

**H F A**

Implementing  
**THE HYOGO FRAMEWORK  
FOR ACTION IN EUROPE:**  
Advances and Challenges

*REPORT for the period 2009-2011*

**ISDR**

International Strategy for  
Disaster Reduction

**EUROPA**  
EUROPA MAJOR HAZARDS AGREEMENT  
ACCORD EUROPE RISQUES MAJEURS



**GFDRR**  
Global Facility for Disaster Reduction and Recovery



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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, both documenting the implementation of the framework and also informing about 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 secretariat (UNISDR).

The main objective of this report 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 2009 and 2011 and to compare progress made, lessons learned and challenges to overcome as compared with those reported in 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.

The urgency with which disaster risk reduction activities must be viewed was recently underscored by the devastation caused by an earthquake measuring 9.0 on the Richter scale that struck Japan, triggering a tsunami and crippling a nuclear power station. Japan's commitment to disaster preparedness undoubtedly reduced the number of casualties in the disaster, but the losses are tragic. Ensuring the safety and resilience of societies must be at the top of the global agenda.



## Acknowledgements

UNISDR gratefully acknowledges the countries and regional organizations of Europe that have reported on the implementation of the HFA.

The countries are: Albania, Armenia, Bulgaria, Croatia, Czech Republic, Finland, France, Georgia, Germany, Italy, the former Yugoslav Republic of Macedonia, Moldova, Monaco, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland and Turkey. Special thanks are offered to the HFA Focal Points of those countries who facilitated, coordinated and presented the reports.

The regional organizations and initiatives are: the Council of Europe (EUR-OPA Major Hazards Agreement), the European Commission, the Disaster Preparedness and Prevention Initiative for South Eastern Europe, the Regional Cooperation Council for South Eastern Europe, the European Forum for Disaster Risk Reduction 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).

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<sup>1</sup> This network includes the following National Platforms and Actors: German Committee for Disaster Reduction (DKKV), l'Association Française pour la Prévention des Catastrophes Naturelles (AFPCN), Polish Platform for Natural Disaster Reduction and the Czech Republic National Platform.



## Contents

Preface.....	5
Acknowledgements.....	7
List of Figures.....	11
Acronyms and Abbreviations .....	12
Executive Summary .....	15
<b>1. HFA implementation at national level .....</b>	<b>23</b>
1.1 Strategic Goals .....	25
1.2 Priorities for Action .....	26
1.2.1 Priority for Action 1 .....	26
1.2.2 Priority for Action 2 .....	34
1.2.3 Priority for Action 3 .....	41
1.2.4 Priority for Action 4 .....	49
1.2.5 Priority for Action 5 .....	56
1.3 Future perspectives and cross-cutting challenges .....	63
<b>2. HFA implementation at regional level .....</b>	<b>71</b>
2.1 Advances in HFA implementation at regional level .....	73
2.1.1 European Union and European Commission .....	73
2.1.2 Council of Europe – European and Mediterranean Major Hazards Agreement .....	79
2.1.3 Disaster Preparedness and Prevention Initiative for South Eastern Europe .....	80
2.1.4 South East Europe Disaster Risk Mitigation and Adaptation Programme .....	82
2.1.5 European Forum for Disaster Risk Reduction .....	83
2.1.6 A European Network of National Platforms .....	85
<b>3. Conclusions and recommendations .....</b>	<b>87</b>
3.1 National trends in disaster risk reduction in Europe .....	89
3.2 Regional and cross-border trends in disaster risk reduction in Europe .....	90
3.3 Progress from previous reporting cycle .....	92
3.4 Gaps and challenges .....	94
3.5 Recommendations .....	95
<b>Annexes .....</b>	<b>99</b>
Annex I : List of countries and organizations that reported on progress .....	99
Annex II : List of main events organized by or in collaboration with European National Platforms and HFA Focal Points .....	100
Annex III : References .....	103



## List of Figures

- Figure 1** : Review of Progress Achieved Over the Reporting Period
- Figure 2** : National Platforms and Focal Points established in Europe
- Figure 3** : Approaches to Cross-Cutting Challenges
- Figure 4** : HFA Priority 1 – Overall levels of progress for the period 2009 - 2011
- Figure 5** : HFA Priority 1 Indicator 1: Percentage of countries achieving levels of progress 1-5
- Figure 6** : HFA Priority 1 Indicator 2: Percentage of countries achieving levels of progress 1-5
- Figure 7** : HFA Priority 1 Indicator 3: Percentage of countries achieving levels of progress 1-5
- Figure 8** : HFA Priority 1 Indicator 4: Percentage of countries achieving levels of progress 1-5
- Figure 9** : HFA Priority 2 – Overall levels of progress for the period 2009 - 2011
- Figure 10** : HFA Priority 2 Indicator 1: Percentage of countries achieving levels of progress 1-5
- Figure 11** : HFA Priority 2 Indicator 2: Percentage of countries achieving levels of progress 1-5
- Figure 12** : HFA Priority 2 Indicator 3: Percentage of countries achieving levels of progress 1-5
- Figure 13** : HFA Priority 2 Indicator 4: Percentage of countries achieving levels of progress 1-5
- Figure 14** : HFA Priority 3 – Overall levels of progress for the period 2009 – 2011
- Figure 15** : HFA Priority 3 Indicator 1: Percentage of countries achieving levels of progress 1-5
- Figure 16** : HFA Priority 3 Indicator 2: Percentage of countries achieving levels of progress 1-5
- Figure 17** : HFA Priority 3 Indicator 3: Percentage of countries achieving levels of progress 1-5
- Figure 18** : HFA Priority 3 Indicator 4: Percentage of countries achieving levels of progress 1-5
- Figure 19** : HFA Priority 4 – Overall levels of progress for the period 2009 - 2011
- Figure 20** : HFA Priority 4 Indicator 1: Percentage of countries achieving levels of progress 1-5
- Figure 21** : HFA Priority 4 Indicator 2: Percentage of countries achieving levels of progress 1-5
- Figure 22** : HFA Priority 4 Indicator 3: Percentage of countries achieving levels of progress 1-5
- Figure 23** : HFA Priority 4 Indicator 4: Percentage of countries achieving levels of progress 1-5
- Figure 24** : HFA Priority 4 Indicator 5: Percentage of countries achieving levels of progress 1-5
- Figure 25** : HFA Priority 4 Indicator 6: Percentage of countries achieving levels of progress 1-5
- Figure 26** : HFA Priority 5 – Overall levels of progress for the period 2009 – 2011
- Figure 27** : HFA Priority 5 Indicator 1: Percentage of countries achieving levels of progress 1-5
- Figure 28** : HFA Priority 5 Indicator 2: Percentage of countries achieving levels of progress 1-5
- Figure 29** : HFA Priority 5 Indicator 3: Percentage of countries achieving levels of progress 1-5
- Figure 30** : HFA Priority 5 Indicator 4: Percentage of countries achieving levels of progress 1-5
- Figure 31** : Level of reliance on multi-hazard approach as driver of progress
- Figure 32** : Level of reliance on gender perspectives approach as driver of progress
- Figure 33** : Level of reliance on strengthened capacities for risk approach as driver of progress
- Figure 34** : Level of reliance on human security and social equity approach as driver of progress
- Figure 35** : Level of reliance on engagement/partnership approach as a driver of progress
- Figure 36** : Review of progress achieved over the reporting period
- Figure 37** : Reporting Countries and Regional Organizations Over the 2009 and 2011 Periods

## Acronyms and Abbreviations

<b>AA</b>	Auswärtiges Amt (German Federal Foreign Office)
<b>ACPDR</b>	Administration for Civil Protection and Disaster Relief (Slovenia)
<b>APD</b>	French Agency for Development
<b>BBK</b>	Bundesamt für Bevölkerungsschutz and 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 and 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>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 Centre)
<b>DMTP</b>	Disaster Management Training Programme
<b>DPP</b>	Disaster Preparedness and Prevention
<b>DPPISEE</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 samfunnsikkerhet og beredskap (Norwegian Directorate for Civil Protection and Emergency Planning)
<b>EC</b>	European Commission
<b>ECHO</b>	DG Humanitarian Aid and Civil Protection (European Commission)
<b>EENA</b>	European Emergency Number Association
<b>EFDRR</b>	European Forum for Disaster Risk Reduction
<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>GFDRR</b>	Global Facility for Disaster Reduction and Recovery
<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>INSARAG</b>	International Search and Rescue Advisory Group
<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 Organization
<b>NGO</b>	Non-governmental Organization
<b>NP</b>	National Platform
<b>PPEW</b>	Platform for the Promotion of Early Warning
<b>PPRD SOUTH</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>RENA</b>	Regional Environmental Network for Accession
<b>SAMRISK</b>	Societal Security and Risks (NO Research Programme)
<b>SEE</b>	South Eastern Europe
<b>SEE CRIF</b>	South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility
<b>SEEDRMAP</b>	South Eastern Europe Disaster Risk Mitigation and Adaptation Programme
<b>TCIP</b>	Turkish Catastrophe Insurance Pool
<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, 18-22 January 2005, Kobe, Hyogo, Japan
<b>WMO</b>	World Meteorological Organization



## 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>2</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>3</sup>. Reporting responsibilities are also identified for regional organizations and institutions, international organizations and UNISDR and the ISDR system.

In accordance with the HFA monitoring and reporting process, reports were prepared for the first and second sessions of the Global Platform for disaster risk reduction, which took place in Geneva, Switzerland, in May 2007 and June 2009, respectively. The report prepared for the second Global Platform covered the period 2007–2009. The aim was to update all stakeholders on the progress made since the 2007 reporting. The reports<sup>4</sup> 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 instituted 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.

In addition, a “Global Assessment Report”<sup>5</sup>, coordinated by UNISDR, was developed to address a major global stock-taking on trends in disaster occurrence and risks and progress on disaster risk reduction. The report was

launched in June 2009. In May 2011, the second annual “Global Assessment Report on Disaster Risk Reduction” will be launched, to assess risks and progress made since 2009.

The 2009 Report was the first biennial global assessment of disaster risk reduction prepared in the context of the implementation of the International Strategy for Disaster Reduction (ISDR). The ISDR, launched in 2000, provides a framework to coordinate actions to address disaster risks at the local, national, regional and international levels. The 2011 Report will assess progress and challenges in mainstreaming disaster risk reduction over the prior two years.

It should be noted that many governments are 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>6</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 2009–2011, as identified by the partners, and to report progress made and challenges encountered since the last report prepared in 2009.

The following added values in the monitoring of progress have been identified:

- 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;

<sup>2</sup> Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters : <http://www.unisdr.org/hfa>

<sup>3</sup> Reporting on Disaster Risks and Progress in Risk Reduction, UNISDR/GP/2007/2, <http://www.preventionweb.net/globalplatform>

<sup>4</sup> Available on the PreventionWeb website <http://www.preventionweb.net/english/hyogo/GP>

<sup>5</sup> 2009 Global Assessment Report on Disaster Risk Reduction: Risk and poverty in a changing climate : Invest today for a safer tomorrow : <http://www.preventionweb.net/gar09>

<sup>6</sup> Reporting on Disaster Risks and Progress in Risk Reduction, UNISDR/GP/2007/2, <http://www.preventionweb.net/globalplatform>

- 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 on-line at PreventionWeb. Other information and reports have also been consulted and 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 36 national authorities/HFA Focal Points included in the HFA Monitor tool for Europe, a total of 22 have reported, inclusive of 2 countries from Central Asia, 21 of which used the on-line monitor facility. The countries which used the on-line monitor are : Armenia, Bulgaria, Croatia, Czech Republic, Finland, France, Georgia, Germany, Italy, the former Yugoslav Republic of Macedonia, Moldova, Monaco, Norway, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland and Turkey. The 22<sup>nd</sup> country to report, Albania, responded using a different format. Several countries and partners agreed to send reports at a later date.

Regional organizations and initiatives that provided information are: the Council of Europe (EUR-OPA 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, the European Forum for Disaster Risk Reduction (EFDRR) and A European Network of National Platforms.

The report provides key insights into how disaster risk reduction is currently conceived and practiced by national authorities implementing the HFA. It analyzes 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 that 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 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 issues and human security/social equity, are highlighted where they have been mentioned in national or other reports.

## Findings

Two significant findings emerge from analysis of the country and regional reports. At first glance, little change is seen in the quantitative levels of progress relative to what had been reported in 2009. This is evidenced in the average levels of indicators of progress summarized in Figure 1. In four of the five HFA Priorities for Action, the average progress reported by countries declined slightly in 2011 relative to what had been reported in 2009.

However, a deeper analysis of the qualitative information provided in the texts of the country and regional reports reveals an evolution from a mindset of crisis and response to one of proactive risk reduction and safety. Evidence of the increased urgency governments and organizations assign to disaster risk reduction is their responsiveness to the expectations and directions of the HFA. At the na-

<sup>7</sup> See Annex I for a full list of actors.

tional level, this commitment is visible in the establishment of 36 HFA Focal Points and 18 National Platforms established for disaster risk reduction activities of Europe, an increase of nearly 50% over the 11 NPs that were in place in 2009.

Over the 2009 – 2011 reporting period, the following countries established National Platforms: Armenia, Croatia, Finland, Monaco, Poland, Portugal and the UK. Countries that are presently working to establish National Platforms include Montenegro, Norway, Serbia and Turkey. National Platforms that had been existence in 2009 strengthened their multi-sectoral approaches by engaging new actors. Figure 2 presents the National Platforms and HFA Focal Points in Europe.

The 2009 HFA Europe report found strong institutional commitments in prioritizing disaster risk reduction at national level, while significant challenges remained in standardizing data and assessments, and an often patchwork or fragmented approach to implementation at all levels. Certain of the challenges identified in 2009 remain; in particular, the difficulty demonstrating the efficacy of investment in disaster risk reduction to ensure adequate funding of initiatives and programmes at all levels. Inadequate funding for DRR initiatives, particularly at local levels, continues to be a constraint.

But the most profound shifts and evidence of progress at national level are to be found in the countries' self-reported approaches to cross-cutting challenges, presented in further detail in Section 1.3. The country reports identify the factors believed to be 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 that a country considers important for integration into plans, policies and programmes as a means to achieve disaster risk reduction goals.

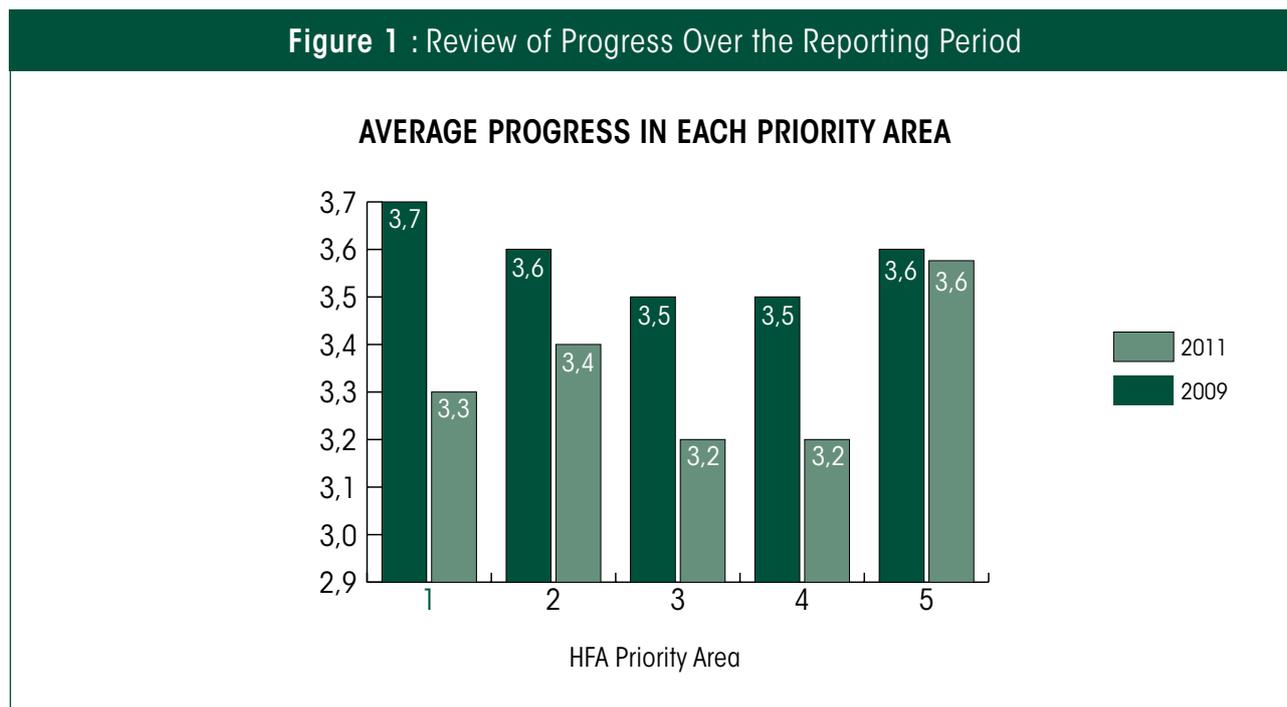
The following issues are considered important drivers or catalysts at the national and local levels for this assessment:

- Multi-hazard integrated approach to disaster risk reduction and development.
- Gender perspectives on risk reduction and recovery adopted and institutionalized.
- 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 nongovernmental actors, civil society and the private sector, among others, have been fostered at all levels.

Each of these drivers is critical to mainstreaming disaster risk reduction to build a culture of resilience. 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.

Gender is also a core factor to be considered in the implementation of disaster risk reduction measures. Gender shapes the capacities and resources of individuals to build resilience, adapt to hazards and to respond to disasters. It

**Figure 1 : Review of Progress Over the Reporting Period**



**Figure 2 : National Platforms and HFA Focal Points Established in Europe**

National Platforms	HFA Focal Points	
Armenia	Albania	The former Yugoslav
Bulgaria	Armenia	Republic of Macedonia
Croatia	Azerbaijan	Malta
Czech Republic	Austria	Moldova
Finland	Bosnia & Herzegovina	Monaco
France	Bulgaria	Montenegro
Germany	Croatia	Norway
Hungary	Czech Republic	Poland
Italy	Cyprus	Portugal
The former Yugoslav	Denmark	Romania
Republic of Macedonia	Finland	Russian Federation
Monaco	France	Serbia
Poland	Georgia	Slovenia
Portugal	Germany	Spain
Russian Federation	Greece	Sweden
Spain	Hungary	Switzerland
Sweden	Iceland	Turkey
Switzerland	Italy	Ukraine
United Kingdom		United Kingdom

is thus necessary 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.

Capacity development is a central strategy for reducing disaster risk. It is sustained through institutions that support capacity development and capacity maintenance as dedicated, ongoing objectives at all levels. Human security and social equity approaches integrated into disaster risk reduction and recovery activities ensure that the special needs of the most vulnerable are met.

Effective disaster risk reduction requires effective community engagement. Partnership approaches can more efficiently capitalize on existing coping mechanisms and strengthen community knowledge and capacities. Thus, the extent to which countries report significant and ongoing reliance on these approaches to cross-cutting challenges is a measure of their achievements in mainstreaming DRR.

Figure 3 summarizes the findings of the reporting countries' approaches to cross-cutting challenges. The second column presents the percentage of countries reporting significant and ongoing reliance on each of these five approaches. There is relatively little variation in the results

reported in 2011 as compared with those reported in 2009. However, a more detailed examination of the findings shows very different results for those countries with NPs or the countries that in 2011 are close to finalizing their NPs. The ratio of countries reporting significant and ongoing reliance to these DRR approaches more than doubles in most instances. Clearly, NPs are having an impact on mainstreaming DRR approaches.

The second significant finding concerns the effectiveness of regional organizations. The 2009 HFA Europe Report found that EU Member States were pursuing coherent and complementary approaches to DRR at all levels, including the creation of regional organizations to build capacity for the respective levels to meet their appropriate responsibilities. The 2009 HFA Europe Report also found a need to standardize data on regional disaster risks and enhance/harmonize early warning systems.

This 2011 HFA Europe report finds that the European Commission and EU Member States have been responsive to the needs identified in the 2009 report, particularly as regards to capacity building, data collection and dissemination, integration of multi-hazard and transboundary approaches and improved early warning systems.

## Conclusions

At the national level the strategic goal statements illustrate the ways in which countries are moving from a culture of reactive response and recovery from disasters to proactive risk reduction and safety. This requires a significant change from a mindset of crisis to one of resilience.

Many challenges remain to successfully embed a resilience culture into policies, programmes and planning. The core challenge relates to the need for the political will to advance disaster risk reduction to the top of the policy agenda. This requires strong public support to ensure that political leaders are responsive to their constituents in assuring that disaster risk programmes are properly supported at all levels.

This is particularly true at local levels where capacities often remain underdeveloped due to insufficient resources. One common theme to emerge in the analysis is that at the national level, legislation is increasingly directed towards mandates for preparedness. But such mandates are not always accompanied with adequate funding for local governments to carry them out. Resource constraints have motivated innovative solutions at country and local levels. It is necessary to capture the lessons learned from these solutions to scale and replicate them to greater effect.

However, in comparing the conclusions of the 2009 HFA Europe report with the results reported in 2011, the evolution of mainstreaming DRR is clear. The EC has addressed, in its programmatic work, the challenges identified in 2009 and is establishing policy frameworks to embed DRR in policies and programmes as diverse as climate change adaptation and social and economic effects of natural and man-made disasters.

The reports of the countries and regional organizations show implementation of each of the recommendations set forth in the 2009 HFA Europe Report:

### At national level:

- Continued achievements in the implementation of DRR-related legal provisions and national policies as an inter-disciplinary approach.
- Further integration of DRR and management in sectoral policies and national development plans.
- Substantially enhanced cooperation at all levels, both horizontally and vertically, and between research programmes and projects in integrating DRR.
- Progress towards engagement of community-level organizations with appropriate resource mobilization for DRR advocacy – this is particularly evident in the “Making Cities Resilient Campaign”, further discussed in the next chapter.
- Substantially increased support for the establishment of National Platforms and regional platforms to enhance exchanges between the NPs.
- Improved access to information on disaster risk assessment and reduction measures, linking science and practice.
- Some progress towards engaging the private sector, but much more remains to be done.
- Continuous improvement of the coordination of information flow in disaster warnings and sharing lessons learned.
- Modest progress towards promotion of DRR themes at the level of school education, but much more remains to be done.
- Progress towards upgrading emergency management systems and early warning alerts.

### At regional level:

- Progress towards placing DRR high on the agen-

**Figure 3 : Approaches to Cross-Cutting Challenges**

Significant and ongoing reliance	All Reporting Countries 2011/ (2009)	Countries with NPs 2011
Multi-Hazard Approach	40% (36%)	75%
Gender	30% (36%)	100%
Capacities	35% (43%)	86%
Security/Social Equity	40% (50%)	88%
Engagement/Partnership	40% (43%)	100%

das of regional and sub-regional partners.

- Tangible results in integrating DRR in development partnerships and programmes.
- Significant accomplishments towards standardizing data gathering and usage and integration of climate risk in such analyses.
- Continued integration of DRR in sector strategies in national and international levels.
- This report presents recommendations to continue the responsiveness to the expectations and directions of the HFA going forward.

This report presents recommendations to continue the responsiveness to the expectations and directions of the HFA going forward.

## Recommendations

Based on the experiences reported by the national and regional partners via the HFA on-line reporting tool, and with reference to other information made available through UNISDR and its partners, the following recommendations are put forth for consideration:

### National level

- The 2009 HFA Europe Report recommended increased engagement of different actors to achieve the goals of DRR and, in particular, better use of resources through public-private partnerships. This report finds very limited progress towards implementing that recommendation. In particular, of the countries with National Platforms that reported results in 2011, 45% do not have representation from the private sector. It is critical to the success of the NPs that they be more inclusive. Specifically, the private sector can inform a more comprehensive assessment of risks and hazards, particularly as regards vulnerabilities impacting livelihoods and production. This is critical to the identification of emerging threats. The private sector should also be encouraged to contribute its distinct competencies to ensure that DRR is not limited to those with civil emergency responsibilities. The development of a common understanding and measurement of impacts is important not only to developing appropriate safety plans, but also to establishing the financial and social returns to DRR investment. It is strongly recommended that at national level, public-private partnerships be more vigorously pursued.
- It is recommended that the National Platforms engage media and communications professionals to develop public awareness campaigns to educate as to safety procedures and to build support

for DRR. UNISDR has begun with media training and handbooks, but public service messaging should be developed with a view towards message effectiveness in changing behaviors to build a culture of resilience. This is particularly important as nearly 100% of countries reported challenges in engaging individuals to comply with emergency procedures.

- Higher income countries reported reliance on access to capital and credit markets to finance possible disaster recovery needs. However, ex ante risk finance is typically more cost-effective than ex-post measures. Innovations on insurance coverage and the accessibility of global pools of capital in the reinsurance market offer countries new opportunities for risk transfer to ensure contingent capital when needed with lower risk. Countries should examine new, less capital-intensive measures to use insurance instruments to protect public resources. This recommendation should be considered in the context of the fragile nature of financial sector recovery where, for even the strongest sovereign credits, capital access cannot be taken for granted.
- Mainstreaming gender issues into DRR was identified as a challenge in the 2009 HFA Europe Report and remains a challenge today. Greater effort must be made to address the needs of the socially vulnerable, such as the elderly, the disabled, women and children. Towards that end, it is recommended that National Platforms engage social welfare and human development experts to compliment their expertise in civil preparedness.
- It is critical that countries address their vulnerable infrastructure, particularly as regards schools and hospitals. Risk assessments should be performed, procedures should be established to assure that such assessments are kept current and safety plans should be developed to ensure the protection of those facilities and the children and adults who use them. This is an area of relatively limited progress since the 2009 Report.
- Substantial progress has been made in gathering risk and hazard data. It is recommended that an appropriate investment be made in developing knowledge management and management information systems to ensure that such data can be retrieved, analyzed and used in the most effective manner.

### Regional level

- One finding that emerges from the report is the efficacy of National Platforms in mainstreaming DRR at national levels. Having a National Platform in place increased the likelihood of timely

reporting of results attained. Of the 18 countries with NPs, 15 reported results for the 2009 – 2011 time period. At the same time, as shown in Figure 3, countries with NPs in place were as much as 100% more likely to significantly rely on five key approaches (Multi-Hazard, Gender, Capacities, Security/Social Equity, Engagement/Partnership) proven effective to address cross-cutting challenges to DRR. For these reasons, it is strongly recommended that the regional organizations, in particular, the EFDRR, support the establishment of new NPs and the deepening of capacity in existing ones. A suggested approach is that regional platforms support “twinning” arrangements whereby countries with platforms mentor NP development in partner countries.

- Investment in contingent risk finance facilities is critical to mobilize cost-effective resources for coordinated disaster response. This investment should also include modernizing regulatory frameworks to ensure that access to affordable insurance is not unduly compromised in the efforts to reduce systemic financial risk. Such investment becomes more feasible when better data are available to support the returns on such programs. The EC has done considerable work in developing guidelines for risk assessment in European countries. In addition, the South East European countries are addressing this need through SEEC CRIF and other programmes and the EU is reflecting on the way to approach this relevant topic. It is recommended that the EC and the regional organizations examine the feasibility of expanding the successful catastrophe risk pools established in the SEE countries throughout Europe and perhaps even globally. Such expansion may offer the benefit of diversifying risk beyond perils specific to a geographic locale, thereby reducing the capital cost of underwriting such risks.
- Better risk assessment with a view towards quantifying the return on investment in disaster reduction activities is critical to build support for continuing or even increasing such investments. Absent such explicit analysis, countries are unable to justify diverting resources from current needs to investment in future resilience. At present, such evidence on returns to DRR investment is mostly anecdotal. In addition, the lack of transparent risk-reward assessments results in the pursuit of policies and programmes for risk governance arrangements of questionable efficacy. The EC has made significant progress towards standardizing data and establishing common methodologies in risk assessment. It is recommended as a further step to develop partnerships with the insurance sector, which has a significant repository of claims data, and the universities, to further develop cost-benefit analyses for DRR.
- It is recommended to build upon the success of the “Resilient Cities” campaign, which has been embraced by regional organizations, such as the Council of Europe, through the Council of Local Authorities, and the EFDRR. Three of the eight member states of DPPI SEE have officially committed to the campaign, the highest regional participation in all of Europe. This participation includes 18 cities in Serbia, 3 in Turkey and 1 in Croatia. The EFDRR and the Council of Europe are urged to advocate for broader participation in the campaign throughout all of Europe; in particular, as a means for engaging new stakeholders in DRR at all levels.
- There has been coherence regarding the recommendations developed in the 2009 HFA Europe Report and the area of focus in the past two years. This report presents information about a number of regional Ministerial Conferences and declarations; in particular, the EU parliamentary session of September 2010 demonstrating high level political engagement. An area of particular success concerns the EU Floods Directive, which had the effect of improving management of transboundary risks. In particular, this report finds coherence and harmonization among EU policies, programmes and frameworks for environmental risks and risks to critical infrastructure. It is recommended that regional organizations better communicate this work to the public to better inform support for continued DRR investment.



# **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. The chapter presents 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 illustrate the ways in which countries are moving from a culture of reactive response and recovery from disasters to proactive risk reduction and safety. This requires a significant change from a mindset of crisis to one of resilience.

The main strategic goal is to establish a principle of risk management for improved safety, instead of building defenses against threats. This requires more in-depth risk analysis than that afforded by the more traditional individual hazard assessment.

Towards this end, there are ongoing efforts to engage stakeholders at all levels and across all professional disciplines. Significant progress has been made in expanding the disaster preparedness dialogue to be more inclusive of local and municipal governments, the private sector, universities, NGO's and other actors.

There has been significant progress in each of the five HFA Priorities for Action. With respect to the first Priority, ensuring that disaster risk reduction is a national and local Priority with a strong institutional basis for implementation, with 85% of countries reporting institutional commitment in this area. However, the specific Indicators within this Priority show uneven levels of progress.

Strong gains have been made in establishing multi-sectoral national platforms, both as new platforms are established in countries that had not been previously represented and as existing platforms strengthen their capacity with the inclusion of new sectors.

At the same time, however, there remain serious constraints to securing adequate resources to implement disaster risk reduction planning at all administrative levels.

A similar pattern is observed with respect to the second Priority for Action : to identify, assess and monitor disaster risks and enhance early warning. The countries report significant achievements in assessing regional/transboundary risks, with a view towards improved cooperation. They also report continued challenges in integrating hazard data and vulnerability information for effective use.

With respect to the third Priority for Action, the use of knowledge, innovation and education to build a culture of safety and resilience at all levels, the quantitative indicators the countries provided in their self-assessments present an incomplete picture. The countries report innovative approaches to education and training that is not fully captured on the overall achievement levels. More work needs to be done to capture these lessons learned.

The fourth Priority for Action calls for the reduction of underlying risk factors where substantial achievements have been reported in each of the indicators. At the same time, the challenges in identifying emerging threats are not clearly captured in the reporting behind the Hyogo Framework.

Country reports tended to focus more on domestic risks with which they are familiar, such as earthquake risk, or more commonly, flood risks. The identification of less visible hazards remains a challenge.

Finally, strengthening the disaster preparedness for effective response for all levels is the fifth Priority for Action. Within this Priority, strong progress has been reported in building institutional capacity. The countries report serious constraints in accessing financial reserves and contingency mechanisms, without which many of the gains made will not be sustainable.

At the regional and international levels, cooperative efforts to enhance resilience are becoming more common and increasingly effective. However, implementation of these efforts to ensure coherence remains a challenge.

## 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.

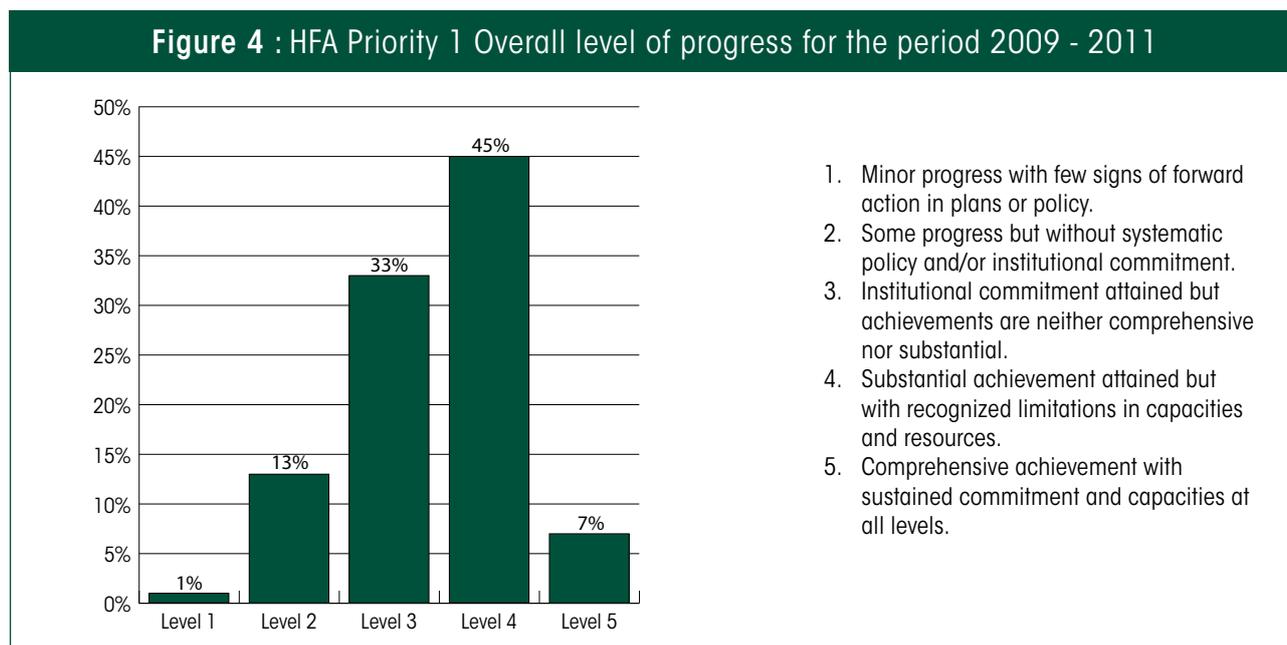
Countries that develop policy, legislative and institutional frameworks for disaster risk reduction, and are able to develop and track progress through specific and measurable indicators, have greater capacity to manage risks. They may also achieve widespread consensus for engagement in and compliance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

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

1. National policy and legal frameworks for disaster risk reduction exists with decentralized 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 underutilized or untapped.

**Figure 4 : HFA Priority 1 Overall level of progress for the period 2009 - 2011**



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.

## Overview of achievements, challenges and recommendations

There has been significant progress in ensuring that disaster risk reduction is both a national and a local priority among the countries that reported results for the 2009 – 2011 time period using the HFA on-line monitor. Progress is especially strong in the area of establishing national policies and legal frameworks with decentralized responsibilities and capacities, with some 85% of countries reporting substantial or comprehensive achievement in this area.

The participating countries reported challenges in updating legal frameworks and coordinating across different levels and the cross-cutting nature of disaster risk reduction. Financial resource limitations were identified as a severe constraint, particularly at local levels where there was often a mismatch between the demand for disaster risk reduction services and operations and the availability of resources to meet that demand.

Other key contextual challenges included the ability to address non-dominant risks, such as non-flood risks, for example, in locales that had historically experienced flooding. Addressing a broad range of risks and hazards within a single framework also remains a challenge for many of the reporting countries.

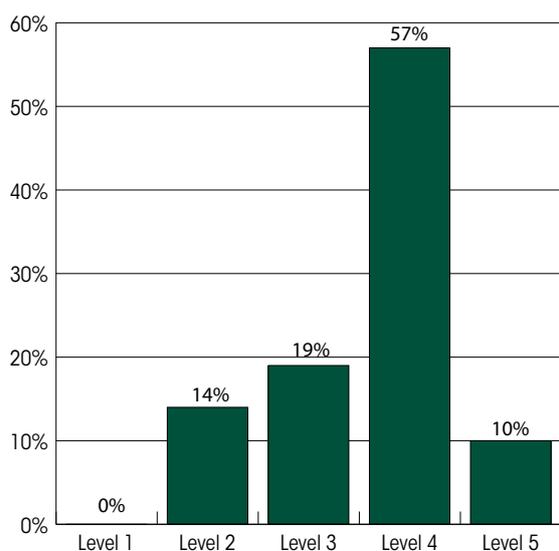
## Specific achievements, challenges and recommendations based on indicators

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

A country’s constitutions, 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 single law exists for its regulation. Instead, the elements of disaster risk reduction are integrated in national legislation at all levels<sup>8</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 over the 2009 – 2011 period, the majority, 57%, of reporting countries believe that substantial achievement has been attained, but with recognized limitations in capacities and resources. This is equivalent to the 56% reported over the 2007 – 2009 period. In the current period 10% of countries report comprehensive achievement with sustained commitment and capacities at all levels, a significant decrease from the 31% that reported comprehensive achievement in 2009. An additional 19% report institutional commitment, but the achievements are neither comprehensive nor substantial, up from 13% reported in 2009.

**Figure 5 : HFA Priority 1 Indicator 1 Percentage of Countries Achieving Levels of Progress 1-5<sup>9</sup>**



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.

Out of 21 countries: 4 are level 3 (19%); 12 are level 4 (57%); 2 are level 5 (10%).

<sup>8</sup> See HFA Monitor on-line, [www.preventionweb.net](http://www.preventionweb.net)

<sup>9</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

It is worth noting that 22 countries reported results, with 21 countries reporting numbers for this indicator using the on-line tool in 2009 -2011 versus 17 that reported in 2007 – 2009 with a different composition of countries represented in the two time periods. Thus, the results are not exactly comparable. Nevertheless, the results do show as trends, the challenges to achieving progress on this indicator, which many reporting countries attributed to a lack of resources.

An example of the evolutionary process of establishing frameworks for disaster risk reduction is illustrated in France where risk prevention is a major cross cutting policy, evidenced by France’s response to the European Union Floods Directive. In July 2010, France passed legislation that was translated into various codes (environment, urban planning, local authorities, insurance regulation) for implementation to comply with EU directives on addressing flood risks. Various plans and programmes contribute to the effectiveness of those laws, including : Priority Programmes of Action against Flood Prevention, Plans for Prevention of Natural Hazards and Technology, Plans Organizing the Response of Civil Defence, the Fund for the Prevention of Major Natural Hazards (Barnier funds) and the regime “Natural Disaster”.

The key contextual challenges reported by the countries/ national authorities/partner agencies involve:

- Challenges to address non-flood risks in areas where flooding was the dominant risk;
- Difficulties addressing broad ranges of hazards within a single framework;
- Coordination among different stakeholders and the cross-cutting nature of disaster reduction;
- Inadequate financial resources, particularly at the local levels.

Three recommendations emerge from the national reports. First, there is a need to ensure that national policies for disaster risk reduction are in place and encompass a range of risks to which the society is exposed. Second, there is a need to ensure that adequate resources are available for disaster risk reduction, particularly at local levels. Finally, it is critical to engage all of the stakeholders in these efforts.

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

## Good Practice

### Enshrining an Integrated Disaster and Emergency Management System in the Legal Framework - *Serbia*

In 2009, Serbia dramatically changed its approach to disaster and emergency management. The need for establishment of an integrated disaster and emergency management system was recognized by the Government, which led to the restructuring of the previous system in which different ministries had divided emergency management responsibilities. The reorganization resulted in the establishment of the Sector for Emergency Management (SEM) within the Ministry of Interior. SEM’s role is to further develop disaster and emergency management policies and recommendations for inclusion of disaster risk reduction measures into development policies as well as to coordinate the activities on local, regional and national levels.

SEM’s most important step towards the establishment of an integrated disaster and emergency management system was to set up a legal framework in this area. The Serbian National Assembly adopted the Law on Emergency Situations and the Law on Fire Protection on 29 December 2009. The Law on Emergency Situations defines and governs the following: actions, declaration of and management in emergency situations; responsibilities of national authorities, autonomous provinces and local authorities in disaster and emergency management system; citizens’ rights and obligations; organization and activities of civil protection; organization of the monitoring, notification and alert system and the future 112 system; funding; inspection activities; international cooperation and other issues of importance for disaster and emergency management.

The Law on Emergency Situations decentralizes disaster and emergency management system imposing greater responsibilities to local authorities. Local authorities are obliged to prepare and regularly update risk and vulnerability assessments and emergency plans since the efficient first response begins at local level.

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 operations 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>10</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 over the 2009 – 2011 period, the majority, 57%, of reporting countries are of the opinion that substantial achievement has been attained, but with recognized limitations in capacities and resources. This is a slight decrease from the 67% reported over the 2007 – 2009 period. Not a single country reported comprehensive achievement with sustained commitment and capacities at all levels, a decrease from the 7% reported in 2009. An additional 29% report institutional commitment, but the achievements are neither comprehensive nor substantial, equivalent to the 27% reported in 2009.

Certain challenges and constraints reported in 2009 remain relevant in 2011, mainly at local and regional levels, including a lack of both financial and human resources. In addition, allocation of resources dedicated to disaster risk reduction activities is a challenge common to most reporting countries. Many countries reported that they do not have a specific line item in their budgets for disaster risk reduction activities. Rather, DRR activities are financed indirectly through other department and agency

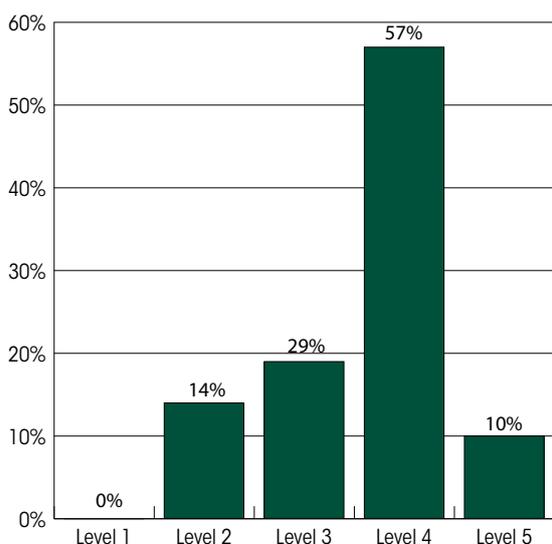
programmes, such as health and welfare, environmental protection, investment and so forth.

Incorporating climate adaptation issues into the work of disaster risk reduction is a focus of many activities. However, it remains a challenge to demonstrate that actions taken to adapt to climate change are adequate and cost-effective. Countries reported the availability of resources for disaster risk reduction activities to be a more severe constraint relative to the 2009 reporting period.

At the regional level, the European Union Floods Directive requires cross-border cooperation, representing both a challenge and an opportunity to countries and regions to mobilize resources and coordinate efforts. Countries reported that economic constraints limited such disaster risk reduction activities.

An area of visible progress concerns the implementation of disaster risk reduction concepts and programmes for disaster mitigation and disaster preparedness. The 2009 HFA Europe report found that development cooperation programmes and projects were mainly financed through emergency aid, which was insufficient for a comprehensive integration of disaster risk reduction. The main challenge to such integration was attributed to inadequate resources. In the current reporting period, despite the fact that availability of resources at national and local levels is a more severe challenge, countries have made visible gains in integrating disaster risk reduction activities in development partnerships.

**Figure 6 : HFA Priority 1 Indicator 2 Percentage of Countries Achieving Levels of Progress<sup>11</sup>**



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.

Out of 21 countries: 6 are level 3 (29%); 12 are level 4 (57%); 0 are level 5 (0%).

<sup>10</sup> See HFA Monitor on-line, [www.preventionweb.net](http://www.preventionweb.net)

<sup>11</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

Dedicated, adequate resources to implement DRR at all levels – *France*

In an economic downturn, committing funds for risk mitigation is often difficult with many countries reporting decreased funding for such activities. France built consensus around the need for DRR within the context of environmental protection and was able to increase its 2010 funding levels relative to what they had been in 2009. For 2010, funds allocated for “Program No. 181: Environmental Protection and Risk Prevention” totaled € 308 million, a 30% increase over 2009 funding levels. France also increased its 2010 funding to its meteorological service by 2.7% relative to 2009 levels. Fonds de prévention des risques naturels majeurs (FPRNM) or “Bottom Barrier” (the fund for the prevention of major natural hazards) and Catastrophes Naturelles (“CATNAT, the system of compensation for natural disasters) are primarily funded by a 12% levy on premiums for housing guarantees.

Germany, for example, has maintained its support for disaster reduction since 2009 and currently invests resources for humanitarian assistance focused on disaster reduction with partners such as UNISDR, the German Committee for Disaster Reduction, NGO’s and government agencies. The German Red Cross also receives funding for disaster reduction, mainly through the German Government and the EU and implements substantial DRR programmes on the local level in partner countries.

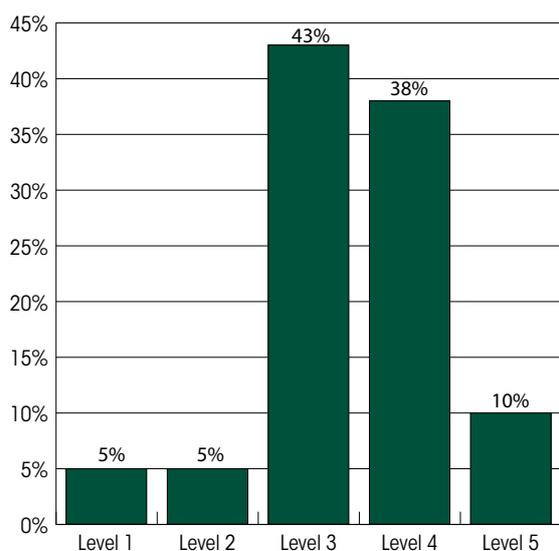
It is recommended that further research be performed to demonstrate the efficacy of investment in disaster reduction activities. Such an effort may better inform policy makers faced with difficult tradeoffs in allocating limited resources in a challenging economic environment. It is

further recommended that such research investigate the cost-effectiveness of regional cooperation in disaster risk reduction activities to advocate for resource mobilization for such activities.

**Indicator 3 :** *Community participation and decentralization are assured 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 levels, promotion of knowledge networks, strategic management of volunteer resources, attribution of roles and responsibilities, and the

**Figure 7 :** HFA Priority 1 Indicator 3 Percentage of Countries Achieving Levels of Progress<sup>12</sup>



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.

Out of 21 countries: 9 are level 3 (43%); 8 are level 4 (38%); 2 are level 5 (10%).

<sup>12</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

### Community participation and delegation – Norway

Norway's 430 municipalities are the local foundation of its national disaster risk reduction programme. The municipalities are responsible for the functioning of key public services and the coordination of those services during emergencies. These services include management of local infrastructure, health services, care for the elderly and other vulnerable populations and dissemination of information to the public. Consistent with the principles of responsibility and of proximity, the primary responsibility for preventive planning and disaster management within their borders resides with the municipalities. They are required to have operational fire and rescue services and, as from 2010, they are required by law to establish systems for emergency preparedness and response. The new Plan and Building Act also requires municipalities to conduct risk and vulnerability analyses in connection with new physical developments.

delegation and provision of authority and resources at local levels.

Of the 21 countries that responded using the on-line tool, 43% reported that institutional commitment has been attained but achievements are neither comprehensive nor substantial. This represents a significant increase over the 31% of countries that achieved this result in 2009. An additional 38% report that substantial achievement has been attained but with recognized limitations in capacities and resources, a significant decline from the 50% of countries reporting that result in 2009. Finally, 10% report that comprehensive achievement has been attained with sustained commitment and capacities at all levels, roughly equivalent to the 13% of countries that had achieved this level in 2009.

A consistent theme emerges from the country reports: most of the responsibility for mitigation, preparedness, planning and recovery efforts has been transferred to municipalities and local governments. The local levels are already responsible for the administration of critical public services such as infrastructure, care for the elderly and other vulnerable populations, health services, and communication and coordination with the public during emergencies. Yet the countries report that local authorities do not have resources sufficient to discharge these responsibilities. Compounding this strain is the fact that the local governments are also the first responders for civil emergencies and must budget for such demands on limited resources.

A second theme consistent in the country reports is the challenges and difficulties inherent in integrating all of the aspects of disaster risk reduction at the local levels. For example, certain authorities, such as water administration or environmental management, may address flood

management but not yet local urban development plans. Further capacity building at the local level is needed with the establishment of sustainable funding for all of the demands made for operationalizing disaster risk reduction at the local levels.

Finally, engaging all of the stakeholders in local disaster risk reduction activities has proved a challenge. It is often the case that other stakeholders in civil society believe it is the exclusive role of governments to provide for public safety. Or perhaps NGO's and other players wish to play a role but their capacity cannot be productively utilized as they lack information about how to contribute to DRR activities. It is recommended that the national platforms expand their efforts to include many different stakeholders to ensure a comprehensive approach to risk mitigation and community safety.

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

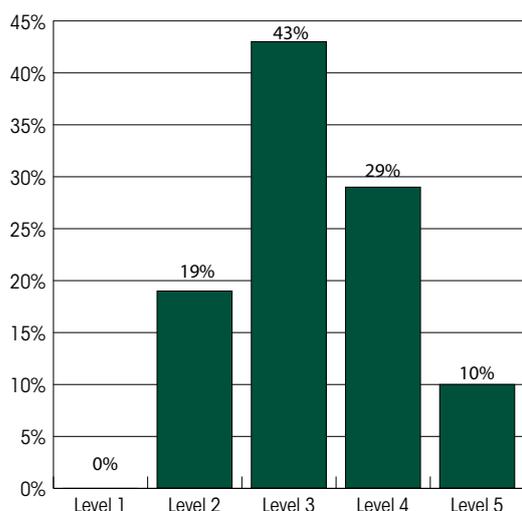
A multi-sectoral National Platform (NP) for disaster risk reduction is as a nationally owned and led mechanism facilitating the interaction of key development players around the national disaster risk reduction agenda. The National Platform serves as an advocate for adopting disaster risk reduction measures at all levels.

The following EU countries have officially designated National Platforms<sup>14</sup>: Bulgaria, Czech Republic, Finland, France, Germany, Hungary, Italy, Poland, Portugal, Spain, Sweden and the United Kingdom. An additional six non-EU countries have also established National Platforms: Armenia, Croatia, the former Yugoslav Republic of Macedonia, Monaco, Russian Federation and Switzerland.

<sup>13</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

<sup>14</sup> For additional information on National Platforms and HFA Focal Points in Europe, see <http://www.unisdr.org/europe/eu-publications/DRR-in-europe.pdf>.

**Figure 8 : HFA Priority 1 Indicator 4 Percentage of Countries Achieving Levels of Progress<sup>13</sup>**



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.

Out of 21 countries : 9 are level 3 (43%); 6 are level 4 (29%); 2 are level 5 (10%).

The following 36 European countries have nominated HFA Focal Points for disaster risk reduction: Albania, Armenia, Austria, Azerbaijan, Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, the former Yugoslav Republic of Macedonia, 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.

### Countries in Europe with National Platforms, 2011

The way National Platforms are linked or integrated into the governmental system of their countries determines the way they can influence national decision-making processes. National Platforms that 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>15</sup>.

Figure 8 summarizes how partner countries assessed the development and functioning of the national multi-se-

ctoral platforms for disaster risk reduction. In total, 43% of self-assessed countries report that institutional commitment for this indicator has been attained, but achievements are neither comprehensive nor substantial. This represents nearly a one-third increase from the level of 31% reported in 2009.

Substantial achievement was attained but with recognized limitations in capacities and resources by 29% of reporting countries, down significantly from the level of 44% reported in 2009. A further 10% of countries reported comprehensive achievement with sustained commitment and capacities at all levels, as compared with 6% in 2009.

However, it should be noted that this report reflects a larger reporting group, 22 countries overall, versus 17 countries that reported results in 2009. Moreover, certain countries that reported results in 2009 did not report or have yet to report for 2011. Other countries are reporting results for the first time in 2011.

The effectiveness of National Platforms in advancing a disaster risk reduction agenda is evident in the increasing number of countries seeking to establish NPs. Over the 2009 – 2011 reporting period, the following countries established National Platforms: Armenia, Croatia, Finland, Monaco, Poland, Portugal and the UK. Countries that are presently working to establish National Platforms include Montenegro, Norway, Serbia and Turkey.

In May 2010, Finland established a National Platform<sup>16</sup> and coordination mechanism in which 13 organizations are represented. The NP is a permanent network and is

<sup>15</sup> 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

<sup>16</sup> [http://www.intermin.fi/intermin/home.nsf/pages/index\\_eng](http://www.intermin.fi/intermin/home.nsf/pages/index_eng)



open to new members, including NGOs and the private sector. The goals of the Finnish NP are to:

- Improve the preparedness for and mitigate damage of potential disasters;
- Convene different actors to utilize work that has already been performed and coordinate future work relevant to disaster reduction; and
- Develop cooperation with the EU and neighboring countries and support transitional countries to build more risk-resilient societies.

In 2009, Poland formally established its National Platform for disaster risk reduction from what was formerly the IDNDR (International Decade for Natural Disaster Reduction) Committee that had been established in 1991 by the Institute of Meteorology and Water Management. Diverse actors are represented within Poland’s National Platform for DRR, including government agencies, scientific institutes and the Polish Red Cross.

To create an effective structure for disaster management in Turkey, the main actors responsible for this function were joined under the Prime Ministry “Disaster and Emergency Management Presidency (AFAD). Within this new organization, three boards and committees were established with membership coming from governmental organizations, non-governmental organizations, universities and the private sector. AFAD has begun the studies necessary to establish a national platform for disaster risk

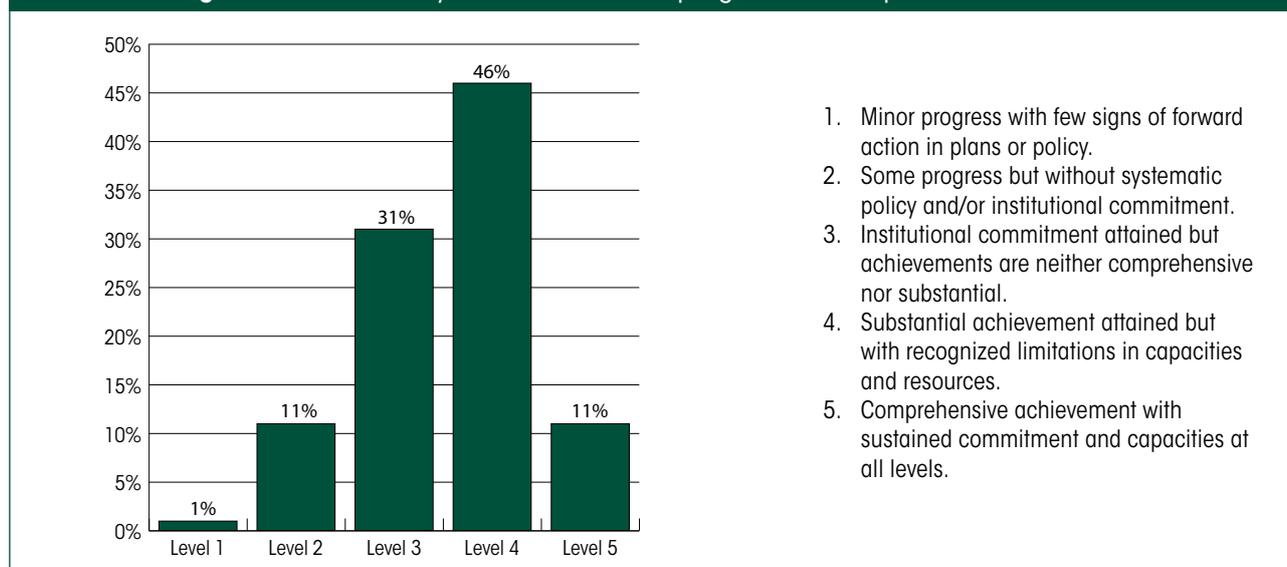
reduction with a view towards completion by year-end 2011. AFAD has also begun to evaluate an accreditation system for NGOs working on DRR activities in Turkey.

The key challenge facing the development of multi-sectoral platforms is that governments have traditionally entrusted responsibility for preparedness to civil protection organizations. These organizations have discharged their responsibilities for emergency response, but often do not possess the full scope of competencies required for the coordination of all multidisciplinary disaster risk reduction needs. This limitation hinders awareness and accessibility to other stakeholders.

An example of successfully integrating a diverse range of professional competencies can be found in the former Yugoslav Republic of Macedonia. Its national, multi-sectoral platform for disaster risk reduction consists of 32 ministries and government agencies and 21 inspectorates, 85 municipalities, 42 public enterprises and services, 79 institutes, research centres and observatories, 173 laboratories, 9 humanitarian organizations, 11 stress and trauma treatment organizations, 21 trading organizations for disaster risk reduction as well as the business and religious communities. Within the platform, seven specialized platforms address specific risk types. Thematic working groups relate to interdisciplinary issues and link two or more specialized platforms.

Scientific, legal and other specialist professionals contribute their expertise as members of the platform. The national platform is organized on national and municipal

**Figure 9 : HFA Priority 2 Overall level of progress for the period 2009 - 2011**



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.

levels; regional councils have been established to deal with risks that cross municipal boundaries. The position of a national coordinator has been established to coordinate and communicate among the stakeholders in the national platform.

In addition, the platforms have a role to play in advocacy, which could be enhanced by supporting research into the cost-effectiveness of disaster risk reduction activities. Such efforts require engaging with universities and NGO's to truly embrace a multi-sectoral approach to building resilience. Engaging stakeholders across a range of sectors in civil society and governments is recommended for the optimal functioning of the National Platforms.

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.

### 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 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” on which progress on implementation can be monitored and reviewed and challenges identified :

1. National policy and local risk assessments based

### Overview of achievements, challenges and recommendations

The reports suggest that sustaining the rate of progress attained in the 2007 – 2009 reporting period had been a challenge. In 2011, some 57% of countries report either substantial or comprehensive achievement in this area and a further 31% report institutional commitment has been attained. This compares with 70% of countries that reported either substantial or comprehensive achievement in 2009 and 23% that reported having attained institutional commitment.

Certain of the indicators remain even with results reported in 2009: putting systems in place to collect, monitor and disseminate key risk data, and establishing and enhancing early warning systems. Consistent with the finding reported in 2009, scarce financial resources were identified as a significant obstacle in this area, particularly in transitional countries.

It is worth repeating that 21 countries<sup>17</sup> reported numbers

<sup>17</sup> For reporting indicators, 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

in 2009 -2011 for the indicators of HFA Priority 2 versus 17 that had reported in 2007 – 2009 with a different composition of countries represented in the two time periods. Thus, the results are not exactly comparable. Furthermore 9 of the 21 countries that reported indicators in this current cycle (Albania, Finland, Georgia, Moldova, Monaco, Poland, Portugal, Romania and Spain) are reporting for the first time.

At the same time, six of the countries that reported in this cycle (Armenia, Croatia, Finland, Monaco, Poland and Portugal) formed National Platforms since the 2009 HFA progress report was published. Thus, for a number of the countries included in this report, the 2011 indicators are their first baseline measures for accomplishing the mandate of the HFA.

One key challenge is consistent in the country reports : the lack of financial resources to accomplish critical disaster risk reduction initiatives. Bulgaria, for example, reported that its government met 25% of its funding requests for DRR work, reflecting the extreme scarcity of resources in a difficult economy.

One area of significant progress concerns regional and transboundary cooperation. New regional initiatives, such as the European Forum for Disaster Risk Reduction, offer exchanges for accomplishing critical DRR goals while existing regional initiatives, such as the Disaster Preparedness and Prevention Initiative for South Eastern Europe, have made advances in their programmes. Specific information about these accomplishments is provided in the second section of this report.

## 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.**

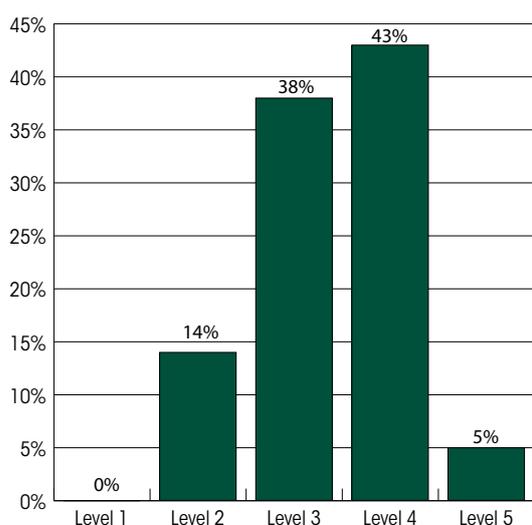
National risk assessments allow decision makers and communities to understand the country’s exposure to various hazards and its social, economic, environmental and physical vulnerabilities and to take effective action to reduce disasters and environmental risks.

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 countries report significant progress in this area, with some 48% describing their achievements in the field of risk assessment as substantial or comprehensive. This represents a decrease from the 69% that achieved this result in the 2007 – 2009 reporting period. A further 38% reported institutional commitments attained that were neither comprehensive nor substantial, an increase from the 25% that achieved this result in the 2009 reporting period.

The level of progress made towards developing risk assessments appears to be strongly correlated with economic and other indicators of national development. Among the

**Figure 10 : HFA Priority 2 Indicator 1 Percentage of Countries Achieving Levels of Progress<sup>18</sup>**



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.

Out of 21 countries: 8 are level 3 (38%); 9 are level 4 (43%); 1 is level 5 (5%).

<sup>18</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

### Assessing local risks – *Finland*

Countries report varying degrees of achievement with respect to implementing the European Critical Infrastructure Directive. Finland has produced a document (“Strategy for Securing the Functions Vital to Society”), which defines critical functions for which risk assessments are performed at local, regional and national levels. Each of the government ministries and sector organizations support the municipalities by collating statistics and furnishing data for risk analyses.

Finland reports that it has performed risk assessments on 100% of its schools and hospitals and developed rescue plans for each one. Local fire inspectors review these plans on an annual basis ensure that they are up to date. Schools are also required to document all relevant safety and security threats and the manner in which they are to respond to such threats.

higher income countries reporting in the current cycle, Germany, Spain, Sweden and Switzerland reported strong levels of attainment in developing risk assessments.

With respect to performing risk assessments on critical services, such as hospitals and schools, the same correlation of economic development and achievement is observed. Finland, for example, reports that it committed resources towards implementation of the European Union Critical Infrastructure Directive. It has completed risk assessments on 100% of its schools and hospitals and devised rescue plans for each one. Armenia, by contrast, reports that it has not performed risk assessments on its hospitals and has done so for only 1/3 of its schools.

Three specific challenges and constraints emerge from the reports. The first is countries are committed to taking steps to reduce disaster risk to their critical infrastructure; however, resource constraints limit their effectiveness. The second is that as countries modernize and update their hazard assessments, it is often difficult to keep the public informed of the latest information to ensure compliance with safety measures. Finally, countries are challenged to assess risk for emerging hazards versus known risks.

In terms of recommendations, countries are strongly urged to respond to these challenges by engaging different stakeholders. A multi-stakeholder risk analysis tends to correct for the cognitive bias inherent in limiting the risk analysis to a single group, such as civil authorities with responsibility for emergency response. Non-governmental organizations and other players in civil society can inform a more comprehensive analysis of risks. They may also play vital roles in informing a broader range of constituents as to the need for compliance with disaster risk reduction measures.

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

*nerabilities.*

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.

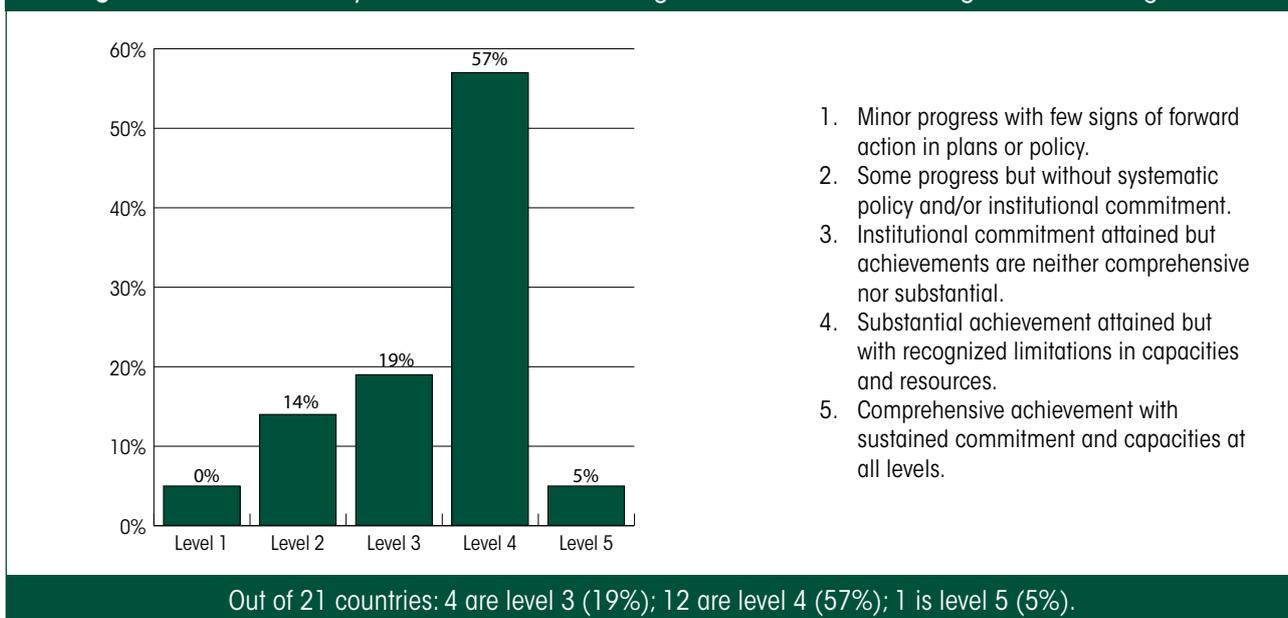
A full 57% of countries report substantial achievement but with recognized limitations in capacities and resources in this area, with one country reporting comprehensive achievement with sustained commitment and capacities at all levels. This is almost identical to the results achieved in the 2009 reporting cycle.

Five specific challenges and constraints emerge from the reports. The first concerns the difficulty in monitoring and disseminating data on emerging threats and hazards, such as, for example, pathogens in drinking water or other environmental dangers induced by climate change.

The second concerns the lack of common understanding or appraisal of impacts. Property damage or destruction of key physical infrastructure is relatively easy to measure, but other losses, such as reduction of the tax base when disasters disrupt livelihoods, loss of biodiversity, environmental risks, and social or cultural risks (such as reduced quality of life or impairment of a community due to population shift induced by disaster risks) are more difficult to measure. To address these gaps in understanding, it is recommended to engage experts from a range of professions and perspectives in the assessment process.

The third challenge concerns the difficulties inherent in collecting and disseminating data from the private sector to inform a comprehensive identification of key hazards and vulnerabilities to society. Private sector players are understandably reluctant to disclose threat incidents for fear of revealing areas of vulnerability that might invite

**Figure 11 : HFA Priority 2 Indicator 2 Percentage of Countries Achieving Levels of Progress<sup>19</sup>**



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.

further attacks. Collecting such information for analysis requires discretion as well as resources and logistical support.

A further challenge concerns the capacity for data storage and appropriate taxonomy for filing for fast retrieval the key information collected. The challenge is both a physical problem for the data storage systems and a knowledge management problem as the data sets grow in complexity. Since data are typically collected on a project basis by hazard or by peril (the earthquake responders, the fire brigade, etc.), identifying information with appropriate “tags” for search and retrieval capability for cross-cutting risks is a challenge. The task is more than collecting data; it is necessary to make sure that the data are easy to retrieve and accessible.

The achievements of Sweden in establishing data systems have led to increased knowledge about the types and frequencies of risks and emergencies in the municipalities. Sweden has robust systems in place to monitor, archive and disseminate data on key hazards and vulnerabilities. All municipalities annually report their local emergencies to Sweden’s Civil Contingencies Agency (MSB), which compiles statistics for each municipality in the country. The compilation of these data comprises the national emergency services statistics, which are published annually. Sweden also maintains a database to register information about injuries.

Sweden’s Civil Protection Act requires that investigations be conducted after emergencies. Such investigations yield data and insightful information about the types and causes of emergencies. These data are captured and reported

by the MSB. In addition the MSB has developed and updates a national natural hazards database that can be accessed from the UNISDR PreventionWeb. The Swedish Geotechnical Institute maintains a landslide database.

The MSB has developed “Fire Risk - Forest and Land”, a national information system to assess the risk of vegetation fires. This system is available to municipal fire brigades and county administrative boards and is also available on the Internet. It contains, for example, information about how the weather can affect the risk level for vegetation fires. The system provides basic data for prevention work and can also assist in decision-making during emergency response operations.

The Swedish Meteorological and Hydrological Institute collects observational data and climate model data nationally and is responsible for quality control. The Mapping, Cadastral and Land Registration Authority of Sweden established Saccess, a national database of satellite data. It provides data, free of charge for non-commercial use, including historical data sets from the 1970s, 1980s, as well as annual comprehensive national data sets from 2007. This agency has also developed a new national elevation database with output from laser scanning.

The complex task of integrating data for ease of use is critical to the productive use of those data in improving disaster risk reduction measures. Given the diversity of actors involved in collecting these data and the very distinct data types critical for analysis, innovations in knowledge management techniques are required.

Finally, resource availability is a challenge. Most coun-

<sup>19</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

National and local risk assessments based on hazard data – *Norway*

Every year the Norwegian Directorate for civil protection and emergency planning conducts and publishes a national vulnerability and preparedness analysis. At the local level, 96% of the municipalities have conducted local risk and vulnerability analysis within the past four years. Norwegian authorities are currently developing a national risk assessment. The aim is to create a cross sector approach to risk assessments enabling national authorities to compare different types of hazards and risks. The methodology is inspired by the Dutch and British approach in which different types of events are measured according to their likelihood and consequences, and finally put into a matrix. A cross sector risk matrix will give Norwegian authorities a better understanding of national risks and vulnerabilities, and hence a better basis for prioritizing preparedness resources. The first national risk assessment will be published in 2011.

tries do not have dedicated line items in their budgets for disaster risk reduction activities. The funds are typically sourced from different agencies, such as environmental programmes, investment programmes, and other functions. Those items are vulnerable in the current climate of fiscal austerity.

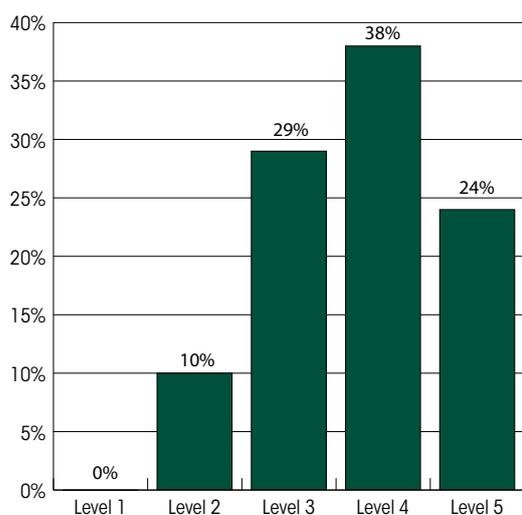
It is recommended that more work be done on the efficacy of return on investment in disaster risk reduction initiatives to demonstrate to stakeholders the importance of DRR programmes. It is also recommended that the DRR community embrace knowledge management techniques and best practices in data management, which is increasingly important as data sets become more complex.

**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 a timely and appropriate manner so as to reduce the likelihood 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% reporting substantial or comprehensive achievement. This is almost even with the 63% that achieved comparable levels in the 2009 reporting cycle. A further 29% of countries are of the opinion that they have attained institutional commitment but that their achievements are neither comprehensive nor substantial. This is unchanged from the 32% of countries achieving the same level in 2009.

**Figure 12 :** HFA Priority 2 Indicator 3 Percentage of Countries Achieving Levels of Progress<sup>20</sup>



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.

Out of 21 countries: 6 are level 3 (29%); 8 are level 4 (38%); 5 are level 5 (24%).

<sup>20</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

The 2009 report on progress in implementing the HFA in Europe stated<sup>21</sup> :

*“However, there is a particular issue with countries in the UNISDR broader geographical coverage of Europe and neighboring states. The main obstacle in this area is scarce financial resources. Because of the high cost of these systems, transitional countries in particular struggle to find the resources necessary for their implementation; often there are several other priorities limiting stretched budgets.”*

This observation holds true today. In reading the country reports, a clear correlation exists between a country’s level of economic development and its achievement in developing and implementing early warning systems. Transitional countries are particularly vulnerable, as disasters can delay or even reverse a country’s development goals.

One of the countries that reported results for this cycle, Finland, built the world’s first national digital radio network based on the TETRA standard for use by the emergency authorities. The network enables top quality sound, data and moving image transmission even in extreme conditions. The Finnish Meteorological Institute together with Finnish Environment Institute and Institute of Seismology is developing a new early warning system for natural hazards called LUOVA. The pilot phase of LUOVA is currently underway. The system will be operational in 2011 as part of government’s situation awareness center.

Other countries in Europe report challenges in the implementation of early warning systems. Armenia, for example, has experienced extreme earthquakes over its history. It reports that its centralized system of early warning is not entirely functional. In addition, it is a complex task to integrate early warning systems in the economically sensitive mining sector. Incidents in this sector are often reported after the fact by the news media.

It is recommended that development partnerships explicitly address the need for robust early warning systems in the context of the Hyogo Framework.

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

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 standardized and accessible information and data on regional disaster risks, impacts and losses.

The majority of countries, 58%, report substantial or comprehensive achievements in this area, a decline from the 75% of countries that attained comparable levels in 2009. A further 38% have attained institutional commitment but their achievements are neither comprehensive nor substantial. This represents an increase over the 25% of countries that reported similar levels in 2009.

Poland provided an example of achievement in assessing transboundary risks with a view to disaster risk reduction. Poland works collaboratively with its neighbors and other countries in the region to identify threats and hazards common to all, to exchange information and agree to procedures for effective, coordinated response. This cooperation is realized both in the form of bilateral agreements with neighboring countries and multilateral agreements with such organizations as the United Nations Economic Commission for Europe, the Council for the Baltic Sea States, the Central European Initiative and the Office for the Coordination of Humanitarian Affairs (which includes INSARAG – International Search and Rescue Advisory Group). Poland also carries out international cooperation on disaster risk reduction with the Central European Disaster Prevention Forum Platform (CEUDIP), the European Forum for Disaster Risk Reduction and A European Network of National Platforms.

Three conclusions can be drawn from the reports. The first is that economic challenges affect bilateral cooperation on transboundary risks. Higher income countries have effective bilateral agreements in place, particularly as regards

## Good Practice

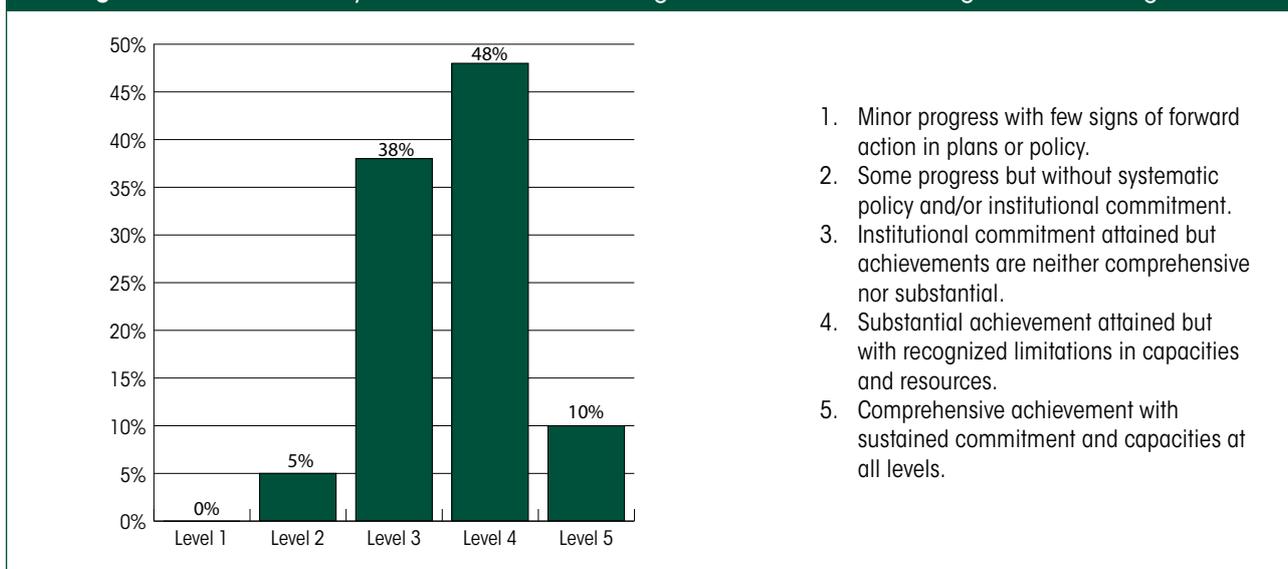
Early warning systems are in place with outreach to communities – *Czech Republic*

The Czech Republic has extensive experience<sup>22</sup> in responding to floods. As such, it has put in place effective early warning systems to provide risk-prone communities timely and understandable advance warnings of impending hazards. The Czech Republic participates in the Elbe, Oder and Danube River Commissions; its National Platform cooperates with the NP’s from France, Germany and Poland in respect of transboundary flood risks and early warnings.

<sup>20</sup> Page 15

<sup>22</sup> [http://www.preventionweb.net/files/15427\\_weatherandemergencis2006](http://www.preventionweb.net/files/15427_weatherandemergencis2006)

**Figure 13 : HFA Priority 2 Indicator 4 Percentage of Countries Achieving Levels of Progress<sup>23</sup>**



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.

Out of 21 countries: 8 are level 3 (38%); 10 are level 4 (48%); 2 are level 5 (10%).

flood risks for rivers on shared borders. They have the means and resources to support the regular exchanges of information on risk and threat assessments, perform joint training exercises and provide early warnings through appropriate arrangements. Transitional countries have fewer resources to satisfy more competing demands for support. Regional mechanisms for cooperation may allow for more efficient use of limited resources and reduce costly duplication.

Within the EU, regional flood management continues to show progress. The EU Floods Directive, which became effective in November 2007, aims to mitigate the risks that floods pose to society, cultural heritage, the environment and the economy. The Directive requires Member States to carry out an initial assessment to identify river basins and associated coastal areas at risk of flooding. For such identified areas, Member States must draw up flood risk maps by 2013 and establish flood risk management plans focused on prevention, protection and preparedness by 2015.

Many countries report initiatives for transboundary cooperation motivated by the need to comply with the EU Floods Directive. In addition, weather forecasting and monitoring systems show continued improved capacity through increased international cooperation with the Global Monitoring for Environment and Security and the World Meteorological Organization.

The European Union Floods Directive has harmonized certain risk management practices. France has formalized cooperation for managing flood risks in the following riv-

ers: the Upper Rhine (with Germany and Switzerland), the Semoy (with Belgium and France) and the Garonne (with Spain). France contributes to the work of the European Commission (including the development of a community approach to risk management) of the EUR-OPA Council of Europe, the Union for the Mediterranean, Alpine Convention and the European Forum for Disaster Risk Reduction SIPC. Since 2009, France has chaired A European Network of National Platforms<sup>24</sup> which works to strengthen early warning systems, support the role of prevention in coping strategies, build links between prevention and relief, and give feedback to influence national policies.

Second, the country reports dealing with the aspects of transboundary risks reveal the cognitive bias inherent in the cooperative process. This reporting period follows a significant period of extreme flooding in Europe. In 2010, heavy rains led to devastating floods in Central and Eastern Europe in May and June with serious consequences for Poland, Austria, the Czech Republic, Germany, Hungary, Slovakia and Serbia also affected. In June 2010, France also experienced extreme floods.

So it is not surprising that cooperation on flood risks is top of mind for disaster risk reduction and features prominently in the country reports. Less familiar risks tend to receive lower priorities in such cooperative efforts. In March 2010, for example, a volcano in southern Iceland's Eyjafjallajökull glacier began to erupt, disrupting air travel and with it, commercial activity throughout Europe.

Increasingly economic losses are less correlated with phys-

<sup>23</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

<sup>24</sup> <http://www.ennp.eu>

## Good Practice

### Regional transboundary risk assessment/cooperation – Croatia

Croatia cooperates with its neighboring countries through bilateral agreements signed with Austria, Bosnia and Herzegovina, Hungary, Montenegro, Poland, Russia, Slovak Republic and Slovenia, as well through regional initiatives and organizations (Disaster Preparedness and Prevention Initiative), CMEP SEE (Civil-Military Planning Council for Southeast Europe) and participation in the EU Civil Protection Mechanism. This cooperation provides for sharing information on risk assessment and developing strategies for joint emergency responses.

ical damage or loss. Business interruption losses, such as those caused by the Icelandic volcano, are more difficult to assess and significantly, the country reports did not address threats arising to them from more remote locales that nevertheless require regional cooperation.

Finally, efforts aimed at enhancing regional cooperation on risk reduction are assuming increasing importance. The European Forum for Disaster Risk Reduction (EFDRR) was established during the Meeting of European National Platforms and HFA Focal Points, in November 2009 in London. Following the official launch of the EFDRR, a concept paper was developed in May 2010 and finalized in December 2010. The European Forum includes HFA Focal Points and representatives of National Platforms in the European region, UNISDR-Europe, regional organizations, in particular representatives from the Council of Europe EUR-OPA, and representatives from the European Commission and sub-regional organizations/institutions as agreed by the Forum. Further information on the achievements of the EFDRR is provided in the second section of this report.

### 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” on 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.

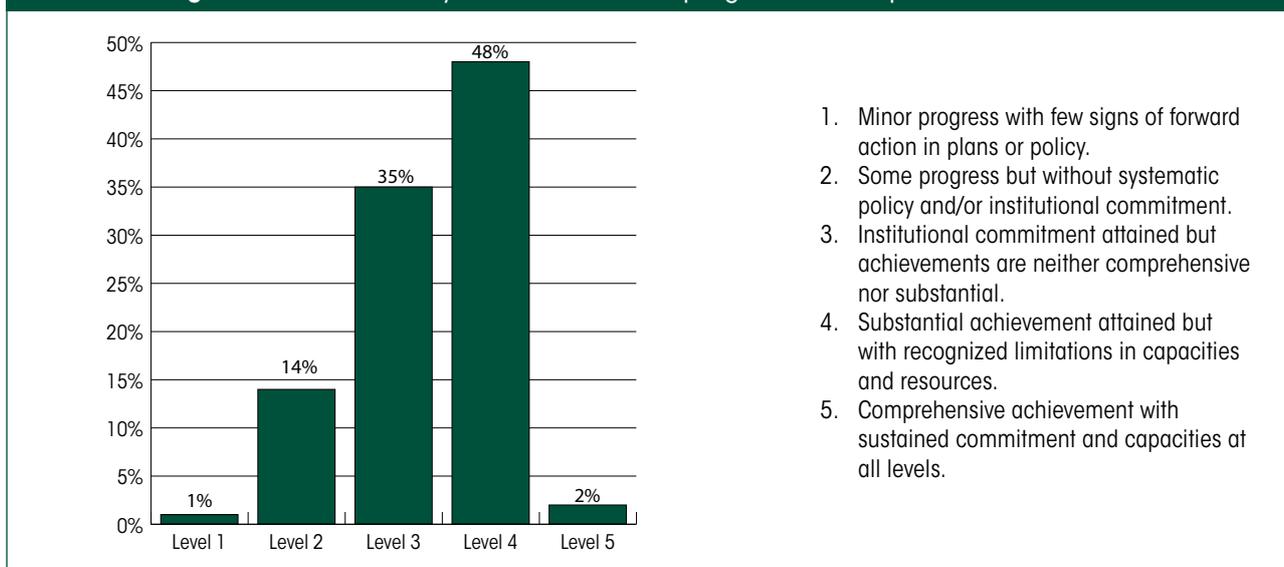
## Overview of achievements, challenges and recommendations

Progress in the use of knowledge, innovation and education to build a culture of safety and resilience remains even with levels of attainment reported in 2009. In 2011, 50% of countries report substantial or comprehensive achievement in this area, virtually even with the 56% that reported in 2009. Furthermore, there is significant variation in the extent to which the policies, programmes and initiatives are considered sustainable in achieving the indicated risk reduction objectives.

Individual country reports show significant achievement in the ways in which relevant information is made available for disaster risk reduction. A large amount of information is already available and on-line tools and databases have been created, although it is not yet clear that there is a common understanding of these tools among all of the stakeholders.

The reporting countries recognize that better coordination of information flow and warnings related to disasters at national level could enhance effectiveness, while archive systems offer good platforms for sharing disaster-related documents. The challenge remains knowledge management to ensure that the information collected can be identified, retrieved and used in an effective and efficient manner.

**Figure 14 : HFA Priority 3 Overall level of progress for the period 2009 - 2011**



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 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. The indicator levels remain unchanged from the previous report in 2009. However, examination of individual country reports shows significant innovation within individual countries to educate and train school children, the public and professionals as to disaster resilience and safety.

Substantial progress has been made in risk assessments for different types of natural hazards. However, more work remains to be done to show the cost effectiveness of such efforts for investment in risk assessment to become sustainable. In addition, risk assessment at many local levels is lacking.

Finally, progress has been limited in the extent to which a nationwide public awareness strategy exists to motivate a culture of resilience with only 48% reporting substantial or comprehensive achievement in this area. This is a common challenge for both high-income and transitional economies to engage the public in disaster protection. The National Platforms should assign this indicator a priority and engage communications teams to inform and educate the public as to basic safety measures.

### 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.

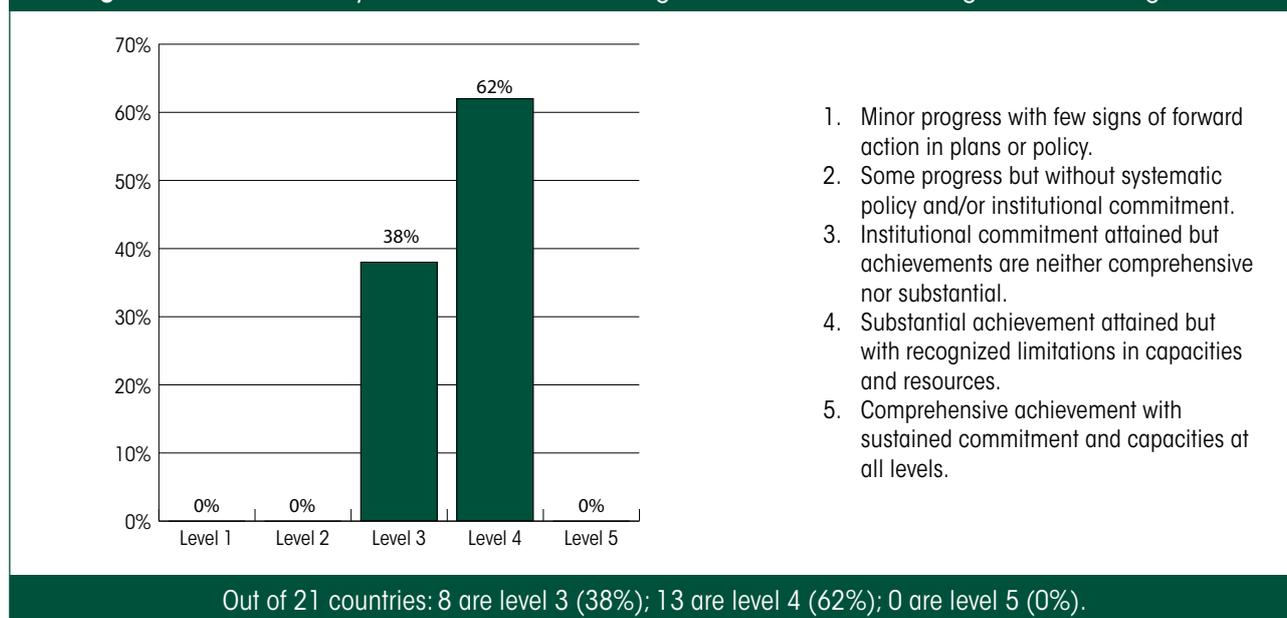
Some 62% of countries report substantial or comprehensive achievement, with a further 38% reporting institutional commitment attained. This compares with 75% of countries that reported substantial or comprehensive achievement and 19% that reported institutional commitment attained in 2009.

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

One such example is Sweden’s RIB Integrated Decision Support system created and maintained for prevention and emergency management. RIB includes an extensive digital library, a chemical database with dispersion models, risk management tools and a command and control system. Crisis information is made available to the public on a website [www.krisinformation.se](http://www.krisinformation.se) where information is collected from all sectors of society in the field of crisis management.

In addition, Sweden’s Mapping, Cadastral and Land Registration Authority maintains a geo-data portal as a gateway to web-based geo-information and services. The portal has been developed over a period of time and is now in its first version. The geo-data portal contains metadata that makes it possible to search, find, view and download geographical data from different sources and are physically stored in different environments. The portal will also

**Figure 15 : HFA Priority 3 Indicator 1 Percentage of Countries Achieving Levels of Progress<sup>25</sup>**



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.

become the main node for Sweden’s cooperation in Europe under the EU INSPIRE Directive.

Sweden’s example illustrates the challenges of making relevant data accessible to all stakeholders at all levels. The wealth of data creates challenges for integration and coordination to ensure that the right data are used to inform decisions, policies and programmes. Transitional countries are in need of additional resources to build such information repositories.

**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 policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives vary

## Good Practice

### Multi-Sectoral National Platform – *Switzerland*

In 1997, the Swiss Federal Council created the Swiss National Platform for Natural Hazards (PLANAT) and assigned it the responsibility of coordinating concepts in the field of prevention against natural hazards. The main missions of the extra-parliamentary commission are strategic work, awareness building and coordination efforts for disaster risk reduction. PLANAT consists of twenty specialists representing all regions of Switzerland, each appointed by the Federal Council for a four-year term. The Swiss Confederation, the Canons, research organizations, professional associations, the business sector and insurance companies are represented in PLANAT. The platform is fully operational and can be considered an example for the implementation of national platforms

<sup>25</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

Relevant information is available and accessible to all stakeholders – *the former Yugoslav Republic of Macedonia*

To ensure that relevant disaster-related information is available and accessible to all stakeholders, the former Yugoslav Republic of Macedonia has established within its Council of State Secretaries working groups to disseminate information internally to all relevant government agencies and to the public. The implementation of a national GIS network, soon to be available on-line, will enable better predictions of hazards. The country has also made progress on the implementation of the E112 emergency telephone calling system and coordination with all of the radio systems in the country for emergency announcements. national laboratory network has also been established incorporating laboratories from universities, healthcare and other public and private institutions to address diseases, epidemics and other related risks and hazards.

significantly and lead to the conclusion that there is still much to be done in this area.

In 2011, 5% of countries (or one country) report comprehensive achievement with sustained commitment at all levels for this indicator. In 2009, two countries, or 13% of the total, reported comprehensive achievement.

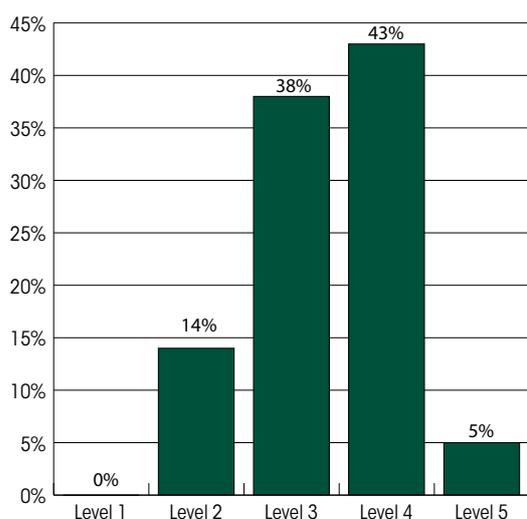
A further 43% report substantial commitment attained but with recognized limitations in capacities and resources, an increase over the 31% of countries that reported the same level in 2009. Finally, 38% of countries reported institutional commitment as compared with 50% that reported the same result in 2009.

Efforts to encourage the development of a culture of safety and resilience through the use of knowledge include EUR-OPA's participation in the biennial ISDR Cam-

paign "Disaster risk reduction begins at school". EUR-OPA followed up with its BeSafeNet initiative, setting up a multi-lingual website with disaster-risk reduction materials suitable for teachers to present in classrooms. This example has motivated innovative approaches at country level, such as the good practices in Georgia, Bulgaria and Turkey highlighted here.

In Georgia, within the social science curriculum, the geography class teaches students the linkages between environmental protection and sustainable societies. Educational materials emphasize natural and manmade hazards, their causes and effects and impacts upon the environment. An elective course on geographic research allows students to conduct research on disasters common to their local environments.

**Figure 16 : HFA Priority 3 Indicator 2 Percentage of Countries Achieving Levels of Progress<sup>26</sup>**



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.

Out of 21 countries: 8 are level 3 (38%); 9 are level 4 (43%); 1 is level 5 (5%).

<sup>26</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

Civil Defence and Safety is a newly introduced subject and is taught in the fourth, eighth, and twelfth grades. For the fourth grade, the objective is to learn how to behave in an unknown environment; in the eighth grade; to prepare for and respond to disasters; and in the twelfth grade, students learn the evacuation rules in case of an emergency and provision of first aid.

Bulgaria, under the auspices of the EUR-OPA Major Hazards Agreement, developed “Mission Rescuer” educational materials, including a coloring book for younger children (“About disasters – rules for children”) containing ten rules for response to different disaster types and posters and educational boards and posters for older children. The Ministry of Education and Science and the National Palace of Children organizes participation in an international competition for children’s drawings to be selected for inclusion into “Mission Rescuer.”

Turkey also reports achievements in providing training on risk reduction practices.

The Turkish Red Crescent project “I am Learning Safe Living” distributes books and CD’s to schools throughout Turkey and has reached approximately 700.000 children. On the national day of civil protection and the Red Cres-

cent, school children pay visits to disaster management centres, government organizations or seismology institutes to raise awareness of disasters.

Turkey has also established professional DRR programmes. Major universities have disaster management excellence centres. Middle East Technical University, for example, collaborates with the World Bank to organize an on-line natural disaster management certificate programme. Istanbul Technical University and Çanakkale University offer programmes in disaster management leading to the Master of Science degree. Most Turkish universities have scientific centres for earthquake research<sup>27</sup>.

The 2010-2015 World Disaster Reduction Campaign “Making Cities Resilient” addresses issues of local governance and urban risk while drawing upon previous ISDR campaigns on safer schools and hospitals, as well as on the sustainable urbanization principles developed in the UN-Habitat World Urban Campaign 2009 – 2013<sup>28</sup>. Currently, cities in the following European countries officially participate in the “Making Cities Resilient” campaign: Austria, Croatia, Germany, Greece, Iceland, Ireland, Italy, Kosovo (as defined by UNSCR 1244), Portugal, Serbia, Spain, Sweden, Switzerland and Turkey. The European

## Good Practice – *Making Cities Resilient*

*“I call for the need of world leaders to address climate change and reduce the increasing risk of disasters- and world leaders must include mayors, townships and community leaders”*

UN Secretary-General Ban Ki-moon at the opening of the Incheon Conference “Building an Alliance of Local Governments for Disaster Risk Reduction”, August 2009

Cities and local governments need to get ready, reduce risks and become resilient to disasters. The 2010-2015 World Disaster Reduction Campaign “Making Cities Resilient” addresses issues of local governance and urban risk. The following cities in Europe and Central Asia have joined, or are in the process of joining, the Safe Cities campaign:

- Austria (province of Tyrol and all of its 279 municipalities)
- Croatia (Bjelovar)
- Germany (Bonn)
- Greece (Patrass)
- Iceland (Arborg)
- Ireland (Dublin)
- Italy (Ancona, Florence, Milan (underway), Rome, Venice)
- Kosovo, as defined by UNSCR 1244 (Pristina)
- Portugal (Amadora, Lisbon)
- Serbia (Aleksandrovac, Arilje, Bojnik, Kanjiza, Kragujevac, Krusevac, Leskovac, Medveda, Nis, Novi Pazar, Pirot, Plandiste, Rekovac, Secanj, Senta, Titel, Tutin, Vlasotince)
- Spain (Bullas, Madrid)
- Sweden (Karlstad)
- Switzerland (Davos)
- Turkey (Antalya, Istanbul, Yalova)

Commission supports this campaign.

“Making Cities Resilient” engages all stakeholders: national governments, local government associations, international, regional and civil society organizations, donors, the private sector, academia and professional associations and citizens. The overall target of the 2010-2015 World Disaster Reduction Campaign is to get as many local governments ready as possible, to span a global network of fully engaged cities of different sizes, characteristics, risk profiles and locations.

Cities join the campaign for diverse reasons. In March 2011, the Mayor of Rome, Gianni Alemanno, and the Mayor of Florence, Matteo Renzi, announced that their cities would join the United Nations World Disaster Reduction Campaign “Making Cities Resilient – My City is Getting Ready!” with the Mayor of Milan officially declaring that her city would soon follow. Rome and Florence share a common goal of cultural heritage protection. Florence, in particular, has been implementing flood protection measures since major flooding occurred in 1966.

Currently more than 600 cities worldwide participate in the “Making Cities Resilient” campaign, with substantial participation coming from Asia. European cities in fourteen countries participate in “Making Cities Resilient”; within certain of those countries, only one city participates. It is recommended that EFDRR advocate and support for increased participation among European cities in

reducing urban disaster risks.

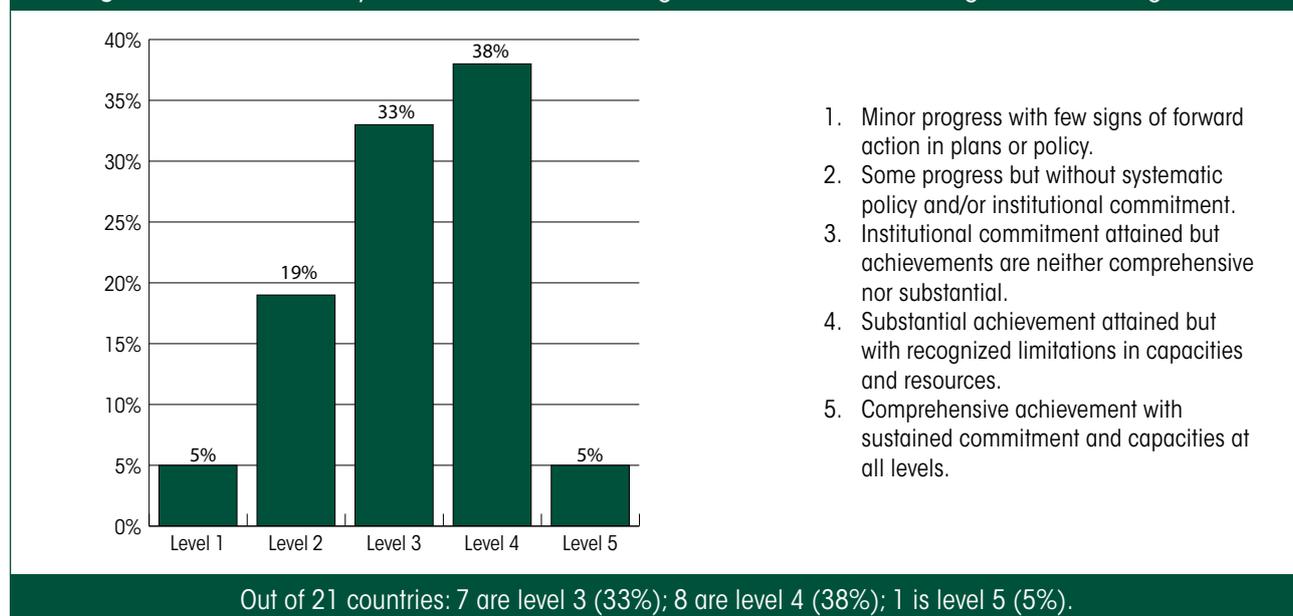
**Indicator 3 :** *Research methods and tools for multi-risk assessments and cost-benefit analysis are developed and strengthened.*

Authorities at national and regional levels 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.

The levels of progress reported in 2011 remain comparable to those reported in 2009. In 2011, 43% report comprehensive or substantial achievements attained as compared with 50% that reported this achievement level in 2009. A further 33% reported institutional commitment attained, down slightly from the 38% that reported this level of attainment in 2009.

The individual country reports show two trends that are not captured by the quantitative indicator levels. First, among the high-income countries, work on adaptation to climate change is increasingly integrated into the research agenda. In Germany, for example, four government agencies are cooperating on the analysis of climate models with regard to extreme events. The Federal Office of Civil Protection and Disaster Assistance (BBK), the Federal Agency for Technical Relief (THW), the German

**Figure 17 : HFA Priority 3 Indicator 3 Percentage of Countries Achieving Levels of Progress<sup>29</sup>**



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.

<sup>27</sup> Related links: Istanbul Technical University Center of Excellence for Disaster Management (see <http://www.cedm.itu.edu.tr/>); the Disaster Management and Implementation Research Center of the Middle East Technical University (see <http://www.dmc.metu.edu.tr/>); the Turkish Disaster and Emergency Management Presidency (see <http://www.afad.gov.tr>) and the Turkish Red Crescent (<http://www.kizilay.org.tr>).

<sup>28</sup> <http://www.unhabitat.org/categories.asp?catid=634>

<sup>29</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

Research for multi-risk assessments is developed and strengthened – *Croatia*

The Republic of Croatia has strong cooperation on which it will continue to build between government agencies and scientific institutions. Croatia intends to build upon that cooperation through its National Platform to further strengthen multi-sectoral approaches to disaster risk reduction research. DRR is included in the national budget for applied scientific research. Academic institutions currently contribute more than half of the research papers for the annual conferences of the Croatian National Platform. The input of academic experts ensures that disaster risk reduction research is not limited to those with direct disaster management responsibilities.

Weather Service (DWD) and the Federal Environment Agency (UBA) started a project aimed at the analysis of climate models with regard to extreme events. This will lead to better data and information basis for civil protection purposes. Since the project results will be based on improved resolution, the quality of flood and low tide, storm and heat wave assessments will be more accurate. The project thus contributes to a more effective development of adaptation strategies in the framework of climate change.

The second trend is greater leverage of EU-wide programmes to conduct multi-risk assessments. The Seventh Framework Programme for Research and Technological Development (FP7), or Cordis, covering the 2007 – 2013 period, supports several research programmes directly or indirectly related to issues involving natural hazards and disasters.

Again using the example of Germany, its Federal Office of Civil Protection and Disaster Assistance is increasingly strengthened by European Commission programmes such as GMES, the Global Monitoring for Environment and Security – Emergency Response Service. This satellite-based mapping service provides a number of benefits including pre-disaster risk assessment and background mapping and post-disaster damage assessments. Germany made recent use of this system in the context of the 2010 floods on the Oder River. In its development cooperation, Germany make such multi-risk analysis available to inform protection measures for vulnerable populations, such as warning systems for natural hazards in Asia.

The progress in EU-wide research collaboration stands apart from two significant challenges in this area. The first is the growing separation from risk assessments at macro level that capture research funding and staff support. But at the local level, the use of research methods and tools for multi-risk assessments remains limited.

The second challenge is the sustainability of funding for multi-risk assessment tools in the absence of an economic rationale. The return on investment in such assessment tools has not been conclusively demonstrated, except per-

haps a few anecdotal examples. Without a strong case for investment, multi-risk assessment programmes will be difficult to sustain.

Two approaches should be considered: it is recommended to ensure adequate work for multi-risk assessments and the need to show a return on investment analysis for the cost required in such assessments. This will ensure that these methods and tools can be made available to enhance safety at the local effort and can do so continuously.

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

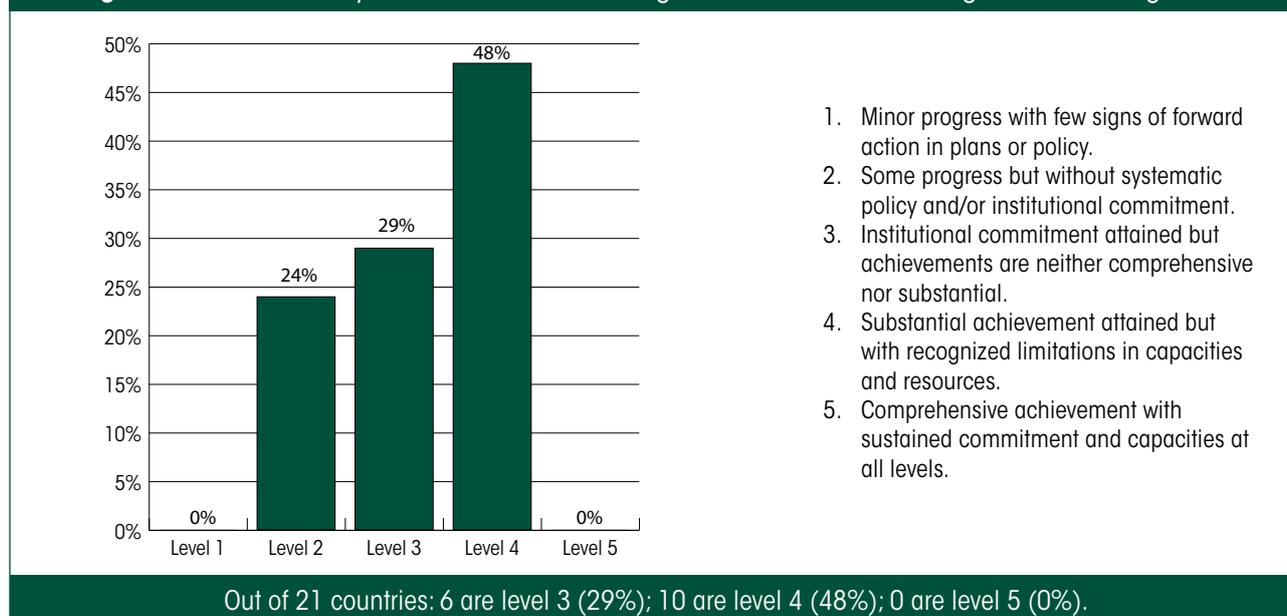
A countrywide public awareness strategy is a national, long-term plan of action with specific goals that organizes how the general population is informed about disaster risk and the ways it can act to reduce its exposure to hazards. Public awareness actions are important tools to help integrate disaster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

Some 48% of the countries report substantial or comprehensive achievement, comparable to the levels reported in 2009. A further 29% report institutional commitment, as compared with 38% that reported that level in 2009.

It emerges from the reports that knowledge about the environment and sustainable development is relatively high among political leaders, authorities, organizations and the public and so is knowledge and awareness of climate change. However, that general knowledge does not appear to translate into insight about natural hazards that are linked to environmental degradation and climate change.

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 its Member States. This is one area where high-income and transitional countries report similar findings. Across Europe, many people believe that it is the responsibility of civil authorities to take care of them in the event of an emergency and so they make little effort to provision for themselves. This changes

**Figure 18 : HFA Priority 3 Indicator 4 Percentage of Countries Achieving Levels of Progress<sup>30</sup>**



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.

slightly following major natural disasters, such as floods, when awareness is higher, but as these events recede into memory, the public once again becomes complacent.

It is highly recommend that the National Platforms and regional fora collaborate with communications professionals to develop and test effective public service messaging for engagement. Citizens who are unaware of disaster threats cannot perform essential services for themselves in the critical 24 – 72 hours following a disaster. Even worse, they make unnecessary demands upon first responders, diverting resources from more urgent needs.

Public service messaging campaigns have been effective

in changing health behaviors, such as reducing the incidence of smoking or driving after consuming alcohol, for example. It is recommended that the National Platforms and regional associations learn from these successful campaigns and explore how they might be adapted to disaster risk reduction, particularly in hard-to-reach rural areas.

## Good Practice

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience – *Turkey*

NGOs also play a critical role in Turkey. Neighborhood Disaster Volunteers (NDVs), for example, offers an innovative means of building capacity. NDV Foundation was established by Turkish businessmen, academicians and organizations in close cooperation with provincial governors and local municipalities. NDV volunteers are residents of neighborhoods (neighborhoods are the smallest administrative unit in Turkey) who receive a 36-hour basic training course and a set of equipment for personal protection and first response. They go on to serve as first responders in emergencies, assist relief teams and educate and lead communities in taking actions to reduce risks. NPV teams are active in 82 neighborhoods, mostly in Istanbul and its environs and work collaboratively with official response organizations such as the Civil Defence SAR units, fire brigades and 112 medical emergency response units. NPV is expanding into different neighborhoods and recruiting more volunteers, thereby ensuring continuous growth.

<sup>30</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

### 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” on 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 sectoral 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

Progress has been limited with respect to HFA Priority for Action 4, reducing the underlying risk factors. A full 41% of countries report substantial achievement in this area, virtually unchanged from the 47% that reported this level in 2009. A further 5% report comprehensive achievement in this area, even with the 6% of countries that reported the same level in 2009. Finally, 29% reported institutional attainment, less than the 43% that had reported this level in 2009. Demonstrating the positive return on investment for actions taken to reduce underlying risk factors may improve public commitment to such initiatives, even during periods of economic scarcity. Lack of financial resources, particularly among transitional countries and particularly at local levels, is the major barrier to progress.

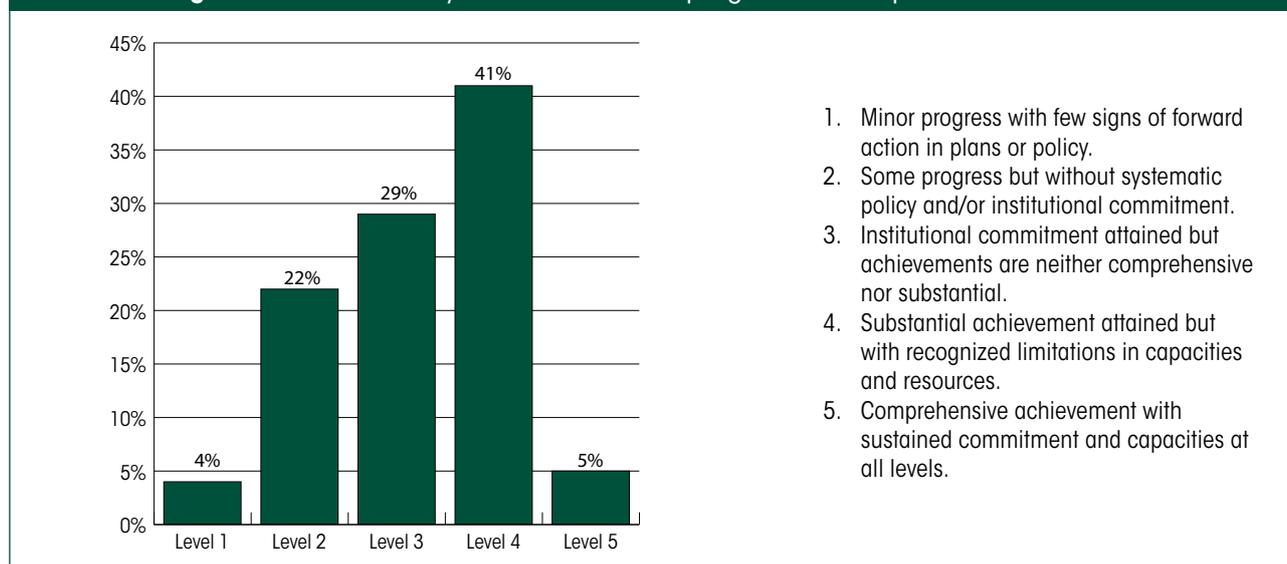
#### Specific achievements, challenges and recommendations based on indicators

**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.

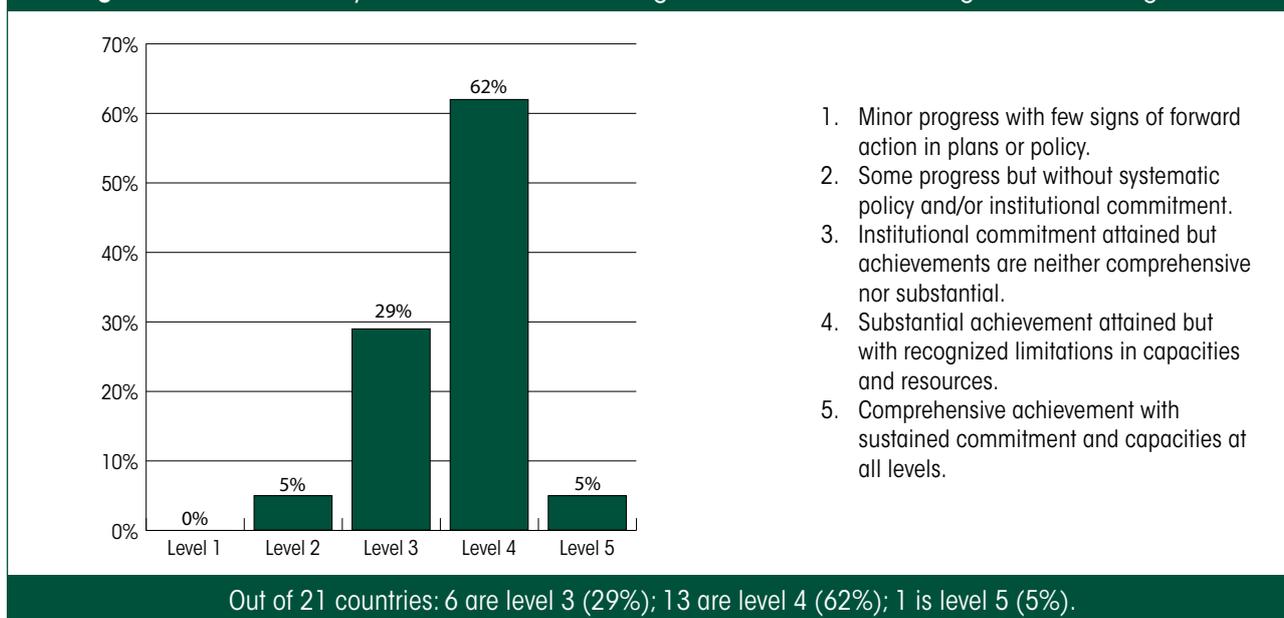
The assessed levels of progress show that institutional commitment is attained in 29% of the countries, substantial achievement is attained in 62% of the countries and comprehensive achievement is attained in 5% of the

**Figure 19 : HFA Priority 4 Overall level of progress for the period 2009 - 2011**



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.

**Figure 20 : HFA Priority 4 Indicator 1 Percentage of Countries Achieving Levels of Progress<sup>31</sup>**



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.

countries. This compares with levels of 47%, 40% and 13%, respectively, in 2009.

A consistent pattern is observed in that land use planning and development policies are higher public priorities than disaster risk reduction. While comprehensive improvements towards incorporating disaster risk reduction elements into environmental and natural resource policies are not yet achieved, the country reports show individual, anecdotal signs of progress, such as financial incentives and subsidies for constructing resilient buildings.

The Czech Republic, for example, has made significant progress in integrating disaster risk reduction as an objective of environment-related policies and plans, including for land use, natural resource management and climate change adaptation. Legislation has been enacted to designate protected areas. The Ministry of the Environment as well as regional and local authorities have enforcement rights of environmental impact assessments and other measures available to them to protect ecosystems. The Czech Republic has begun to apply operation programs for environmental protection supported by the E.U. The country has also introduced a National Program to Abate the Climate Change Impacts<sup>32</sup>.

Other countries report different approaches. Moldova has integrated disaster risk reduction into its environmental policies with protected areas legislation, payments for ecosystems services, integrated planning, environmental impact assessments and climate change adaptation projects and programmes. Moldova's national development strategies explicitly address actions to reduce greenhouse gases and to eliminate persistent organic pollutants and obso-

lete pesticides.

The Swiss Federal Office for the Environment (FOEN) is responsible for the sustainable use of natural resources, including soil, water, air and forests. Use and protection of natural resources and protection from natural hazards is within FOEN's mandate. Furthermore, disaster risk reduction and environmental protection are both anchored in Swiss Federal Laws. In 2009, the Swiss Federal Council asked for the elaboration of national strategy for climate change adaptation. The national strategy will include nine sectoral strategies: water management, agriculture, forest management, energy production, tourism, dealing with natural hazards, biodiversity, health and land use.

**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 disadvantaged 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 43% of the countries report substantial or comprehensive progress, with a further 29% achieving institutional commitment on this indicator. This represents a decrease from

<sup>31</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

<sup>32</sup> [http://www.preventionweb.net/files/15427\\_ozknationalprogramme20040303.pdf](http://www.preventionweb.net/files/15427_ozknationalprogramme20040303.pdf)

## Good Practice

### Social development policies reduce the vulnerability of at-risk groups – Germany

As a high-income country, Germany’s social development policies provide a safety net for its citizens in the event of disaster. Germany directs its strategy of sustainable development approaches for disaster risk reduction in vulnerable societies. The German Red Cross seeks to further mainstream DRR into development cooperation. The German Red Cross is experienced in supporting long-term community development, with activities focused on health (including water, sanitation and hygiene) and food security. The overall goal for development cooperation, as in DRR, is to reduce the vulnerability of those most at risk in the countries where Germany has development partnerships.

the levels of 53% and 47%, respectively, of countries reporting these levels in 2009.

Significant differences are observed between the experiences reported by high-income and transitional countries. The former report social development policies with respect to overseas development aid targeting disaster risk reduction. The latter report resource constraints in reducing the vulnerability of their at-risk populations. It is recommended that disaster risk reduction be integrated into sector strategies at national and international levels, in particular in transitional countries with institutional, donor or other partner support.

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

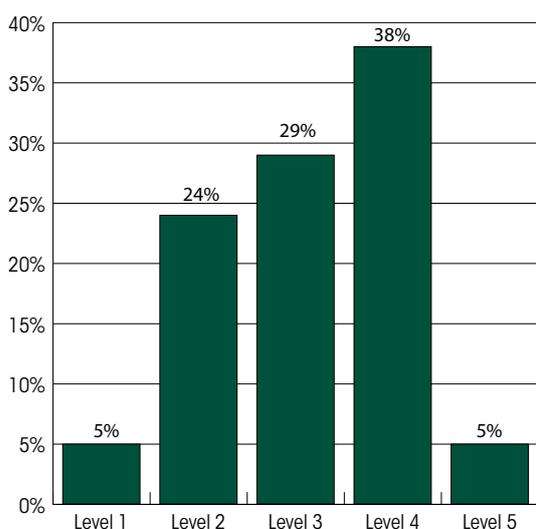
Focusing on the protection of the State’s most vulnerable economic activities and productive sectors is an efficient strategy to help reduce overall impacts of disasters.

This indicator shows very different levels of attainment relative to those reported in 2009.

Here, 20% report substantial or comprehensive achievement as compared with 67% that reported those levels in 2009. A further 35% report institutional attainment, roughly equivalent to the 33% that had reported this level in 2009.

Significantly in 2009, not a single country reported levels 1 or 2 for this indicator; while in 2011, 9 countries did so and 2 countries that reported overall results did not do so for this indicator.

**Figure 21 : HFA Priority 4 Indicator 2 Percentage of Countries Achieving Levels of Progress<sup>33</sup>**

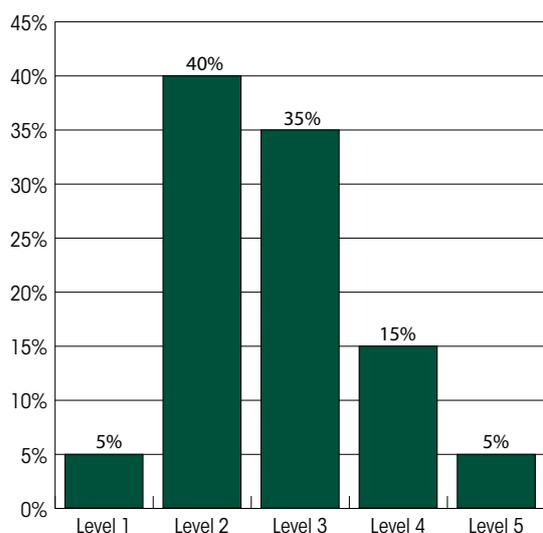


1. Minor progress with few signs of forward action in plans or policy.
2. Some progress but without systematic policy and/or institutional commitment.
3. Institutional commitment attained but achievements are neither comprehensive nor substantial.
4. Substantial achievement attained but with recognized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

Out of 21 countries: 6 are level 3 (29%); 8 are level 4 (38%); 1 is level 5 (5%).

<sup>33</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

**Figure 22 : HFA Priority 4 Indicator 3 Percentage of Countries Achieving Levels of Progress<sup>34</sup>**



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.

Out of 20 countries: 7 are level 3 (35%); 3 are level 4 (15%); 1 is level 5 (5%).

**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 48% of the countries that conducted self-assessments report substantial achievement but with recognized

limitations in capacities and resources, a lower level than the 67% that reported this level in 2009. A further 24% reported institutional attainment, as compared with 40% that reported this level in 2009.

The biggest challenge identified by countries is that immediate economic constraints outweighed longer-term safety concerns. Enforcing building codes to ensure earthquake-resilient structures is a costly endeavor in a period of high unemployment and public deficits.

Many buildings in Romania, for example, are at least 70 years old and they were not designed to withstand ma-

**Good Practice**

*Integrating disaster risk reduction in climate change adaptation measures – Germany*

Disaster risk reduction is an important part of the German government’s sustainability strategy in which the national strategy of adaptation to climate change (Deutsche Anpassungsstrategie or DAS) is integrated. DAS pursues the twin goals of reconfiguring existing capacities and resources to optimize climate change adaptation while developing new frameworks, methods and tools based on scientific developments to cope with all aspects of climate change. Within the DAS, experts are working on an “Action Plan for Adaptation” to address planned federal government measures and those measures with other stakeholders, such as the states and civil society. The process of developing the Action Plan began with a civil stakeholder workshop in 2010 and is expected to be complete in April 2011. However, integrating disaster risk reduction into the public consciousness remains a challenge.

<sup>34</sup> The graphic reflects only the responses from the 20 of the 21 countries that used the on-line tool and reporting format and reported this indicator, while overall 22 countries have reported on HFA implementation.

## Good Practice

### Implementing plans to reduce vulnerability of economic activities – Armenia

Following the 1988 Spitak earthquake, new master plans of development were established for 80% of the cities and towns in Armenia. Each master plan includes plans for land use, inventory valuation and zoning on the both the degree of hazard and risk assessment of building and the plans for economic and social development. Each plan provides a scheme of engineering protection of the existing and planned development of territories, taking into consideration the geodynamic and seismic risks. The government also invested in areas at risk for flooding, particularly in northern regions of the country, which have experienced substantial flooding over the past decade.

For earthquakes. Building owners underestimate the risks and fail to appreciate the urgent need for rehabilitation of the structures. Due to the high costs, owners neglect or postpone necessary work. The Romanian government has established a rehabilitation program for buildings that are particularly vulnerable to earthquake risk. The government pays subsidies to the owners of the buildings to partially cover the expenses associated with rehabilitation such as the need for professional experts, project cost and long-term interest cost on the mortgage loans. The owners are legally required to take measures to reduce the seismic risk of their buildings.

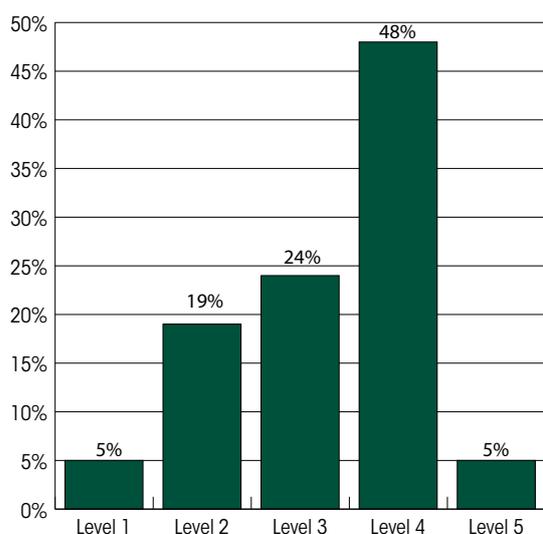
In addition, there is a significant gap between the regulations and standards of the reporting countries within and

outside the European Union.

The major recommendation is the need to educate about the longer terms benefits of disaster risk reduction versus the immediate costs. To encourage the public and private sector to undertake investments in disaster risk reduction elements in a difficult economy requires better cost-benefit data to justify the required trade-offs and compromises.

As the insurance sector has done substantial research on loss mitigation costs as compared with claims expense, it is further recommended that National Platforms form insurance sub-groups to enlist the expertise of this sector in order to advocate for the need to invest in disaster risk reduction even during an economic downturn.

**Figure 23 : HFA Priority 4 Indicator 4 Percentage of Countries Achieving Levels of Progress<sup>35</sup>**



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.

Out of 20 countries: 7 are level 3 (35%); 3 are level 4 (15%); 1 is level 5 (5%).

<sup>35</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

### DRR elements considered in public structures – Portugal

Portugal has plans and policies in place that take disaster risk reduction into account, particularly when managing human settlements. The government took human safety into account when relocating a population that lived in unsafe, self-constructed housing to newly constructed, safer facilities. The process of improvement is continuous with the government deciding to reinforce certain viaducts in Lisbon when seismic risk analyses detected vulnerabilities.

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

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.

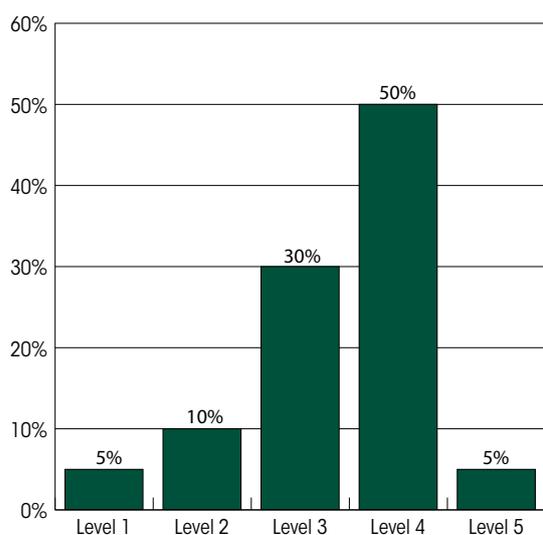
In 2011, 5% of countries reported comprehensive achievement; the comparable level in 2009 was zero. A further 50% reported substantial achievement in 2011, comparable to the level reported in 2009. Institutional attainment was reported by 30% of countries in 2011, a decrease from the 40% that reported this level in 2009.

Integrating risk reduction measures into post-disaster recovery is a challenge owing, in part, to the urgency attached to providing new shelter and other services to those displaced. Nevertheless, at regional and international levels, humanitarian assistance and development aid includes disaster risk reduction in recovery and rehabilitation processes. The goal is to “build back better” and equip vulnerable populations to build resilience.

While the numerical levels of attainment for this indicator show limited progress, the country reports share experiences of integrating disaster risk reduction methods when recovering from domestic disasters.

Albania, for example, experiences disasters such as earthquakes, floods, landslides and forest fires. Two recent disasters are noteworthy for their severity: the September 2009 earthquake in Dibra Qark and the December 2009

Figure 24 : HFA Priority 4 Indicator 5 Percentage of Countries Achieving Levels of Progress<sup>36</sup>



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.

Out of 21 countries: 6 are level 3 (30%); 10 are level 4 (50%); 1 is level 5 (5%).

<sup>36</sup> The graphic reflects only the responses from the 20 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

## Good Practice

### Disaster risk reduction measures integrated into post-disaster recovery – Italy

Italy has taken disaster risk reduction elements into consideration in all phases of the emergency management cycle. The National Civil Protection Service includes rules for both forecasting and preventive measures and emergency and recovery. Following the L'Aquila earthquake of 2009 an extensive rebuilding plan named "CASE project" has provided over 27000 homeless people with fully anti-seismic, modern houses compliant to the most recent building standards.

– January 2010 floods caused by the rainfalls in Lezha Qarks. Strong cooperation among the agencies and organizations at the local, national and regional levels resulted in resource mobilization and effective response to these disasters. Albania took steps to enhance resilience post-disaster; in particular, the creation of temporary livelihoods for the evacuated populations mitigated economic risks and accelerated recovery.

Armenia invests in resilience by assigning 17% of its recovery and reconstruction funds to disaster risk reduction measures. Additional investment in key infrastructure enhances resilience and accelerates post-disaster recovery and rehabilitation. The major dams for irrigation purposes in Kotayk marz are fortified. Armenia's annual budget also allocates funding for strengthening major buildings to code, a critical investment for post-disaster recovery,

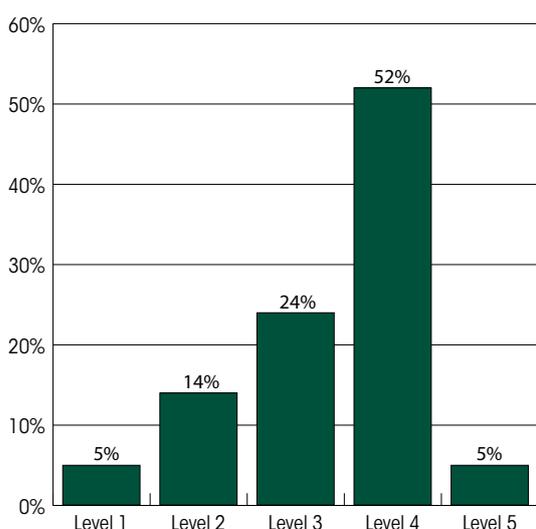
given that Armenia has experienced major earthquakes throughout its history.

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

It is crucial to institutionalize 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.

The self-assessment finds that 57% of the countries have attained comprehensive or substantial achievement, an

**Figure 25 : HFA Priority 4 Indicator 6 Percentage of Countries Achieving Levels of Progress<sup>37</sup>**



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.

Out of 21 countries: 5 are level 3 (24%); 11 are level 4 (52%); 1 is level 5 (5%).

<sup>37</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

increase over the 47% that reported such levels in 2009. A further 24% report institutional commitment, as compared with 47% that reported this level in 2009.

Spain requires environmental impact studies for all public works risk analyses. Its procedures for strategic environmental evaluation of public works, including infrastructure projects, explicitly consider the impact of climate change on the life cycle of the project. The objective of the analysis is to anticipate adaptation measures to reduce vulnerability to climate change and the natural hazards resulting from such change, and to ensure that such measures are taken.

Disaster risk reduction measures and environmental and social compatibility assessments are most often included in development projects. Ensuring consistency of integrating disaster risk reduction elements into land use projects remains a challenge. A rigorous financial analysis demonstrating the positive return on investment for such measures may help improve the consistency with which DRR elements are applied to projects.

### 1.2.5 Priority for Action 5:

*Strengthening the 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.

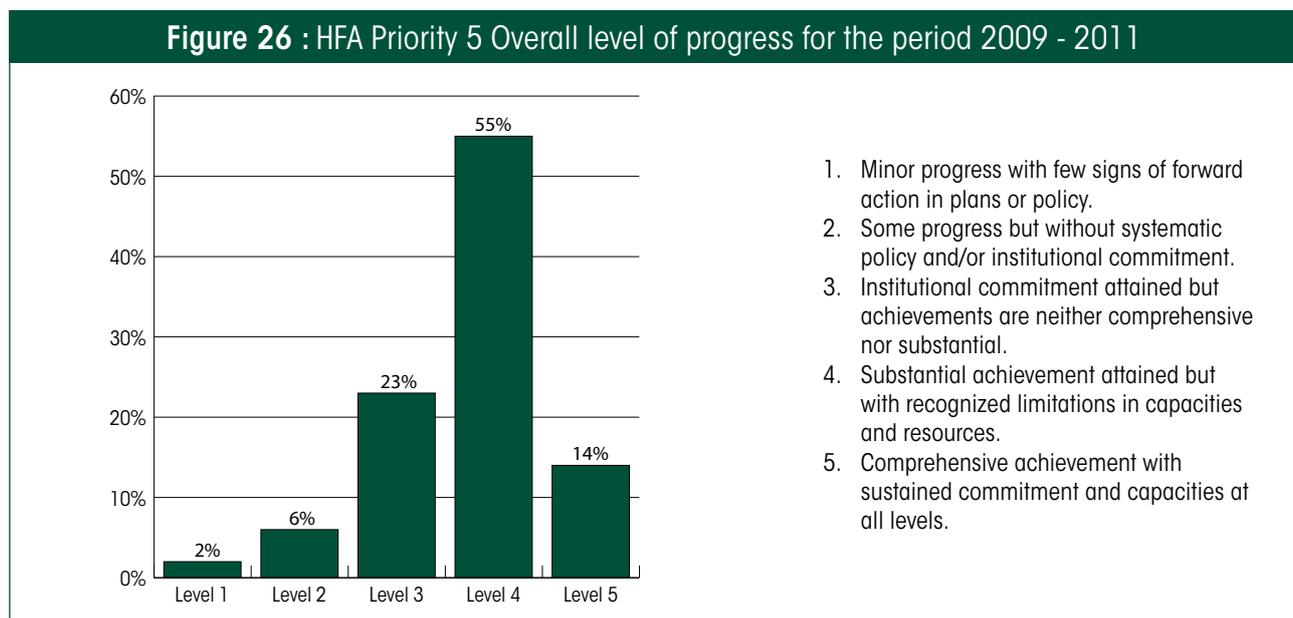
HFA Priority for Action 5 has four “core indicators” on which progress on implementation can be monitored and reviewed and challenges identified :

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

In 2011, 69% of countries report substantial or comprehensive achievement in strengthening disaster preparedness for effective response at all levels, a result comparable with the 61% that reported comparable levels in 2009.

However, there is a large degree of variation in the individual indicators and progress made over the past two years. The 2009 report found substantial progress in the degree to which strong policy, technical and institutional capacities and mechanisms for disaster risk management were in place, with 81% of countries reporting substantial or comprehensive achievement in this area. The remaining countries reported having achieved institutional commit-



ment. However, the report noted that while progress was strong, the extent to which disaster risk reduction perspective was integrated into disaster risk management was not entirely clear.

In 2011, 66% of countries report substantial or comprehensive achievement in the area of strong policy, with 14% of countries reporting that they had not yet achieved institutional commitment. Many countries report challenges related to shortages of financial and technical capacity, particularly experienced personnel.

The results for establishing contingency plans and holding regular training drills to test them showed significant improvement over 2009 results, with 72% of countries reporting substantial or comprehensive improvement, a major gain from the 44% that reported this result two years ago.

Many countries reported that their national governments often mandate local governments to establish disaster preparedness plans and regular training drills, but they do not provide adequate resources to ensure compliance.

With respect to the availability of dedicated funds or insurance facilities to support effective response and recovery, 67% of reporting countries attained substantial or comprehensive achievement in this area, an eleven-point increase from the 56% that reported these achievements in 2009. Certain high-income countries elected to forego dedicated contingency funds, owing to their access to capital and credit markets that could be initiated in an emergency.

Transitional countries are working with UNISDR and other partners to build capacity for risk transfer. These innovative approaches to reducing risk show promising results based on initial assessments. It is strongly recommended that such efforts be expanded.

With respect to establishing procedures for exchanging information during emergencies and conducting post-event reviews thereafter, countries report strong progress with 71% having achieved substantial or comprehensive achievement in this area. This represents an increase over the 63% that reported comparable levels of achievement in 2009.

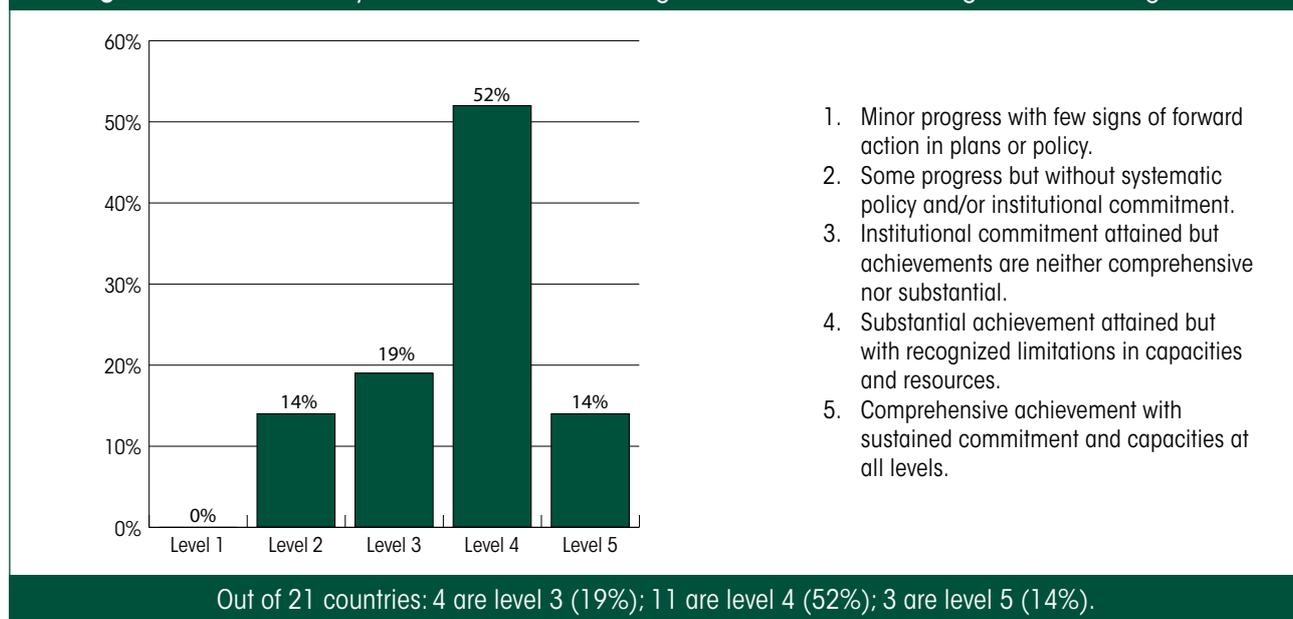
In assessing progress made in 2011 as compared with 2009, it bears repeating that the composition of reporting countries is different for the two cycles. Nevertheless, key themes emerged in the analysis of the country reports; chiefly, the difficulty securing adequate resources for disaster risk reduction activities.

### 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

**Figure 27 : HFA Priority 5 Indicator 1 Percentage of Countries Achieving Levels of Progress<sup>38</sup>**



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.

<sup>38</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

impacts, and improves response measures.

Most self-assessed countries report significant progress in this area, with some 66% describing their achievement as substantial or comprehensive. This is a significant decrease from the 81% that reported these levels of achievement in 2009. A further 19% reported that institutional commitment has been attained, although achievements are neither comprehensive nor substantial. The comparable figure for 2009 was also 19%.

In 2009, the need for strong institutional capacities for disaster risk management was emphasized by the Communication adopted by the European Commission on an EU approach to the prevention of disasters caused by natural or man-made hazards<sup>39</sup>, encouraging better alignment of actors and policies throughout the disaster management cycle.

The HFA Europe 2009 report found that while preparedness mechanisms and capacity building have been strengthened in comparison with levels reported in previous years, it was unclear as to the extent to which disaster risk reduction perspective is integrated in most of the reporting countries. This finding remains relevant today.

The report also stated that Germany, which was one of two countries in which the integration of disaster risk reduction was explicit, had reported challenges in terms of policy and institutional capacities related to the forecasting abilities at different levels and sectors of disaster risk reduction and disaster management.

Germany reports that those challenges continue to exist, as the vertical and horizontal diversification at different levels and sectors are so distinct that there are no central actions plans to address them. Each organization has a plan of action, but those plans must be adapted for an emergency situation. An approach to integrate and adapt

these plans has been further developed and is now operational.

Many countries report challenges related to shortages of financial and technical capacity, particularly experienced personnel. The difficulties are further compounded by high turnover among disaster response staff in many agencies and the difficulty recruiting qualified staff in rural areas. It is recommended that both vertical and horizontal coordination be strengthened, along with an integrated approach to disaster risk reduction.

**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.*

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.

The country reports show that emergency plans are in place at local, regional and national levels and regular training is performed at all levels. Plans and training focus on emergency management/disaster response. Some 72% of countries report substantial or comprehensive achievement in this area, a significant increase from the 44% reporting these achievements in 2009.

Several key challenges emerge from the country reports. First, national governments often mandate local governments to establish disaster preparedness plans and regular

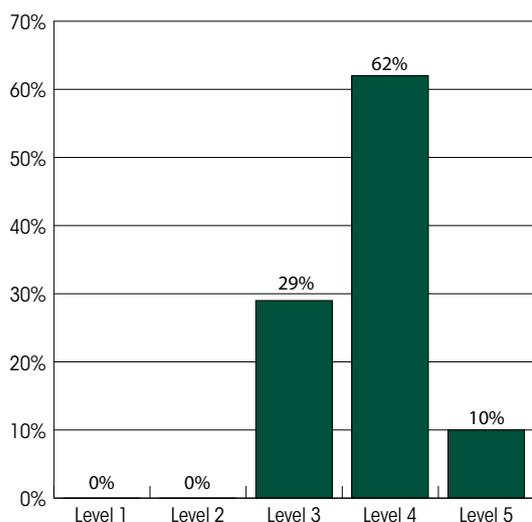
## Good Practice

### Institutional Capacities in Place for Disaster Management – Armenia

Armenia is undertaking a software project funded by Sweden to assess the seismic vulnerability of hospitals and schools in its capital city, Yerevan. The assessment is underway with a target completion date in 2012. Additional measures to build capacities into key institutions – namely, hospitals and schools – for disaster management include educational programmes. The government provides hospitals with visual aids to explain emergency procedures. The Crisis Management State Academy developed disaster-training materials suitable for school children. The Ministry of Emergency Situations oversees the inclusion of disaster training in the school curricula.

<sup>39</sup> COM (2009) 82.

**Figure 28 : HFA Priority 5 Indicator 2 Percentage of Countries Achieving Levels of Progress<sup>40</sup>**



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.

Out of 21 countries: 6 are level 3 (29%); 13 are level 4 (62%); 2 are level 5 (10%).

training drills, but they do not provide adequate resources to ensure compliance. Italy, for example, reports that small municipalities located in remote areas are not always provided with sufficient technical and/or financial resources to develop effective disaster preparedness and contingency plans. In other cases, plans are in place, but owing to these limitations, they are not updated or sufficiently drilled or rehearsed. This was a common experience among the reporting countries.

the number of volunteers due to demographic changes including migration within countries that rely on voluntary services, such as all-volunteer fire brigades, for example. Finally, there needs to be a knowledge management system sufficiently robust to allow lessons learned in disaster risk reduction to be captured and disseminated. The obstacles to integrating information systems are both financial and technical, but such integration would allow more effective response and overall improvement in DRR systems.

Second, the difficult economic conditions have exacerbated one of the challenges identified in 2009: the decline in

**Indicator 3 : *Financial reserves and contingency***

**Good Practice**

Enhanced preparedness through a good communication system – *Sweden*

MSB has developed a national communication system, RAKEL, to strengthen society’s capacity for managing crises and to facilitate effective leadership and coordination in preparation for and during emergencies. It is designed for use by all emergency organizations such as police, fire brigade, ambulance, and other services to improve coordinated responses. The use of RAKEL leads to better cooperation between municipalities, county councils, country boards and national agencies. Municipal leaders and politicians state that RAKEL provides an increased level of security through faster and more accurate communications, better service to citizens, effective use of resources and better collaboration both internally and with other actors. If RAKEL is used on a daily basis, it increases the level of preparedness for crises. A film is available on MSB’s web site for users throughout the country, a newsletter provides updates and training is available.

<sup>40</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

*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. Following major disasters, such action is essential to restore critical infrastructure and livelihoods, to support the resilience of affected communities, until long-term reconstruction of assets takes place.

Overall, 67% of reporting countries attained substantial or comprehensive achievement in this area, a eleven-percentage point increase from the 56% that reported these achievements in 2009.

The literature on disaster risk reduction shows that to be effective, response must be rapid to enable follow-on recovery. Rapid response and recovery are dependent on the availability of financial resources. It is critical that resources be committed for early recovery programmes, including prompt assessment of damage, needs and capacities; and rapid restoration of critical infrastructure and livelihoods. This is essential following a major disaster to support the resilience of the community, until longer-term reconstruction plans are implemented.

European countries have adopted a range of approaches to finance their response and recovery needs. More high-income countries, such as Germany and Switzerland, for example, continue to forego dedicated contingency funds as they have the credit strength to open funding lines when necessary.

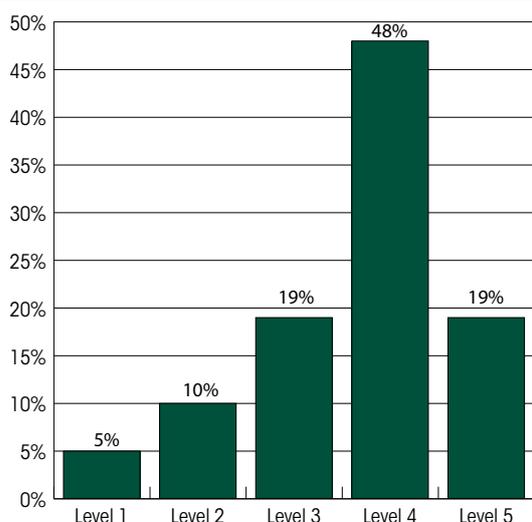
However, given the turbulence in the capital markets, and the increasing levels of indebtedness of major high-income countries, it may be risky to rely on post-event funding strategies. Italy, for example, reported that “ad hoc programmes and measures” are in place to ensure the economic resilience of businesses and communities following disasters, but further steps with disaster insurance policies are being debated.

However, at the same time, high-income countries also tend to have policies to reduce economic vulnerability by requiring universal compulsory insurance against natural hazards and other types of risks. Such policies use private capital for underwriting risks, thereby reducing the demands made for relief aid post-disaster by local governments, businesses and citizens who could afford to pay the premiums representing the actuarial costs of their risks.

But these measures are not without challenges. The purchase of personal or commercial insurance requires a high degree of financial literacy. Even within high-income countries, where such coverage is available, the lack of sophistication about insurance products remains a problem. And in the aftermath of the banking crisis, insurance is becoming increasingly expensive as insurance companies earn lower returns on their investment portfolios.

Transitional countries report the need for legal frameworks to deepen their insurance sectors and attract foreign capital to underwrite risks. These countries typically do not have the resources to ensure social protection during disasters. Within European transitional countries, insurance is virtually non-existent among farms, small and medium enterprises and homeowners, with only 0.5 – 2.0%

**Figure 29 : HFA Priority 5 Indicator 3 Percentage of Countries Achieving Levels of Progress<sup>41</sup>**



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.

Out of 21 countries: 6 are level 3 (29%); 13 are level 4 (62%); 2 are level 5 (10%).

<sup>41</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

able to obtain coverage<sup>42</sup>.

Development partners are innovating new approaches to meet these needs. It is hoped that these programmes will both meet immediate needs to protect livelihoods of economically vulnerable populations from shocks such as natural disasters, while providing the stimulus to develop domestic insurance industries in these countries.

In 2009, the World Bank and UNISDR, in partnership with RCC SEE, established the South East and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF). The regional approach allows the relatively small countries in this area to diversify their risks, thereby lowering the cost of risk capital.

The facility exists to promote access to insurance and reinsurance for disaster coverage (risk protection) among SEE homeowners and small and medium enterprises. Europa RE, incorporated in Switzerland in December 2009, manages the facility. Governments join the facility by purchasing Europa Re shares. Albania was the first country to do so, borrowing funds from the World Bank for this purpose. In December 2010, the former Yugoslav Republic of Macedonia followed. It is expected that within five years, this facility will be sustainable and fully privatized. Further information about SEE-CRIF is provided in Section 2.1.4 of this report.

Regional catastrophe risk transfer initiatives are also supported by the European Commission under the Instrument for Pre Accession Assistance Multi Beneficiary Programme (IPA MB).

The Commission is improving its knowledge base on disasters and encouraging effective and greater investment in disaster prevention. Concerning the latter, the following issues were identified as deserving further consideration<sup>43</sup> :

- Effective use of EU funding for prevention of disasters;
- Introducing conditionality in EU funding – linking the level of funding to Member States to prevention measures being in place;
- Increased use of disaster insurance policies with risk-based premiums for households, the public sector, business and agriculture; possibility of insurance pooling;
- Exploring the possible use of insurance-linked securities (catastrophe bonds) and other alternative risk transfer instruments in the European context to raise additional finance on the international capital markets and thus reduce the costs of insur-

ance.

- The SEE CRIF model of reinsurance pooling was built upon an earlier, successful initiative, the Turkish Catastrophe Insurance Pool (TCIP) established with support from the World Bank after the 1999 Marmara earthquake. The pool is a public-private partnership that provides earthquake insurance to households and businesses. The pool is supported by reinsurance obtained in the international markets, thus bringing foreign capital for risk transfer outside of Turkey.

The TCIP, one of the largest earthquake insurers in the world, increased the penetration rate of earthquake insurance from 3% of households and businesses in 1999 to 23% ten years later. TCIP became financially sustainable within five years of operation, such that it no longer requires the support of the World Bank.

The World Bank has also established a catastrophe insurance risk pool in Romania. Of course, in addition to the need for risk capital, transitional countries need legal frameworks for the insurance sector to develop, as well as hazard and risk data to allow underwriting. The EC offers several financial instruments for risk identification/impact assessment, knowledge development, and the development of legal frameworks as institutional arrangements. These include pre-accession funds, cohesion policy funding and civil protection funds. Further information is provided in the second section of this report.

Owing to the ability to significantly diversify risk exposures across Europe, it is strongly recommended that countries evaluate the benefits of integrated disaster risk financing arrangements. It is also recommended that countries take measures to reduce the impact of disasters by exploring more innovative insurance facilities. To build the political consensus for such measures, it is recommended that more work be done to show the cost-effectiveness of pre-financing risks over post-financing disaster recovery.

**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 be included in the design and implementation of all types of planning.

Countries report strong progress in establishing procedures to exchange relevant information during emergencies and to undertake post-event reviews thereafter,

<sup>42</sup> World Bank, "Climate and Catastrophe Facility for SEE Countries", February 3, 2011.

<sup>43</sup> See, inter alia, Council Conclusions of 8 November 2010 on Innovative Solutions for Financing Disaster Prevention.

with 71% having achieved substantial or comprehensive achievement in this area. This represents an increase over the 63% that reported comparable levels of achievement in 2009. The countries report diverse approaches in working towards this goal.

Spain has comprehensive procedures in place to exchange relevant information during disasters to undertake post-event reviews. State plans have procedures for the exchange of information within relevant agencies and specific conventions for cooperation among the institutions defined in the different plans. The country's General Directorate for Civil Protection and Emergencies maintain a database of losses due to natural disasters. Spain maintains an INFORRIESGOS website that publishes information on disaster risk reduction that it collects from various governmental institutions and distributes it to the other relevant sites for republication. Consorcio de Compensación de Seguros, a public insurance association, compiles, prepares and publishes data on insurance losses due to natural risks.

Switzerland's Joint Information Platform for Natural Hazards has been operational since March 2010. The Platform allows for timely and relevant information to be provided by government specialists from the Federal Office of Meteorology and Climatology, MétéoSwiss, the Federal Office for the Environment and the Institute for Snow and Avalanche Research. The platform includes current measurement and monitoring data, forecasts, models and bulletins regarding storms, floods and avalanches. It is accessible to federal, cantonal and communal task forces in order to facilitate their response to natural events. After major disasters, the government authorities usually carry

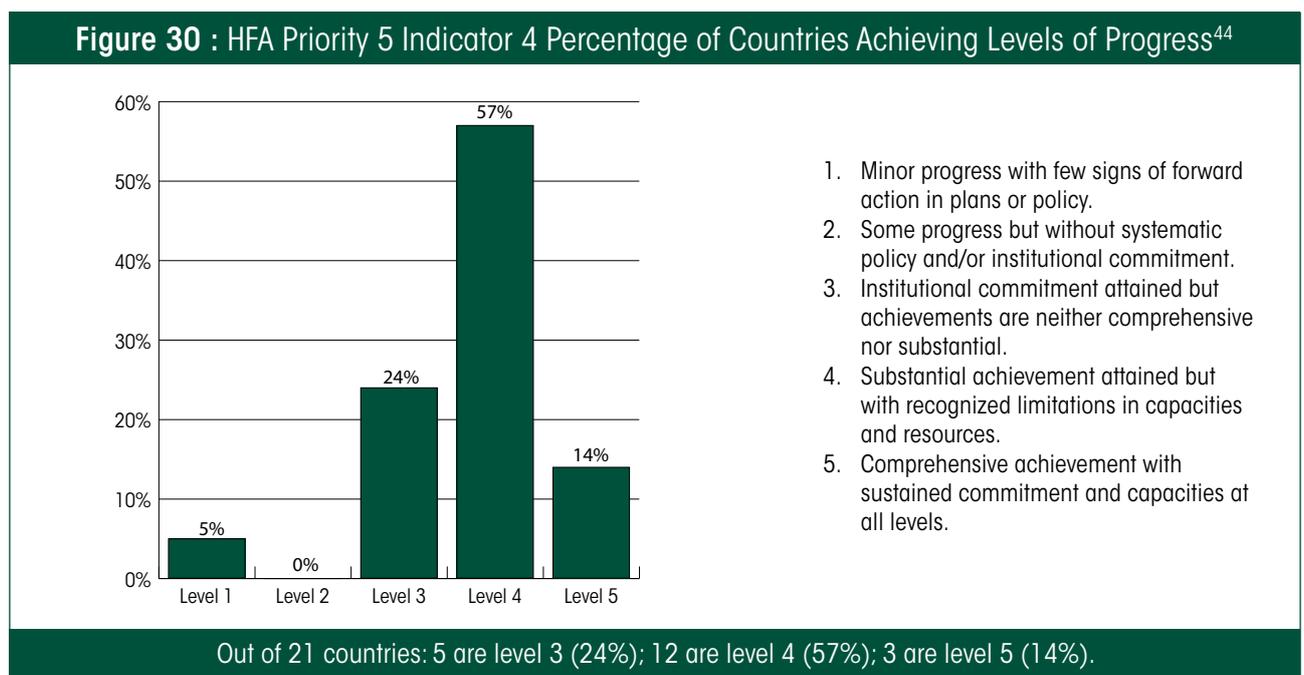
out in-depth event analysis. Some lessons learned from past events have led to new policies regarding disaster risk reduction.

Georgia's National Environmental Agency and other scientific institutions collect data and conduct studies of natural and manmade risks for natural disasters and industrial facilities' disasters. They plan preventive and palliative measures and assess damages and losses. They conduct reviews of losses after they have been incurred to document damages and develop insight into improving future preparedness.

The countries reported two major constraints: first, there are challenges inherent in disseminating relevant information to all of the affected actors in an emergency situation. Second, coordinating post-event reviews, where such reviews were required, remains a challenge.

### 1.3 Future perspective and cross-cutting challenges

The country reports also identify the factors believed to be 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 that 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



<sup>44</sup> The graphic reflects only the responses from the 21 countries that used the on-line tool and reporting format, while overall 22 countries have reported on HFA implementation.

important drivers or catalysts at the national and local levels for this assessment:

- Multi-hazard integrated approach to disaster risk reduction and development.
- Gender perspectives on risk reduction and recovery adopted and institutionalized.
- 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 nongovernmental actors, civil society and private sector, among 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. Communities face risk exposures from a variety of hazards, both natural and man-made in origin, which can stem from hydro meteorological, geological, technological or environmental forces. The resulting cumulative risks cannot be properly addressed 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.

Georgia provides an example of a multi-hazard approach to disaster risk reduction and development. On 2 September 2010, the President of Georgia officially adopted Georgia's Threat Assessment Document for 2010 – 2013.

The national threat register identifies threats to Georgia's national security, presents possible scenarios of their realization and provides analysis of their probability and impacts. The assessment considers a diverse range of threats to consider in planning, including socio-economic threats and natural and man-made disasters.

Another example is provided by Italy, which has a National Warning System, a network of "Functional Centres" that currently covers all major identified risks. Data produced by other systems are acquired through bilateral and multilateral agency agreements. This approach allows the system to produce multi-risk analyses, maps and atlases that are circulated to the scientific community and to civil protection authorities at all levels. The system is being enhanced through the integration of other networks, with a view towards improving it in the framework of the National Platform for Disaster Risk Reduction.

Countries acknowledge this issue but do not fully implement it across policies and practice. Some 55% of countries report only partial or some reliance (level 2) a decline from the 64% that reported this level in the 2009 reporting cycle. A further 40% of countries report significant and ongoing reliance (level 3), consistent with the 36% that reported this level in 2009.

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 creation of new National Platforms for disaster risk reduction could facilitate these activities.

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

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 experience different disaster-related risks. Gender shapes the capacities and resources of individuals to build resilience, to 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.

Although there is gender equality by law and the importance of gender balance is widely recognized and emphasized, women are not always equally integrated in the appropriate organizations of disaster management due to previous regulations and traditions.

Some 30% of countries report no or little reliance in this area (level 1) as compared with 7% that reported level 1 in 2009. A further 40% of countries report partial or some

**Figure 31 : Level of reliance on multi-hazard approach as driver of progress**

1: No or little reliance	2. Partial or some reliance	3. Significant and ongoing reliance
Bulgaria	Armenia Croatia Finland The former Yugoslav Republic of Macedonia France Georgia Monaco Serbia Sweden Switzerland Turkey	Czech Republic Germany Italy Moldova Norway Poland Portugal Romania
No. of countries: 1 Percentage of total: 5%	No. of countries: 11 Percentage of total: 55%	No. of countries: 8 Percentage of total: 40%

*Note : Two of the 22 countries reporting for this cycle did not provide levels for this indicator.*

reliance (level 2) as compared with 57% in 2009. Finally, 30% report significant and ongoing reliance (level 3) down slightly from the 36% that had reported this level in 2009.

It should also be noted that there is significant variation from country to country even within a common quantitative indicator (level 1, 2 or 3) as to how gender issues are treated. Certain countries believe that as gender equity is enshrined in law, the issue has been addressed. Other countries believe that gender issues are not pertinent to disaster risk reduction as men and women both sustain disaster-related losses. One country reported efforts to try to recruit more women for disaster risk reduction professions.

However, gender issues are explicitly treated in the developing cooperation/ international assistance agendas. Sweden, for example, plans to include a gender analysis and a subsequent gender action plan and specific reporting in all long-term disaster risk reduction projects. A gender handbook for all international assistance projects has been developed which highlights women’s participation and gender-disaggregated data. Gender and diversity are integrated into more large-scale DRR projects through analysis, education/training, specific activities and recommendations within the project.

The former Yugoslav Republic of Macedonia reported

that among the 42 national federations of NGOs and professional associations that are part of the former Yugoslav Republic of Macedonia’s National Public, two are gender-related: the National Women’s Council and the Macedonian Women’s Lobby\*. In collaboration with the UNDP and the Government of Japan, a project is underway to draft a national plan for crisis management in accordance with gender issues.

In connection with UNISDR’s mid-term review of the implementation of the HFA, a research paper was prepared<sup>45</sup> offering an in-depth study examining the ways in which women act as agents of community resilience. It recommended mechanisms that would empower women’s organizations to become stakeholders for implementation of the HFA. The examples presented focused on the experience of women in transitional economies.

It is recommended that the regional organizations address the need to better understand gender perspectives on disaster risk reduction, even within the member countries’ domestic contexts. For example, while both men and women may be evacuated in a civil emergency, there are safety and security issues unique to women and girls that must be addressed to ensure adequate preparedness. Another issue to consider is search and rescue protocols, particularly in gender-segregated areas, such as schools and hotels. A recent UNISDR publication<sup>46</sup> references studies

\* Name of the organization

<sup>45</sup> [http://www.preventionweb.net/files/18197\\_201guptaandleung.therolesofwomenasaf.pdf](http://www.preventionweb.net/files/18197_201guptaandleung.therolesofwomenasaf.pdf)

**Figure 32 : Level of gender perspectives approach as driver of progress**

1: No or little reliance	2. Partial or some reliance	3. Significant and ongoing reliance
Armenia Bulgaria France Georgia Moldova Romania	Czech Republic The former Yugoslav Republic of Macedonia Italy Monaco Poland Serbia Sweden Turkey	Croatia Finland Germany Norway Portugal Switzerland
No. of countries: 6 Percentage of total: 30%	No. of countries: 8 Percentage of total: 40%	No. of countries: 6 Percentage of total: 30%

*Note : Two of the 22 countries reporting for this cycle did not provide levels for this indicator.*

that show that women’s vulnerabilities during and after disasters are linked to their role and status in society, making women and children 14 times more likely to die than men during a disaster.

This effort can both ensure that gender issues are addressed appropriately within the DRR framework, as well as to initiate a dialogue to further understanding as to what gender issues mean within the HFA framework.

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

Capacity development is a central strategy for reducing disaster risk. It is 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 levels is limited, with 65% of countries reporting only partial or some reliance (level 2), a slight increase over the 57% that reported this result in 2009. A further 35% report significant and ongoing reliance (level 3), as compared with 43% in 2009.

Countries again report significant variations as to their experience and attainment even within an identical level indicator (level 1, 2, 3). The variations appear to be the result of resources available to support capacity building. Capacity development is dependent of adequate resources, which, in turn, is dependent upon public awareness of the importance of disaster risk reduction, thus ensuring fund-

ing for DRR remains a priority.

Leveraging limited resources is a critical role performed by the regional organizations, as such participation is helpful to capacity building. Bulgaria, for example, is an active participant in international trainings for disaster risk reduction and has a regional trainer for DRR for South-Eastern Europe, part of a joint project of DPPI, MSB and CADRI. Such exchanges allow for efficient capacity building by leveraging the expertise within the regional networks.

Building capacity requires identification, strengthening and linking existing resources, while acquiring new resources as necessary. To achieve this goal, the former Yugoslav Republic of Macedonia is developing a set of risk assessment methodologies addressing: (1) risk assessment of risk-related phenomena, (2) communal resilience and vulnerability assessment, (3) competent institutions’ capacity assessment, (4) damage assessment and consequential damage assessment of accidents and disasters, (5) response assessment and (6) financial implications assessment for prevention, response and rehabilitation. Furthermore, the former Yugoslav Republic of Macedonia identified five specific assessments to be developed. The Council of State Secretaries has organized nine working groups to undertake this task.

It is further recommended that the EFDRR engage its members to address means of ensuring adequate funding for capacity building initiatives, perhaps through advocacy.

<sup>46</sup> <http://www.unisdr.org/publications/index.php?pid=0&tid=38&rid=0>

**Figure 33 : Level of reliance on capacities approach as driver of progress**

1: No or little reliance	2. Partial or some reliance	3. Significant and ongoing reliance
	Bulgaria Croatia Czech Republic Finland The former Yugoslav Republic of Macedonia France Georgia Monaco Poland Romania Serbia Sweden Turkey	Armenia Germany Italy Moldova Norway Portugal Switzerland
No. of countries: 0 Percentage of total: 0%	No. of countries: 13 Percentage of total: 65%	No. of countries: 7 Percentage of total: 35%
Note : Two of the 22 countries reporting for this cycle did not provide levels for this indicator.		

*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.

Although programmes partly take account of socio-environmental risks to the most vulnerable and marginalized groups, there is room for improvement. Some 55% of countries report partial or some reliance (level 2) virtually unchanged from the 50% that reported this level in 2009. With the exception of Monaco, the remaining countries report significant and ongoing reliance (level 3), again virtually unchanged from the 2009 report.

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

Effective disaster risk reduction requires effective com-

munity 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.

To create an effective structure for disaster management in Turkey, the main actors responsible for this function were joined under the Prime Ministry “Disaster and Emergency Management Presidency (AFAD). Within this new organization, three boards and committees were established with members from governmental organizations, non-governmental organizations, universities and the private sector. AFAD has begun the studies necessary to establish a national platform for disaster risk reduction with a view towards completion by year-end 2011. AFAD has also begun to evaluate an accreditation system for NGOs working on DRR activities.

Some 60% of countries report only partial or some re-

**Figure 34 : Level of reliance on security/social equity approach**

1: No or little reliance	2. Partial or some reliance	3. Significant and ongoing reliance
Monaco	Armenia Czech Republic Finland The former Yugoslav Republic of Macedonia France Georgia Poland Romania Serbia Sweden Turkey	Bulgaria Croatia Germany Italy Moldova Norway Portugal Switzerland
No. of countries: 1 Percentage of total: 5%	No. of countries: 11 Percentage of total: 55%	No. of countries: 8 Percentage of total: 40%
<i>Note: Two of the 22 countries reporting for this cycle did not provide levels for this indicator.</i>		

liance in this area (level 2), unchanged from the results reported in 2009. A further 40% report significant and ongoing reliance (level 3), an insignificant decrease from the 43% reported in 2009. It emerges that there is scope for enhanced coordination among NGOs and public authorities. Many of the countries report challenges in coordinating the activities of the various partnerships.

All actors involved in disaster risk reduction are part of Italy’s National Civil Protection Service. These include public institutions, public agencies, research centres, private companies and voluntary associations. Partnerships are established through bi- and multi-lateral agreements and by means of inter-agency bodies, such as the National Commission for the Forecasting and Prevention of Major Risks and the Civil Protection Operational Committee. Similar bodies have been established at the regional, provincial and local levels. While such mechanisms allow for engagement of diverse sets of professional expertise, they require careful coordination to be effective.

**Figure 35 : Level of reliance on engagement/partnership approach**

1: No or little reliance	2. Partial or some reliance	3. Significant and ongoing reliance
	Armenia Bulgaria Czech Republic Finland Georgia Moldova Monaco Poland Romania Serbia Sweden Turkey	Croatia The former Yugoslav Republic of Macedonia France Germany Italy Norway Portugal Switzerland
No. of countries: 0	No. of countries: 12	No. of countries: 8
Percentage of total: 0%	Percentage of total: 60%	Percentage of total: 40%
<i>Note: Two of the 22 countries reporting for this cycle did not provide levels for this indicator.</i>		





# **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 progress is assigned mainly to national governments, reporting responsibilities are also assigned to regional and international organizations and institutions.

In response to 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 highlight organizational effectiveness in fulfilling regional-level tasks identified in the HFA, which include promoting regional programmes to support disaster risk reduction; supporting the development of regional collaborative centers; 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 transboundary 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 are examined in Section 2.1.

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

#### 2.1.1. European Union and European Commission

Within the European Commission<sup>47</sup>, the DRR agenda has made significant advances on both political and technical levels.

The current political framework for EU policy has been set by two Communications adopted as a package in February 2009 – one covering EU Member States and the other transitional countries, both endorsed by Council conclusions.

Since 2009, implementation of the internal strategy has progressed especially in the areas of risk assessment, data comparability and financing.

The external strategy has been followed by an implementation plan (recently issued by the Commission) outlining actions to be pursued in the next three years. Synergies with the implementation of the EU framework on disaster prevention within the EU, as well as with existing tools and instruments, such as the Community Civil Protection Mechanism and the climate adaptation policy, are planned.

#### EU approach on the prevention of natural and man-made disasters

In parallel to reinforcing the EU's response to disaster<sup>48</sup>, the European Commission continues to work in the fields of prevention, preparedness and disaster risk reduction.

The political framework for EU policy in the field of prevention has been set by a Commission Communication adopted in February 2009<sup>49</sup>, supported by Council Conclusions adopted in November 2009<sup>50</sup> and reinforced by the European Parliament Resolution of 21 September 2010<sup>51</sup>. In April 2010, Council Conclusions on prevention of forest fires within the EU were adopted.

The Prevention Communication included the following proposals:

- *Development of knowledge-based disaster prevention policies* : spreading best practices, developing common approaches to risk assessment and mapping.
- *Extending cooperation of actors involved in disaster management* : developing coordinated mechanisms involving prevention, preparedness, response and recovery activities, reinforcing early warning tools and training.
- *Targeting legislative and financial instruments for prevention action.*
- *International cooperation* : implementing the strat-

<sup>47</sup> A number of a number of General Directorates (DGs) support DRR issues within the European context, including DG Humanitarian Aid and Civil Protection (ECHO) DG Research, DG Enlargement, DG Climate Action, DG Environment.

<sup>48</sup> A Communication to strengthen the EU's disaster response capacity was adopted on 26 October, 2010.

<sup>49</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "A Community approach on the prevention of natural and man-made disasters" [COM (2009) 82 final of 23.2.2009].

<sup>50</sup> Council Conclusions on a Community framework on disaster prevention within the EU of 30.11.2009 (Document 15394/09).

<sup>51</sup> European Parliament resolution of 21 September 2010 on the Commission communication: A Community approach on the prevention of natural and man-made disasters.

egy in cooperation with Candidate countries or potential Candidates for accession and as part of the Programme for Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD) within the Euro-Mediterranean Partnership and the Eastern Partnership.

The Commission is coordinating these actions in alignment with the HFA.

The Council Conclusions on an EU framework for disaster prevention adopted in November 2009 invited Member States and the Commission to further develop approaches and procedures to risk management, based on building blocks such as risk mapping, risk assessment and analyses, and covering the potential major natural and man-made disasters. The importance of prevention policy at all levels of government has been recognized, including the synergies with adaptation to climate change.

The Commission engaged in a number of activities to fully implement the EU framework for the prevention of disasters<sup>52</sup>.

Within this framework, on 21 December 2010, the Commission issued a guidance paper on national risk assessment and mapping for disaster management, which was developed together with the national authorities of the Member States<sup>53</sup>.

The guidelines focus on the processes and methods of risk assessment as carried out within the broader framework of risk management and risk mitigation and are based on a multi-hazard and multi-risk approach, covering in principle all natural and man-made disasters. They also propose definitions of the most important terms, based on ISO and UNISDR terminology. In addition, definitions for the major impact categories are proposed. A strong emphasis is put on using empirical quantitative methods as far as possible.

It is now expected that EU Member States will further develop national risk management processes, in the context of which they would make use of those guidelines. On the basis of the information to be provided by Member States to the Commission by the end of 2011, the latter will produce an overview of the major risks faced by the EU in 2012.

The Commission is also working towards an improvement

of its knowledge base on disasters and encouraging effective and greater investment in disaster prevention. Concerning the latter, the following issues were identified as deserving further consideration<sup>54</sup>:

- Effective use of EU funding for prevention of disasters;
- Introducing conditionality in EU funding – linking the level of funding to Member States to prevention measures being in place;
- Increased use of disaster insurance policies with risk-based premiums for households, the public sector, business and agriculture; possibility of insurance pooling;
- Exploring the possible use of insurance-linked securities (catastrophe bonds) and other alternative risk transfer instruments in the European context to raise additional finance on the international capital markets and thus reduce the costs of insurance.

Actions were also developed with the European Environment Agency (EEA) to encourage better information and comparability of disaster data, such as information on the costs of disasters<sup>55</sup>. The results of this work will contribute to the development of the adaptation to climate change Clearing House Mechanism.

Within the framework of an 18-month disaster prevention programme, the EC has begun to collect information focused on specific perils (earthquakes, tsunamis, floods, storms, droughts and heat waves) and horizontal measures (such as infrastructure design). By year-end 2012, the programme will result in the adoption of EU guidelines on minimum standards for disaster prevention.

The EC February 2009 Communication<sup>56</sup> also calls for training and raising awareness of disaster prevention. The Commission endorses cooperation projects on public awareness and education, such as the preparation of school curricula, for example, under the Civil Protection Financial Instrument.

## Community approach on the prevention of natural and man-made disasters

On 23 February 2009, the EC issued a communication

<sup>52</sup> See Communication of the Commission on a Community approach on the prevention of natural and man-made disasters [COM(2009)82 final of 23.2.2009] and Council Conclusions of 30 November 2009 on a Community framework on disaster prevention within the EU.

<sup>53</sup> Commission Staff working Paper - Risk Assessment and Mapping Guidelines for Disaster Management [SEC(2010) 1626 of 21.12.2010].

<sup>54</sup> See, *inter alia*, Council Conclusions of 8 November 2010 on Innovative Solutions for Financing Disaster Prevention.

<sup>55</sup> Such action will build on the report of the European Environment Agency "Mapping the impacts of natural hazards and technological accidents in Europe", 2010.

<sup>56</sup> Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Community approach on the prevention of natural and man-made disasters, February 23, 2009, see : [http://ec.europa.eu/environment/civil/pdf-docs/com\\_2009\\_82en.pdf](http://ec.europa.eu/environment/civil/pdf-docs/com_2009_82en.pdf).

(COM.2009.82) to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, “The Community approach on the prevention of natural and man-made disasters”. The Communication explicitly recognizes the increasing frequency and severity of disasters, which vulnerability is the consequence of climate change.

The strategy set forth in the Communication is part of a set of instruments with both an external and an internal dimension. Emergencies related to conflicts or acts of terrorism are excluded from consideration. The strategy recognizes that hazards often have cross-border impact and effects on the growth and competitiveness of the European Union (EU). A Community approach to enhance the effectiveness of preventive measures is based on:

*Developing existing knowledge, so as to improve the effectiveness of prevention policies.* The 7<sup>th</sup> Research and Development Framework Programme (RDFP) supports the coordination of research activities and the dissemination of information on disaster risks, including land use planning and risk mapping.

*Extending cooperation of actors involved in disaster management.* Prevention, preparedness, response and recovery activities should be based on coordinated mechanisms involving public and private actors. Links between detection and early warning systems should be developed, including in cooperation with Mediterranean third countries. The Commission must further develop the evaluation of the Civil Protection Mechanism and training will be carried out within the framework of the civil protection programme.

*Targeting legislative and financial instruments for prevention action.* Within the framework of the 2007-2013 budget, the Commission should identify the instruments that could finance prevention measures (for example, in the areas of rural development, civil protection, environmental protection, research and information and communication technologies). If necessary, the Commission shall make recommendations for the integration of these measures in national operational programmes.

International cooperation. This strategy should be implemented in cooperation with Candidate countries or potential Candidates for accession, with Neighborhood Policy (ENP) partner countries and as part of the Programme for Prevention, Preparedness and Response to Natural and Man-Made Disasters (PPRD) within the Euro-Mediterranean Partnership.

The Commission will coordinate these actions in alignment with the HFA.

## Consultative Meetings With Parliamentarians

UNISDR held consultative meetings with parliamentarians around the world, aiming to increase the understanding and knowledge of national legislators on disaster risk reduction and climate change adaptation, which led to an International Roundtable of Parliamentarians on Disaster Risk Reduction and Climate Change Adaptation. The Roundtable took place in Malta on 24 November 2009 at which event the Mediterranean Parliamentary Assembly adopted the “Malta Declaration of the Commitment of Parliamentarians to COP15 and Beyond”.

Recognizing disaster risk reduction as a first line of defense in adapting to climate change, the parliamentarians urged political commitment through action at the UN Climate Change Conference in Copenhagen. The Declaration calls for the parties at the 15th session of the Conference of the Parties to the UNFCCC (COP 15) to “ensure immediate action for the finalization of a legally-binding agreement, with progressive and accessible financing mechanisms adequate for reaching the goals of disaster risk reduction coupled with accessible appropriate technology, to ensure availability based on region-specific vulnerabilities.”

On that basis, they called upon:

*“All the Parties to the Conference to ensure immediate action to finalize a legally-binding agreement, with progressive and accessible financing mechanisms adequate for reaching the goals of disaster risk reduction, coupled with accessible appropriate technology, to ensure availability based on region-specific vulnerabilities.”*

*The private sector, civil society and other relevant stakeholders to use their influence to ensure the implementation of COP 15 decisions and achieving and realizing their national goals.*

*The private sector to set aside no less than 10% of corporate social responsibility funding for the specific use for disaster risk management and climate change adaptation programmes and projects.”*

## Research activities

The EU finances research to support disaster risk reduction.

The ongoing Seventh Framework Programme (FP7) (2007-2013) contributes, through some of its specific research programmes and yearly calls for proposals, financing of projects related to disaster risk reduction. The Infrastructures programme, for example, reinforces the seismic networking capacity (through a large project called NERA) as well as the seismic engineering infrastructures (SERIES) related to the construction sector promoting seismic building codes.

Concerning the Environment (including climate change) research programme, the focus was on the improved knowledge base, methods and integrated frameworks that are necessary for a better assessment of hazards, vulnerabilities and risks and for the development of a more sound risk management approach promoting prevention and mitigation strategies. On the pre-operational level, activities are developed under the JRC (Joint Research Centre-in Ispra-GDACS) or the GMES Emergency response service (Global Monitoring for Environment and Security) programme<sup>57</sup>. Both make use of more applied research and contribute to the assessment of crisis/emergency situations as well as to the improvement of management and security issues<sup>58</sup>.

In 2009 and 2010, as a further example under the Environment Research programme (natural hazards research) and besides the hazards driven research some more concern has been given to the social and economic dimension of natural hazards research. In 2009 the topics open for research were the following: Forest fires in the context of climate and social changes; Cost of natural hazards; Vulnerability assessment of buildings, lifelines systems and networks related to earthquakes; and Risk prevention and management of urban floods with a focus on Asia. In 2010, the topics addressed: Early warning and forecasting systems to predict climate-related drought vulnerability and risks in Africa; Building a culture of risk prevention in Europe; New methodologies for multi-hazard and multi-risk assessment; Social science research on natural hazards and decision making processes. This will certainly enable a broader and integrated understanding of the core issues, representing a major contribution to overall disaster risk reduction goals.

On the issues related to climate change research, the Environment (including climate change) research programme focused in 2009 and 2010 on topics including: Climate change predictions in Sub-Saharan Africa (east to west), Quantification of impacts and assessment of adequate adaptation measures; Climate-induced changes in water resources in southern Europe and neighboring countries as a threat to security; Methods to quantify the impacts of climate and weather on health in lower income countries; The effect of environmental change on the occurrence and distribution of water-related vector-borne diseases in Africa; Assessing vulnerability of urban systems, populations and goods in relation to natural and man-made disasters in Africa.

To disseminate research results, the European Commission, in collaboration with UNISDR, organized two international workshops to promote dialogue between the European scientific community and the policymakers on issues related to climate change adaptation and risk reduc-

tion. Both workshops gathered participants from different scientific and policy sectors, as well as representatives of several policy EC directorates. The October 2009 workshop had a broad consideration of natural hazards, while the July 2010 workshop focused on climate change impacts and adaptation on water-related disasters.

The events brought scientists (mainly representatives of EC- funded FP6 and FP7 research projects) and policymakers together for an exchange on various issues related to climate change impacts and hazards. The workshop discussed the state of knowledge, research perspectives and needs, as well as the best way to communicate key findings to policymakers and stakeholders, including IPCC authors and ISDR system partners.

A main outcome of these events was to boost the communication of key scientific findings to representatives of EC Policy DGs, IPCC and UNISDR, highlighting how these could contribute to EU policies. The events highlighted that an important component to boost communication and exchanges among the scientific and policy community passes through a better science-policy interface. This aspect has been discussed in depth at the workshops, using FP6 and FP7 research projects as examples for guiding the debate. Discussions highlighted the growing awareness for building up operational science-policy transfers.

While the science-policy interfacing difficulties are well understood, operational solutions are not yet in place to improve links between the two communities. The workshops provided some recommendations in this respect, namely :

- Interdisciplinary/multidisciplinary RTD projects on DRR need to be emphasized. Social and policy teams should be encouraged to work with natural scientists for improving the transfer of policy-relevant results. This can be helped by the involvement of relevant users such as civil protection units
- There is a need to build up an operational, effective and sustained platform to optimize the way research will be used at international, EU, national, regional or local levels. European National Platforms might help in this respect.
- Effective transfer should also be investigated in light of previous achievements as documented by case studies from European research projects and “success stories” carried out at different scales could be identified, building up cooperation links among different initiatives.
- Finally, the format in which science information is made available to policy stakeholders should be im-

<sup>57</sup> [www.emergencyresponse.eu](http://www.emergencyresponse.eu)

<sup>58</sup> See the GDACS (Global Disaster Alert and Coordination System- [www.gdacs.org](http://www.gdacs.org) –and the European Flood alert system EFAS or the European Forest Fires Information System (EFFIS).

proved. Recent examples of “Science-Policy Briefs” starting from policy questions and providing scientific insights, have been well received by EU Member States. More could be done on the development of guidance documents (translated in different EU languages) describing research outputs in a practical way. While the EU and international organizations may act as facilitators, it should be up to the national authorities and mechanisms such as National Platforms to take over the relay of the information and its use at the most appropriate scale.

On publications with relevance to DRR, the research programme Environment produced in 2009 a report “Principles of multi-risk assessment.”<sup>59</sup>

The European Environment Agency developed a report on the impact of natural hazards and technological accidents in Europe over the past decade<sup>60</sup>. In addition, in May 2010, the EU held an expert meeting in Copenhagen with the EEA to identify information needs and gaps on disaster data.

### Adapting to climate change

The EC contributes to the establishment of a European framework to 1) improve the resilience of social and economic systems as well as ecosystems across Europe and in other parts of the world, 2) reduce their vulnerability to the impacts of climate change, and 3) ensure that crucial areas such as food security, human health, ecosystem protection, economic and social cohesion and energy supply are guaranteed.

The White Paper on Adaptation<sup>61</sup> sets out the Commission’s approach for adaptation and is divided into two phases. Phase 1 from 2010-2012 involves mainstreaming of adaptation into EU Community policies; Phase 2 from 2013 onwards represents the implementation phase of a comprehensive adaptation strategy. The work plan includes 1) steering the implementation of the White Paper on adaptation to Climate Change for ensuring that an appropriate climate adaptation dimension is present in all Community policies; 2) developing an integrated adaptation strategy to climate change inside the EU from 2013 afterwards, building on the White Paper; and 3) supporting adaptation in transitional countries, in particular, Least Developed Countries and Small Island Developing States, through EU programmes, such as the Global Climate Change Alliance (GCCA) and international negotiations on climate change.

The work programme for the period 2009-2012 focuses on the implementation of the White Paper and development of the EU adaptation strategy. The paper discusses how to improve the resilience of social and economic systems as well as ecosystems across Europe and in other parts of the world. This includes reducing vulnerability to the impacts of climate change and ensuring that crucial areas such as food security, human health, ecosystem protection, economic and social cohesion and energy supplies are guaranteed. For the work programme, an action plan is outlined on four pillars. Pillar 1 strengthens the knowledge/evidence base. Pillar 2 promotes mainstreaming climate adaptation into key policy areas. Pillar 3 involves policy instruments for adaptation financing. Pillar 4 steps up international cooperation on adaptation. Humanitarian assistance in climate change adaptation is also addressed in the work programme.

Currently, the Commission is developing an adaptation clearinghouse mechanism in order to support the knowledge base. This will be a tool to share information on climate change risks, impacts and best practices. It will be targeted at governments, agencies, and organizations working on adaptation policies. The clearinghouse aims to be operational in 2012 and disaster risk reduction is one of the areas covered by the tool.

Mainstreaming adaptation into key EU policies is an ongoing area of work. This includes mainstreaming into EU financing instruments, and integrating adaptation into regional policy, agriculture, research, disaster prevention and preparedness, as well as external policies. In relation to development cooperation, the Commission staff working document on the implementation plan for an EU strategy for supporting DRR in transitional countries 2011-2014 (SEC (2011) 215 final) promotes coherence between disaster risk reduction and adaptation to climate change.

The European Environment Agency, EEA, has a data center on climate change<sup>62</sup>, which includes an overview on the national adaptation strategies<sup>63</sup>.

### Financing Instruments

The European Union seeks to better integrate disaster prevention in existing EU financing instruments. To do so, the EU is finalizing a study of its funding sources related to prevention to identify means of improving funding effectiveness.

Cohesion Policy funding (ERDF, ESF, CF) is a major financing instrument with the 2007 – 2013 programme for

<sup>59</sup> [http://ec.europa.eu/research/environment/index\\_en.cfm?pg=hazards](http://ec.europa.eu/research/environment/index_en.cfm?pg=hazards)

<sup>60</sup> European Environment Agency, Mapping the Impacts of Natural Hazards and Technological Accidents in Europe: An Overview of the Last Decade, EEA Technical Report, No. 13/2010.

<sup>61</sup> COM (2009) 147

<sup>62</sup> <http://www.eea.europa.eu/themes/climate>

<sup>63</sup> <http://www.eea.europa.eu/themes/climate/national-adaptation-strategies>

co-financing of €6.5 billion on risk prevention with the focus on prevention and preparedness. Many disaster risk reduction activities are eligible under the territorial co-operation (INTERREG) financing instrument. Other financing instruments at EU level include Civil Protection (CPFI), Pre-Accession (IPA) and Neighborhood Policy (ENPI), Rural Development (EARDF), Environment (Life+) and Research and Development.

In 2010, for example, the civil protection budget was €26 million of which €1.13 million was invested in early warning systems, €1.7 million in prevention projects and €1.35 million in preparedness projects. An additional €7 million was spent on training and exercises, including exchange of experts' programmes.

The European Commission encourages National Platforms to seek financing within the framework of cooperation projects. However, many Platforms and HFA Focal Points are not familiar with the financial instruments and the process of preparing a project proposal for funding.

The EC is contemplating a number of measures to improve funding effectiveness for DRR, including :

- Publication of a Catalogue of Prevention Measures;
- Assistance in project definition and preparation;
- Clearer guidance on "prevention" concepts and definitions of success indicators;
- More support for dissemination of project findings;
- Mainstreaming prevention into EU instruments; and
- Fostering collaboration and knowledge transfer among Member States.

The EC is also exploring innovative solutions to risk finance with the objective of lowering the cost of insurance commensurate with improved risk management practices.

### *International Cooperation*

Given the increasing importance of international coordination in effective disaster response, the EC contributes to the prevention and preparedness for and response to disasters, especially in regions adjacent to the EC (Western Balkans, EUROMED and Eastern Partnership) and those most prone to natural disasters (Asia, Pacific, Caribbean).

#### **EUROMED PPRD South**

The 2009-2012 EUROMED Programme on Prevention, Preparedness and Response to Natural and Man-Made

Disasters (PPRD South) is implemented by the Consortium established by the Italian Civil Protection Department, as leader, jointly with the civil protection authorities of Algeria, Egypt and France and the UNISDR. PPRD South works with the national disaster management agencies of Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Israel, Jordan, Lebanon, Montenegro, Morocco, Palestinian Authority, Syria, Tunisia and Turkey (the "Partner Countries").

Building upon the previous EU-funded "Pilot" and "Bridge" programmes on Euro-Mediterranean cooperation in Civil Protection, PPRD South reinforces the quality of civil protection services in the Euro-Mediterranean region and continues institutional cooperation in the field, both between the EU and the Partner Countries and among the Partner Countries themselves. Its objectives include bringing Partner Countries closer to the Community Civil Protection Mechanism.

The activities of PPRD South include thematic workshops with a dual focus on disaster "prevention and preparedness" and "response", developing a regional risk atlas and a civil protection operational manual, study visits and targeted technical assistance missions and exchange of experts, as well as risk prevention public information and awareness campaigns in the interested Partner Countries.

#### **Eastern Partnership PPRD East**

The Programme for the Prevention, Preparedness and Response to Natural and Man-Made Disasters (PPRD-East) is one of the six Flagship Initiatives of the Eastern Partnership. The six beneficiary countries are: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. The Programme became operational in 2011 and has a budget of €6 million over four years. The work plan of the Programme includes a web-based regional risk atlas and the preparation and distribution of an operational civil protection manual. The programme will tackle prevention, preparedness and response to natural and man-made disasters affecting the Eastern Partnership countries and the EU, in view of the joint commitment to greater cooperation on disaster management.

#### **Instrument for Pre-Accession Assistance Multi-Beneficiary Programme 2011 – 2013: Environment and Disaster Risk Reduction**

The programme aims at supporting candidate countries and potential candidates to align to the environmental Acquis, as well as to develop the capacities, tools, mechanisms and frameworks for cooperation they need in order to cope with the challenges faced on their way to accession in the area of environment, disaster risk reduction and adaptation to climate change.

A Working Group on Environment and Disaster Risk

Reduction (WG) was established in October 2009, with the view to enhance a participatory approach and regional ownership of the IPA MB 2011-2013 programming process. This WG consists of representatives of IPA Beneficiaries (candidate countries and potential candidates), European Commission (EC) and international organizations (RCC, UNDP, UNEP, UNISDR, WB, and WMO).

The direct involvement of all relevant stakeholders, including donors in the Working Group aims at better coordination in the sector and creating synergy between various interventions as well as avoiding overlaps. The 2011 – 2013 allocated budget for the IPA Programme is €15 million.

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

In 1987, the Committee of Ministers of the Council of Europe established an inter-governmental Open Partial Agreement called EUR-OPA Major Hazards Agreement<sup>64</sup>, which has been joined by 25 countries to date. The main objective of the agreement is “to reinforce and promote cooperation between member states in a multi-disciplinary context to ensure better prevention, protection and organization of relief in the event of major natural or technological disasters by calling upon present day resources and knowledge to ensure efficient and interdependent management of major disasters.”

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. In 2009, Serbia joined EUR-OPA. In that same year, the Committee of Permanent Correspondents representing the Member States of EUR-OPA adopted recommendations on cultural heritage and climate change and on national platforms.

The network of 27 specialized centers within EUR-OPA has developed extensive work in such diverse fields as risk education, landslides and urban risks. The network also organized a major workshop on climate change impact on water-related and marine risks.

The Agreement's activities are 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 previous activities developed by EUR-OPA in several areas are 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. After co-organizing with UNISDR two European meetings of National Platforms and HFA Focal Points in 2007 and 2008, the Agreement supported the organization of the 2009 European meetings of National Platforms and HFA Focal Points in Bonn and London, which led to the creation of the European Forum for Disaster Risk Reduction (EFDRR). The Agreement acts, together with UNISDR Europe, as a secretariat to the EFDRR and continues its support of the development of National Platforms (NPs).

As an international cooperation group, the Agreement is mainly interested in the comparability of risk issues between countries. Along those lines, a comparative study in the various Member countries on the involvement of local and regional authorities in major hazard management has been launched and its first phase report (based on eight countries) highlighted good practices.

The Agreement has continued its support to two major initiatives concerning data dissemination: 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, and the Extremum Project (operated by the Moscow Centre), which completes it with an early estimation of the possible consequences of the reported earthquake. Based on that information, the Agreement collects possible needs expressed by the affected country to disseminate them among the other Member States.

The transboundary effects of major hazards are also an important aspect for the Agreement. Examples of such commitment include the ongoing initiatives on forest fires (management in the Balkans and consequences of forest fires in Chernobyl area) lead by the Freiburg Centre, as well as the previously mentioned mapping project in the Caucasus and comparative legislation study.

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 remains an active member of the Thematic Platform on Knowledge and Education.

In recognition of the role public awareness campaigns can play in increasing resilience to disasters, a pilot project to identify the needs and shortcomings of national and municipal campaigns on population information has been developed in Armenia with a view to define a general methodology valid for other neighboring countries.

Long-standing work on cultural heritage and risks continues to be a concern along with the broader aspects of

<sup>64</sup> [http://www.coe.int/t/dg4/majorhazards/default\\_EN.asp?](http://www.coe.int/t/dg4/majorhazards/default_EN.asp?)

disaster risk reduction. Examples include the work by the Athens Centre to study the vulnerability of monuments and possible interventions to reduce this risk exposure. Two master level courses on the impact of climate change on cultural heritage have been organized respectively for researchers (2009) and for cultural managers (2010). This approach is consistent with the shift in recent years to focus on the origins of, rather than the responses to, disasters.

The Council of Europe together with the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM), organized the 12th Ministerial Session of EUR-OPA Major Hazards Agreement on 28 September 2010 in Saint Petersburg. The session provided guidance to the work of EUR-OPA with a view to the implementation of the United Nations Hyogo Framework of Action on disaster reduction in Europe and the Mediterranean. The Ministers took stock of the mid-term results and adopted a new Medium Term Plan for 2011-2015. The new plan focuses on improving prevention and preparedness and promoting good risk governance; using knowledge to reduce vulnerability; improving preparedness for emergencies to save lives and help victims of disasters. Participants (EUR-OPA and Council of Europe Member States, International Organizations) also discussed the consequences that climate change may have on the frequency and intensity of natural disasters and the measures to strengthen societies' adaptation and resilience.

The new 2011-2015 Medium-Term Plan builds on previous achievements to further promote disaster risk reduction in Europe, but also stresses the recent emergence of two important issues: the role of people themselves as tools to improve resilience and the additional challenges raised by climate change.

The Agreement's 2011- 2015 aligns with the HFA in the following respects:

- *Identify risks; enhance early warning.* The Agreement will help maintain the European Warning System at the Euro-Mediterranean Seismological Centre and will promote other information exchanges. It will promote the maintenance and information update of the EXTREMUM database which permits rapid assessments of predicted damage in the minutes following an event, particularly in the case of earthquakes.
- *Using knowledge to build a culture of safety.* The Agreement will promote research and knowledge management among the Specialized Euro-Mediterranean Centres, will support research related to climate change and environmental degradation and will support the training of risk specialists. The Agreement will promote new remote

sensing and space-based technologies for mapping risks, particularly multi-hazard risks. The Agreement will promote retrofitting of vulnerable buildings in seismically active areas. The Agreement will promote work aimed at improving techniques for technological risks resulting from industrial activities and radiological installations. The Agreement will promote risk education and awareness and continue to support the National Platforms.

- *Support human safety, particularly for vulnerable populations, and effective governance.* The Agreement will continue to promote national initiatives and campaigns, exchanges of experiences, dissemination of educational materials, pilot projects aimed at children or other vulnerable groups and will elaborate new materials as teaching aids, to be carried out in the framework of the BeSafeNet project.

Following the recommendations of the 12<sup>th</sup> Ministerial Session, EUR-OPA has further strengthened the collaboration with UNISDR and the two organizations are jointly carrying out a study on governance of climate change adaptation and risk reduction that will be published in the second quarter of 2011.

### 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 (DPPI) to contribute to the development of a cohesive regional strategy for disaster preparedness and prevention for its eleven members (Albania, Bosnia & Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Moldova, Romania, Serbia, Montenegro, Slovenia and Turkey) and partnering countries (Greece and Hungary).

The goal of the DPPI SEE is to foster regional cooperation and coordination in disaster preparedness and prevention for disasters in South Eastern Europe, as well as moving towards:

- Strengthening good neighborly relations through the exchange of information, lessons learned and best practices in the field of disaster management.
- Enhancing cooperation between DPPI partners in view of EU enlargement and the process of Euro-Atlantic integration for SEE countries.
- Supporting and encouraging 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.

- Assisting and encouraging 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), the North Atlantic Treaty Organization (NATO), the Swedish Rescue Services Agency and the Danish Emergency Management Agency.

DPPI's current work plan includes three projects: Joint Fire Fighting (JFF), Joint Emergency Response Units for Floods (JERU) and the Disaster Management Training Programme (DMTP). The work plan is aimed at a comprehensive, holistic approach to preparedness. It is the result of comprehensive studies that concluded with recommendations for improving disaster risk reduction measures.

### Joint Fire Fighting (JFF)

The Joint Fire Fighting project works to improve preparedness, prevention and response to fires in the SEE region; and to establish the regional platform for education, training, equipping and coordinating information regarding fire risks. In September 2010, DPPI members Albania, Bosnia & Herzegovina, Croatia and the former Yugoslav Republic of Macedonia met in Skopje to continue their work in establishing a regional platform for joint fire fighting, encompassing education, training, response and coordination activities. JFF is an important DPPI project for the region and for the whole of Europe in respect of disaster risk reduction.

### Joint Emergency Response Units for Floods (JERU)

The Joint Emergency Response Units for Floods (JERU) work to improve preparedness and response for floods with joint emergency response units and cross-border cooperation in the South Eastern Europe Region. A meeting of the JERU was held in Zagreb in September 2010 to coordinate the work plan and financing of such activities going forward. DPPI seeks donor support to reactivate JERU for further work on cross-border emergency flood response.

DPPI has engaged with the World Meteorological Organization (WMO) in respect of climate change-induced risks to the hydro systems of each member country. Arrangements are being made to obtain expert assistance to address these risks.

In compliance with the EU's Seveso II Directive, which deals with protection against chemical accidents, DPPI is developing a database, PREMIAN, to track and monitor such risk exposures.

### Disaster Management Training Program (DMTP)

DPPI's Disaster Management Training Program (DMTP) builds capacity in regional disaster management. Beginning in 2009, the focus of DMTP activities has shifted from rescue and relief to preparedness and prevention. This shift has been accompanied by increasing collaboration with relevant ministries such as health and other organizations focused on disaster risks.

In 2009, DPPI conducted nine major training programmes, aimed at building capacity for and implementing DRR measures by training expert trainers. These programmes addressed the risks of fire, crisis intervention, flood protection, cave rescue and pandemic influenza. Other programmes focused on the development of multi-hazard warning systems and the development of disaster risk capacity at all levels. UNISDR committed support to specific DPPI training projects through the Capacity for Disaster Reduction Initiative (CADRI).

In 2010, DMTP offered ten advanced training courses aimed at building capacity in all aspects of disaster risk reduction. The composition of the training programmes shows a pronounced shift from rescue- and relief-oriented training to disaster risk reduction methodologies. This reflects a pronounced cultural shift in the manner in which DPPI works to build regional resilience.

Consistent with the growing emphasis on risk reduction, DPPI is adopting new technologies to engage all stakeholders. A survey to discover the most effective means of using social network technologies found that DRR experts under the age of 35 embraced such technologies for collaborative exchanges. Accordingly, DPPI established its own social network groups using platforms such as Facebook and Twitter. Other channels are used to engage experts, chiefly those over the age of 35, who are uncomfortable with such technologies.

Further proof of the shifts in mindset towards disaster risk reduction over rescue and recovery appears in the wordings of relevant legislation of DPPI member countries. Most of the countries in the South Eastern Europe region have seen changes in their legislation and their government structures. The work of DPPI SEE is visible in the language of the new codes and new structures. Much of the legislation passed in DPPI SEE member countries since 2009, such as in Serbia and Turkey, reflects the approach of the HFA.

One means of advocating for DRR at all levels of government is the National Platforms. Over the 2009 – 2011 time period, DPPI provided significant technical support to the National Platforms of its member countries. In addition, over the past two years, DPPI had engaged in high level policy dialogue on DRR topics. This was accomplished through participation in the Multi-Beneficiary Accession Project funded by the European Union.

At the local level, DPPI SEE has secured committed participation in the UNISDR “Resilient Cities” campaign. Three of the eight member states of DPPI SEE have officially committed to the campaign, the highest regional participation in all of Europe. This participation includes 18 cities in Serbia, 3 in Turkey and 1 in Croatia.

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 plans to build upon existing foundations and further develop ongoing and new activities and projects. The projects will focus 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.

Throughout 2009 – 2011, DPPI continued its work on updating and improving current seismic risk maps with a view towards improving regional assessment methodologies and data exchange.

DPPI contributed to four reports to enhance understanding of disaster risk reduction:

- Mitigating the Adverse Financial Effects of Natural Hazards on the Economies of South Eastern Europe: A Study of Disaster Risk Financing Options<sup>65</sup>;
- South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative: Risk Assessment for South Eastern Europe<sup>66</sup>;
- South Eastern Europe Disaster Risk Mitigation

Adaptation Programme<sup>67</sup>; and

- Strengthening the Hydro Meteorological Services in South Eastern Europe<sup>68</sup>

UNISDR and the World Bank, in collaboration with regional and international partners, including DPPI, began an initiative, the South Eastern Europe Disaster Risk Mitigation and Adaptation Programme (SEEDRMAP) aimed at helping the countries of South Eastern Europe reduce their vulnerability to natural hazards and adapt to climate change. Further details about SEEDRMAP are provided in Section 2.1.4.

In 2010, in the context of the SEEDRMAP implementation, UNISDR supported DPPI SEE in the creation of a management information system hosted by the DPPI SEE website. This system includes the technical development of a database for recording and tracking the SEE DRR experts and function as on-line hosting of documents related to disaster prevention and risk reduction in SEE region.

## 2011 and Beyond

Building on the progress to date, DPPI intends to expand its Joint Fire Fighting project in 2011. It also seeks to reactivate JERU with donor support. A total of 15 DRR events are planned for 2011, including a Regional Conference on Cooperation between Bosnia and Herzegovina, Croatia, Montenegro and Serbia on April 17 and 18. The intent of the conference is to convene decision makers and professionals to further strengthen regional cooperation. Further work is planned for seismic risk mapping and hydro net mapping in partnership with the UNISDR and the World Bank. Work on the PREMIAN database to address chemical risks is planned, as well as expanded training offerings under DMTP. DPPI will continue to engage with regional and international partners, including the EC’s civil protection programmes.

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

The World Bank and UNISDR have initiated SEEDRMAP (South Eastern Europe Disaster Risk Mitigation and Adaptation Programme) in collaboration with regional and international partners. This initiative contributes to regional and country-specific investment priorities (projects) in the area of early warning, disaster risk reduction and financing.

<sup>65</sup> [www.unisdr.org/preventionweb/files/1742\\_SEEDRFinancing.pdf](http://www.unisdr.org/preventionweb/files/1742_SEEDRFinancing.pdf)

<sup>66</sup> [www.unisdr.org/preventionweb/files/18135\\_seedrmapbrochure.pdf](http://www.unisdr.org/preventionweb/files/18135_seedrmapbrochure.pdf)

<sup>67</sup> [www.unisdr.org/europe/eu-gfdr-r/Concept-Note-SEEDRMAP.pdf](http://www.unisdr.org/europe/eu-gfdr-r/Concept-Note-SEEDRMAP.pdf)

<sup>68</sup> [www.unisdr.org/.../files/7650\\_StrengtheningHydrometeorologicalSEE1.pdf](http://www.unisdr.org/.../files/7650_StrengtheningHydrometeorologicalSEE1.pdf)

SEEDRMAP incorporates three focus areas: (i) hydro-meteorological forecasting, data sharing and early warning; (ii) coordination of disaster mitigation, preparedness, and response; and (iii) financing of disaster losses, reconstruction and recovery, and disaster risk transfer (disaster insurance). The initiative will build on the existing cooperation in the region and will complement and consolidate the activities promoted by the EC, the European and Mediterranean Major Hazards Agreement of the Council of Europe, the United Nations, DPPI SEE, RCC SEE and others to promote more effective disaster mitigation, preparedness and response.

SEEDRMAP has catalyzed the engagement of other donors in the region. Through DG Enlargement, the EC funded the Disaster Risk Reduction Initiative with a budget of €6 million over three years. Italy, Sweden, Denmark and Croatia have agreed to join the SEEDRMAP objectives through the strengthening and/or development of national platforms, the provision of technical expertise, and regional capacity development and training. These activities are undertaken within the existing regional organizations, mainly DPPI SEE and RCC SEE.

The SEEDRMAP objective is to reduce the vulnerability of SEE countries to disasters, including the loss of life, property and economic productivity caused by weather extremes and other natural hazards. Since financing of disaster losses, reconstruction and recovery, and disaster risk transfer (disaster insurance) represent a SEEDRMAP focus area, the World Bank and UNISDR support the creation of the South Eastern Europe and Caucasus Catastrophe Risk Insurance Facility (SEEC CRIF).

The commercial insurance market in South Eastern Europe does not offer affordable and dependable insurance coverage to protect individuals and small businesses against material losses arising from catastrophes caused by natural hazards. Consequently, the establishment of the SEEC CRIF makes a visible difference to citizens and small businesses. This unique facility plays an important role in reducing the level of economic and fiscal exposure to disasters caused by natural hazards in SEE. The facility has been expanded to cover countries in the Caucasus, which have similar risks and had expressed an interest in participating. The proposed facility is being established as a regional catastrophe risk pool owned by countries.

It contributes to the development of a catastrophe insurance market in South Eastern Europe and the Caucasus and reduces government post-disaster budgetary outlays on reconstruction. Regional risk diversification and extensive donor assistance will promote a growing private market for catastrophe insurance, which will in turn provide homeowners and small and medium enterprises (SMEs)

with the opportunity to purchase affordable insurance coverage.

Switzerland supported the initiative with a US\$4.5 million contribution in the form of a dedicated trust fund to support the technical preparatory work for the facility's operations in SEE countries.

In 2011, UNISDR and the World Bank published an assessment<sup>69</sup> of the initial impact of SEEDRMAP, which found SEEDRMAP to be an effective programme for disaster risk reduction. Therefore, UNISDR and the World Bank seek to replicate the SEE experience in Central Asia, an area with high risks and vulnerabilities.

### 2.1.5. European Forum for Disaster Risk Reduction

Since the establishment of the UNISDR Regional Office for Europe in 2007, the European NPs and HFA Focal Points have met to share their experiences, good practices and challenges in addressing disaster risk reduction in the context of the HFA implementation.

In addition, the Second Session of the Global Platform for Disaster Risk Reduction<sup>70</sup> offered an exchange of regional perspectives on DRR issues. The Second Session was a gathering of the world's risk reduction community, setting the disaster risk agenda for the next two years and beyond. Held in Geneva, Switzerland on 16 – 19 June 2009, the Second Session focused on delivering four outcomes: commitment to greater investment in disaster risk reduction, reducing risk in a changing climate, accelerating community resilience and livelihood protection and the mid-term review of the HFA.

These meetings have been thematically based and have proved useful; hence the agreement to establish the European Forum for Disaster Risk Reduction (EFDRR) during the London Meeting of European National Platforms and HFA Focal Points in November 2009. A concept paper was developed in May 2010 and finalized in December 2010.

The European Forum includes HFA Focal Points and representatives of National Platforms in the European region, UNISDR-Europe, regional organizations, in particular representatives from the Council of Europe EUR-OPA, and representatives from the European Commission, Civil Protection Policy, Prevention, Preparedness and Disaster Risk Reduction Unit DG ECHO, and sub-regional organizations/institutions as agreed by the Forum.

<sup>69</sup> <http://www.unisdr.org/europe/publications/v.php?id=18136>

<sup>70</sup> <http://www.preventionweb.net/globalplatform/2009/>

The objectives of the EFDRR are:

1. To stimulate and facilitate the exchange of information and knowledge among participating National HFA Focal Points and Platforms and regional/sub regional partners.
2. To provide advocacy for effective action to reduce disasters, by contributing to the implementation of the HFA and by promoting and supporting the creation of new National Platforms.
3. To create a safer Europe by reducing the impact of natural hazards to reduce vulnerability, and increasing the ability to minimize consequences of disasters.
4. To facilitate exchanges among European nations on the implementation of the HFA, for expanding the political space devoted to the issue and innovative ideas in the field of DRR.

The EFDRR held its first annual meeting in Sweden in October 2010 for an exchange of ideas and best practices and a review of progress in implementing the Hyogo Framework for Action since the Second Session of the Global Platform for Disaster Risk Reduction in 2009. The role of the National Platforms was identified as key to bringing the climate change adaptation and the disaster risk reduction scientific communities and practitioners together. National Platforms and HFA Focal Points shared their experiences and success in showing examples on how climate change adaptation and DRR have moved forward at the national level. The existing task force on climate change adaptation and DRR agreed to continue to embrace this issue as well as to inform, share and when possible, influence the European regional policy papers and documents emerging from the European Commission. The participants agreed to continue to strengthen exchanges on disaster risk reduction through seminars, conferences and exchanges between professionals in different countries. UNISDR now produces a monthly e-bulletin to increase awareness on news, activities and progress in Europe. UNISDR, in cooperation with participating countries, developed a brochure describing the EFDRR.

*UNISDR Parliamentarian Initiative.* This Initiative promotes advocacy among parliamentarians, including partnership building with sub-regional and regional parliamentary fora and assemblies. Technical support and guidance is provided to parliamentarians who become advocates and champions for greater synergies between disaster risk reduction and climate change adaptation. To date, more than 900 parliamentarians from 130 countries are advocates of DRR in the context of climate change and development. On 6 October 2010, the Advocacy Kit

for Parliamentarians “Disaster Risk Reduction: An Instrument for Achieving the Millennium Development Goals” was launched at the 123rd Assembly of the Inter-Parliamentary Union.

*Private sector engagement.* The establishment of a private sector advisory group is underway, with the development of a concept note and work plan. On October 13, 2010, International Day for Disaster Reduction, an event was held with private sector representatives. The SRSG participated in several major private sector meetings, including the Global Compact Summit 2010. The UNISDR and the World Bank collaborated with the Regional Council for South Eastern Europe to establish a risk insurance facility providing coverage for homeowners and small businesses (see Section 2.1.4).

*Global Assessment Report, HFA Monitoring and HFA Mid-Term Review.* The UNISDR prepared the 2011 Global Assessment Report and the second round of progress reporting (2009 – 2011) for HFA Europe. In 2010, a mid-term review of the HFA was performed to assess the effectiveness of the instrument.

*Climate change adaptation and disaster risk reduction.* UNISDR supports the Inter-Governmental Panel on Climate Change Special Report “Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation”. In Europe, the three main focus areas of UNISDR in relation to climate change adaptation are: 1) coordination and capacity building for effective use of resources among European actors involved in climate change adaptation and DRR; 2) production of knowledge on weather hazards and coping mechanisms which can be adopted at all levels to enhance communities and households resilience; and 3) advocacy for enhanced financial and political commitment towards investments in climate change adaptation and DRR.

*Global capacity development.* Together with the Capacity for Disaster Reduction Initiative (CADRI), UNISDR developed a training tool for local governments in the context of the “Making Cities Resilient” Campaign. A website<sup>71</sup> has been launched. UNISDR Europe collaborates with DPPI SEE, MSB and ISDR partners on the implementation of the Disaster Management Training Programme (DMTP) in SEE. Capacity developments are also included in the context of the EC PPRD South’s EUROMED programme (Italy, France, Egypt, Algeria and UNISDR) where the DRR agenda is also advanced through trainings on NP developments delivered to the member states.

*Global advocacy.* On the occasion of the 2009 G8 Summit, the seven international agencies/organizations that

<sup>71</sup> See [www.cadri.net](http://www.cadri.net)

form the management oversight board of the UNISDR urged G8 leaders and their governments to advance disaster risk reduction in the international agenda. The context of the 2009 G8 Summit, where key agenda issues included climate change and food safety, was particularly relevant to disaster risk reduction. The Summit was held at L'Aquila, Italy, where a devastating earthquake had struck on 6 April 2009, underscoring societal vulnerability to disaster.

*Media Training.* UNISDR developed a “Handbook for Multi-Media Reporting on Disaster Risk Reduction” and delivered a pilot media training to the EFDRR in Brussels in November 2010. A media expert presented insights on how to effectively communicate disaster risk information to the news media.

After taking stock of achievements to date, the EFDRR agreed to its agenda for 2011: in addition to the areas already cited, it will address harmonization of risk mapping and assessments including data collection, protection of critical infrastructure including hospitals and schools, and cost-benefit analysis case studies.

### **2.1.6. A European Network of National Platforms**

The network is an agreement of the following National Platforms and actors: the German Committee for Disaster Reduction, l'Association Française pour la Prévention des Catastrophes Naturelles (AFPCN), the Polish National Platform (IMGW) 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 levels. The network is also a partner to the EU, the Council of Europe (EUR-OPA) and other relevant international organizations in all aspects related to disaster risk reduction.

Throughout the reporting period, the Network and its members improved information exchanges through organization of joint events. A common work plan for the period 2010-2011 was developed. Based on the work plan, joint project proposals to the EC were developed. The Network is implementing a programme “REX-Integrated-Prevention” dealing with threshold designs in view of natural events. It aims at the elaboration of synthesized lessons learned as the partners of the Network investigate past extreme natural hazards in their countries.

The Network coordinated and submitted comments to

public consultations of the European Commission. Network members were invited to participate in the advisory board of a European-funded project on risk perception (CapHazNet). They also established contacts with the science programme “Integrated Research on Disaster Reduction” (IRDR) of the International Council of Science Union (ICSU).

Recent activities include an international workshop on early warning for flash floods organized by the Czech National Platform in November 2010; the outcomes will be published in the near future.



# 3

## Conclusions and Recommendations



### 3. Conclusions and recommendations

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

Many governments and organizations recognize the need to raise the priority of disaster risk reduction and are directly responding to the expectations and directions of the HFA. There is strong support for this in Europe, where UNISDR coverage includes 49 countries:

- National Platforms for disaster risk reduction have been established in 18 countries, of which 12 are EU member states.
- Thirty-six countries have established official HFA Focal Points, including those with officially designated National Platforms<sup>72</sup>.
- Several ministerial-level regional agreements, arrangements and strategies have been developed in sub-regions of Europe that include disaster risk reduction in their programmes and projects.
- UNISDR, the ISDR system and governments have systematically promoted and advanced the implementation of the Hyogo Framework, such as within the European Union, where EC initiatives are aimed at reducing vulnerability to disasters.

With the adoption of the HFA and the three strategic goals, the country reports show that the main strategic goal described for the 2009 – 2011 period is to anchor a culture of risk and safety, instead of reactive emergency responses. The country reports also show increasing concern about adaptation to climate change challenges relative to what had been reported in 2009.

With respect to the specific indicators of progress, country reports for HFA Priority 1 show that a slight majority, 52%, of reporting countries have attained institutional commitment or substantial achievements, but with recognized limitations in capacities in resources, in ensuring that disaster risk reduction is a national and local priority, with a strong institutional basis for implementation.

In most reporting countries, disaster risk reduction is a cross-sectoral topic and no single law exists for its regulation. However, most have integrated elements of disaster risk reduction into legislation at all levels. Some 55% have attained substantial achievement in terms of the extent to which policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

Some 57% of countries 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.

Multi-sectoral National Platforms for disaster risk reduction are functioning in the following 12 EU Member States to date: Bulgaria, Czech Republic, Finland, France, Germany, Hungary, Italy, Poland, Portugal, Spain, Sweden and the United Kingdom. They are also functioning in Armenia, Croatia, the former Yugoslav Republic of Macedonia, Monaco, Russian Federation and Switzerland. The following countries are in the process of forming National Platforms: Norway, Montenegro, Serbia and Turkey.

In addition, the following 36 European countries have nominated HFA Focal Points for disaster risk reduction: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, the former Yugoslav Republic of Macedonia, Malta, Moldova, Monaco, Montenegro, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom.

Country reports covering HP Priority 2 show that 48% of countries report substantial or comprehensive achievement in risk assessment, although national legislation defining responsibilities at all levels varies significantly and implementation appears correlated with economic development.

With respect to developing and putting in place systems to monitor, archive and disseminate data on key hazards and vulnerabilities, substantial achievement is attained by 57% of reporting countries, despite recognized limitations in capacities and resources. The main obstacle in this area is a lack of financial resources. The high cost of these systems is a limiting factor, particularly in transitional countries, where there are other competing priorities.

Reports covering HFA 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 body of information is available through websites and publications. On-line tools and databases have been created to record past events. Hazard and risk assessments are being used at all levels, national to local. Events are analyzed in detail and the results are used for adapting priorities for action.

<sup>72</sup> <http://www.unisdr.org/europe/eu-nplatform/np-guidelines.php>

With respect to the development of education and training programmes, the quantitative indicators show that there is scope for capacity development in this area. But the country reports share experiences of innovative approaches in working with NGO's and other actors to develop suitable materials for education.

Progress has been made in harmonizing risk assessments for different types of natural hazards and many countries have developed tools, methodologies and guidelines. Some 58% of the reporting countries have attained comprehensive or significant achievement in this area, a level virtually unchanged with that reported in 2009.

Similarly, 48% of countries report substantial or comprehensive achievement in the area of establishing countrywide public awareness of the principles of a culture of safety and resilience with outreach to urban and rural areas. This result is also even with what had been reported in 2009.

With respect to HFA Priority 4, 67% of the countries report that substantial or comprehensive achievement has been attained in the extent to which risk reduction goals are incorporated in environmental risk management policies, with a further 29% reporting institutional commitment.

Having social development policies in place to reduce the vulnerability of at-risk populations is a goal for which 43% of countries have made significant or comprehensive achievement. Certain of the high-income countries answered this question in the context of their aid programmes and partnerships with transitional countries.

A slight majority, 53%, of countries report substantial or comprehensive achievement with planning and management of human settlements incorporating disaster risk reduction elements, including the enforcement of building codes.

Just over half of the countries report substantial or comprehensive achievement in considering disaster risk reduction elements when designing post-disaster recovery and rehabilitation processes in order to build back to a greater level of resilience. This result is virtually unchanged from that reported in 2009.

HFA Priority 4, Indicator 3, "Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities" showed the most dramatic results, both in absolute and relative terms. Some 20% of countries reported substantial or comprehensive achievement in this area, a troubling result. A further 35% of countries report that institutional commit-

ment has been achieved. This represents a significant decline from the 67% of countries that reported substantial or comprehensive achievement in this area in 2009.

Emergency management plans are in place at local, regional and national levels and regular training is performed at all levels. Some 72% of countries report having attained substantial or comprehensive achievement in this area, a result nearly unchanged from 2009.

The use of contingency funding mechanisms varied widely by country, with more high-income countries reporting reliance on post-event financing and certain transitional countries reporting successful partnerships with UNISDR and the World Bank to transfer insurance risks through catastrophe risk pools.

Finally, procedures to exchange relevant information before and during disasters and to undertake post-event reviews are generally in place, with 71% of countries reporting either substantial or comprehensive achievement in this area.

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

At the regional level, EU Member States are implementing EU legislation concerning strategic disaster risk reduction measures, ranging from management of floods to the management of chemical hazards. It should also be noted that the European Commission is implementing a series of activities to give effect to the EU framework on the prevention of disasters: improved risk assessment, high level political engagement and increased regional funding towards disaster risk reduction.

#### **Improved Risk Assessment**

In 2010, the EC Communication<sup>73</sup> on the Internal Security Strategy (in particular, Action 2 of Objective 5 on "An all-hazards approach to threat and risk assessment") states that by year-end 2010 the Commission will develop, together with Member States, EU risk assessment and mapping guidelines for disaster management, based on a multi-hazard and multi-risk approach, covering in principle all natural and man-made disasters.

EU Member States then have until year-end 2011 to further develop national approaches and procedures to risk management including risk analyses, covering the potential major natural and man-made disasters, taking into account the future impact of climate change. On the basis of the national risk analyses, the EC is to prepare,

<sup>73</sup> COM (2010) 673: Objective 5: Increase Europe's resilience to crises and disasters - Action 2: An all hazards approach to threat and risk assessment

by year-end 2012, a cross-sectoral overview of the major natural and man-made risks that the EU may face in the future, taking into consideration the future impacts of climate change and the need for climate adaptation, as well as regional risks that emerge from review of the national risk analyses. The process aims to establish by 2014 a coherent risk management policy linking threat and risk assessments to decision making.

## High Level Political Engagement

A pronounced shift in thinking towards disaster risk reduction as mainstream policy is evident in high level political engagement, best illustrated by the ministerial sessions and conferences held since 2009, including the following examples:

- The South East European Cooperation Process (SEECP) Ministerial Conference (Antalya, 13 May 2010) addressed the need for a more comprehensive approach to disaster risk reduction, tracking status of and protecting critical infrastructure, coordination and active participation of the national authorities<sup>74</sup>.
- A new Medium Term Plan for 2011-2015 was adopted at the 12th Ministerial Session of EUROPA Major Hazards Agreement (28 September 2010, St Petersburg) to “improve prevention and preparedness and promote good risk governance, use knowledge to reduce vulnerability, improve preparedness for emergencies.” The Ministerial Session addressed the consequences of climate change on the frequency and intensity of natural disasters and the measures to strengthen societies’ adaptation and resilience<sup>75</sup>.
- The European Parliament adopted a resolution on the Commission communication “A Community approach on the prevention of natural and man made disasters” that welcomes the Commission’s commitment to ensuring that disaster-prevention-related issues are taken into account more coherently in EU policies and programmes, and stresses the need for a holistic approach to disaster prevention. Members consider it necessary to enhance cooperation, both at regional and EU level, based on complementarity of action, dissemination of best practices and the principle of solidarity between Member States<sup>76</sup>.

- The European Forum on DRR members agreed on the need to continue strengthening exchanges on DRR, including with National Platforms, HFA Focal Points, the scientific community and local level practitioners, in the following areas: training, exchange of experts and sharing of lessons learned, capacity development, national platform building as well as risk mapping and assessment<sup>77</sup>.

## Increased Regional Funding Towards DRR

Such political commitment has translated to specific, tangible funding of support for disaster risk reduction initiatives, aimed at mainstreaming resilience within the policy agenda. An example of such progress presented in this report is that an allocation of € 12 – 20 million is planned for the Environment and Disaster Risk Reduction Sector under IPA Multi-Beneficiary aimed at benefiting the following candidate and potential candidate countries: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Kosovo under UNSCR 1244, Montenegro, Serbia and Turkey. This new regional cooperation framework will be complementary to the existing bilateral dialogue between the Commission and the countries concerned and consolidates EU-led regional initiatives.

The EC is funding an Environment research programme to support both more applied research and assessment of crisis/emergency situations as well as to the improvement of management and security issues. The research agenda encompasses the social and economic dimensions of natural hazards as well as the environmental and climate change impacts. Increased regional funding will enable a broader and integrated understanding of the core risk issues and represents a major contribution to the overall disaster risk reduction goals in alignment with the HFA.

Other new initiatives, such as the European Forum for Disaster Risk Reduction, are making substantial contributions to implementing the HFA, particularly as regards information sharing, advocacy, resource mobilization and training. The EFDRR supports the NPs in bringing together the climate change adaptation and disaster risk reduction scientific communities and practitioners to work towards a common goal of resilient societies. The EFDRR is a critical regional platform for local engagement, particularly as regards its support of the “Making Cities Resilient” campaign. In 2011, the EFDRR agenda will address harmonization of risk mapping and assessments including data collection, protection of critical infrastructure including hospitals and schools and cost-benefit analysis

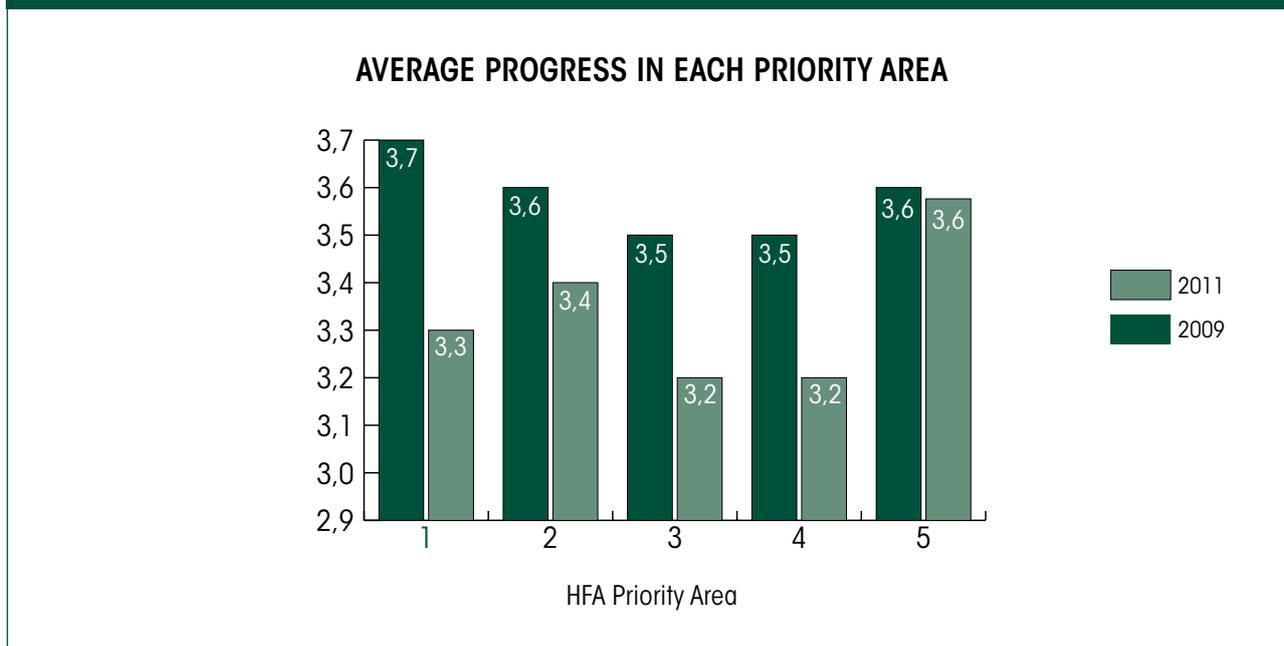
<sup>74</sup> <http://preventionweb.net/go/14040>

<sup>75</sup> [http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/RES\\_2010-1\\_PreventionPreparednessResponse\\_EN.pdf](http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/RES_2010-1_PreventionPreparednessResponse_EN.pdf) & [http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/RES\\_2010-2\\_EthicsResilienceDisasters\\_EN.pdf](http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/RES_2010-2_EthicsResilienceDisasters_EN.pdf) & [http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/REC\\_2010-1\\_Vulnerability\\_EN.pdf](http://www.coe.int/t/dg4/majorhazards/ressources/Apca2010/StPetersburg/REC_2010-1_Vulnerability_EN.pdf)

<sup>76</sup> <http://www.europarl.europa.eu/sides/>

<sup>77</sup> <http://preventionweb.net/go/15110>

**Figure 36 : Comparison of Progress Over the Reporting Period**



case studies.

A particularly exciting development is the trend towards regional pooling of risks for diversification and insurance in catastrophic risk pools. Such trends have the potential to dramatically increase insurance capacity and penetration rates, particularly in transitional countries.

### 3.3. Progress from the previous reporting cycle

Monitoring and reporting on progress is an essential feature of the HFA. This report presents an analysis of the self-assessments provided by reporting countries and regional organizations as to their achievements and challenges over the 2009 – 2011 time period.

It is worth noting that 22 countries reported self-assessments for the 2009 -2011 time frame (21 with the use of the on-line reporting tool) as compared with 17 that had reported in 2007 – 2009 with a different composition of countries represented in the two time periods. Thus, the results are not perfectly comparable. Nevertheless, certain developments can be observed and common themes emerge from the reports.

The first observation is that countries with National Platforms were more likely to report results using the on-line tool. Of the 18 countries with NPs, 15 reported results for the 2009 – 2011 time period. Having a National Platform in place increases the likelihood of timely reporting of results attained.

At first glance, the levels of progress may appear limited

when compared with the levels reported in 2009. Within a measure of statistical certainty, levels of progress remained roughly even or showed slight declines across four of the five the Priority Areas in 2011 as compared with 2009.

Certain indicators within each of the Priority Areas that showed significant variation (15% or more) relative to 2009 results are described below.

With respect to the availability of dedicated, sufficient resources for DRR at all levels, the countries reporting substantial or comprehensive achievement declined in 2011 relative to 2009 levels. Certain challenges and constraints reported in 2009 remain relevant in 2011, mainly at local and regional levels, including insufficient financial and human resources. Countries reported the availability of resources for disaster risk reduction activities to be a more severe constraint relative to the 2009 reporting period.

At the regional level, the European Union Floods Directive requires cross-border cooperation, representing both a challenge and an opportunity to countries and regions to mobilize resources and coordinate efforts.

An area of visible progress concerns the implementation of disaster risk reduction concepts and programmes for disaster mitigation and disaster preparedness. The 2009 HFA Europe report found that development cooperation programmes and projects were mainly financed through emergency aid, which was insufficient for a comprehensive integration of disaster risk reduction. The main challenge to such integration was attributed to inadequate resources. In the current reporting period, despite the fact that availability of resources at national and local levels is a more severe challenge, countries have made visible gains

Figure 37 : Reporting Countries and Regional Organizations

Reporting Countries and Organizations	Reporting Period	
	2007/2009	2009/2011
Countries		
Albania		x
<b>Armenia</b>	x	x
<b>Bulgaria</b>	x	x
<b>Croatia</b>	x	x
<b>Czech Republic</b>	x	x
Finland		x
<b>The former Yugoslav Republic of Macedonia</b>	x	x
<b>France</b>	x	x
Georgia		x
<b>Germany</b>	x	x
Hungary	x	
<b>Italy</b>	x	x
Moldova		x
Monaco		x
Montenegro	x	
<b>Norway</b>	x	x
Poland		x
Portugal		x
Romania		x
<b>Serbia</b>	x	x
Slovenia	x	
Spain		x
<b>Sweden</b>	x	x
<b>Switzerland</b>	x	x
<b>Turkey</b>	x	x
United Kingdom	x	
Total	17	22
Regional Organizations		
<b>Council of Europe (EUR-OPA Major Hazards Agreement)</b>	x	x
<b>European Commission</b>	x	x
Central European Disaster Prevention Forum	x	
<b>Disaster Preparedness and Prevention Initiative for South Eastern Europe</b>	x	x
Regional Cooperation Council for South Eastern Europe	x	
<b>A European Network of National Platforms</b>	x	x

*(Countries and Organizations in Bold-Faced Type Reported Results for Both 2009 and 2011)*

in integrating disaster risk reduction activities in development partnerships.

Within HFA 1 Indicator 3 (“Community participation and decentralization are assured through the delegation of authority and resources to local levels”), the countries reporting substantial or comprehensive achievement declined in 2011 relative to 2009 levels.

A consistent theme emerges from the country reports: most of the responsibility for mitigation, preparedness, planning and recovery efforts has been transferred to municipalities and local governments. The countries report that local authorities do not have resources sufficient to discharge these responsibilities.

The functioning of multi-sectoral National Platforms showed significant gains. Since 2009, the following countries established National Platforms: Armenia, Croatia, Finland, Monaco, Poland, Portugal, and the UK. Countries that are presently working to establish National Platforms include Montenegro, Norway, Serbia and Turkey. In addition, countries with existing National Platforms expanded their reach to include additional sectoral actors. This action expands the range of competencies able to implement disaster risk reduction policies and programmes.

HFA 2 Indicator 1 (“National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors”) results declined since the 2009 reporting cycle. The level of progress made towards developing risk assessments appears to be strongly correlated with economic and other indicators of national development. With respect to performing risk assessments on critical services, such as hospitals and schools, the same correlation of economic development and achievement is observed.

Assessing transboundary risks proved a greater challenge to reporting countries in 2011. Economic challenges affect bilateral cooperation on transboundary risks. High-income countries have effective bilateral agreements in place, particularly as regards flood risks for rivers on shared borders. They have the means and resources to support the regular exchange of information on risk and threat assessments, perform joint training exercises and provide early warnings through appropriate arrangements. Transitional countries have fewer resources to satisfy more competing needs. Regional mechanisms for cooperation may allow for more efficient use of limited resources and reduce costly duplication.

The availability and accessibility of disaster-related information to all stakeholders at all levels proved a greater challenge than what had been reported in 2009. In reviewing individual country reports, it appears that substantially all of the decline can be attributed to countries that were reporting for the first time, thereby establishing

their baseline measures within the HFA framework.

HFA 4 Indicator 3 (“Economic and productive sectoral policies and plans have been implemented to reduce the vulnerability of economic activities”) illustrates the most significant differences between results reported over the two cycles. Only one-third as many countries report having attained substantial or comprehensive achievement in 2011 relative to those that had reported such levels in 2009.

HFA 4 Indicator 6 (“Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure”) shows substantial improvement in levels of achievement reported by countries in 2011 as compared with 2009.

The HFA Europe 2009 report found that while preparedness mechanisms and capacity building have been strengthened in comparison with levels reported in previous years, it was unclear as to the extent to which disaster risk reduction perspective is integrated in most of the reporting countries. This finding remains relevant today.

The results for establishing contingency plans and holding regular training drills to test them showed significant improvement over 2009 results, with 50 % increase of countries reporting substantial or comprehensive improvement, relative to 2009 levels.

### 3.4. Gaps and challenges

The increased awareness of the importance of disaster risk reduction is evident in the country and regional partner reports. However, building a culture of safety and resilience is challenging owing to the crosscutting nature of disaster risk reduction.

As severe disasters increasingly impact economic and social development without necessarily accompanying physical damage, policymakers are challenged to shift their paradigm of disasters and risk finance. This requires new policy frameworks, responses and programmes for risk mitigation, needs that are challenging.

A challenge that assumed greater urgency in the 2009 – 2011 time frame is related to the shift of disasters that do not necessarily impose significant physical damage, but nonetheless impact resilience and social and economic development. Such disasters reduce the economic and financial capacity to mobilize support for future contingencies and may reverse hard-won development gains.

Economic conditions continue to challenge efforts to build resilience. Competing demands on fewer public resources may confound investments in resilience. Significant gaps exist in the public understanding of the efficacy of investment in disaster risk reduction measures. The ina-

bility to concretely demonstrate a return on investment in disaster risk reduction, absent cases of anecdotal evidence, hinders the mobilization of resources sufficient to ensure safe societies. At the same time there has been a growing interest for gathering information on the economic costs of disasters and the added value in investing in prevention. The commitment to gather such information is supported at the regional level, particularly within the EU, which is committing resources to collect data sets in the near future.

The difficulties inherent in integrating all of the aspects of disaster risk reduction at the local levels continue to pose challenges. Disaster management continues to be performed in functional silos, based on hazard, with the result that flood management may be addressed by one set of authorities in one locale and another elsewhere. The nature of this division of responsibilities hinders efforts at integrating the services required for public safety.

Engaging all of the stakeholders in local disaster risk reduction activities remains difficult. It is often the case that other stakeholders in civil society believe it is the exclusive role of governments to provide for public safety or perhaps NGO's and other players wish to play a role but their capacity cannot be productively utilized as they lack information about how to contribute to DRR activities. In addition, the composition of the National Platforms and their linkages with governments may help or hinder stakeholder engagement.

Engaging stakeholders in rural areas where NGO's and other diverse actors may not exist or may not be represented in sufficient number to be effective remains a challenge.

A promising initiative for engaging stakeholders is the "My City is Getting Ready" campaign. The campaign has been identified as an effective way to raise awareness at the local level as well as promote disaster risk reduction initiatives. Both the Council of Europe, through the Council of Local Authorities, and the EFDRR have embraced the campaign, providing support for exchanges among cities in Europe and other regions for documenting and disseminating best practices. More than 300 cities in 14 European countries have officially joined the campaign.

The need to protect critical infrastructure remains a challenge, particularly as regards hospitals and schools. Some countries report that no risk assessments or safety plans have been put in place for these institutions.

Increasing the awareness of school children as to disaster risk reduction is important not only for their own immediate safety, but to build support for resilient communities in the future. At present, such educational efforts are done on an ad hoc basis in most countries, with a patchwork of NGO's, local Red Cross and Red Crescent societies and other groups providing training materials as resources

permit.

A significant gap exists in the understanding of protection measures for the socially vulnerable, particularly the elderly, the disabled and women and children. Many of the countries reported completely different interpretations of such measures, confounding efforts to arrive at a common framework for social protection.

Effectiveness in implementing DRR is hindered by the lack of common understanding or appraisal of impacts. Property damage or destruction of key physical infrastructure is relatively easy to measure, but other losses, such as reduction of the tax base when disasters disrupt livelihoods, loss of biodiversity, environmental risks, and social or cultural risks (such as reduced quality of life or impairment of a community due to population shift induced by disaster risks) are more difficult to measure. To address these gaps in understanding, it is recommended to engage experts from a range of professions and perspectives in the assessment process.

There are difficulties inherent in collecting and disseminating data from the private sector to inform a comprehensive identification of key hazards and vulnerabilities to society. Private sector players are understandably reluctant to disclose threat incidents for fear of revealing areas of vulnerability that might invite further attacks. Collecting such information for analysis requires discretion, as well as resources and logistical support.

A further challenge concerns the capacity for data storage and appropriate taxonomy for filing for fast retrieval of key information collected. The challenge is both a physical problem for the data storage systems and a knowledge management problem as the data sets grow in complexity. Data retrieval capability for cross-cutting risks is a challenge.

### 3.5. Recommendations

Based on the experiences reported by the national and regional partners via the HFA on-line reporting tool, and with reference to other information made available through UNISDR and its partners, the following recommendations are put forth for consideration:

#### National level

- The 2009 HFA Europe Report recommended increased engagement of different actors to achieve the goals of DRR and, in particular, better use of resources through public-private partnerships. This report finds very limited progress towards implementing that recommendation. In particular, of the countries with National Platforms that reported results in 2011, 45% do not have representation

from the private sector. It is critical to the success of the NPs that they be more inclusive. Specifically, the private sector can inform a more comprehensive assessment of risks and hazards, particularly as regards vulnerabilities impacting livelihoods and production. This is critical to the identification of emerging threats. The private sector should also be encouraged to contribute its distinct competencies to ensure that DRR is not limited to those with civil emergency responsibilities. The development of a common understanding and measurement of impacts is important not only to developing appropriate safety plans, but also to establishing the financial and social returns to DRR investment. It is strongly recommended that at national level, public-private partnerships be more vigorously pursued.

- It is recommended that the National Platforms engage media and communications professionals to develop public awareness campaigns to educate as to safety procedures and to build support for DRR. UNISDR has begun with media training and handbooks, but public service messaging should be developed with a view towards message effectiveness in changing behaviors to build a culture of resilience. This is particularly important as nearly 100% of countries reported challenges in engaging individuals to comply with emergency procedures.
- Higher income countries reported reliance on access to capital and credit markets to finance possible disaster recovery needs. However, ex ante risk finance is typically more cost-effective than ex post measures. Innovations on insurance coverage and the accessibility of global pools of capital in the reinsurance market offer countries new opportunities for risk transfer to ensure contingent capital when needed with lower risk. Countries should examine new, less capital-intensive measures to use insurance instruments to protect public resources. This recommendation should be considered in the context of the fragile nature of financial sector recovery where, for even the strongest sovereign credits, capital access cannot be taken for granted.
- Mainstreaming gender issues into DRR was identified as a challenge in the 2009 HFA Europe Report and remains a challenge today. Greater effort must be made to address the needs of the socially vulnerable, such as the elderly, the disabled, women and children. Towards that end, it is recommended that National Platforms engage social welfare and human development experts to compliment their expertise in civil preparedness.
- It is critical that countries address their vulnerable infrastructure, particularly as regards schools and hospitals. Risk assessments should be performed,

procedures should be established to assure that such assessments are kept current and safety plans should be developed to ensure the protection of those facilities and the children and adults who use them. This is an area of relatively limited progress since the 2009 Report.

- Substantial progress has been made in gathering risk and hazard data. It is recommended that an appropriate investment be made in developing knowledge management and management information systems to ensure that such data can be retrieved, analyzed and used in the most effective manner.

## Regional level

- One finding that emerges from the report is the efficacy of National Platforms in mainstreaming DRR at national levels. Having a National Platform in place increased the likelihood of timely reporting of results attained. Of the 18 countries with NPs, 15 reported results for the 2009 – 2011 time period. At the same time, as shown in Figure 3, countries with NPs in place were as much as 100% more likely to significantly rely on five key approaches (Multi-Hazard, Gender, Capacities, Security/Social Equity, Engagement/Partnership) proven effective to address cross-cutting challenges to DRR. For these reasons, it is strongly recommended that the regional organizations, in particular, the EFDRR, support the establishment of new NPs and the deepening of capacity in existing ones. A suggested approach is that regional platforms support “twinning” arrangements whereby countries with platforms mentor NP development in partner countries.
- Investment in contingent risk finance facilities is critical to mobilize cost-effective resources for coordinated disaster response. This investment should also include modernizing regulatory frameworks to ensure that access to affordable insurance is not unduly compromised in the efforts to reduce systemic financial risk. Such investment becomes more feasible when better data are available to support the returns on such programs. The EC has done considerable work in developing guidelines for risk assessment in European countries. In addition, the South East European countries are addressing this need through SEEC CRIF and other programmes and the EU is reflecting on the way to approach this relevant topic. It is recommended that the EC and the regional organizations examine the feasibility of expanding the successful catastrophe risk pools established in the SEE countries throughout Europe and perhaps even globally. Such expansion may offer the benefit of diversifying risk beyond

perils specific to a geographic locale, thereby reducing the capital cost of underwriting such risks.

- Better risk assessment with a view towards quantifying the return on investment in disaster reduction activities is critical to build support for continuing or even increasing such investments. Absent such explicit analysis, countries are unable to justify diverting resources from current needs to investment in future resilience. At present, such evidence on returns to DRR investment is mostly anecdotal. In addition, the lack of transparent risk-reward assessments results in the pursuit of policies and programmes for risk governance arrangements of questionable efficacy. The EC has made significant progress towards standardizing data and establishing common methodologies in risk assessment. It is recommended as a further step to develop partnerships with the insurance sector, which has a significant repository of claims data, and the universities, to further develop cost-benefit analyses for DRR.
- It is recommended to build upon the success of the “Resilient Cities” campaign, which has been embraced by regional organizations, such as the Council of Europe, through the Council of Local Authorities, and the EFDRR. Three of the eight member states of DPPI SEE have officially committed to the campaign, the highest regional participation in all of Europe. This participation includes 18 cities in Serbia, 3 in Turkey and 1 in Croatia. The EFDRR and the Council of Europe are urged to advocate for broader participation in the campaign throughout all of Europe; in particular, as a means for engaging new stakeholders in DRR at all levels.
- There has been coherence regarding the recommendations developed in the 2009 HFA Europe Report and the area of focus in the past two years. This report presents information about a number of regional Ministerial Conferences and declarations; in particular, the EU parliamentary session of September 2010 demonstrating high level political engagement. An area of particular success concerns the EU Floods Directive, which had the effect of improving management of transboundary risks. In particular, this report finds coherence and harmonization among EU policies, programmes and frameworks for environmental risks and risks to critical infrastructure. It is recommended that regional organizations better communicate this work to the public to better inform support for continued DRR investment.



## Annexes

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

Country / Organization	Abbreviation
Albania	AL
Armenia	AM
Bulgaria	BG
Croatia	HR
Czech Republic	CZ
Finland	FI
The former Yugoslav Republic of Macedonia	MK
France	FR
Georgia	GE
Germany	DE
Italy	I
Moldova	MD
Monaco	MC
Norway	NO
Poland	PL
Portugal	PT
Romania	RO
Serbia	SRB
Spain	ES
Sweden	SE
Switzerland	CH
Turkey	TR
Council of Europe	CoE
European Commission	EC
Central European Disaster Prevention Forum	DPPI-SEE
Disaster Preparedness and Prevention Initiative for South Eastern Europe	RCC
Regional Cooperation Council for South Eastern Europe	EFDRR
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 June 2009 through March 2011

DATE	HOSTING COUNTRY	ORGANIZERS / CO-ORGANIZERS	EVENT	WEB LINKS
June 2009	Switzerland	UNISDR	Session of the Global Platform for Disaster Risk Reduction	<a href="http://www.preventionweb.net/globalplatform/2009/">http://www.preventionweb.net/globalplatform/2009/</a>
June 2009	Switzerland	World Bank, UNISDR, WMO	Programme on DRR in Southeastern Europe	<a href="http://www.unisdr.org/europe/news/v.php?id=10515">http://www.unisdr.org/europe/news/v.php?id=10515</a>
July 2009	Italy	G8	G8 Summit	<a href="http://www.g8italia2009.it/G8/Home/G8-G8_Layout_locale-1199882116809_Home.htm">http://www.g8italia2009.it/G8/Home/G8-G8_Layout_locale-1199882116809_Home.htm</a>
July 2009	Italy	PPRD South	EUROMED Programme on Preparing for Natural and Manmade Disasters	<a href="http://www.unisdr.org/europe/events/v.php?id=10451">http://www.unisdr.org/europe/events/v.php?id=10451</a>
July 2009	Sweden	Sweden, EC	Disaster Prevention Workshop	<a href="http://www.unisdr.org/europe/events/v.php?id=10434">http://www.unisdr.org/europe/events/v.php?id=10434</a>
Aug/Sept 2009	Bosnia-Herzegovina	Bosnia-Herzegovina HFA Focal Point (Ministry of Security) UNDP Country Office, UNISDR, CADRI	NP for Advancing Risk Reduction at National Level Workshop	<a href="http://www.unisdr.org/europe/events/v.php?id=10493">http://www.unisdr.org/europe/events/v.php?id=10493</a>
October 2009	Belgium	EC, UNISDR	International Workshop on DRR: Dialogue Between Scientists and Stakeholders	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=10785">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=10785</a>
November 2009	United Kingdom	UK, UNISDR, EUR-OPA	United Kingdom	<a href="http://www.unisdr.org/europe/events/v.php?id=11476">http://www.unisdr.org/europe/events/v.php?id=11476</a>
December 2009	Denmark	United Nations	Copenhagen Climate Change Conference	<a href="http://www.denmark.dk/en/menu/Climate-Energy/COP15-Copenhagen-2009/cop15.htm">http://www.denmark.dk/en/menu/Climate-Energy/COP15-Copenhagen-2009/cop15.htm</a>
January 2010	Switzerland	EFDRR UNISDR	Consultation Meeting	
February 2010	Egypt	Sweden, PPDR	PPRD South Training Workshop "DRR: Mechanisms, Tools and Methodologies in the Field of Civil Protection"	
March 2010	France	Sweden, EUR-OPA, UNISDR	Friends of the Chair Meeting	<a href="http://www.unisdr.org/preventionweb/15110_efdrsummarymeetin-goct2010.pdf">www.unisdr.org/preventionweb/15110_efdrsummarymeetin-goct2010.pdf</a> February 2010

DATE	HOSTING COUNTRY	ORGANIZERS / CO-ORGANIZERS	EVENT	WEB LINKS
April 2010	Sweden	Sweden	DG Meeting between Sweden and Russian Federation	
May 2010	Switzerland	EFDRR, UNISDR, EUR-OPA, UNESCO, EC	International Disaster and Risk Conference (IDRC) Davos	<a href="https://www.conftool.com/idrc2010">https://www.conftool.com/idrc2010</a>
May 2010	Denmark	EC, EEA	Workshop to identify disaster data needs and gaps	
May 2010	Turkey	South East European Cooperation Process Participating States, UNISDR, DPPI	Ministerial and Experts Meeting on Disaster and Emergency Management	<a href="http://prezentacije.mup.gov.rs/svs/2010-05-13%20Deklaracija">http://prezentacije.mup.gov.rs/svs/2010-05-13%20Deklaracija</a>
June 2010	U.S.A.	UNISDR, CoE, UNESCO	Understanding Risk Forum	
July 2010	Belgium	EC, EFDRR, UNISDR	International Workshop on Reducing Water-Related Risks	<a href="http://www.preventionweb.net/.../14411_CCWaterWorkshopProgramme.pdf">www.preventionweb.net/.../14411_CCWaterWorkshopProgramme.pdf</a>
August 2010	Switzerland	EFDRR, EUR-OPA, UNISDR, EC, UNESCO	Sessions at IDRC Davos	<a href="http://www.unisdr.org/europe/news/v.php?id=14861">http://www.unisdr.org/europe/news/v.php?id=14861</a>
September 2010	The former Yugoslav Republic of Macedonia	EFDRR	Annual Meeting Preparations, Review of Lessons Learned, Handover	
September 2010	Russia	European and Mediterranean Major Hazards Agreement	12 <sup>th</sup> Ministerial Session at which CoE, EUR-OPA, UNISDR and EFDRR spoke	
October 2010	Sweden	Swedish Civil Contingencies Agency, EUR-OPA, UNISDR	First Meeting of the European Forum for Disaster Risk Reduction	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=15110">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=15110</a>
November 2010	Belgium	UNISDR, EC, UNRIC, Thomson Reuters Foundation	Media Training Workshop	<a href="http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=16121&amp;pid:50">http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=16121&amp;pid:50</a>
November 2010	Czech Republic	Czech NP	International Workshop: Early Warning for Flash Floods	<a href="http://www.ennp.eu/Calendar.htm">http://www.ennp.eu/Calendar.htm</a>
December 2010	Bosnia Herzegovina	DPPI SEE and Ministry of the Interior of Albania	DPPI SEE Extraordinary Meeting	

DATE	HOSTING COUNTRY	ORGANIZERS / CO-ORGANIZERS	EVENT	WEB LINKS
March 2011	Italy	Italy, Florence, Rome, UNISDR	Signing Ceremony, Rome and Florence for the "Make My City Resilient" campaign	<a href="http://www.unisdr.org/europe/news/v.php?id=18299">http://www.unisdr.org/europe/news/v.php?id=18299</a>
March 2011	Italy, UNISDR	NPs, EC, UNISDR	Launch of the HFA Mid-Term Review	<a href="http://www.preventionweb.net/english/hyogo/hfa-mtr/">http://www.preventionweb.net/english/hyogo/hfa-mtr/</a>
March 2011	Italy	Italy, EC, UNISDR, WB	Disaster Risk Reduction in South Eastern Europe: SEEDRMAP	<a href="http://www.protezionecivile.it/.../cms/.../Agenda_8_marzo_2011_SEEDRMAP.pdf">www.protezionecivile.it/.../cms/.../Agenda_8_marzo_2011_SEEDRMAP.pdf</a>
March 2011	Italy	PPRD South	Disaster Risk Reduction in PPRD South Programme Countries	<a href="http://www.protezionecivile.it/.../cms/.../Agenda_8_marzo_2011_SEEDRMAP.pdf">www.protezionecivile.it/.../cms/.../Agenda_8_marzo_2011_SEEDRMAP.pdf</a>

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International Strategy for  
Disaster Reduction

UNISDR  
Regional Office for Europe  
UN House  
14 Rue Montoyer  
B-1000 Brussels, Belgium  
Email : [isdr-europe@un.org](mailto:isdr-europe@un.org)  
[www.unisdr.org/europe/](http://www.unisdr.org/europe/)



EUR-OPA  
Major Hazards Agreement  
Avenue de l'Europe  
F - 67075 Strasbourg Cedex,  
France  
Email : [europa.risk@coe.int](mailto:europa.risk@coe.int)  
[http://www.coe.int/t/dg4/major-hazards/default\\_en.asp](http://www.coe.int/t/dg4/major-hazards/default_en.asp)



**GFDRR**  
Global Facility for Disaster Reduction and Recovery

GFDRR  
Global Facility for Disaster  
Reduction and Recovery  
The World Bank  
1818 H Street, NW  
Washington, DC 20433  
T: +1 (202) 458-0268  
F: +1 (202) 522-3227  
Email : [drm@worldbank.org](mailto:drm@worldbank.org)  
[www.gfdrr.org](http://www.gfdrr.org)