themes at the level of school education is needed. Furthermore,

an additional challenge will be to integrate protection and disaster management components into the many study programmes relevant to risk reduction and recovery that already exist. This could include updating existing programmes with new developments in the field, such as those relating to climate change.

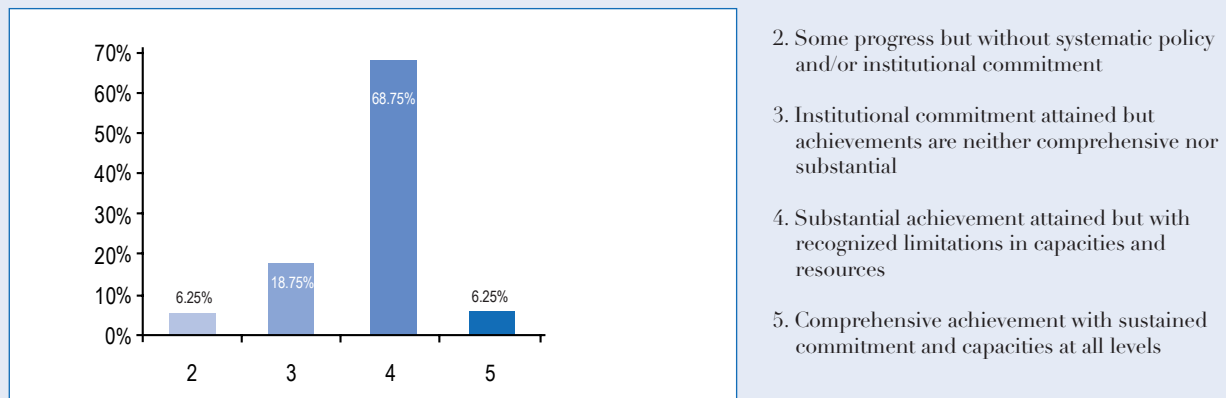
There has been an important harmonization between risk assessments for different types of natural hazards in recent years. However, although tools and guidelines have been developed in several countries the ability to use such facilities at regional level remains limited. Moreover, with the exception of the insurance industry, cost-benefit analysis tends not to be integrated in assessments.

Overall, just 50 per cent of countries report substantial or comprehensive achievement in this area. The promotion of research at all levels is identified as a way of enhancing multi-risk analysis, including cost-benefit analysis.

Progress has also been slower in the extent to which a nationwide public awareness strategy exists to stimulate a culture of disaster resilience, with only 50 per cent of countries reporting substantial or comprehensive achievement in this area. It is recognized that National Platforms, where established, could facilitate further achievements through such means as coordination

31 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 12: HFA Priority 3 **Indicator 1** – Percentage of countries achieving levels of progress 1-5



Out of 16<sup>32</sup> countries: 1 is level 2 (6.25%); 3 are level 3 (18.75%); 11 are level 4 (68.75%); 1 is level 5 (6.25%).

2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

of public awareness campaigns at national level, or coordination of research into public responses.

## Specific achievements, challenges and recommendations based on indicators

**Indicator 1:** *Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc).*

Information on disaster risks and protection options, especially to citizens and local authorities in high risk areas, should be easily available and understandable to enable them to take action to reduce risk and build resilience.

Some 75 per cent of countries report substantial or comprehensive achievement, with a further 18.75 per cent reporting institutional commitment attained.

A substantial amount of information is already available via websites and publications. On-line tools and databases have been created to keep records of past events and hazard and risk assessments and are being used at all levels (national through municipal). Events are analyzed in detail and the results are used for adapting priorities for action.

Examples include the UK Met Office, which offers relevant information to emergency responders

through a web portal, as well as to the public through a wide range of media outlets. The Hungarian National Directorate General for Disaster Management has developed a separate section on its official website for the preparedness to disasters ([www.lakossag.katasztrofavedelem.hu](http://www.lakossag.katasztrofavedelem.hu)). The motto used is ‘Get ready!’

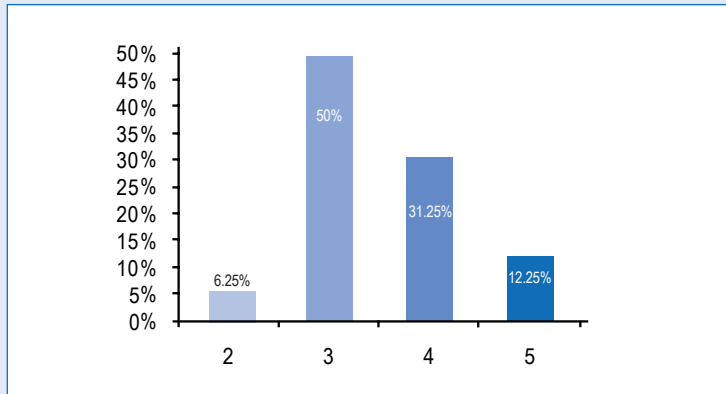
At the international level, the circulation and exchange of relevant information about disasters at all levels are being implemented through such means as the inclusion of information about disaster risks publications, events, conferences and dialogue boards in individual country profiles.

To achieve an appropriate level of awareness of disaster risk reduction in competition with the many other urgent and important tasks is a great challenge. Although there is a large amount of information available, the task is achieving a common understanding, and an awareness of responsibilities, probabilities and possibilities among all (potential) actors.

The better coordination of information flow and warnings related to disasters among ministers and government offices at national levels, and further efforts to clarify terms and definitions, roles and responsibilities could enhance effectiveness.

32 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 13: HFA Priority 3 **Indicator 2** – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>33</sup> countries: 1 is level 2 (6.25%); 8 are level 3 (50%); 5 are level 4 (31.25%); 2 are level 5 (12.5%).

Furthermore, archive systems could offer good platforms for sharing disaster-related documents, such as regarding lessons learned. They could become ‘knowledge portals’ including the full spectrum of educational materials, providing a ‘one-stop-shop’ for users ranging from academic institutions to the private sector.

**Indicator 2:** *School curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices.*

Incorporating disaster risk-related issues into existing education curricula contributes to continuous learning and reinforces knowledge for disaster risk reduction. Training activities also provide the opportunity to consider indigenous knowledge and traditional practices for risk reduction and mitigation.

The levels of self-assessed progress of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives vary significantly and lead to the conclusion that there is much still to be done in this area.

There have been several efforts to encourage the development of a culture of safety and resilience through the use of knowledge. EUR-OPA has participated in the biennial ISDR Campaign ‘Disaster risk reduction begins at school’, is

## Good Practice

Awareness raising in schools –  
*Armenia and Hungary*

Armenia has been actively participating in the ISDR campaign ‘Disaster risk reduction begins at school’ to raise awareness within school communities. Armenia’s contribution has been incorporated in the joint publication<sup>34</sup> ‘Towards a Culture of Prevention: Disaster Risk Reduction Begins at School. Good Practices and Lessons Learned – 2007’, and could be used as source material for disaster reduction and for education. In Hungary awareness training for teachers is organized twice a year. It consists of 40 hours of lessons in the following fields: disaster prevention, fire and civil protection, first aid, panic management, energy safety, accident prevention, and consumer and environmental protection. The courses also include theoretical and practical elements of crisis and panic management, as well as educational methodology. Additionally, every year the National Directorate General for Disaster Management announces the national disaster management youth competition for 10-19 year-olds.

33 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

34 ActionAid International, EUR-OPA, IFRC, DFID, UNESCO, Provention Consortium and UNISDR.

an active member of the Thematic Platform on Knowledge and Education and has continued its BeSafeNet initiative, which includes setting up a multilingual website with disaster risk reduction-related material (produced by Specialised Centres) and mainly addressed to teachers wishing to incorporate such material in pre-existing courses.

Other examples include the efforts by the FYR of Macedonia and Bulgaria whereby primary school and high school curricula include topics on risks and disasters, communicated through different subjects and training.

### Good Practice

The Administration for Civil Protection and Disaster Relief – *Slovenia*

The Administration for Civil Protection and Disaster Relief (ACPDR) provides basic education for adults (through leaflets, articles, posters and the yearly publication of the magazine UJMA, where researchers, academics and practitioners share their expertise and experiences etc.) and children (through books, puppet shows on disasters caused by natural and other hazards, promotional material on the 112 single European call number, and didactic games etc.). For members of protection, rescue and relief units, services and bodies comprehensive training programmes (introductory, basic and advanced) are carried out.

These efforts in the area of education and training were acknowledged by the European Emergency Number Association (EENA), which in 2008 awarded ACPDR for comprehensive achievements in informing the population, especially children, about the 112 emergency number.

Increasing the awareness of school children is one of the important factors in creating disaster resilient communities of the future. That is why integration of disaster risk reduction into school curricula is necessary, and its absence represents a deficiency. It is of further concern that efforts to reform education in this regard are assessed to be rather slow.

Although there are many study programmes relevant to risk reduction and recovery, challenges remain because disaster management components are not yet sufficiently integrated into certain subject areas, such as studies into spatial and land-use planning. As yet there is no systematic approach to incorporate relevant, disaster-related curricula into existing study programmes in these areas.

It is clear that further achievements could be made through a more intensive promotion of disaster risk-related themes at the level of school education. Updating existing programmes with new developments in the field, such as those relating to climate change, could also help to raise awareness and build resilience.

**Indicator 3:** *Research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened.*

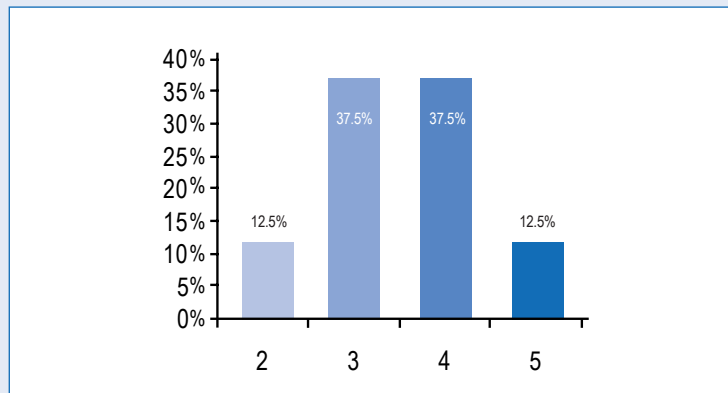
Authorities at national and regional level have a key role to play in strengthening the technical and scientific capacities to develop and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

An important harmonization between risk assessments for different types of natural hazards has taken place in recent years. But although tools and guidelines have been developed in several countries, the reports show that cost-benefit analysis on this subject is uncommon in half of the countries.

Awareness raising for cost-benefit issues tends to be made only on the basis of specific research.

Switzerland's tools and guidelines include 'LearnRisk' and 'RiskPlan', which offer opportunities to learn

Figure 14: HFA Priority 3 **Indicator 3** – Percentage of countries achieving levels of progress 1-5



Out of 16<sup>34</sup> countries: 2 are level 2 (12.5%); 6 are level 3 (37.5%); 6 are level 4 (37.5%); 2 are level 5 (12.5%).

2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

about risk management and implementation, and 'EconoMe', to justify investments in risk reduction.

In Norway, the research programme 'Societal Security and Risks' aims to increase knowledge about threats, dangers and vulnerabilities, and about how unwanted events can be prevented and crisis management strengthened. The programme aims to achieve this by contributing to the development of new knowledge, building networks and through the inclusion of the research community in the EU research programme 'Security'.

In Italy, a structure of multi-risk 'functional centres' has been set up in recent years, composed of a Central Functional Centre, hosted by the National Civil Protection Department, and Regional Functional Centres, which are being organized to improve multi-risk assessment and research capacities. Each centre has to be organized in order to allow risk prevention and early warning by pooling, analyzing, synthesizing and disseminating data and information produced by its own technologies and by systems managed by other entities.

The Seventh Framework Programme for Research and Technological Development (FP7) supports several research programmes directly or indirectly related to issues involving natural hazards and disasters. The Environment Research Programme is a case in point. It funds projects in various areas related to disaster risk reduction, including

research into such fields as climate change, sustainable management of resources, environmental technologies, Earth observation and assessment tools.

German development cooperation aims to enhance its approaches to multi-risk analyses through the promotion of research at all levels. GTZ accomplishes these mainly in South America and combines this research with cost-benefit analyses. At the 2005 World Conference on Disaster Reduction GTZ presented a concept for 'Cost-Benefit Analysis for Disaster Risk Management'.

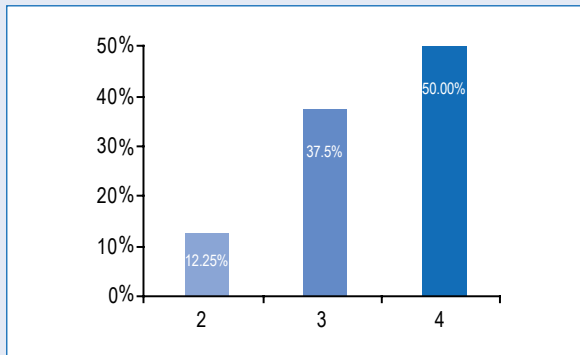
In terms of the overall picture, the growing harmonization between risk assessments for different types of natural hazards should not obscure the fact that the ability to use existing methods and tools at local and regional level remains limited. Furthermore, with the exception of the insurance industry, cost-benefit analyses tend not to be integrated in the assessments, while research frequently lacks sufficient practical application.

The main recommendation to emerge is that of the need to enhance multi-risk analysis (including cost-benefit analysis) through the promotion of research at all levels. This should include the integration of climate change risks into risk analysis.

**Indicator 4:** *Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.*

35 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation

Figure 15: HFA Priority 3 *Indicator 4* – Percentage of countries achieving levels of progress 1-5



- 2. Some progress but without systematic policy and/or institutional commitment
- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources

Out of 16<sup>36</sup> countries: 2 are level 2 (12.5%); 6 are level 3 (37.5%); 8 are level 4 (50%).

A countrywide public awareness strategy is a national, long-term plan of action with specific goals that organizes how the general population is informed about disaster risk and the ways it can act to reduce its exposure to hazards. Public awareness actions are important tools to help integrate disaster risk reduction into every-day life.

Half of the countries report substantial achievement and a further 37.5 per cent report institutional commitment attained in this area, but achievements are neither comprehensive nor substantial.

It emerges from the reports that knowledge about the environment and sustainable development is high among politicians, authorities, organizations and the public and so is knowledge and awareness of climate change. However, the levels of knowledge and awareness regarding natural hazards are much lower, especially among the public.

## Good Practice

### Disaster risk reduction in foreign countries – *Germany*

The German ‘Position Paper of the Federal Government on Disaster Reduction in Foreign Countries’ recognizes disaster risk reduction as one of the main topics that is effective in the fields of humanitarian aid, development-oriented emergency aid and nearly all areas of development cooperation. This paper defines three main elements: risk analyses, disaster prevention, and preparedness, underlining the so-called ‘Linking Relief and Development’ concept as a guideline for development policies. The German Federal Foreign Office (emergency aid) and the Federal Ministry for Economic Cooperation and Development (development-oriented emergency aid and development cooperation) as well as the Federal Ministry of the Interior (BMI) (civil protection activities) handle disaster risk reduction in cooperation with each other, as well as with stakeholders. The AA, for example, has been very actively engaged in the ‘European Strategy for disaster risk reduction in Developing Countries’ since April 2008 (involving the better integration of disaster risk reduction into development, humanitarian policies and planning as well as crisis response; improvement of identification, assessment and sharing of disaster risk; development and strengthening of disaster risk reduction institutions, mechanisms and capacities; enhancement of knowledge and public awareness, and; reduction of the underlying risk factors) and the ‘European Consensus on Humanitarian Aid’.

German development cooperation has implemented disaster risk reduction into its regional and national portfolios in areas at high risk and considers disaster risks in its project planning, implementation and evaluation. This strategy aims at implementing stand-alone disaster risk reduction projects and cross-cutting considerations of disaster risk reduction in other projects, such as sustainable resource management. On the project level different HFA Priorities are integrated. For the institutionalization of disaster risk reduction in development cooperation the BMZ has initiated the sector project ‘Disaster Risk Reduction in Development Cooperation’.

36 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Raising awareness as a way to effectively increase the levels of self-protection among European citizens is one of the key strategies adopted by the EU and Member States.

Under the action programme for civil protection, various projects in the field of awareness raising have been financed. As a follow-up to the project 'Information to the public', managed by the Swedish rescue agency between 2000 and 2002, an EU network 'Information to the public' has been established and meets regularly to exchange ongoing activities and good practices. An EU Workshop on 'Public awareness raising in the event of major disasters' was organised in February 2007.

National Platforms, where established, could facilitate this through coordination of public awareness campaigns at national level and through coordination of research into public responses, especially involving communities at risk.

#### 1.2.4. Priority for Action 4:

##### *Reduce the underlying risk factors.*

Disaster risks related to changing social, economic and environmental conditions, and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

HFA Priority for Action 4 has six 'core indicators' through which progress on implementation can be monitored and reviewed and challenges identified:

1. Disaster risk reduction is an integral objective of environment-related policies and plans, including for land use, natural resource management and adaptation to climate change;
2. Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk;
3. Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities;

4. Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes;
5. Disaster risk reduction measures are integrated into post-disaster recovery and rehabilitation processes; and
6. Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

### Overview of achievements, challenges and recommendations

The country reports suggest that although over the past two years there has been some progress made in reducing the underlying risk factors, the progress made is not large. Only 53 per cent of countries report substantial or comprehensive achievement in this area, with a further 43 per cent reporting institutional commitment attained, but achievements are neither comprehensive nor substantial.

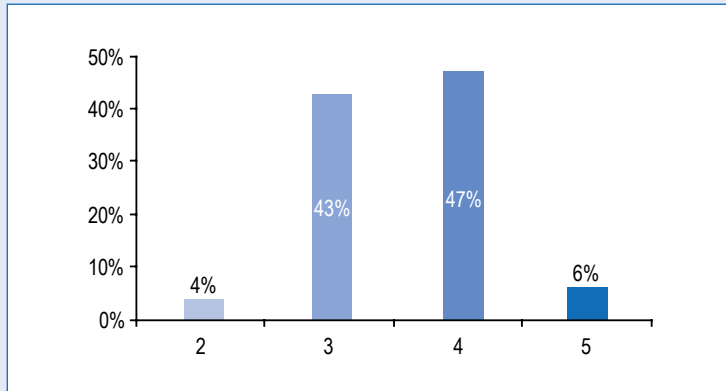
In terms of the way disaster risk reduction has been made an integral objective of environment-related policies and plans, some 60 per cent of countries report substantial or comprehensive achievement. However, it emerges that certain objectives will only be achieved over the long term as disaster risk reduction often has a lower priority than other considerations in issues of planning and development.

Progress has been slower towards the implementation of social development policies and plans to reduce the vulnerability of populations most at risk, with only 53 per cent of countries reporting substantial or comprehensive achievement in this area. There remains a need to identify the populations most at risk and their vulnerabilities in the programmes for disaster risk reduction and emergency prevention, preparedness and response.

Progress has been most limited in the implementation of economic and productive sectorial policies to reduce economic vulnerability, with only 33 per cent of countries reporting substantial or comprehensive achievement in this area. Although the overall levels of economic

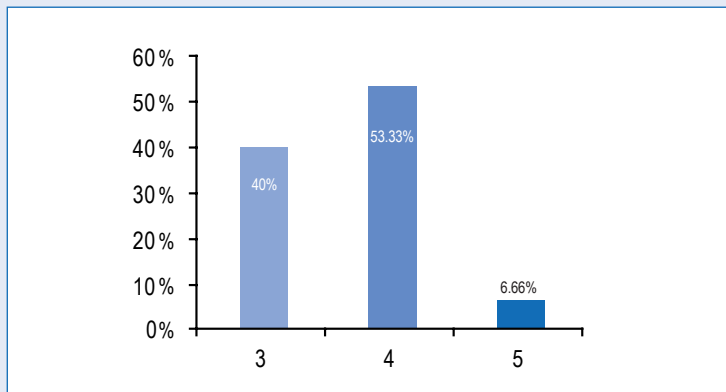


Figure 16: HFA Priority 4 – Overall level of progress<sup>37</sup> for the period 2007-2009



- 2. Some progress but without systematic policy and/or institutional commitment
- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

Figure 17: HFA Priority 4 *Indicator 1* – Percentage of countries achieving levels of progress 1-5



- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 15<sup>38</sup> countries: 6 are level 3 (40%); 8 are level 4 (53.33%); 1 is level 5 (6.66%).

vulnerability have been reduced in recent years in many European countries, challenges remain due to the complex interdependency of cross-border activities, especially in the energy sector.

There has been much more progress in the extent to which planning and management of human settlements incorporate disaster risk reduction elements, with 67 per cent of countries reporting substantial achievement in this area. The biggest challenge identified is that economic aspects often overrule safety and security parameters, while the major recommendation is that the principle of subsidiarity needs to be strengthened.

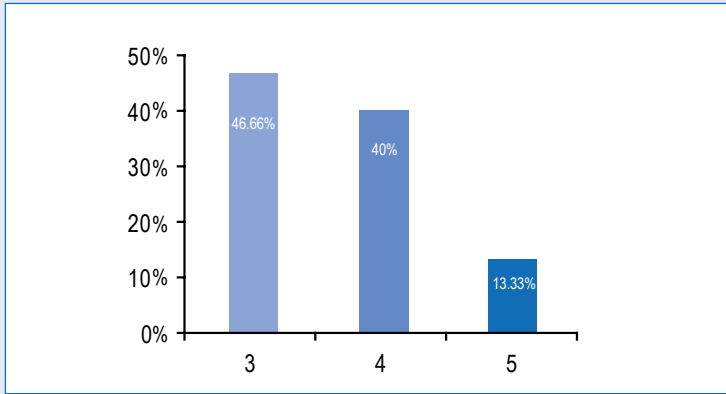
Some 53 per cent of countries report substantial achievement in the integration of disaster risk reduction measures into post-disaster recovery and rehabilitation processes. It emerges that risk reduction is often extensive, costly and takes a long time to implement, often requiring legal action to complete. It is recognised that the further integration of disaster risk reduction in recovery processes will require the introduction of specific legislation.

There has been some progress in the extent to which procedures are in place to assess the disaster risk impacts of major development projects, with 47 per cent of countries reporting substantial or comprehensive achievement in this area. However,

<sup>37</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

<sup>38</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 18: HFA Priority 4 **Indicator 2** – Percentage of countries achieving levels of progress 1-5



Out of 15<sup>39</sup> countries: 7 are level 3 (46.66%); 6 are level 4 (40%); 2 are level 5 (13.33%).

- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

changing land-use patterns and diversified responsibilities present particular difficulties to risk reduction efforts and a further 47 per cent of countries report only institutional commitment.

It is recommended that the procedures to integrate disaster risk reduction measures into national sustainable development strategies, plans and programmes are institutionalised.

### Specific achievements, challenges and recommendations based on indicators

**Indicator 1:** *Disaster risk reduction is an integral objective of environment-related policies and plans, including for land use, natural resource management and adaptation to climate change.*

The scope of environment risk management policies can have a major impact on disaster risk reduction, and should explicitly incorporate risk reduction goals and strategies. When environmental and natural resource policies specifically incorporate disaster risk reduction elements they can help reduce underlying risk factors.

The assessed levels of progress show that institutional commitment is attained in 40 per cent of the countries, substantial achievement is attained in a further 53.33 per cent and

comprehensive achievement with sustained commitment and capacities at all levels is present in 6.66 per cent.

It emerges that in land-use planning and development other interests often have a higher priority than disaster risk reduction. It is clear that certain objectives will be achieved only over a period of time. Furthermore, there remains a need for environmental and natural resource policies to specifically incorporate disaster risk reduction elements in order to help reduce underlying risk factors.

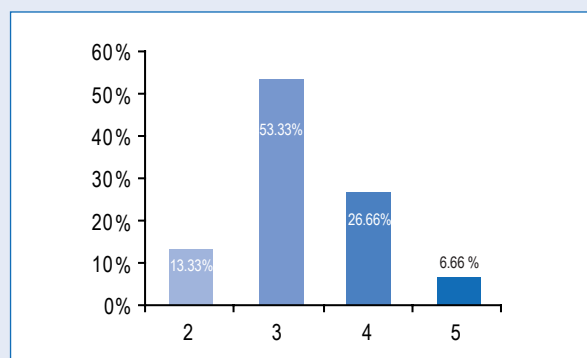
**Indicator 2:** *Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.*

This action can be achieved by addressing such issues as food security, public health, risk-sharing mechanisms and protection of critical public infrastructure. When public awareness, education, early warning and environmental policies specifically incorporate disaster risk reduction elements they can help reduce underlying risk factors and reduce the vulnerability of impoverished groups.

Self-assessed progress reports of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives show that over half of the countries report substantial or comprehensive progress, with

39 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 19: HFA Priority 4 **Indicator 3** – Percentage of countries achieving levels of progress 1-5



- 2. Some progress but without systematic policy and/or institutional commitment
- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 15<sup>40</sup> countries: 2 are level 2 (13.33 %); 8 are level 3 (53.33%); 4 are level 4 (26.66 %); 1 is level 5 (6.66%).

the remaining 46.66 per cent of countries reporting institutional commitment in this area.

It emerges that there is a need to identify the populations most at risk and their vulnerabilities in the programmes for disaster risk reduction and emergency prevention, preparedness and response.

It should be noted that there is significant difference between the experiences of industrialized nations and those of the developing countries in broader Europe, where financial limits to necessary projects obstruct the desired development in that area.

In order to further reduce vulnerabilities it is recommended that disaster risk reduction is integrated into the respective sector strategies at national and international level, in particular in developing countries with international or donor support.

## Good Practice

### Compulsory Earthquake Insurance Pool – Turkey

The Compulsory Earthquake Insurance Pool (DASK) has been formed by the State in collaboration with the private sector to mitigate the potential consequences of earthquakes. It includes an important insurance application in relation to the possible financial consequences of these events. Some 96 per cent of Turkish territory is prone to earthquakes.

DASK is a non-profit institution with the status of a public corporation and was created to provide compulsory earthquake insurance. The management is comprised of public, university and private sector representatives.

The primary objectives of DASK can be summarized as follows:

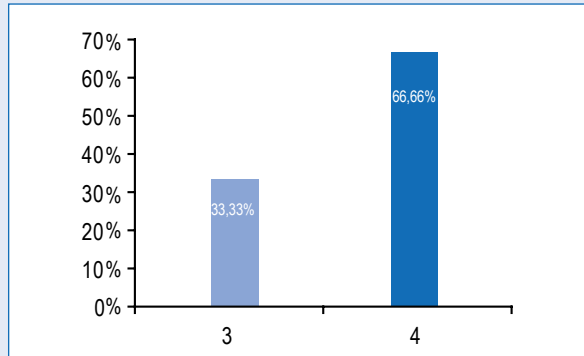
1. To provide insurance coverage for all dwellings, within the scope of its mandate, against earthquakes in return for a premium;
2. To ensure risk sharing within the country and also to distribute the financial liabilities caused by earthquakes on to international reinsurance markets through insurance;
3. To mitigate the possible financial burden of earthquake-related consequences on the government;
4. To utilize the insurance system as a means for the construction of reliable structures;
5. To ensure the accumulation of long-term resources to meet earthquake damage;
6. To contribute to awareness raising about earthquake risks among the public.

The Compulsory Earthquake Insurance Pool is limited to municipalities. This coverage is a mandatory insurance, for which the guarantee is provided by DASK, but the marketing authority is given to authorized insurance companies and their agencies to provide coverage for the financial damage caused by earthquakes on dwellings<sup>41</sup>.

40 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

41 See <http://info.worldbank.org/etools/docs/library/139644/Final%20Project%20Nilgun%20Okay%20May05.pdf>, <http://www.dask.gov.tr/>

Figure 20: HFA Priority 4 **Indicator 4** – Percentage of countries achieving levels of progress 1-5



- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources

Out of 15<sup>22</sup> countries: 5 are level 3 (33.33%); 10 are level 4 (66.66%).

**Indicator 3:** *Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities.*

Focusing on the protection of a State’s most vulnerable economic activities and productive sectors is an efficient strategy to help reduce the overall impacts of disasters.

Progress in this area has been more limited, with some 53.33 per cent of countries reporting only institutional commitment achieved. Just 33.33 per cent of countries report substantial or comprehensive achievement in implementing the plans and policies to reduce vulnerabilities.

Nevertheless, it emerges that there is an increasing focus on the need to protect societies’ most vulnerable economic activities and productive sectors, which will involve the development of more resilient infrastructures.

However, although the overall levels of economic vulnerability have been reduced in recent years

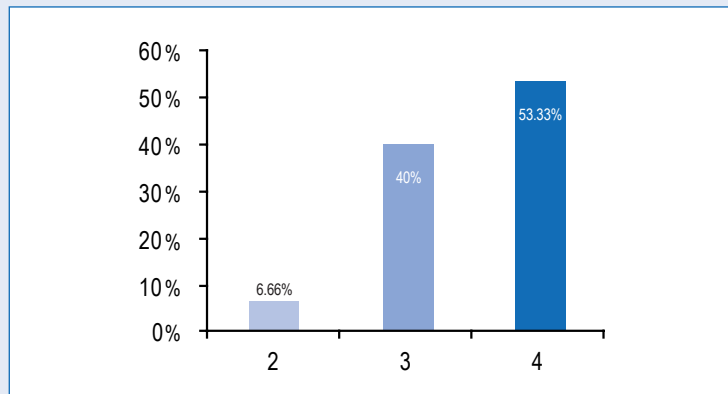
## Good Practice

The National Board of Housing, Building and Planning – *Sweden*

The National Board of Housing, Building and Planning is the central Government authority for planning, the management of land and water resources, urban development, building and housing. A fundamental requirement in the Planning and Building Act is that land has to be suitable for building development from a general point of view. In examining building permits, the municipality has to take account of whether the land is suitable for development in consideration of the health and safety of the residents. In the field of planning and urban development the Board is responsible for ensuring that ecological, economic, cultural and social aspects are taken into account. The focus of planning is increasingly turning to regional development and sustainable urban development by introducing new planning methods. In the field of building, the Board is responsible for developing design and building regulations and other regulative measures for construction as well as implementation measures concerning EC directives. The Board supports the development of cost and energy efficient, healthy and sustainable buildings as well as accessible public spaces. The Board is responsible for the Environmental Quality Objective ‘A Good Built Environment’, under which: “Cities, towns and other built-up areas must provide a good, healthy living environment and contribute to a good regional and global environment. Natural and cultural assets must be protected and developed. Buildings and amenities must be located and designed in accordance with sound environmental principles and in such a way as to promote sustainable management of land, water and other resources.” The Planning and Building Act is under redraft. Changes concerning water-front development, environment and climate can be expected in the coming years.

42 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 21: HFA Priority 4 **Indicator 5** – Percentage of countries achieving levels of progress 1-5



Out of 15<sup>43</sup> countries: 1 is level 2 (6.66%); 6 are level 3 (40%); 8 are level 4 (53.33%).

2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources

in many European countries, challenges remain due to the complex interdependency of cross-border activities, especially in the energy sector. The significant differences in levels of economic development between European and neighbouring countries can impact this. Critical infrastructure protection is still a challenge.

**Indicator 4:** *Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.*

Including disaster risk reduction elements in land-use plans is an important strategy for reducing the vulnerability of communities to hazards. Land-use planning that is carefully designed and rigorously implemented is a useful approach to managing expanding human settlements and minimizing associated risks.

Some 66.66 per cent of the countries that conducted self-assessments report substantial achievement but with recognized limitations in capacities and resources.

The biggest challenge identified by countries is that economic aspects often overrule safety and security parameters. There is an additional issue in that technical regulations and standards are not always harmonized with European standards.

## Good Practice

Post-disaster recovery – *FYR of Macedonia*

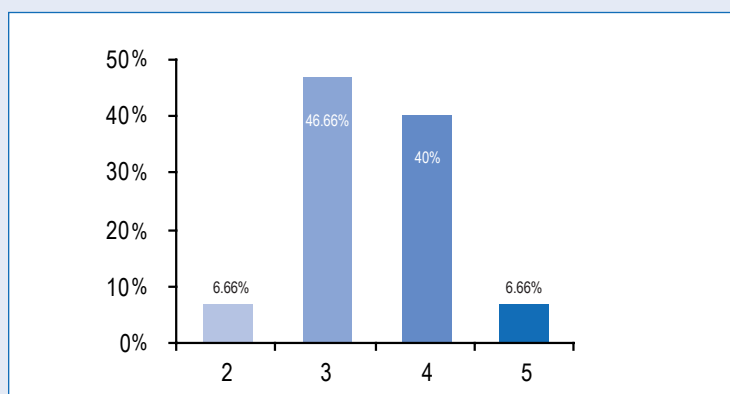
After the great wildfires of 2007, when a state of emergency was declared in the FYR of Macedonia, a process of forestation was initiated that was supported by governmental and non-governmental sectors and civil society. There was mass participation. The Government declared two working days as `days of the tree`, during which all citizens were encouraged to plant a tree in order to renew the forests and improve the environment. This was a practical application of disaster risk reduction.

The major recommendation to emerge is that the principle of subsidiarity has to be strengthened at the community level, especially in relation to the role of the private sector. There is also a need for better clarification of possible dangers and sensitization of individual responsibilities.

**Indicator 5:** *Disaster risk reduction measures are integrated into post-disaster recovery and rehabilitation processes.*

<sup>43</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 22: HFA Priority 4 **Indicator 6** – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 15<sup>44</sup> countries: 1 is level 2 (6.66%); 7 are level 3 (46.66%); 6 are level 4 (40%); 1 is level 5 (6.66%).

It is essential to consider disaster risk reduction principles when designing post-disaster recovery and rehabilitation processes in order to ‘build back better’ and not recreate risk. There is an identified need for the national and local implementation of international post-disaster recovery and reconstruction norms and standards.

Some 53.3 per cent of countries report that substantial achievement has been attained, but with recognized limitations in capacities and resources, while 40 per cent report some progress, but without systematic policy and/or institutional commitment.

At regional and international levels, humanitarian assistance and development-oriented emergency aid now mostly include disaster risk reduction in recovery and rehabilitation processes. The goal is clearly to integrate disaster risk reduction and preventive activities into emergency aid to strengthen the preparedness of vulnerable societies. Further achievements could be gained through the inclusion of additional risk analyses in the rehabilitation and rebuilding processes to enhance prevention.

The reports highlight several constraints on the integration of disaster risk reduction into post-disaster recovery and rehabilitation.

It emerges that risk reduction measures are often extensive and take a considerable time to implement. Furthermore, they are complex, costly

and often require legal action to complete. As yet there are no laws or policies, besides building regulations, for the integration of disaster risk reduction in recovery processes.

Until recently, insurance companies would not accept paying for the higher cost of relocation to areas with less risk and buildings destroyed during disaster events were often reconstructed in the same places. Public aid mechanisms and regulations – and in particular policies relating to disaster insurance – could be used to facilitate such relocations to safer areas.

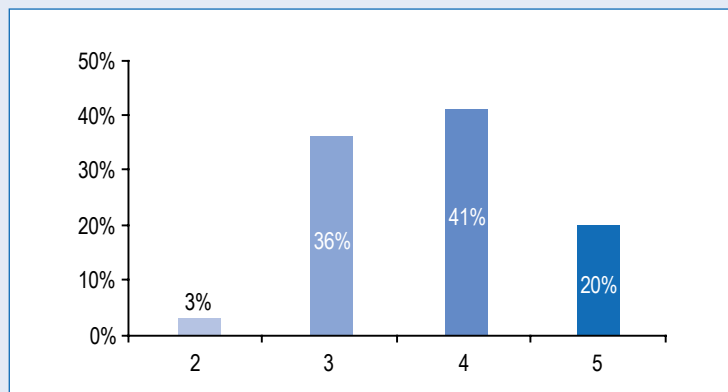
**Indicator 6:** *Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.*

It is crucial to institutionalise procedures to integrate disaster risk reduction measures into national sustainable development strategies, plans and programmes in key areas such as poverty reduction, housing, water, sanitation, energy, health, agriculture, infrastructure and environment to ensure that development does not create further disasters.

At the national level, reports show that in 46.66 per cent of the self-assessed countries some institutional commitment is attained, but achievements are neither comprehensive nor substantial, while achievements are either substantial or comprehensive in a further 46.66 per cent of countries.

44 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation. It should be noted that in this instance, only 15 countries responded with self-assessed levels of progress.

Figure 23: HFA Priority 5 – Overall level of progress<sup>45</sup> for the period 2007-2009



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

It emerges that disaster risk reduction issues, and environmental and social compatibility assessments, are generally included in international development projects.

In terms of challenges, changing land-use patterns and diversified responsibilities present particular difficulties to risk reduction efforts. In fast-developing countries the challenge is even greater, involving as it does the coordination of disaster risk reduction efforts and development projects.

Institutionalising procedures to integrate disaster risk reduction measures into national sustainable development strategies, plans and programmes in key areas could help ensure that development avoids these issues.

### 1.2.5. Priority for Action 5:

*Strengthening disaster preparedness for effective response at all levels.*

At times of disaster, impacts and losses can be substantially reduced if authorities, individuals and communities in hazard-prone areas are well prepared and ready to act and are equipped with the knowledge and capacities for effective disaster management.

Priority for Action 5 has four ‘core indicators’ through which progress on implementation can be monitored and reviewed and challenges identified:

1. Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective, are in place;
2. Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes;
3. Financial reserves and contingency mechanisms are in place to support effective response and recovery when required; and
4. Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.

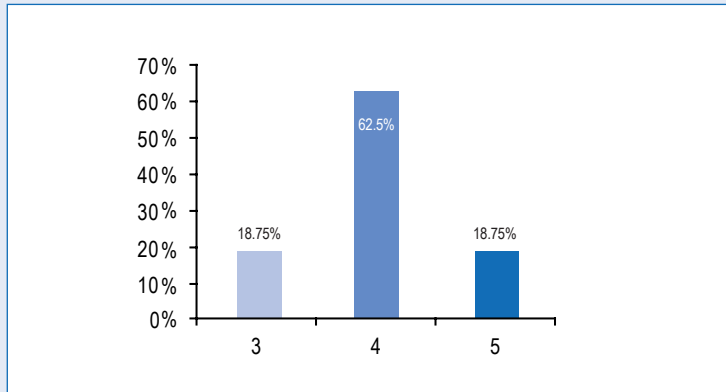
### Overview of achievements, challenges and recommendations

There has been some progress towards strengthening disaster preparedness for effective response at all levels, with 61 per cent of countries reporting substantial or comprehensive achievement in this area. However, there is a large degree of variation in the individual indicators.

Progress is especially notable in the degree to which strong policy, technical and institutional capacities and mechanisms for disaster risk management are in place, with 81 per cent of countries reporting

<sup>45</sup> The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 24: HFA Priority 5 *Indicator 1* – Percentage of countries achieving levels of progress 1-5



Out of 16<sup>46</sup> countries; 3 are level 3 (18.75%); 10 are level 4 (62.5%); 3 are level 5 (18.75%).

- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

substantial or comprehensive achievement in this area and the remaining countries reporting institutional commitment. But although progress has been strong, the extent to which the disaster risk reduction perspective is integrated in disaster risk management in most of the reporting countries is not especially clear.

In terms of the extent to which disaster preparedness plans and contingency plans are in place and regular training exercises held, progress has been slower, with only 43 per cent of countries reporting substantial or comprehensive achievement in this area. The insufficient integration of information systems and geographical information analysis into emergency management plans still presents a challenge and it is recognised that promoting the establishment of emergency management systems compatible with such technologies among local administrations would be beneficial.

It emerges from the reports that there is a general recognition of the value of financial and contingency mechanisms to support effective response and recovery. But despite this many countries report that they have attained only institutional commitment in this area, with just 56 per cent of countries reporting substantial or comprehensive commitment. There remains a clear need for more achievements in this sector.

Slightly more progress has been made in the extent to which procedures are in place to

exchange relevant information during hazard events and disasters, and to undertake post-event reviews, with 63 per cent of countries reporting substantial or comprehensive achievement in this area. Nevertheless, despite this progress post-event reviews and recommendations by individual organizations and authorities are not yet a requirement and can lack coordination.

## Specific achievements, challenges and recommendations based on indicators

**Indicator 1:** *Strong policy; technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective, are in place.*

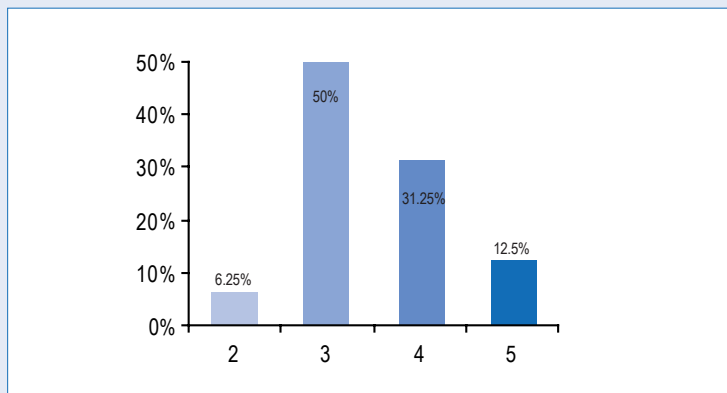
An investment of time and resources in systematically evaluating and subsequently improving disaster preparedness capacities and mechanisms provides states with a substantial increase in readiness for managing disaster impacts, and improves response measures.

Most self-assessed countries report significant progress in this area, with some 81.25 per cent describing their achievement as substantial or comprehensive. The remaining 18.75 per cent report institutional commitment has been attained, although achievements are neither comprehensive nor substantial.

46 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.



Figure 25: HFA Priority 5 **Indicator 2** – Percentage of countries achieving levels of progress 1-5



2. Some progress but without systematic policy and/or institutional commitment
3. Institutional commitment attained but achievements are neither comprehensive nor substantial
4. Substantial achievement attained but with recognized limitations in capacities and resources
5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>49</sup> countries; 1 is level 2 (6.25%); 8 are level 3 (50%); 5 are level 4 (31.25%); 2 are level 5 (12.5%).

It is clear that preparedness mechanisms and capacity-building measures at national, regional and international level have been strengthened in comparison with levels reported in previous years. However, the extent to which the disaster risk reduction perspective is integrated in most of the reporting countries is not especially clear. The exceptions are Germany and Norway, where the integration of disaster risk reduction is explicit.

In general, the systems of protection against disasters caused by natural and other hazards are organized in an interdisciplinary manner and are merging professional and voluntary rescue services. They are based on the obligation of the States and municipalities to prevent and mitigate risks and to act immediately in the event of disasters, and on the obligations of companies and other organizations to protect their employees and properties in the case of disaster, including co-financing of preparedness measures in the municipalities where they are located. Technical and institutional capacities and mechanisms for disaster risk management are established at all levels.

In the case of Germany, the challenges reported in terms of policy and institutional capacities relate to the forecasting abilities at the different levels and sectors of disaster risk reduction and disaster management.

At the operational level, the main challenges facing many countries refer to the shortage of financial and technical capacities, particularly communication systems, and the need for adequately-trained personnel.

It is recommended that both vertical and horizontal coordination are strengthened, along with an integrated approach to disaster risk reduction in line with that outlined in the EC Communication adopted in March 2008 on reinforcing the Union's disaster response capacity<sup>47</sup>. It took an integrated approach encompassing all stages of disasters (prevention, preparation, immediate response and recovery), addressing all types of disasters (inside or outside the EU, caused by natural or man-made hazards), and covering all EU instruments as well as inter-institutional coordination.

In February 2009, the Commission adopted a Communication on a Community approach on the prevention of disasters caused by natural or man-made hazards<sup>48</sup>, focusing inter alia on a better linking between actors and policies throughout the disaster management cycle.

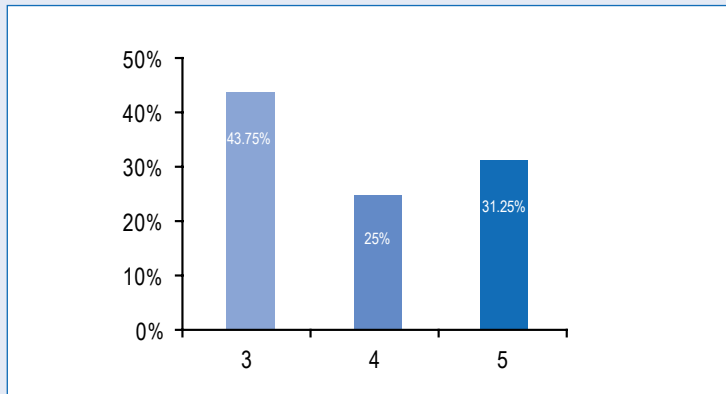
**Indicator 2:** *Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.*

47 COM (2008) 130.

48 COM (2009) 82.

49 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 26: HFA Priority 5 **Indicator 3** – Percentage of countries achieving levels of progress 1-5



- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>50</sup> countries: 7 are level 3 (43.75%); 4 are level 4 (25%); 5 are level 5 (31.25%).

## Good Practice

### National level – *Switzerland*

A new national alarm and tracking centre for all natural hazards started operations in July 2008. This centre centralizes the information of MeteoSwiss (meteorology), the Swiss Federal Institute for Snow and Avalanche Research, and the Swiss Seismological Service. The Federal Office for the Environment's own information is also now available via a 24-hour service. A common information platform is used and more accurate and precise alerts shall be given with better prediction models and methods. Communication and collaboration with regional and local levels will be enhanced through regular exercises. Post-event reviews are already undertaken.

### International level – *Germany*

In the case of an international disaster, the Federal Foreign Office takes charge of coordinating German emergency assistance through its crisis and response centre, as well as with special meetings of the coordination group for humanitarian assistance. The AA also works together with other departments and organizations and participates very actively in the European Commission's DG Humanitarian Aid (ECHO) and others such as the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

Disaster preparedness and response planning for recovery and rehabilitation efforts should be inclusive of the lessons learned from previous disasters as well as knowledge of risk reduction measures in order to avoid missing the underlying causes of risk. Disaster risk reduction actions should be required in the design and implementation of both types of planning.

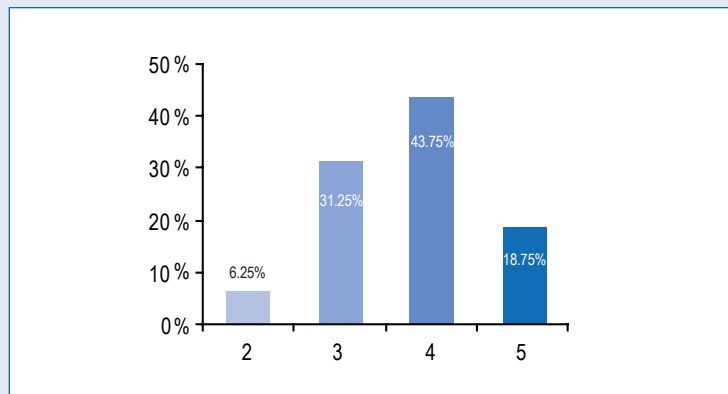
It can be summarized from the country reports that emergency management plans are in place at local, regional and national levels, and regular training is performed at all levels. Plans and training are based mostly on general emergency management. Some 43.75 per cent of countries report substantial or comprehensive achievement in this area.

Nevertheless, the insufficient integration of information systems and geographical information analysis into emergency management plans still presents a challenge. Despite shortages of financial resources and experts at local levels, the establishment of emergency management systems compatible with such technologies should be promoted among local administrations.

A general decline in the number of volunteers due to demographic changes including migration has been identified as a challenge faced by countries with significant voluntary services.

50 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

Figure 27: HFA Priority 5 **Indicator 4** – Percentage of countries achieving levels of progress 1-5



- 2. Some progress but without systematic policy and/or institutional commitment
- 3. Institutional commitment attained but achievements are neither comprehensive nor substantial
- 4. Substantial achievement attained but with recognized limitations in capacities and resources
- 5. Comprehensive achievement with sustained commitment and capacities at all levels

Out of 16<sup>51</sup> countries; 1 is level 2 (6.25%); 5 are level 3 (31.25%); 7 are level 4 (43.75%); 3 are level 5 (18.75%).

Overall, there is a need to more effectively apply the lessons learned from previous disasters and exercises, along with knowledge of risk reduction measures.

**Indicator 3:** *Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.*

It is important for governments to commit resources for early recovery programmes, including quick assessment of damage, needs and capacities, and restoration of critical infrastructure and livelihood, following major disaster events to support the resilience of affected communities, until long-term reconstruction of assets takes place.

It is clear from the reports that many different approaches are in place across Europe. In general, reserves such as specific funds have been established at national and sometimes provincial levels that can be used to support areas and communities hit by disaster. It is a system that has been tested over the last couple of years in countries such as the Czech Republic and proved to be valuable.

Other countries, such as Switzerland and Germany, choose not to maintain dedicated funds. Rather, they establish special governmental funding lines that are opened rapidly in case of necessity. Private fund-raising, such as through Swiss Solidarity, is also an important source of funding in case of major disasters. Private losses are generally covered through insurance.

The insurance industry is an important and established financial reserve and reconstruction mechanism. Privately-available risk capital, in the form of natural hazard and other specific damage/indemnity insurance, amounts to several billion Euros worldwide. The evaluation of risk accumulation and the establishment of reserves are the most important duties of an insurance company or enterprise.

Nevertheless, despite the general recognition of the value of financial and contingency mechanisms many countries report that they have attained only institutional commitment in this area. There remains a clear need for substantial achievements in this sector.

**Indicator 4:** *Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.*

Lessons learned from previous disasters should be included in emergency preparedness and response as well as in planning for recovery and rehabilitation. It is important that disaster risk reduction is included in the design and implementation of all types of planning.

Most of the countries report that the lessons learned from disasters or training exercises are applied to all levels. Some countries have unfortunately experienced major disasters in the

51 The graphic reflects only the responses from the 16 countries that used the on-line tool and reporting format, while overall 17 countries have reported on HFA implementation.

recent past, such as the earthquakes in Armenia and Turkey. Both countries have taken their experiences into account in preparing emergency response plans, preparing development and research projects, purchasing new equipment and educating and training members of rescue and relief forces, as well as the public.

Self-assessed levels of progress show that 62.5 per cent of countries report substantial or comprehensive achievement in this area, while 31.25 per cent of countries report institutional commitment, but achievements are neither comprehensive nor substantial.

The major constraint identified is that post-event reviews and recommendations by individual organizations and authorities sometimes lack coordination. Furthermore, because they are not yet a requirement the reviews are not universal and do not always reflect the experiences of all actors.

Disseminating relevant information in a hazard situation to all actors in a timely manner can also represent a challenge.

### 1.3. Future perspectives and cross-cutting challenges

The country reports also identify the factors that are considered to act as drivers or catalysts for achieving substantial progress in disaster risk reduction and sustainable recovery from disasters. These factors vary across national and local contexts, but typically emphasize the factors or issues which a country considers important for integration into plans, policies and programmes as a means to achieve disaster risk reduction goals. The following issues are considered important drivers or catalysts at the national and local level for this assessment:

- Multi-hazard integrated approach to disaster risk reduction and development.
- Gender perspectives on risk reduction and recovery adopted and institutionalised.
- Capacities for risk reduction and recovery identified and strengthened.

- Human security and social equity approaches integrated into disaster risk reduction and recovery activities.
- Engagement and partnerships with non-governmental actor, civil society and private sector; amongst others, have been fostered at all levels.

Three levels of reliance are identified to provide a qualitative measure of the progress countries are making towards the implementation of the HFA, while relying on the particular drivers of progress outlined above.

1. No/little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/little done to address it;
2. Partial/some reliance: full acknowledgement of the issue; strategy/framework for action developed to address it; application still not fully implemented across policy and practice; complete buy-in not achieved from key stakeholders;
3. Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

#### *Multi-hazard integrated approach to disaster risk reduction and development.*

A multi-hazard approach can improve effectiveness. A community is usually exposed to risks from a variety of hazards, which can be either natural- or human-induced in origin, and can stem from hydrometeorological, geological, technological or environmental forces. The resulting cumulative risk cannot be tackled effectively if actors plan merely for selective hazardous events. A multi-hazard approach involves translating and linking knowledge of the full range of hazards into risk management approaches, strategies, assessments and analysis, leading to greater effectiveness and cost efficiency<sup>52</sup>.

Countries acknowledge this issue but application of it is still not fully implemented across policies and practice. Some 64 per cent of countries report

52 See [www.preventionweb.net/HFAon-line](http://www.preventionweb.net/HFAon-line)

## Good Practice

### *Slovenia*

According to EU Directive 2002/22/EC of the European Parliament and the Council on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), Slovenia has initiated procedures to enable the hearing impaired to use the 112 emergency call number.

only partial or some reliance (level 2), while 36 per cent report significant and ongoing reliance (level 3).

Disaster management is a cross-sector activity, and one of the key challenges in the future will be to improve cooperation among different ministries, government agencies, institutes and public services. The establishment of National Platforms for disaster risk reduction could be one step in this direction.

### *Gender perspectives on risk reduction and recovery adopted and institutionalised.*

Gender is a core factor to be considered in the implementation of disaster risk reduction measures. Gender is a central organizing principle in all societies, and therefore women and men are differently at risk from disasters. Gender shapes the capacities and resources of individuals to build resilience, adapt to hazards and to respond to disasters. It is thus necessary to identify and use gender-differentiated information, to ensure that risk reduction strategies are correctly targeted at the most vulnerable groups and are effectively implemented through the roles of both women and men<sup>53</sup>.

Although there is gender equality by law, and also in terms of career choice, and the importance of gender balance is widely recognized and emphasized, women are not equally integrated

in the appropriate organizations of disaster management due to previous regulations and traditions.

Some 7 per cent of countries report no or little reliance in this area (level 1), 57 per cent report partial or some reliance (level 2), while 36 per cent report significant and ongoing reliance (level 3).

It should be noted that gender disaggregated data is only partly available.

However, gender issues are very high in the developing cooperation/international assistance agendas.

### *Capacities for risk reduction and recovery identified and strengthened.*

Capacity development is a central strategy for reducing disaster risk and needs to be sustained through institutions that support capacity development and capacity maintenance as dedicated, ongoing objectives at all levels.

Capacity for risk reduction at local and regional level is limited, with 57 per cent of countries reporting only partial or some reliance (level 2), and 43 per cent reporting significant and ongoing reliance (level 3).

It emerges that the key driver for improving capacity is local and regional political attention which requires public awareness. If the voters regard disaster risk reduction efforts as important the politicians will act.

### *Human security and social equity approaches integrated into disaster risk reduction and recovery activities.*

One of the key challenges in disaster risk management is to ensure that the most vulnerable are protected from existing and emerging environmental risks, and that those most affected are reached through disaster response and recovery programmes. Often, the most vulnerable belong to socio-economical and geographical 'minority' groups. Focused attention to meeting the special needs of the socio-economically vulnerable and/or geographically secluded groups needs to be ensured through risk reduction and recovery plans and programmes<sup>54</sup>.

53 See [www.preventionweb.net/HFAon-line](http://www.preventionweb.net/HFAon-line)

54 See [www.preventionweb.net/HFAonline](http://www.preventionweb.net/HFAonline)

Although programmes partly take account of socio-environmental risks to the most vulnerable and marginalized groups, there is room for improvement. Some 50 per cent of countries report partial or some reliance (level 2), while the remaining 50 per cent report significant and ongoing reliance (level 3).

*Engagement and partnerships with non-governmental actors, civil society and private sector, amongst others, have been fostered at all levels.*

Effective disaster risk reduction requires effective community participation. Participatory approaches can more efficiently capitalize on existing coping mechanisms and strengthen community knowledge and capacities. Equally, public-private partnerships are an important tool for disaster risk reduction.

Such voluntary associations may involve public organizations such as government agencies, professional and/or academic institutions and NGOs, together with business organizations such as companies, industry associations and private foundations. Public-private partnerships can offer opportunities to combine resources and expertise to act jointly to reduce risks and potential losses. They can in turn improve the resilience of communities<sup>55</sup>.

Some 57 per cent of countries report only partial or some reliance in this area (level 2), while the remaining 43 per cent report significant and ongoing reliance (level 3). It emerges that there is plenty of scope for enhanced coordination among NGOs and public authorities.

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55 See [www.preventionweb.net/HFAon-line](http://www.preventionweb.net/HFAon-line)







# 2

**HFA  
implementation at  
regional level**

## 2. HFA implementation at regional level

Monitoring progress is an essential feature of the HFA and although responsibility for monitoring is assigned mainly to national governments, reporting responsibilities are also assigned to regional and international organizations and institutions.

Following requests for information, several regional and sub-regional organizations and initiatives have reported on the advances in the implementation of the HFA. The updates on their activities indicate how effective such organizations have been at fulfilling the regional-level tasks identified in the HFA, which include promoting regional programmes to support disaster risk reduction; supporting the development of regional collaborative centres; undertaking and publishing baseline assessments of disaster risk reduction status; coordinating and publishing reviews on progress in the region and on impediments and support needs; and supporting the development of regional mechanisms and capacities for early warning of disasters.

The reports indicate the degree to which preparedness mechanisms and capacity building are being strengthened at regional level, along with efforts to assess and monitor regional and trans-boundary risk.

A key component of successful disaster risk reduction is the availability of reliable, accessible and compatible information on disaster risks, impacts and losses. Several organizations and networks have been established in an attempt to meet this demand for standardized information and accessible data on a regional basis, and also to provide early warnings. The operations of several such initiatives, including the DPPI SEE and CEUDIP, are examined in section 2.1.

### 2.1. Advances in HFA implementation at regional level

#### 2.1.1. European Union and European Commission

##### *Community Civil Protection Mechanism*

The complexity and scope of multidimensional challenges in dealing with disasters require a comprehensive integrated approach<sup>56</sup>.

The Community Civil Protection Mechanism has been increasingly called upon in the international response to major disasters. It was created in 2001 to facilitate mobilisation, coordination and cooperation between the Community and the Member States in civil protection assistance interventions. Thirty countries (the 27 EU Member States plus Iceland, Liechtenstein and Norway [Croatia is due to join in 2009]) participate in the Mechanism, so as to ensure an effective delivery of assistance in emergencies which may require urgent responses.

The Mechanism has a number of tools intended to facilitate preparedness and effective community-level responses to disasters:

- The Monitoring and Information Centre (MIC) acts as a communication hub between participating states, the affected country and field experts. Any country inside or outside the EU affected by a major disaster can request civil protection assistance through the MIC. It also provides updated information on the actual status of an ongoing emergency and plays a coordination role by matching offers of assistance put forward by participating states.
- The Common Emergency and Information System is a secure web-based application facilitating emergency communication among the participating states. It provides an integrated platform to send and receive alerts, details of assistance required, to make offers of help and to view the development of the ongoing emergencies as they happen.

Recent examples of activations of the Community

56 EC, Communication from the Commission to the European Parliament, the Council on Reinforcing the Union's Disaster Response Capacity. Brussels, 5 March 2008. COM(2008) 130 final.

## Good Practice

### EU-HUROMEX

The emergency management field exercise of the EU-HUROMEX 2008 project was designed to test the operations of the Community Civil Protection Mechanism in a complex simulated trans-boundary flood scenario where the disaster exceeded the response capacities of an individual country.

The 18-month project is being conducted through bilateral Hungarian-Romanian and European disaster assistance and has been supported by the EU, involving funding for the Hungarian disaster management system for the organization of the exercise.

The scenario lasted six days and involved rescue teams from Austria, Bulgaria, Croatia, Lithuania, Slovakia, Slovenia and Poland, in addition to the local forces of Hungary and Romania and an EU assessment and coordination team. It involved both field and command post simulations and the whole operation was watched by observers from all of the EU Member States. In total, 1,000 people were mobilized at the same time.

The exercise aimed to mitigate and eliminate the trans-boundary consequences of a natural hazards radiological and chemical incident as well the potential consequences of terrorist attack with CBRN agents against the civilian population. It required the incorporation of team capacities through the civil protection modules and as such tested the language, command and interoperability of teams and equipment.

Achievements include improvements to the efficiency of cooperation between the national fire-fighting and disaster management staff and the efficient cooperation of nine countries to test the Civil Protection Mechanism in a realistic environment.

Mechanism include the responses to the 2007 forest fires in Greece, the 2008 China earthquake, the Myanmar cyclone, the Romania/Moldova/Ukraine floods and the crisis in Georgia. Most recently, the MIC coordinated the evacuation of EU citizens wounded during the Mumbai terrorist attacks.

Given the increasing frequency and severity of disasters in the EU and globally, European civil protection is clearly developing rapidly. The fact that recourse to the Mechanism increased from 3 activations in 2002 to 20 in 2008 is testament to this.

In March 2008, a communication of the Commission addressed the strengthening of the Union's disaster response capacity<sup>57</sup>. The Communication suggests a number of improvements that represent a further step in the rationalisation of disaster response instruments. Some concern the functioning of existing instruments, while others are relevant to the development of new 'cross-cutting' tools, which are designed to ensure more effective coordination.

With reference to the existing tools, suggestions for reinforcing the Community Civil Protection Mechanism and European Humanitarian Aid are introduced. To reinforce the Mechanism it is proposed to:

- Improve the European Civil Protection response capacity. With reference to disasters such as floods and forest fires, gaps in response resources should be identified and options for filling them assessed, including developing additional European resources complementary to capacities of the participating states.
- Build up the Monitoring and Information Centre so it can fulfil the role of a genuine operational centre for European Civil Protection interventions. This would include the development of the centre into a larger structure featuring monitoring, early-warning and other analytical capabilities.

57 EC, Communication from the Commission to the European Parliament and the Council on Reinforcing the Union's Disaster Response Capacity. COM(2008) 130 final.

- Create a European Disaster Response Training Network (currently transformed into the European Training Arrangements), and improve disaster preparedness measures, early-warning systems and use of the single European emergency number '112'.

Regarding financing of prevention, preparedness and response, the EC established a civil protection financial instrument in 2007 with the aim of supporting and complementing the efforts of Member States to protect people, the environment and property, including cultural heritage, in the event of disasters caused by natural or technological hazards, or emergencies caused by acts of terrorism. Furthermore, it aims to facilitate reinforced co-operation between the Member States in the field of civil protection. The instrument covers response and preparedness actions, and has a financial envelope of around €190 million for 2007-2013.

Most recently, on 23 February 2009, the EC adopted two communications related to disasters. They are a Community approach to reducing the impact of disasters caused by natural or technological hazards within the EU, and a strategy for supporting disaster risk reduction in developing countries. The communications are seen as a first attempt to establish a more strategic approach.

Proposed action at Community level focuses on areas where a common approach is considered more effective than separate national approaches, such as developing knowledge, linking actors and policies, and improving the performance of existing Community disaster prevention instruments. With regard to developing countries, the Commission is setting out an EU strategy to help reduce the impact of disasters caused by natural hazards on countries considered to be high-risk. Both communications contribute to the implementation of the HFA.

### *Research activities*

In terms of research, the EC has been supporting research related to natural hazards and disasters since the late 1980s through successive framework programmes

(FPs). The ongoing FP7 programme (2007-2013) contributes, through some of its research programmes<sup>58</sup>, to the necessary improved knowledge-base, methods and integrated frameworks for the assessment of hazards, vulnerabilities and risks and to the development of risk management, prevention and mitigation strategies. Furthermore, through more applied research and actions, risk and crisis/emergency management situations as well and security issues are tackled.

As an example, in the Environment Research programme, hazards related to climate – such as storms, droughts, forest fires, landslides, avalanches and floods – and geological hazards – such as earthquakes, volcanoes and tsunamis – and their impact will be studied from the hazard to the risk and multi-risk perspective.

This research will allow the underlying processes to be better understood. It will also enable detection, prediction and forecasting methods to be improved in order to underpin the necessary scientific development of early-warning and rapid-response systems. New methodologies for multi-risk assessment will be addressed in order to improve mitigation/adaptation strategies and the decision-making process. More social and economic dimensions will be integrated in the research in order to better assess the impact of disasters on society and on its resilience.

In the field of climate change, the programme is also addressing key research questions of direct relevance to European policy and international efforts that will help to better assess the foreseen impacts in the field of disaster risks.

From an environmental/technological perspective, research will target in particular technologies preventing or reducing environmental risks, and mitigating hazards and disasters. An earth observation research effort is also devoted to the development and integration of the Global Earth Observation System of Systems for issues involving the environment and sustainable development. This research is conducted in the framework of the GEO initiative to which GMES is complementary. It addresses interoperability between observation

<sup>58</sup> Examples include: Information and Communication Technologies; Nano sciences-Materials; Environment including climate change; Space/GMES; Research Infrastructures; Actions of the Joint Research Centre.

systems, information management and data sharing, and optimisation of information with the aim of enhancing understanding, modelling and the ability to predict environmental phenomena and related human activities.

### *International cooperation*

The EC is aiming to enhance coherence in the field of prevention, preparedness, and response, especially in the context of cooperation with candidate countries in view of enlargement as well as with partners in the Mediterranean region. In March 2008 it issued a memo on cooperation on disaster prevention, preparedness and response related to West Balkan countries. The aim was to develop the capacity of countries in the West Balkans and to enhance regional cooperation in the field of civil protection and disaster prevention. This included developing region-wide management of information systems, acquiring emergency communication tools and other equipment, and improving the interoperability of civil protection services, fire brigades, hydrological and meteorological services, and the health sector.

A two-year programme on Civil Protection Cooperation with the candidate countries and potential candidates, financed by €4 million through the Instrument for Pre-accession Assistance (IPA), is under preparation. The programme is designed to reinforce civil protection capacities of the beneficiary countries and to bring them closer to the Community Mechanism. It foresees three strands of activities: i) trainings and exchanges of experts, ii) regional simulation exercises and participation of South Eastern Europe (SEE) teams in the Mechanism exercises, and iii) a series of seminars on topics such as the culture of lessons learned, early-warning systems, host-nation support and '112'. The programme is expected to be launched in 2009.

The Euro-Med Programme for the Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD MED) (2009-2012, €4.4 million) started on 5 March 2009 under the lead of Italy, Egypt, France, UNISDR and Algeria. The PPRD MED aims to develop and reinforce the level of civil protection in the Euro-Mediterranean region

and to bring Mediterranean Partner Countries progressively closer to the Mechanism.

The Disaster Risk Reduction Initiative (DRRI), financed by €2 million yearly through the IPA, aims to support capacity building of the Western Balkan countries and Turkey as well as data collection, processing and sharing and the preparation of a regional strategy and thus will complement the Mechanism's outreach in the region.

The DRRI, which will be implemented by the WMO and UNDP/ Bureau for Crisis Prevention and Recovery in close cooperation with other donors and stakeholders, is complementary and in coordination with the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP), developed by the World Bank and UNISDR in collaboration with other United Nations agencies and partners<sup>59</sup> (see section 2.1.5. for an outline of the activities of SEEDRMAP).

### **2.1.2. Council of Europe – European and Mediterranean Major Hazards Agreement**

EUR-OPA has pursued a twofold task of formulating recommendations addressed primarily to Member States' authorities and developing the knowledge to facilitate the implementation of such recommendations.

The Committee of Permanent Correspondents representing the 25 Member States of EUR-OPA has adopted three recommendations on coastal risks (2007), on psychological support to victims (2007) and on radiological information for populations (2008).

The network of 26 specialized centres has developed extensive work in such diverse fields as risk education, landslides or urban risks. Furthermore, three major workshops have been organised on disaster risk reduction education (2007) and on new governance of radiological risk and of natural risk (2008).

59 For more information on SEEDRMAP see: <http://www.unisdr.org/europe/eu-gfdr-r/gfdr-r-eu.html>

The Agreement's activities since 2007 have been defined according to its medium-term plan for 2007-2011. The plan reflects the priorities for action in the field of disaster reduction in the European and Mediterranean area within the context of the HFA, taking into account the previous activities developed by EUR-OPA in several areas now included in the five HFA priority areas.

In order to cope with the wider spread of competencies among multiple stakeholders, the Agreement has supported the creation of National Platforms as a way to better coordinate their actions and maintain efficiencies. Two European meetings of National Platforms and Focal Points were co-organised with UNISDR in 2007 and 2008 and support for setting up such National Platforms in the interested Member States has been proposed.

The Agreement is mainly interested in the comparability of risk assessments between countries. In line with this, the Georgian Centre, in collaboration with other South Caucasus partners, carried out a study in 2007 on how to obtain a regional mapping of hazards.

The Agreement has continued its support for two major initiatives concerning data dissemination. The first initiative is the European Warning System (operated by the Bruyères-le-Châtel Centre), which provides real-time alerts on earthquakes higher than 6 on the Richter scale within the Euro-Mediterranean area. Based on that information, the Agreement collects possible needs expressed by the affected country to disseminate them among the other Member States. The second initiative is the Extremum project (operated by the Moscow Centre), which completes that information with an early estimation of the possible consequences of the reported earthquake.

The trans-boundary effects of major hazards are also an important aspect for the Agreement. Examples of such commitment include the ongoing initiative on fire management in the Balkans lead by the Freiburg Centre, as well as the previously mentioned mapping project in the Caucasus.

Following the Ministerial Session of 2006 which adopted a specific recommendation on disaster

risk reduction through education at school, the Agreement has participated in the biannual ISDR campaign 'Disaster Risk Reduction Begins at School' and is an active member of the Thematic Platform on Knowledge and Education. A pilot project to identify the needs and shortcomings of national and municipal campaigns on population information has been launched in Armenia in recognition of the role public awareness campaigns can play in increasing resilience to disasters.

Long-standing work on cultural heritage and risks has continued a concern with the wider aspects of disaster risk reduction. Examples include the work by the Athens Centre to study the vulnerability of monuments and possible interventions to reduce it.

In the past two years, the Agreement's activities have concentrated on addressing the sources of possible disasters rather than on responding to those disasters. This has been supported by the fact that in Europe response mechanisms are in place at most levels and an important degree of international co-operation is already effective.

### **2.1.3. Disaster Preparedness and Prevention Initiative for South Eastern Europe**

In 2000, the Stability Pact for South Eastern Europe launched the Disaster Preparedness and Prevention Initiative in an effort to contribute to the development of a cohesive regional strategy for disaster preparedness and prevention.

Since the completion of the transition process from the Stability Pact for SEE to the regionally-owned Regional Cooperation Council, established on 27 February 2008, the DPPI acts under the overall umbrella of the Regional Coordination Council, thus streamlining further its activities in line with the principle of regional ownership.

A Memorandum of Understanding on the institutional framework of the DPPI that defined the rights and obligations of the signatory states was signed in Zagreb on 25 September 2007 by a total of eight countries: Albania, Bulgaria, Montenegro, FYR of Macedonia, Moldova, Romania, Slovenia and Croatia. Since then Bosnia and Herzegovina as well as Turkey

have signed the Memorandum, by which the DPPI family has been expanded to 10 signatories.

The overarching goal of the DPPI SEE is to foster regional cooperation and coordination in disaster preparedness and prevention for disasters in South Eastern Europe, without creating new structures or layers of bureaucracy, as well as moving towards:

- Strengthened good neighbourly relations and improvement through the exchange of information, lessons learnt and best practices in the field of disaster management.
- Enhanced cooperation between DPPI partners in view of EU enlargement and the process of Euro-Atlantic integration for SEE countries.
- Support and encourage countries in the region to develop, adopt and/or enforce state-of-the-art disaster emergency legislation, environmental regulations and codes designed to prevent and mitigate disasters in line with guidelines and common practices accepted in the international community.
- Assist and encourage countries in the region to implement the Hyogo Framework for Action 2005 – 2015.

Other international and regional organizations that have supported this process include the EU, UNDP, UNISDR, UN OCHA, the International Federation of Red Cross and Red Crescent Societies (IFRC), North Atlantic Treaty Organisation (NATO), the Swedish Rescue Services Agency and the Danish Emergency Management Agency.

Since its formation, DPPI SEE and its partners have initiated, developed and implemented (or are implementing) various project proposals with the aim of strengthening regional cooperation through the use of coordinated action and by using internationally-accepted methodologies. They have included a Disaster Management Programme; Joint Flood Emergency Response Units; and the Harmonization of Seismic Hazard Risk Reduction Projects and Maps in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Moldova, Romania and Turkey, supported by experts from Slovenia and Turkey.

DPPI SEE is planning to build upon existing

foundations and further develop ongoing and new activities and projects. The projects will be focused on areas of common interest of the member nations, which could include a regional centre for coordination of fire-fighting operations, the harmonization of national monitoring water-level systems in the Sava and Danube basin, and defining a standard operating procedure for information exchange.

In April 2008, at the SEE Cooperation Process Ministerial Meeting in Sofia, a Ministerial Statement was adopted based on the agreements already made by countries of the region under the Memorandum of Understanding on the DPPI. This included a commitment to the HFA and a common approach to the disaster management and risk reduction challenges in the region, developing a regional co-operation strategy for disaster preparedness and prevention.

#### **2.1.4. South Eastern Europe Disaster Risk Mitigation and Adaptation Programme**

The Disaster Risk Mitigation and Adaptation Programme for South Eastern Europe countries (SEEDRMAP) is a collaborative initiative developed by the World Bank and the United Nations International Strategy for Disaster Reduction Secretariat, in collaboration with a number of regional and international partners within the context of the Global Facility for Disaster Reduction and Recovery.

SEEDRMAP's objective is to reduce the vulnerability of the countries of South Eastern Europe to the risks of disasters. It addresses the loss of life, property and economic productivity caused by weather extremes and other natural hazards. To that end, SEEDRMAP has three focus areas: (i) hydrometeorological forecasting, data sharing and early warning (in close partnership with the WMO); (ii) coordination of disaster mitigation, preparedness and response; and (iii) financing of disaster losses, reconstruction and recovery, and of disaster risk transfer (disaster insurance) (in close partnership with the RCC SEE).

## Good Practice

### Southeastern and Central Europe Catastrophe Risk Insurance Facility

In Southeastern and Central Europe (SECE), natural catastrophes such as floods and earthquakes wreak severe consequences on lives, property and national economies. Currently, the commercial insurance market in SEE and Central Europe does not offer affordable and dependable insurance coverage to protect individuals and small businesses against material losses arising from natural catastrophes. Yet, insurance can play an important role in reducing the level of economic and fiscal exposure to disasters caused by the impact of natural hazards in SECE countries.

As part of SEEDRMAP's area of focus iii: financing of disaster losses, reconstruction and recovery, and disaster risk transfer (disaster insurance), the World Bank, UNISDR and the Regional Cooperation Council have been facilitating the creation of the Southeastern and Central Europe Catastrophe Risk Insurance Facility (SECE-CRIF).

The proposed facility will be established as a regional catastrophe risk pool owned by countries and managed by the private sector. It has received endorsement from the EU as well as financial support from the Global Facility for Disaster Reduction and Recovery<sup>60</sup> and the government of Switzerland. The facility would greatly contribute to the development of a catastrophe insurance market in Southeastern and Central Europe and could reduce government post-disaster budgetary outlays on reconstruction. Regional risk diversification and extensive donor assistance would promote a growing private market for catastrophe insurance, which would in turn provide homeowners and SMEs with the opportunity to purchase affordable insurance coverage.

The programme aims to build on existing cooperation in the region and has been conducted in close cooperation with the following entities: EC, Council of Europe (EUR-OPA), DPPI SEE, RCC SEE, Council of Europe Development Bank, Organization for Economic Cooperation and Development, WMO, the Informal Conference of South Eastern Europe Directors, and several other partners including OCHA, UNDP and the United Nations Children's Fund.

It is suggested that the DPPI SEE, the newly established Regional Cooperation Council and its secretariat play an important role in the various activities that will be implemented and coordinated at regional level.

## 2.1.5. A European Network of National Platforms

This network is an agreement of the following National Platforms and players: the German Committee for Disaster Reduction, l'Association Française pour la Prévention des Catastrophes Naturelles (AFPCN), the Swiss National Platform for Natural Hazards (PLANAT) and the Czech Republic National Platform on cooperation on disaster risk reduction issues.

The Network's goals include the facilitation and improvement of the exchange of information among members and support for the integration of disaster risk reduction into all aspects of European society at national, regional and international level. It also aims to become a partner to the EU, the Council of Europe (EUR-OPA) and other relevant international organizations in all aspects related to disaster risk reduction. Specific objectives include encouraging the development of National Platforms in Europe and neighbouring countries and ensuring support for disaster risk reduction in developing countries and countries in transition.

Recent activities have included the participation in the consultation process on the EU green paper on climate change adaptation and

60 Since its establishment in 2006 to assist disaster-prone countries to reduce vulnerability to natural hazards, the GFDRR has evolved into a partnership of Australia, Canada, Denmark, European Commission, Finland, France, Germany, Italy, Japan, Luxembourg, Norway, Spain, Sweden, Switzerland, United Kingdom, UNISDR, USAID Office of Foreign Disaster Assistance, and the World Bank.



## Good Practice

European National Platforms to organize events related to disaster risk reduction within their country's role in the EU Presidency

Starting with the German EU Presidency, the National Platforms in Europe have succeeded in raising the topic of disaster risk reduction at EU level. The following are the National Platforms' roles or events organized:

- Germany EU Presidency: 'Integrating environment, development and conflict prevention – European and national approaches and challenges';
- Slovenia EU Presidency: Seminar on strengthening cooperation with the candidate countries and Western Balkan countries in the field of civil protection;
- France EU Presidency: 'Risque 2008: Conference on natural disaster risk reduction';
- Czech Republic EU Presidency: Involved in organizing the EU presence and participation in the Global Platform (16-19 June 2009);
- Sweden: EU disaster prevention conference, 27-29 July 2009, and a flood risk conference, 8-11 September 2009.

developing a project proposal entitled 'Complex Vision for Future Natural Disaster Research in Europe' to the EC call under the FP7. The network has submitted coordinated comments to the EC Directorate-General Development on the working paper 'Disaster Risk Reduction in Developing Countries'. It has also participated in the session on National Platforms at the UNISDR Global Platform and a workshop in Davos on National Platforms with participants from developing countries.

## 2.1.6. Central European Forum for Disaster Prevention

The Central European Forum for Disaster Prevention was established following the catastrophic floods in 1997 which devastated large parts of Central Europe. It was created to facilitate the exchange of experience and knowledge and to improve coordination of activities between member platforms, namely those of Austria, Czech Republic, Germany, Hungary, Poland and Slovakia.

The main objectives of CEUDIP are to strengthen regional cooperation in disaster reduction; improve early-warning systems; improve education and training towards an increase of public awareness, such as training in disaster prevention and reduction with emphasis on disasters of hydrometeorological origin; and to meet once a year and exchange information about activities. The main achievements of CEUDIP include the improved coordination of early warning, the several workshops organized by hydrometeorological services, and the exchange of education and training materials. Since 2007 efforts have focused on the possible impact of climate change on disaster risk in Central European countries. The member platforms sent comments on the green paper 'Adapting to Climate Change in Europe – Options for EU Action'.

Other achievements include meetings between the member platforms of the Czech Republic, Germany and Poland, which exchange experience and knowledge at annual meetings of CEUDIP, devoted each time to different problems in disaster risk reduction.



# 3

## Conclusions and recommendations

## 3. Conclusions and recommendations

### 3.1. National trends in disaster risk reduction in Europe

Many governments and organizations have recognized the need to raise the priority of disaster risk reduction and are directly responding to the expectations and directions of the HFA. Evidence of this in Europe (UNISDR regional coverage includes 49 countries) can be seen in the following:

- National Platforms for disaster risk reduction have been established in 11 countries (8 of which are EU member states).
- Thirty four countries have established official Hyogo Framework Focal Points, including those with officially designated National Platforms<sup>61</sup>.
- Several ministerial-level regional agreements, arrangements and strategies have been developed, or are being developed in sub-regions of Europe, that include disaster risk reduction in their programmes and projects (for instance the Disaster Preparedness and Prevention Initiative for South Eastern Europe).
- UNISDR, the ISDR system and active governments have systematically promoted and advanced the implementation of the Hyogo Framework (for instance within the EU and EC a number of initiatives are being developed among different DGs aimed at reducing vulnerability to disasters).

With the adoption of the HFA and the three strategic goals, country reporting in Europe (UNISDR coverage) shows that the main strategic goal described for the period 2007-2009 is to anchor the principle of a culture of risk and safety, instead of a mere defence against hazards.

It is acknowledged that sustainability can be achieved by jointly considering safety, environmental and socio-economic aspects in any scenario of excessive risk and by strengthening

capacities of societies to build resilience towards potential disasters and environmental risks. In this context, most countries refer to climate change adaptation as one of the most important strategic challenges we face today.

In terms of the specific indicators of progress, country reports covering HF Priority 1 show that a large majority (77 per cent) of reporting countries have attained institutional commitment or substantial achievements, albeit with recognized limitations in capacities and resources, in ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation.

In most of the reporting countries, disaster risk reduction is a cross-sectoral topic and no sole laws exist for its regulation. However, most have integrated elements of disaster risk reduction into legislation at all levels. Some 75 per cent have attained substantial achievement in terms of the extent to which policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

A far smaller proportion of countries, just 15 per cent, report attaining comprehensive achievement with sustained commitment and capacities at all levels in community participation and decentralization, despite the fact that municipalities and local governments have been given increased tasks and responsibilities for disaster risk reduction and most of the mitigation, preparedness, planning and recovery works have been transferred to this level.

Multisectoral National Platforms for disaster risk reduction are functioning in the following eight EU member states to date: Bulgaria, Czech Republic, France, Germany, Hungary, Italy, Spain, and Sweden. They are also functioning in Switzerland and the Russian Federation, while the FYR of Macedonia an official letter on the development of a National Platform will be shared shortly.

In addition, the following 34 European countries have nominated Focal Points for disaster

61 See <http://www.UNISDR.org/europe/eu-nplatform/np-guidelines.html>

risk reduction: Albania, Austria, Bosnia & Herzegovina, Armenia, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, FYR of Macedonia, Malta, Moldova, Monaco, Montenegro, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and United Kingdom.

Country reports covering HF Priority 2 show that 75 per cent of countries report substantial or comprehensive achievement in risk assessment, although national legislation defining responsibilities at all levels varies significantly and implementation seems to depend on economic factors and levels of national development. Some countries, such as Switzerland, are very advanced in this respect. It aims to cover the whole country with hazard maps and assessments for both geological and hydrological hazards by 2011 and apply them in land-use planning.

In terms of developing and putting in place systems to monitor, archive and disseminate data on key hazards and vulnerabilities, substantial achievement is attained by 85 per cent of reporting countries, despite recognized limitations in capacities and resources. The main obstacle in this area is scarce financial resources. The high cost of these systems is a limiting factor, particularly in developing countries, where there are many other priorities.

Often, the supply of data is still heterogeneous as different institutions participate with their own methods. There is plenty of scope for enhanced coordination in this area.

Reports covering HF Priority 3 demonstrate that there is substantial or comprehensive achievement towards building a culture of safety and resilience through the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities. A large amount of information is available through websites and publications. On-line tools and databases have been created to record past events and hazard and risk assessments are being used at all levels (national through municipal).

Events are analyzed in detail and the results are used for adapting priorities for action.

However, there is significant variation in the degree to which disaster risk reduction and recovery concepts are being extended into education and training programmes and there is much scope for capacity development in this area. It was reported that some training activities provide the opportunity to consider indigenous knowledge and traditional practices for risk reduction.

An important harmonization between risk assessments for different types of natural hazards has taken place in recent years and tools and guidelines have been developed in some countries. However, the on-line inputs show that cost-benefit analysis is not common on this subject in 45 per cent of the reporting countries and awareness raising for cost-benefit issues is made only on the basis of specific research. Switzerland is one country which has developed tools and guidelines, including 'LearnRisk' and 'RiskPlan' for risk management and implementation, and 'EconoMe' to justify investments in risk reduction.

Reports covering HF Priority 4 show that in almost half of the countries institutional commitment is attained in the way in which sector development planning and programmes address disaster risks related to changing social, economic and environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change. In 50 per cent of countries substantial achievement has been attained in the extent to which risk reduction goals are incorporated in environmental risk management policies, with a further 43 per cent reporting institutional commitment.

Reports indicate that there is significant difference between the industrialized nations and developing nations in broader Europe in terms of how social development policies and plans are being implemented to reduce the vulnerability of populations most at risk. However, they also indicate that countries are increasingly focusing on the protection of the most vulnerable economic activities and productive sectors, which is an efficient strategy to help reduce the overall impact of disasters and will lead to enhanced resilience.

In most of the countries, planning and management of human settlements incorporates disaster risk reduction elements, including enforcement of building codes. Substantial achievement has been attained by 65 per cent of countries over the past few years in newly planned and built settlements, although there is still an issue over how to apply standards to existing buildings.

It is essential to consider disaster risk reduction principles when designing post-disaster recovery and rehabilitation processes in order to 'build back better' and not re-create risk. Half of the countries report that institutional commitment has been attained, but achievements are neither comprehensive nor substantial, and the other half report that substantial achievement has been attained, but with recognized limitations in capacities and resources. Furthermore, procedures to assess the disaster risk impact on major development projects, especially infrastructure, are only partly in place.

The reports indicate that although knowledge about the environment, sustainable development and climate change is high among politicians, authorities, organizations and the public there is far less awareness regarding natural hazards, especially among the public.

Reports covering HF Priority 5 indicate that preparedness mechanisms and capacity building measures at national, regional and international level have been strengthened in comparison with previous years, although the extent to which the disaster risk reduction perspectives are integrated is not yet apparent.

It is clear that emergency management plans are now generally in place at local, regional and national level and regular training is performed at all levels. Some 67 per cent of countries report having attained substantial or comprehensive achievements over the last few years.

There is significant variation in the ways in which national administrations approach the support of effective response and recovery through financial reserves and contingency mechanisms. In general, countries report having some form of reserve funds

at both State and municipal level that can be used to support areas and communities hit by disaster. The system has been tested several times during disasters over the last few years and has proved to be valuable.

Rather than dedicated funds, countries such as Switzerland and Germany use special governmental funding lines which are opened rapidly in case of necessity. Private fund-raising, such as through Swiss Solidarity, is also a major source of finance in case of major disasters. Private losses are generally covered through insurance, with the insurance industry representing an important and established financial reserve and reconstruction mechanism. The privately-available risk capital, in the form of natural hazard and other specific damage/indemnity insurance, amounts to several billion Euros worldwide.

However, despite recognizing the potential value of financial reserves and contingency mechanisms, many countries report attaining only institutional commitment in this area. There is a clear need for substantial further achievements in this area.

Procedures to exchange relevant information before and during disasters and to undertake post-event reviews are generally in place, with 70 per cent of countries reporting either substantial or comprehensive achievements. Most countries apply the lessons gained through training exercises or through real experiences when they prepare emergency response plans, research and development projects and education and training programmes, or purchase new equipment.

### **3.2. Regional and cross-border trends in disaster risk reduction in Europe**

At the regional level, EU Member States are following EC directives concerning strategic adaptation matters in various fields and on different levels.

Some countries are particularly active to stress the need for streamlining and coordination of EU and United Nations initiatives in the area of disaster

risk reduction. France, during its presidency of the EU in the second half of 2008, and Sweden, during its presidency in the second half of 2009, included or intend to include climate change as one of the prioritized topics along with disaster risk reduction.

The legislative framework for European civil protection enables the Commission to establish a framework for effective and rapid cooperation between national civil protection services when mutual assistance is needed. Information sharing and highlighting best practices ensure that civil protection teams are both compatible with each other as well as complementary. At the international level, the Commission aims to enhance coherence, especially in the context of cooperation with candidate countries in view of enlargement as well as with partners in the Mediterranean region.

The EC Directorate-General Research reported several disaster risk reduction-related portions in the Seventh Framework Programme within the European Research Area: Climate Change, Pollution and Risks; Sustainable Management of Resources; Environmental Technologies; Earth Observation and Assessment Tools; and Mobility, Environmental Sustainability and Energy Efficiency.

European research, through several FP7 programmes, is actively contributing (directly or indirectly) to the overall effort to address hazard and disaster challenges. Yearly funds are committed to support research projects within Europe and in collaboration with third countries. The projects are producing new knowledge, methods, tools and information that should enable an improvement to and an increase in capacities to better manage and reduce risks, while improving awareness and the resilience of our societies.

In March 2008 the EC issued a memo on cooperation on disaster prevention, preparedness and response related to Western Balkans countries. The Disaster Risk Reduction Initiative,

financed by €2 million yearly through the Instrument for Pre-accession Assistance, will support capacity building of the Western Balkan countries and Turkey as well as data collection, processing and sharing and the preparation of a regional strategy<sup>62</sup>.

The programme, which will be implemented in close cooperation with other donors and stakeholders, is complementary and in coordination with the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme, developed by the World Bank and UNISDR in collaboration with other United Nations agencies and partners<sup>63</sup>. The SEEDRMAP objective is to reduce the vulnerability of the countries of South Eastern Europe to the risks of disasters. It addresses the loss of life, property and economic productivity caused by weather extremes and other natural hazards.

EU member states engaged in developing countries via different projects are bringing disaster risk reduction to all levels. The European and Mediterranean Major Hazards Agreement, for instance, has pursued a twofold task: to formulate recommendations on coastal risks (2007), on psychological support to victims (2007) and on radiological information to populations (2008) addressed primarily to member States' authorities; and to develop the knowledge to facilitate the implementation of such recommendations through a network of 26 Specialized Centres, which have conducted extensive work in such diverse fields as risk education, landslides and urban risks. The Agreement's activities since 2007 have been defined according to the Medium Term Plan 2007-2011, which reflects the five Priorities for Action of the HFA.

EU Member States in their development cooperation programmes and projects are pursuing a coherent and complementary approach to disaster risk reduction at all levels. This includes the creation of basic conditions and the capacity building necessary for the respective levels to meet their appropriate responsibilities.

62 EC Memo on Cooperation on disaster prevention, preparedness and response  
<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/139&format=HTML&aged=0&language=EN&guiLanguage=en>

63 For more information on the SEEDRMAP see: <http://www.unUNISDR.org/europe/eu-gfdr-r/gfdr-r-eu.html>

It also includes the need to cooperate regionally and internationally to assess and monitor regional and transboundary risks, exchange standardized information and accessible data on regional disaster risks, impacts and losses, and provide early warnings. This need, in addition to bilateral agreements between countries, has led to the establishment of several regional organizations and networks in Europe, including DPPI SEE, RCC SEE and CMEPC.

In April 2008, at the SEE Cooperation Process Ministerial Meeting, a Ministerial Statement was adopted that included a commitment to HFA and a common approach to the disaster management and risk reduction challenges in the region, developing a regional co-operation strategy for DPPI SEE.

The majority of countries report improved cooperation with neighbouring countries and relatively well established regional and transboundary cooperation, with substantial or comprehensive achievement attained over the last few years.

At regional and international levels, humanitarian assistance and development-oriented emergency aid now mostly include disaster risk reduction in recovery and rehabilitation processes, as well as environmental and social compatibility assessments. The goal is clearly to integrate disaster risk reduction and preventive activities into emergency aid to strengthen the preparedness of vulnerable societies.

### 3.3. Gaps and challenges

Although the general recognition of the importance of disaster risk reduction at policy level is undisputable, there remains a lack of understanding of the concept when it comes to issues such as the implementation of legal frameworks and the updating of existing legislation with new concepts. In short, the cross-cutting nature of disaster risk reduction makes coordination of different levels a challenge.

Concrete and active strategies for disaster risk reduction rely on different institutions, each with its own legal framework, and this necessitates specific sectoral strategies. However, although the benefits from further developing and/or establishing National Platforms for disaster risk reduction are clearly recognized and prioritized, there will need to be more commitment from governments to achieve this.

The way National Platforms are linked or integrated into national governmental systems determines the way they can influence national decision-making processes. National Platforms which are part of the political system can have direct influence on these processes, whereas civil society structures have to focus on advocacy and lobbying activities to create the necessary momentum.

The key contextual challenge encountered by countries, national authorities and partner agencies is that governments often, due to international obligations, entrust the task of facilitating the establishment of National Platforms to HFA Focal Points. In many cases the Focal Points are civil protection organizations, which traditionally have a more focused mandate on response preparedness. An understanding of the multi-sectoral dimension of disaster risk reduction is essential to provide the HFA Focal Points with the necessary knowledge to ensure the successful development of the National Platforms' structures and activities.

The contradictory interests between different national entities – for example in the development of water-front areas, where residents wish to live close to rivers, lakes and ocean shorelines despite the higher risk of flooding – together with scarce financial resources at the local or regional level are hindering some urgent risk reduction measures.

Furthermore, the rapid migration from rural to urban areas and the concentration of populations are increasing the vulnerability of certain societies, while available resources



often do not follow the same trends. For most municipalities issues like employment, building development, schools, and ensuring that local areas are attractive places to live are considered much more urgent matters than disaster risk reduction. Natural hazards tend to be given low priority; until disasters occur.

Due to limited resources and the low priority frequently given to the management of natural hazards, existing knowledge of risks is often not used at local level and risk analysis, such as through the use of stability or flood maps, is often not visible in municipal programmes. Furthermore, whereas required systems are often in place for large regions, for example river basins, deficits often exist for smaller areas, such as small watersheds, or in remote areas.

To achieve the appropriate level of attention for natural hazards and disaster risk reduction in 'competition' with the many other urgent and important tasks is a great challenge.

Moreover, although there is a large amount of risk reduction information available, the task is to promote a common understanding and an awareness of responsibilities, probabilities and possibilities among potential actors.

Increasing the awareness of school children is one way to facilitate the creation of disaster resilient communities for the future. The lack of integration of the disaster risk reduction concept into school curricula is a major deficiency, and the slow rate of progress of incorporating this message is a particular concern.

Despite a reduction in economic vulnerability in recent years among many European countries, challenges remain due to the frequently complex interdependency of cross-border activities, especially in the energy sector. Significant differences in economic development in Europe and neighbouring countries can intensify this pressure. It should be noted that economic considerations often overrule safety and security parameters. In the field of insurance, until recently

destroyed buildings were often reconstructed in the same location as insurers would not accept the additional cost of relocation. Disaster risk reduction measures are often extensive, take considerable time to implement, are complex, costly and often require legal action.

At the operational level the main constraints on the effectiveness of disaster preparedness are the shortage of financial and technical capacities, particularly communication systems, and the need for adequately-trained personnel. This situation is often compounded by the general decline in the numbers of volunteers, due to demographic changes, in those countries which have significant voluntary sectors.

On a technical level, early-warning systems often ignore the communication lines to those communities most affected by disasters. This is an issue which has been identified by German agencies<sup>64</sup> as requiring more attention from donor agencies and political decision makers.

Overall, the ability to use existing methods and tools at local and regional level is often limited. Generally, with the exception of the insurance industry, cost-benefit analyses are not integrated into assessments and research frequently has little practical application.

## 3.4. Recommendations

Based on the experiences reported by the national, sub-regional and regional actors via the HFA Monitor tool, and with reference to other information made available through UNISDR and ISDR partners and other actors, the following recommendations are made:

### National level

- The implementation of disaster risk reduction related legal provisions and national policies as an inter-disciplinary approach should be further pursued.
  - National policies for disaster risk reduction and management should not only be in place but also appropriately implemented and sufficiently integrated into sectoral policies and national development plans.
  - Cooperation at all levels, both horizontally and vertically, and between research programmes and projects should be further promoted. Links between natural, societal and economic research with actors and institutions in disaster risk reduction are essential. Currently, climate change is the main focus of many activities while other areas must be further developed and integrated in all sectors.
  - To raise awareness among and empower local- and community-level organizations, volunteer groups and other active members of civil society to participate in disaster risk reduction decision-making, planning and implementation and to improve vertical coordination is of the utmost importance to build capacities at all levels. Studies and reports to highlight the economic impact of disaster risk reduction at municipal level would mobilize interest groups and other concerned people to put peer pressure on local governments.
  - To harness the potential of National Platforms in Europe to advance disaster risk reduction it is important that governments and civil society increase their support for the establishment and enhanced performance of National Platforms. Furthermore, within the context of a network of National Platforms, efforts and exchanges should be consolidated to facilitate the establishment of a regional platform on disaster risk reduction to stimulate a high-level political debate.
- Improved access to information on disaster risk assessment and reduction measures and implementation of initiated inter-disciplinary research linking science and practice are key to further development.
  - The private sector should be encouraged to practice and contribute to risk reduction and strengthen public-private sector partnerships.
  - Better coordination of the information flow in warnings related to disasters among various ministers and government offices at national levels and further efforts towards the clarification of terms and definitions, roles and responsibilities are required. Archive systems may also be used as a good platform for sharing disaster-related documents (lessons learned). They can be used as knowledge portals including a full spectrum of educational materials and become a one-stop-shop for users from academic institutions, practitioners and private areas.
  - A more intensive promotion of disaster risk related themes is necessary at the level of school education. An update of existing programmes with new developments, such as climate change, is required.
  - Upgrading of emergency management systems with integrated information systems and geographical information analysis should be promoted with local governments, despite the frequently insufficient financial resources and shortage of experts at local level.

## Regional level

- In the sub-regional and regional arrangements partners should encourage disaster risk reduction to be put high on all agendas.
- Development cooperation programmes and projects abroad are still financed mainly through emergency aid, which is not sufficient for a comprehensive integration of disaster risk reduction. Consequently, the inclusion of independent disaster risk reduction funds within technical cooperation projects would be a major achievement.
- Standardization of data gathering and usage is an important factor and should be promoted at all levels along with enhanced approaches for multi-risk analyses (including cost-benefit analyses) through enhanced research at all levels. Climate change risks should be integrated into risk analyses.
- Continued integration of disaster risk reduction in the respective sector strategies at national and international level, and in particular in developing countries with international donor support, is crucial. Public aid mechanisms and regulations, in particular policy relevant to insurance, to facilitate relocations to safer areas would be useful. More disaster risk reduction standards have to be considered in the case of recovery.

## ANNEXES

### Annex I: List of countries and organizations which reported on progress

Country / Organization / other	Abbreviation
Armenia	AM
Bulgaria	BG
Croatia	HR
Czech Republic	CZ
France	FR
Germany	DE
Hungary	H
Italy	I
FYR of Macedonia	MK
Montenegro	ME
Norway	NO
Serbia	SRB
Slovenia	SI
Sweden	SE
Switzerland	CH
Turkey	TR
United Kingdom	UK
Central European Disaster Prevention Forum	CEUDIP
Council of Europe – European and Mediterranean Major	EUR-OPA
Directorate-General Environment - Civil Protection	DG Environment
Directorate-General Research	DG Research
Disaster Preparedness and Prevention Initiative for South Eastern Europe	DPPI SEE
Regional Cooperation Council for South Eastern Europe	RCC SEE
A European Network of National Platforms	ENNP

## Annex II: List of main events organized by or in collaboration with European National Platforms and HFA Focal Points from January 2008 to February 2009

Date	Hosting country	Organizers/ Co-Organizers	Event	Web link
February 2008	Slovenia	Slovenia as EU Presidency, EC DG Environment/Civil Protection Unit, DG Enlargement in collaboration with UNISDR EUROPE Europe, WB, WMO	Seminar on "Strengthening Cooperation with the Candidate Countries and Western Balkan Countries in the Field of Civil Protection"	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1408">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1408</a>
April 2008	France	Council of Europe (EUR-OPA), UNISDR Europe in collaboration with DKKV, (hosted by UNESCO)	NPs and HFA Focal points Meeting	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1896">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1896</a>
April 2008	Bulgaria	DPPI SEE, RCC SEE, NATO, UNISDR Europe, WB and UNOCHA	Ministerial meeting on "Disaster Preparedness and Management in SEE"	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1410">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=1410</a>
June 2008	Switzerland	Italy in collaboration with Switzerland, Russian Federation (EMERCOM), Egypt, EU DG Environment/Civil Protection, UNISDR Europe, UNOCHA and other partners	Conference on: "Role of Modern Civil Protection Systems and the New Global Challenges: from the Hyogo Framework for Action to Real Time Response"	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=3041">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=3041</a>
October 2008	Switzerland	WB-UNISDR Europe-RCC SEE	Regional Conference on "The Southeastern and Central Europe Catastrophe Risk Insurance Facility"	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/index.php?rid=3&amp;timeID=2008&amp;tid=Any&amp;oid=0&amp;hid=0&amp;t=1&amp;x=7&amp;y=6">http://www.preventionweb.net/english/professional/trainings-events/events/index.php?rid=3&amp;timeID=2008&amp;tid=Any&amp;oid=0&amp;hid=0&amp;t=1&amp;x=7&amp;y=6</a>
October 2008	Moldova	Moldova-WMO-UNISDR Europe-WB	Regional scientific and technical conference on "The Role of the NMHSs in Prevention and Mitigation of Natural Hazard Impact".	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=2525">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=2525</a>
November 2008	France	France as EU Presidency	Risq-ue 2008: Conference on "Natural Disaster Risk Reduction From Past Disasters to Challenge in Climate Change in Europe"	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=3042">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=3042</a>
February 2009	Germany	Council of Europe (EUR-OPA), UNISDR Europe and DKKV (hosted by DKKV),	NPs and HFA Focal points meeting	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=7747">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=7747</a>

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