ANNEX 3

PROGRESS IN IMPLEMENTING THE HYOGO FRAMEWORK FOR ACTION 2011-2013

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ANNEX 3

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Feedback from nations participating in the 2011-2013 HFA Review Process shows evidence of steady progress and improvements in implementation. While levels of progress are variable, a number of common themes emerge as being the key challenges and obstacles to progress. However, as 2015 draws near, countries are increasingly examining progress with an eye to the future, and exploring the means to enhance their ability to better reduce risk. The 2011-2013 reporting cycle also invited countries to contribute to the development of the post-2015 disaster risk reduction framework. The ensemble of these contributions provide a rich snapshot of key issues that participating nations have experienced- or expect to- in addressing the demands of the HFA and the subsequent framework.

1. Introduction.

In 2005, 168 countries adopted the Hyogo Framework for Action 2005-2015: *Building the resilience of nations and communities to disasters* (HFA), a comprehensive set of three strategic goals and five priorities for action. The expected outcome of the HFA is the "substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries" by 2015. The strategic goals and priorities for action are shown in Box 2, which also sets out the 22 core indicators and five levels of progress against which countries have assessed their implementation of the HFA during the review processes of 2007–2009, 2009-2011 and 2011-2013.

To support the appraisal of the implementation of the HFA, the World Conference on Disaster Reduction (WCDR) requested the UN Office for Disaster Risk Reduction (UNISDR) to create a systematic review process. A request for reporting was issued in January 2007 to the nationally nominated HFA Focal Points and to the Permanent Missions to the United Nations in Geneva. This was accompanied by guidelines for reporting on progress on the implementation of the HFA. In order to systematize existing data and assessments, and reviews of progress at the national level, an on-line monitoring and review tool - the HFA Monitor - was made available to countries.

This Annex reviews countries' progress towards the achievement of the strategic goals and priorities for action of the HFA, based on the quantitative and qualitative analysis of the interim national HFA progress reports that countries have voluntarily submitted in the 2011-2013 cycle to date. It is supplemented by analysis examining progress since 2005 upon completion of previous HFA review cycles.

At the time of writing, 94 national authorities had submitted either an interim or final report for the 2011-2013 cycle with a further 39 still undertaking the HFA review. 144 countries have used the HFA Monitor at least once since its introduction in 2007.

Box 1. The HFA Review Process and Monitor

The HFA Review process is an entirely voluntary, self-assessment process led and owned by inter-governmental organizations, governments and local government institutions at regional, national and local levels, respectively. It is designed to promote a multi-stakeholder appraisal of the state of disaster risk, of the measures that each government are taking to address risk, and allow an assessment of progress in implementing the HFA. It is intended to stimulate an inter-disciplinary planning process that ensures that disaster risk is appropriately considered in public and private investment portfolios, not least to reduce mortality, minimize fiscal exposure and losses and contribute to sustainable development.

The HFA Monitor, a multi-tier online tool facilitated by UNISDR and led by country governments[i], was developed to assist inter-governmental organizations, governments and local government institutions in conducting regional, national and local progress reviews. The tool provides a mechanism to capture responses against the indicators of progress of the HFA, allowing some degree of comparability of data over time series. The data are generated by governments, which assess their own progress and identify continuing challenges. Achievements in each CI are rated on a scale of 1-5, with 1 representing 'minor' achievement and 5 indicating 'comprehensive' achievement. It also gives governments the opportunity to assess their achievements and challenges, and to upload relevant documents, such as legislation, policies and reports[ii]. At the behest of governments, key questions and means of verification have been added to the Monitor, to allow more in-depth analysis. This includes an invitation in the Future Outlook section for nations to provide inputs to the development of a post-2015 disaster risk reduction framework.

At the time of writing[iii], the countries which had submitted interim or final reports in the 2011-2013 HFA Progress Review are: Anguilla, Argentina, Armenia, Australia, Bahrain, Bangladesh, Barbados, Belarus, British Virgin Islands, Bulgaria, Burkina Faso, Cambodia, Canada, Chile, China, Colombia, Comoros, Cook Islands, Côte d'Ivoire, Croatia, Czech Republic, Djibouti, Dominican Republic, Ecuador, Ethiopia, Fiji, Finland, France, Gambia, Georgia, Germany, Ghana, Greece, Guatemala, Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Lebanon, Lesotho, Malawi, Malaysia, Maldives, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia (Fed. States of), Monaco, Morocco, Myanmar, Nauru, Netherlands, New Zealand, Niger, Niue, Norway, Pakistan, Palau, Palestine (State of), Panama, Papua New Guinea, Peru, Poland, Portugal, Republic of Korea, Romania, Rwanda, Saint Kitts and Nevis, Samoa, Senegal, Serbia, Slovenia, Solomon Islands, Sri Lanka, Sweden, Switzerland, Togo, Tonga, Trinidad and Tobago, Turkey, Turks and Caicos Islands, Tuvalu, Uganda, United Republic of Tanzania, United Kingdom, United States of America, Uruguay, and Vanuatu.

This Annex presents:

- an overview of global progress, highlighting the steady progress made by participating nations against the HFA since 2005 (sections 2.1 & 2.2);
- an analysis of key issues emerging from the 2011- 2013 review (sections 2.2, 3.1, 3.2, 3.3 & 3.4) - the challenges of connecting policy and practice; the integration of DRR in climate change adaptation and sustainable development; investment in institutions and capacities; risk reduction, a shared public and private responsibility;
- HFA progress reported by participating nations, examining each Priority for Action (PFA) and respective Core Indicator (CI), with samples of the Means of Verification provided in the HFA Monitor, key challenges encountered and related issues from the Drivers of Progress and Future Outlook sections (chapter 4.);
- a snapshot of country inputs to the development of the post-2015 disaster risk reduction framework (HFA2) as well as feedback on the evolving nature of the HFA progress review and HFA Monitor (chapter 5.).

2. Global Overview - Steady progress against the HFA

2.1. National commitment to the HFA Review process.

At 136, country participation in the 2011-2013 HFA Review process is on a par with the 2009-2011 cycle (133). Respectively, 34 and 60 countries have submitted final and interim reports at the time of writing, and a further 42 countries are undertaking the review[iv]. Figure 1 shows the trend since inception; the total number of countries submitting reports in the 2011-2013 cycle is expected to surpass the 109 countries that reported in the last cycle. 43 countries have participated in each of the three review cycles, and a further 55 in two cycles.

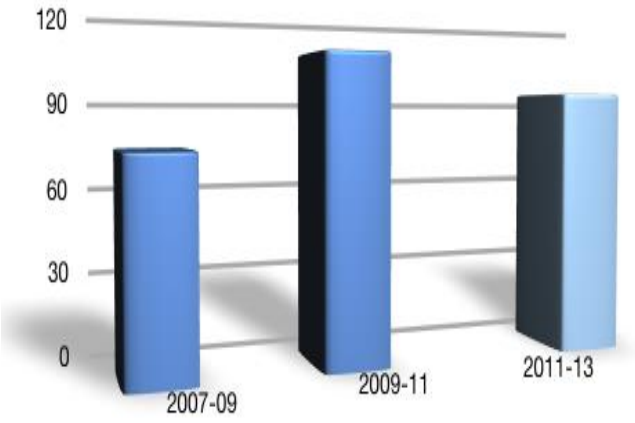

Figure 1. Total number of countries reporting (interim and final)

A more even distribution of participating countries across regions was observed in the current cycle as compared with previous cycles; this was in part due to the increased participation of countries from Oceania, a region that had been previously been under-represented (up from 7 percent in 2009-2011 to 12 percent in 2011-2013). 22 percent of the total number of participating countries hail from Africa, 23 percent from the Americas, 24 percent from Asia, and 19 percent from Europe.

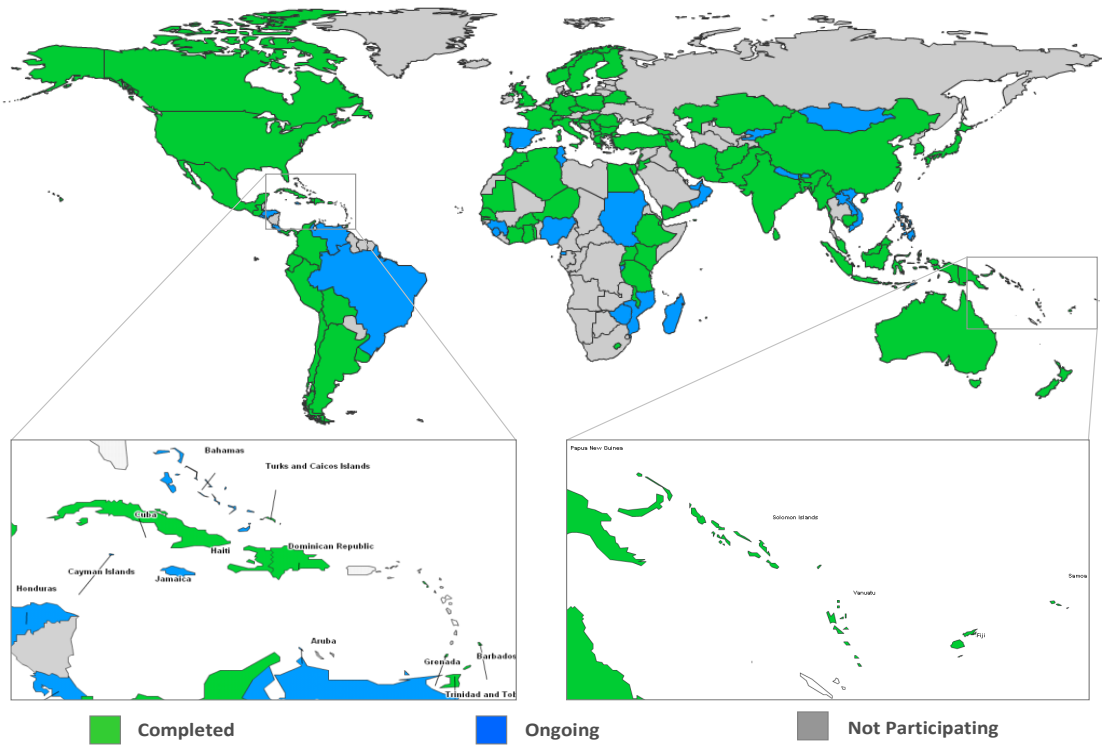

Figure 2. Regional distribution of participation in the 2011-2013 HFA Progress Review

All regions attained participation rates of over 50 percent. Just over half of the countries of Europe (51 percent) and Africa (52 percent) participated in the 2011-2013 review process; an increase from 48 percent at the conclusion of the 2009-2011 review cycle in

Europe, but down from 70 percent in Africa.

The most significant increase in participation was observed in Oceania, where 70 percent of the countries of the region participated, as compared with 38 percent in the previous cycle. Participation rates in the Americas and in Asia remained high and stable, at 59 and 67 percent respectively.

2.2. Overview of progress.

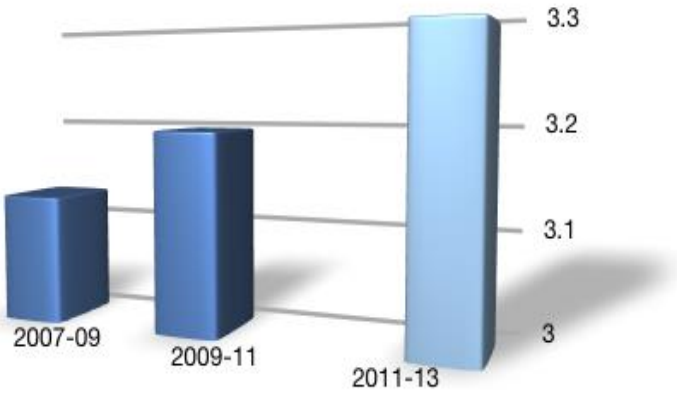

Figure 3. Overall average progress across Priorities for Action

On the basis of the HFA Progress Reviews undertaken by the 144 countries that have used the HFA Monitor since 2005 to date, nations continue to make steady progress in addressing disaster risk. The results of the current HFA review cycle[v] as shown in Figure 3, indicate that the overall trend of gradual improvement since the first reporting cycle of 2007-2009 has continued.

However, progress achieved in HFA implementation remains uneven across the world, reflecting economic and institutional differences among countries (Figure 4). This figure shows the average score per country across all Priorities for Action for countries having submitted an interim or final report.

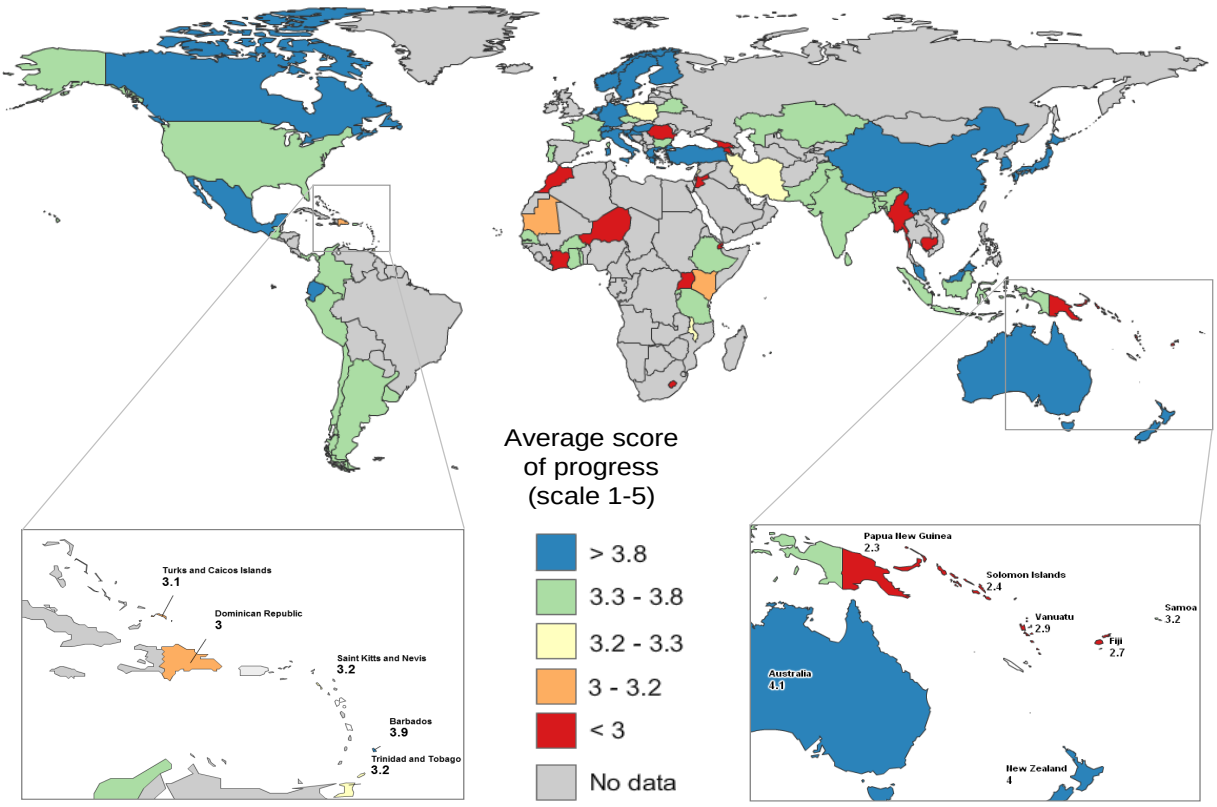

Figure 4. Average progress across HFA Priorities for Action, 2011-2013

Progress has been made in all priorities for action throughout the three cycles since 2007. Importantly, priorities that had previously demonstrated static progress (PFA1 and PFA4) saw modest gains in the 2011-2013 cycle. Steady improvement continued in other priorities (PFA5) and more significant gains were observed in priorities two and three (see Figure 5). Analysis of the qualitative review of governments in the National HFA Progress Reports 2011-2013 broadly concur with the quantitative trend, but recognise that the development of a culture of safety and resilience at all levels (PFA3) and reducing the underlying risk factors (PFA4) are much longer term undertakings.

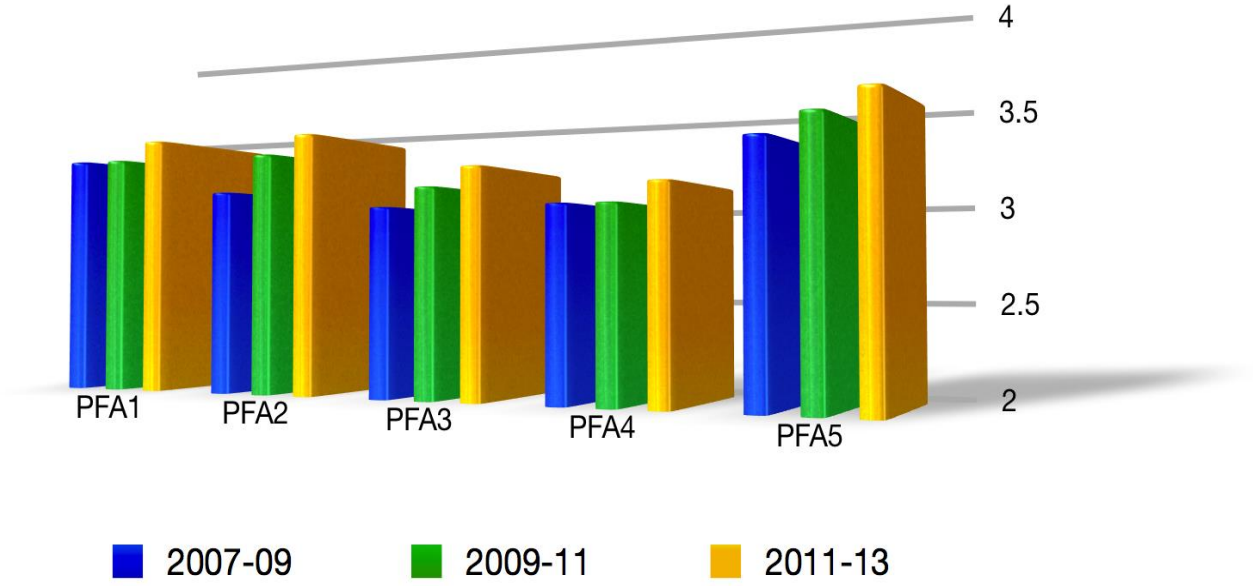

Figure 5. Average progress 2007-2013 by Priority for Action

The quantitative feedback received from nations provides a useful basis for indicative trends analysis, but it is in the narrative provided by states that a truly representative picture of progress is found. In analysing the narrative, two distinct findings emerge:

- Country reports **reveal an evolution from a mind-set of crisis and response to one of proactive risk reduction and safety** for multiple hazards rather than single-events, not least reinforced by the establishment of national coordinating mechanisms for disaster risk reduction (DRR), including National Platforms. While there remain countries that underline the challenge of changing mind-sets, deeper analysis of the qualitative reporting underlines a nuanced shift away from disaster response.
- Countries consistently report that **inadequate resources are an obstacle to greater progress in HFA implementation**. This is an observation found in the responses to each of the 22 indicators of progress, and is **consistent for countries at all income levels.** One country, for example, reported that its government met 25 percent of its funding requests for critical DRR initiatives, reflecting the extreme scarcity of resources in a difficult economy. The demands of the HFA are competing for fewer resources in a fiscally constrained environment, and the policy choices being made by governments in this context. This is aggravated by the fact that few countries have been able to provide actual figures concerning budgetary allocations and expenditure on DRR.

3. Principal Issues emerging from National Implementation of the HFA

3.1. Connecting Policy and Practice.

Legal and policy frameworks do not readily translate themselves into effective DRR. Countries cite the confusion of roles as legislation is operationalised, the difficulty in divining priorities from legal frameworks, and the frequent inadequacy of resources to achieve results consistent with legislators' intent.

Recent cycles of review have persistently demonstrated that good DRR policy does not necessarily lead directly to good practice. For some, it is the absence of an integrated and operational common platform for the various stakeholders in DRR that causes weak enforcement and compliance of regulation (**Ghana**, **Guatemala**), for others, it is the lack of knowledge sharing within and between participating nations; an issue that can be redressed by the establishment of effective national coordinating structures for DRR (**Tonga, Solomon Islands)**, or entities responsible for data collation and storage overseeing a framework for knowledge sharing (**Tuvalu**).

The contextual diversity of countries means that the location of this coordinating lead institution varies significantly. Of the 90 countries submitting data in the 2011-2013 cycle, 31 percent are situated in the Prime Minister's/President's Office, just under 26 percent are found in a civil protection department or emergency management institution, 11 percent in a central planning and/or coordinating unit, 10 percent in the Ministry of the Interior and 7 percent in the Ministry of Environment. Reflecting national risk profiles, others situate DRR in a manner which reflects their prevailing risk profile and priorities; **Ethiopia** for example, locates its coordinating institution in the Ministry of Agriculture. Other countries have deemed DRR of sufficient importance to have created dedicated overarching entities for the management of disaster risk (**China**, **Ecuador**).

States make a range of suggestions on how to more effectively connect policy to practice. Several countries offered a general call for a greater focus on implementation (**Niue**, **Saint Kitts** and **Sri Lanka**). One in particular called for less attention to policy and more on community implementation (**Samoa**). Several called for new concepts to enhance implementation of HFA Priority 4 – reducing underlying Risk Factors (**Indonesia**) and greater attention to supporting measures linked to land-use planning, building codes, agricultural and ecosystem management, water management and drainage (**Norway**). While others looked to the enhancement of institutional capabilities for risk reduction, including through the creation of DRR units in respective line ministries (**Burkina Faso, Islamic Republic of Iran**), others provided evidence of the systematisation of DRR within budgetary and planning systems by ministries of finance and/or planning (**Uruguay**).

Many recommendations made the link between successful implementation and improved means of monitoring progress. These included a call to design a system for evaluating challenges and achievements (**Colombia**), and a DRR reporting system based on historical national data audits (**Bahrain**). The need to identify country-specific drivers of progress and priority actions (**India**), as well as means of verification that reflect different capacities, was noted as well. Several countries referred to shared monitoring and evaluation of results and progress in implementation (**Colombia**, **Dominican Republic** and **Trinidad and Tobago**). **New Zealand** provides sound advice when it states that

‘applying the risk management standard requires ongoing monitoring and review of risk reduction practices and including, where necessary, reviewing the institutional frameworks underpinning hazards and risk management. New and revised policy, for example updating of the building code, is an on-going institutional activity in order to account for new knowledge about hazards and risks and/or changes in vulnerability to them.’

3.2. Integration of DRR in Sustainable Development & Climate Change Adaptation

Countries report difficulties addressing the risks internalized in different sectors and resources. Success in systematically incorporating DRR considerations into environment-related policies and plans has proved elusive - success against this indicator is haphazard. Nearly all countries reported difficulties in mainstreaming climate change adaptation measures into national policies. Thus an area for future research may be to develop strategies and best practices on addressing climate change adaptation to inform policymaking at national level.

The emphasis on integrated approaches to DRR and development reflects the recognition that DRR is a driver of national economic health and sustainability of communities (**USA**). Countries offer numerous options as to how the HFA could be more effectively integrated into sustainable development and climate change adaptation (CCA).

Sustainable Development

Countries called for integration of DRR into the mainstream development agenda and integration of DRR into decision-making at all levels – including within the private sector (**Australia**), inclusion of DRR policies in development and poverty reduction plans (**Chile**, **Ecuador**), mainstreaming DRR in all sectors – particularly economic and productive sectors - through development planning and implementation (**Burkina Faso**, **Dominican Republic, Mauritania, Myanmar**), integrating disaster and environmental risk management within land use planning (**Portugal**).

This includes raising awareness of integrated approaches to risk management (**Mexico**) and specifically a more focused approach to mainstreaming (**India**), with clear guidelines on the integration process in sustainable development, together with the bridging of the science/policy interface (**Barbados**). At the same time, **Australia** insists that the post-2015 disaster risk management framework should ensure that targeted DRR interventions are not lost in the broader development agenda.

Several countries specifically addressed the need to highlight integrated approaches (**Canada**) that introduce DRR directly into development and economic planning (**British Virgin Islands**, **Ethiopia**) and in sectoral level activities (**Kazakhstan** and **Togo**). Several states focused specifically on the need to address the underlying causes of disaster (**Bangladesh**, **Georgia**) and encouraged planning processes based on evidence and drivers of risk (**Australia**). The importance of examining social indicators of poverty were identified specifically as was the importance of securing income for populations in high risk areas (**Chile**).

Environmental issues emerged as a key concern, with broad calls to recognize environmental sustainability as a priority (**Gambia, Rwanda**), enhance social and environmental vulnerability assessments (**Belarus, Turks and Caicos**), recognize ecosystem values (**Ethiopia**) and address mismanagement of the environment (**Rwanda**). Indeed, **Uganda** went so far as to say that the overemphasis on socio-economic aspects of the environmental impact assessment of development projects, to the exclusion of the consequences for disaster risk, have in some cases increased communities' vulnerability.

Climate Change Adaptation

In discussing the need to reconcile and consolidate DRR and CCA approaches, some countries call for defining resilience to encompass both DRR and CCA (**Bangladesh**), creating new systems for resourcing these fields (**Vanuatu**) and creating synergies between DRR and CCA institutions (**Cook Islands**, **Niger**). **Fiji** is contemplating the merger of the Council for Climate Change with the Council for Disaster Management.

Malaysia has integrated DRR and CCA into the land use planning system at national, state and local levels, and having reviewed national policies and practices, **Japan** now considers disaster risk reduction a central issue in CCA. Building capacities (**Maldives**) and providing practical advice for DRR and CCA – including, through engaging those that are most affected (**Norway**) – have been identified as priorities as well.

Eighteen countries specifically referred to the need to integrate CCA more fully into the post-2015 disaster risk management framework. These comments included various calls for integration of CCA into national disaster risk management frameworks (**Federated States of Micronesia**), integration of DRR into CCA strategies (**Niger**) and merging CCA and DRR into a joint national action plan (**Fiji**). The harmonisation of CCA and DRR at the programmatic level - rather than within a single framework – was pursued by **Samoa**.

International Development Assistance and Humanitarian Action

The 2011-2013 HFA progress reports included numerous references to the important role played by national and international humanitarian actors in supporting national level DRR (**Côte d'Ivoire**, **Jordan**, **Marshall Islands**). However, countries also underlined the challenge of convincing humanitarian and development actors to integrate and align their efforts with national priorities (**Ethiopia**), and identified how short-term funding windows limit the utility of humanitarian instruments to the mid-term development needs of host nations. In some cases, reports referred to a reliance on international partners to lead disaster risk management and CCA priority actions (**Djibouti, Niue**), a reliance which in some cases contributed to a de-prioritisation of public responsibility for risk management. Relatively few donor countries made explicit links between domestic HFA/DRR efforts and the cooperation, development and humanitarian efforts made regionally and internationally (**Australia**, **Germany, and Sweden**).

3.3. Investment in Institutions and Capacities

Capacity development is a central strategy for reducing disaster risk, and the number of countries citing this as a 'significant and on-going' driver of progress has grown markedly. Continued progress is dependent on available resources; country reporting reveals a clear correlation between national income and capacity development.

Reporting nations clearly identified enhanced investment in institutions and capacities as fundamental in moving DRR forward. Statements ranged from generic calls for capacity building (**Dominican Republic, Chile** and **Mexico**) to calls for very specific capacities targeting sub-national and local governments (**Cambodia**, **Italy, Myanmar** and **Tanzania**), communities (**Mauritius, Solomon Islands**) and local hazards (**Malawi**). National platforms (**Malaysia**) and national hydro-met services (**Togo**) were also singled out for more support.

Two countries called for more structured approaches to capacity building in general including implementation of national training strategies (**Croatia, India**). Priorities were identified in preparedness for response and post-disaster interventions (**Chile**, **Niger, Turks and Caicos**) and disaster risk reduction and climate change adaptation (**Maldives**). Several focused on the need for capacity building in identifying, measuring and allocating resources to manage risk (**Kiribati**, **Turks and Caicos, Tuvalu**), as well as the need to build capacities of governments to collate and share risk data collected by the many stakeholders active at national level (**Sweden**) and for the use of risk information in decision-making (**Vanuatu**).

Countries see opportunities for strengthening capacities for DRR at multiple administrative levels in ongoing decentralisation processes (**Lebanon, Pakistan**), in environmental impact assessments (**Barbados**), and in the mobilisation of the non-government sector (including the private sector, the media, academia and even from the communities themselves) –crucial to capitalising on initial developments in the capacity of responsible agencies, institutions and offices to enforce risk reduction regulations (**Indonesia**). Recognising that existing institutions and capabilities for disaster preparedness and response at the national and local levels are often better developed than those for DRR, the **Islamic Republic of Iran** will employ these capabilities in multi-sectoral and multi-stakeholder planning in development sectors, whilst simultaneously enhancing prevention capabilities and integrating DRR norms and standards into development planning over the medium to long term.

School and university curricula and professional and government training modules were frequently identified as specific means for building capacities (**Burkina Faso, Senegal**).

Although most countries clearly identify their capacity requirements, many describe how the strengthening of institutional and community capabilities for DRR are hampered, to a greater or lesser degree, by budgetary constraints (**Bulgaria**, **Côte d'Ivoire**, **Gambia**, **Kiribati**). Nevertheless, despite fiscal pressures, examples where institutional strengthening and capability building for more effective disaster risk management is prioritised are numerous. Capabilities are being strengthened in national DRR

coordinating institutions for climate change adaptation, policy and planning, financial management and media, (**Comoros**, **Pakistan**, **Uruguay**), and in **Germany**, capacity development for DRR is integrated throughout all actions of federal and state institutions addressing the HFA Priorities for Action. In undertaking consultative pre-disaster impact analysis, the **Republic of Korea** seeks to systematise disaster risk mitigation, and is putting in place the necessary human resource and technical capacity required for enforcement.

Some recognized the potential role of the post-2015 HFA in facilitating the exchange of information (**Canada**) and called for the promotion of "twinning" among cities and foreign partners as a means for building capacities and sharing information (**Italy**).

3.4. Reducing Risk – a Shared Public and Private Responsibility

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Engagement and partnerships with the private sector, and other non-governmental actors, is a critical element of national disaster resilience. Protecting communities from the impact of disasters is a shared responsibility that cannot be borne by governments alone (Government of Australia, 2012).

National governments recognise the primary responsibility that they bear for building resilience to disasters; however, countries in all income groups also provide evidence of varying degrees of reliance on the private sector in effectively understanding and managing disaster risk. Countries cite numerous partnership approaches including, availing and mobilizing resources, technical input, conducting risk and vulnerability assessments (**Papua New Guinea**); providing enabling regulatory environments for risk-sensitive private investment and shared responsibility for DRR (**Greece**, **Japan**); study and research collaborations with independent institutes in support of enhanced risk-sensitive decision-making (**Djibouti**) and disaster management tools (**Republic of Korea**), to programmes for disaster-specific business continuity planning (**Anguilla**).

Public / private interactions for DRR are common in the realm of land management, transport and infrastructure planning, design, construction, operation and maintenance (**Chile**, **Georgia**, **Sweden**); this is magnified when ownership rests with private sector. The enforcement of disaster risk considerations in construction by the private sector of infrastructure and buildings is often the responsibility of sub-national governments to which public investment and planning decisions have been decentralized (**Australia**). Others ensure that public and private actors manage the vulnerability of economic activities, manufacture an optimal risk allocation between the public and private sectors, and promote business continuity, through institutions responsible for economic development and business promotion (**Italy, Kazakhstan**).

Public / private partnerships are common in the immediate aftermath of disaster events, for example corporate sector support to emergency response, DRR planning at the local level and in risk transfer mechanisms (**Argentina**, **Germany**, **India**, **State of Palestine**, **and Tanzania**). The formation of the Disaster Management Committee of the Confederation of Indian Industries – a body created to advise and assist its member industries in disaster risk reduction planning, is a case in point. Public / private collaboration for the provision of micro-insurance and micro-financing programmes is

also in evidence (**Indonesia**, **Pakistan**), although penetration and geographic coverage varies significantly.

Establishing such partnerships can be challenging; inadequate legislation, and an inability to assure ubiquitous enforcement is frequently cited as hampering efforts to strengthen resilience with, and of, private actors. Evidence is provided of resistance by asset owners to take required risk reduction measures, despite national subsidies on offer (**Romania**), difficulties in improving understanding of inter-dependencies across sectors (**Lebanon**), challenges in expanding commercial engagement in related disaster management industries (**Republic of Korea**), and overcoming commercial sensitivity that may limit disclosure by private entities (**New Zealand**).

For many countries, the definition of the parameters for private sector involvement in DRR at national and sub-national levels is in its infancy. The cooperating mechanisms for public / private interaction (**Comoros**, **Jordan**, **Sweden**), development of legislation and enforcement of risk sensitive building codes (**Bahrain**, **Mauritius**), are all work in progress.

Nevertheless, 42 percent of countries include at least one private sector entity in the national coordinating mechanism for DRR. The importance accorded by governments to partnerships with the private sector in managing disaster risk is significant. Many of these mechanisms feature multiple representatives, and some (**Barbados**, **Canada**, **Ecuador**, **Indonesia**, **Malawi**, **Sri Lanka**) describe coordinating structures that comprise between 10 and 20 business entities.

4. Review of National Progress – HFA Priorities for Action 2011 – 2013

4.1. HFA Priority for Action 1.

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

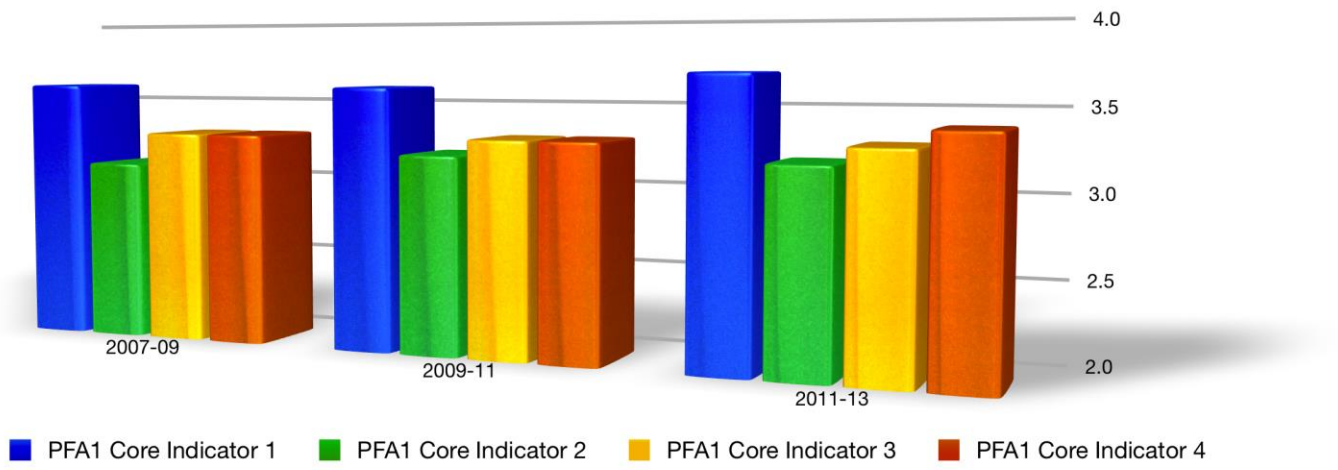

Figure 6. Progress in Indicators 2007–2013 - HFA Priority for Action 1

The **average score for Priority 1 remains 3.4**, a marginal increase on the average score of 3.3 reported in both the 2007 – 2009 and 2009 – 2011 cycles. Almost half of reporting countries rated themselves as "4", which indicates substantial achievement. While there is significant variance in the progress levels reported for the respective Core Indicators, the overall average progress has seen little change since 2007.

Overview of Progress 2007 – 2013: Countries report significant progress in ensuring that disaster risk reduction is both a national and a local priority; characterised by the establishment of national policies and legal frameworks with decentralized responsibilities and capacities, and increasing interest among countries in establishing national coordinating mechanisms for DRR. Despite reporting increasing awareness of the need for DRR investment, mobilising sufficient resources for DRR is problematic.

Core Indicator 1 (PFA1):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.6	3.6	3.7

Means of Verification	
Is disaster risk taken into account in public investment and planning decisions?	87%
National development plan	74%
Sector strategies and plans	80%
Climate change policy and strategy	77%
Poverty reduction strategy papers	43%
CCA/ UNDAF (Common Country Assessment/ UN Development Assistance Framework)	46%
Civil defence policy, strategy and contingency planning	66%
Have legislative and/or regulatory provisions been made for managing disaster risk?	83%

Almost 90 percent of countries report the integration of disaster risk in some form in public investment and planning decisions; to achieve this, countries have developed a range of strategies, policies, legal frameworks and plans that address DRR. 121 countries have enacted legislation to establish legal and policy frameworks for DRR. In many cases, countries highlight the success of integrating DRR into broader frameworks, for example: the Strategy for Accelerated Growth and Development in **Burkina Faso**; the Growth and Transformation Plan, **Ethiopia**; **Rwanda's** Vision 2020; and the Perspective Plan 2012-2021 in **Bangladesh**, which ties together all Government investment plans.

All countries affirm the importance of governance and accountability as being key drivers of successful DRR/HFA implementation. The **Solomon Islands** concluded that governance is the heart of successful DRR. **Anguilla** underlined the critical requirement for legal-based instruments where accountabilities are made clear. **Papua New Guinea** described the challenge as the requirement for "integrated and functional legal and institutional capacities" as being the challenge for governance. In some instances, the obstacles to greater progress were listed as being the lack of political will (**Ghana**) in that DRR is not seen as a priority and a need for greater political engagement (**Italy**).

In its recently adopted Development Plan 2012-2015, **Kiribati** has included measurable indicators that integrate DRR components in planning and investment in all six key performance areas. The KDP is designed to align and be evaluated against the MDG indicators and the Pacific Plan (Kiribati National HFA Progress Report, 2011 – 2013).

In its Strategy for Accelerated Growth and Promotion of Employment, **Togo** has ensured that DRR has been elevated to a national priority through its integration as a gauge of durable development. This progressive integration is reflected in sectors of activity including infrastructure and construction, agriculture and the environment.

Core Indicator 2 (PFA1):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.2	3.2

Means of Verification	
Reporting countries providing information on the percentage of the national budget dedicated to risk reduction / prevention	33%
Reporting countries providing information on the percentage of national budget dedicated to relief and reconstruction	25%
Reporting countries providing information on the percentage of the de-centralized/sub-national budget dedicated to risk reduction / prevention	25%
Reporting countries providing information on the percentage of decentralized/sub-national budget dedicated to relief and reconstruction	23%
Number of countries providing an estimate of budget allocated to hazard proofing sectoral development investments	15
Total number of estimates provided (other than 0)	11

Although most countries report the integration of disaster risk in public investment and planning decisions (see above core indicator), the means of verification provided very limited insight into the actual budgets and spending on DRR. A small minority of countries were able to provide disaggregated information as to specific investments in disaster risk reduction allocated from national budgets – notably in the infrastructure and transport sectors – but overall, this determination continues to be problematic for national officials participating in the HFA progress review; fewer still are able to detail the distribution between national and sub-national investments. As DRR activities are financed through multiple departments or ministries, developing complete estimations often in the absence of specific accounting protocols for DRR investment were challenging for multi-stakeholder entities and extremely difficult for HFA focal points.

The struggle to mobilize sufficient resources for DRR was common to most countries at all income levels, and links to the economic downturn were often made. **Anguilla** reported that the economic downturn and its consequence on decreasing tourism revenues have further limited their resources and subsequent staffing. The **British Virgin Islands** framed the same constraint in the context of their national development priorities, revenue generation and the on-going financial crisis. **St. Kitts and Nevis** and **Tonga** state that the global economic recession and the country's heavy debt burden have not only severely restricted its participation in regional and sub-regional programmes and projects, but that it impedes efforts to build adequate capacity to address DRR in multiple sectors.

New Zealand, however, identified opportunities in economic challenges: 'Competing priorities within tighter economic conditions can create challenges for public and stakeholder groups in recognizing a return on investment (ROI) from risk reduction programmes. These challenges not only concern the direct costs of [DRR] programmes, but also perceived lost opportunity due to restrictions on high value- high risk land-use

development within hazard prone areas'. Recent disasters have created an opportune moment to raise awareness of DRR and its potential to deliver high ROI- while highlighting the broader social and economic implications following a large-scale event.

The Government of **Canada** allocated C$99.2 million in Budget 2012 to share the cost of permanent flood mitigation investments made by provinces and territories affected by spring floods in 2011. In addition the Building Canada program, administered by Infrastructure Canada, seeks to create a more competitive and prosperous economy, by investing in projects to reduce the vulnerability of communities or public infrastructure to hazards and climate change.

China reports major DRR investments in 2011 by the central government, for example in flood prevention and drought relief (USD 10.5 billion); in geological disaster prevention and control (USD 400 million p.a.), with 23 provinces, 176 cities and 932 counties establishing special complementary funds amounting to an estimated USD 2 billion since 2011; and in agricultural disaster prevention and reduction (just under USD 600 million). China's Comprehensive Disaster Prevention and Reduction Plan (2011-2015) aims to reduce direct economic losses caused by natural disasters to 1.5 percent of annual GDP.

In **Sri Lanka**, 60 per cent of the annual allocation to the Ministry of Disaster Management is dedicated to corrective disaster reduction projects. **Ecuador** established a fund (worth USD 150 million in 2012) to support disaster resilient recovery and reconstruction, focusing on structural hazard mitigation measures. In 2012, **Sweden** allocated USD 60 million for disaster reduction in the transport sector. **Japan's** 2012 disaster management budget is USD46 billion, of which USD6.4 billion is allocated to disaster prevention management, and USD9.5 billion to national land conservation. In **Australia**, the National Partnership Agreement on Natural Disaster Resilience (NPA), provides State governments with approximately USD27 million per annum to invest in disaster risk reduction projects prioritised in accordance with state-wide risk assessments complementing investments by the private sector.

Estimates vary considerably as to the proportion of recovery and reconstruction financing that is assigned to disaster risk reduction. **Senegal** estimates this to be at 2 percent, **Bahrain** at 5 percent, **Anguilla** between 20-40 percent, and **Colombia**, 60 percent.

Many countries expressed their aspirations for financing disaster risk reduction. These ranged from general calls for resource mobilization and addressing the lack of financial resources (**Burkina Faso, Lesotho, Maldives, Senegal**) to calls for direct resources to areas of greatest risk, (**Kiribati**), broad country interventions (**Turks and Caicos**) national platforms (**Togo**) and joint national action plans for DRR and CCA (**Fiji**). Several mentioned specific financial mechanisms such as creation of a dedicated funding window for DRR (**India**), pre-identifying funds for DRR (**Croatia**), and reinforcing financial mechanisms (**Niger**).

Calls for including DRR in national budget lines supported by international mechanisms for financing with simpler mechanisms for the release of funds (**Comoros**), were complemented by calls for greater global political commitment to invest resources (**Dominican Republic**) and recognizing prevention and mitigation of disasters as a global public good.

Core Indicator 3 (PFA1):

Community participation and decentralization are assured through the delegation of authority and resources to local levels.

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.3	3.3	3.3

Means of Verification	
Do local governments have legal responsibility and regular / systematic budget allocations for DRR?	54%
Legislation (Is there a specific legislation for local governments with a mandate for DRR?)	65%
Regular budget allocations for DRR to local government	43%
Number of countries providing an estimated percentage of DRR represented against total local budget allocations (of 24 reporting)	14

HFA reporting for 2011-2013 showed similar levels of progress at delegating authority to local levels and fostering inclusion and community participation in DRR as compared with previous reporting cycles. In some cases, decentralization has been challenged by unclear legal and regulatory frameworks (**Indonesia**). In many cases, funding has not followed the decentralization of authority and responsibility (**Ghana, Lesotho, Myanmar, Palau, and Senegal**), other countries noted that local capacities were uneven and required further investment (**Croatia, Kenya**).

However, innovative approaches by governments have emerged. In light of financial constraints, volunteers were highlighted as a means bolstering capacity at local levels (**Australia**, **Ghana**). In other contexts, strong NGO and CBO participation were emphasized as being force-multipliers at the local level (**Anguilla, Australia, China, Ghana, Indonesia, Italy**).

In the example of **Ecuador**, the State assigns authority and resources to the Municipalities of Guayaquil and Quito, with 1 and 5% of their respective budgets allocated to their Centres of Public Safety, responsible for risk management activities. Albeit with an overarching emphasis on disaster response and recovery, an estimated 2% of the local budget is assigned to DRR in the **Islamic Republic of Iran**, where the national disaster management structure is mirrored at the provincial, municipal and district levels

While challenged to ensure national coverage with DRR systems, **Niger** has reinforced its network of community early warning systems and response systems. This measure has leveraged the capacity building of local elected officials and their communities while reinforcing their role in prevention. Disaster prevention and mitigation is defined by the citizenry in **Kazakhstan**, within the confines of the prescribed legal framework, with large scale programmes realized in accordance with developed and approved local government plans.

Core Indicator 4(PFA1):

A multi-sectoral National Platform for disaster risk reduction is functioning.

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.3	3.3	3.4

Previous global reviews have shown the increasing number of countries seeking to establish National Platforms (NPs). A total of 85 NPs have been created, including 7 national platforms initiated in 2012. These NPs continue to work towards becoming more inclusive, engaging more stakeholders in DRR. HFA reports for 2011 – 2013 affirm these findings; however, few countries offer an appraisal for whether the national coordinating mechanism is functioning optimally to achieve disaster risk reduction. The existence of national platforms and DRR coordinating mechanisms is in general assumed to indicate higher levels of HFA engagement within countries.

The average composition of a national platform was comprised of 9 CSO organizations, 5 finance and planning institutions, 14 sectoral organizations, 5 private sector organizations, 6 science and academic institutions and 2 women's organizations. While progress is being made in effectively integrating the private sector into national coordinating mechanisms for DRR, this remains a challenge, regardless of income level.

In the 2011-2013 cycle, 47 countries reported the inclusion of civil society organizations, national finance and planning institutions, key economic and development sector organizations in their national coordinating mechanism. The reporting in this area is patchy, as data were not provided by many reporting countries.

Specific country examples illustrate the wide variance in respective membership of national coordinating mechanisms. In **Burkina Faso**, the national platform includes 31 government representatives, and only 2 CSO organizations; **Ethiopia** reports 45 CSO organizations, and only 8 government representatives; in **Ghana**, civil society is absent.

Despite attempts in some countries to merge related fields of intervention, for example the **Cook Islands** National Platform for Climate Change and Disaster Risk Management, or the National Committee for Natural Disaster Reduction of the **Czech Republic**, whose membership includes multiple ministries and services, as well as academia and the private sector, the compartmentalised nature of each area has at times proved an impediment to achieving a fully functioning forum. The selection of the coordinating lead institution for disaster risk reduction can be instrumental in addressing this; for example, this is situated in the Ministry of Finance in **France** and in the Department of Provincial and Local Level Government Affairs in **Papua New Guinea.**

The mandated role accorded to respective national DRR coordinating mechanisms varies widely; with some going well beyond that of simple coordination. For example, the **Swiss** National Platform for Natural Hazards has the stated goal of coordinating concepts in the field of prevention against natural hazards.

Finally, there were country examples where there was no single national platform. **Australia** describes a number of platforms, bodies and mechanisms for disaster risk reduction; similarly, **New Zealand** hosts various clusters of agencies that cooperate on risk reduction activities. This short set of examples demonstrates that national platforms and other national coordinating mechanisms serve the contextual needs of respective countries, and there is no one-size-fits-all solution.

4.2. HFA Priority for Action 2.

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

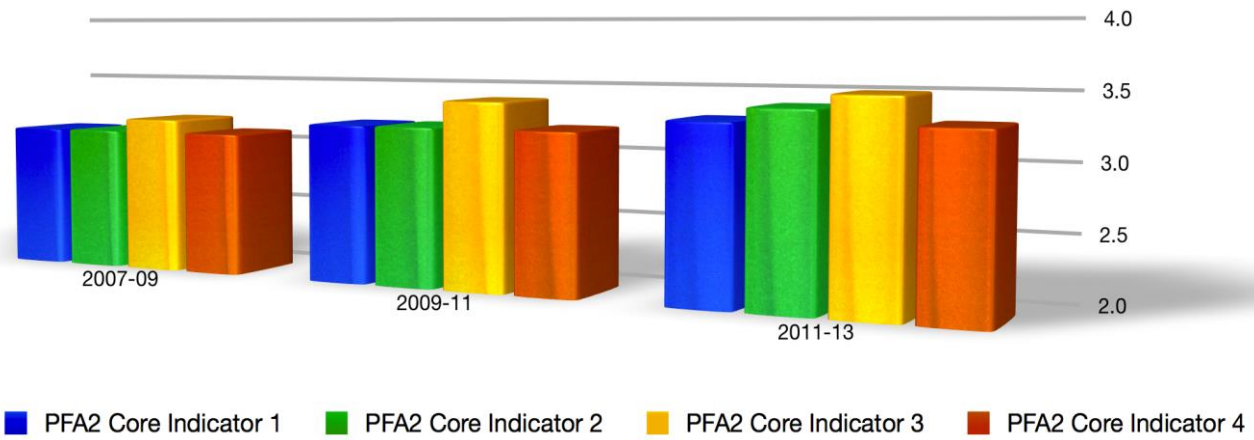

Figure 7. Progress in Indicators 2007–2013 - HFA Priority for Action 2

The **average score for Priority 2 is 3.4**, which represents a continuation of the modest upward trend from previous cycles (3.1 and 3.3 in the 2007 – 2009 and 2009 – 2011 cycles respectively). Just under half the countries undertaking the review assessed themselves as level "4" and one third at level "3", indicating respectively substantial achievement or institutional commitment attained.

Overview of Progress 2007 – 2013: Despite progress in regional and trans-boundary cooperation, familiar challenges remain at the national level: comprehensive risk assessments remain elusive; national standards in assessing disaster risks/losses remain absent; weak links to the local level. Reporting across the Core Indicators consistently refer to the acute problems of limited financial, human and technical resources.

Core Indicator 1(PFA2):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.2	3.3

Means of Verification	
Is there a national multi-hazard risk assessment with a common methodology available to inform planning and development decisions?	61%
Gender disaggregated vulnerability and capacity assessments	20%
Agreed national standards for multi hazard risk assessments	40%
Risk assessment held by a central repository (lead institution)	38%
Future / probable risk assessed	47%
Average percentage of schools and hospitals assessed (*where data provided*)	70%

While there has been significant progress in this Core Indicator since 2007, countries are largely challenged with the translation of the results of risk assessments into mitigation measures, and in developing mechanisms to prioritise risks associated with hazards. Countries experiencing rapid growth find their risk assessments become obsolete very quickly. Finally, countries are challenged to coordinate their risk assessment and data collection efforts at national and local levels.

In 2012, **Serbia** adopted the Law on Emergency Situations, which requires systematic National Risk Assessment as a complement to existing risk mapping of operational agencies and the forthcoming National Vulnerability Assessment. **Malaysia** reports that disaster risk assessment is a precondition for sectoral development planning and programming, including in the following: agriculture, airports, drainage and irrigation, land reclamation, fisheries, forestry, housing, industry, infrastructure, ports, mining, petroleum, power generation and transmission, transportation and tourism.

High-resolution regional climate models were used by the **Maldives** Ministry of Housing and Environment and the Meteorological Service (MMS) to provide projections for use in national and local planning projects, but that risk-sensitive decision-making is hampered by limited information on disaster risks. **Tonga** reports that risk assessment information exists, but is not centralized; users seek their own information from those that collect such information.

Analysis of the national HFA reporting from the Future Outlook section provides deeper insights into the challenges faced by participating countries and the diverse levels of implementation. Several high-income countries identify risk assessments and analyses as the basis for sound protection measures (**Australia, Norway, and Switzerland**). The **British Virgin Islands** has developed a complete Hazard Identification and Risk Assessment (HIRA) that guides national planning and development activities.

Numerous countries highlighted the challenge in the coordination of risk assessments (**Maldives, Marshall Islands**). Often data is being collected by a number of agencies and not collated (**Trinidad and Tobago, Tuvalu**).

In the case of lower- income countries, they often require external support to undertake implementation. Such development aid is difficult to attain and donor-funding conditions do not always correspond to the mid-term commitment required for success.

Core Indicator 2(PFA2):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.2	3.4

Means of Verification	
Are disaster losses and hazards systematically reported, monitored and analyzed?	78%
Disaster loss databases exist and are regularly updated	62%
Reports generated and used in planning by finance, planning and sectoral line ministries (from disaster dB / information systems)	62%
Hazards are consistently monitored across localities and territorial boundaries	57%

In contrast to these encouraging statistics, analysis of the narrative reviews revealed that despite requisite systems being in place, programmes or actions do not follow. As **Argentina** reported, 'Losses are quantified in general, but this is not compelling- or does not necessarily reach- the general public'.

Bangladesh reported on a range of risk assessments and an ongoing project to update poverty maps and systematic monitoring of vulnerability. Despite these successes, they highlighted the need to monitor an even broader range of vulnerabilities, including social, economic and environmental dimensions.

In **France** systematic damage assessments are undertaken after each major hazard event and reports of historical data presented in its Plan des Prévention des Risques Naturels. Risk information from departmental services is then freely available via the portal Prim.net operated by the national platform.

Since flooding in 2008, **Morocco**'s Ministry of the Interior has undertaken a survey of disaster losses and extracted lessons to inform better DRR planning and preparation for at-risk zones. It is currently developing a database system and is in the process of applying reporting by implicated Ministries.

Developed by the Institute of Geography, extensive risk assessment in **Kazakhstan** has been undertaken through the National Atlas and Integrated Database for Emergency Situations; a programme of application and certification is being finalized together with administrative territories and the Ministry of Education and Science.

Disaster data collection, management and sharing received significant attention in the Future Outlook contributions made by reporting nations. These ranged from general commitment to disaster statistics (**Chile**) and expansion of data collection (**Niue**), including through space-based information infrastructure (**China**) to issues of database management building on available technologies (**India**) and data sharing between departments (**China**).

Similar to results from Core Indicator 1, the dependence of lower-income countries on external resources is an obstacle for greater progress in this area. A lack of financial, human and technical resources were consistently cited.

Core Indicator 3(PFA2):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.2	3.4	3.5

Do risk prone communities receive timely and understandable warnings of impending hazard events?	89%
Early warnings acted on effectively	76%
Local level preparedness	76%
Communication systems and protocols used and applied	69%
Active involvement of media in early warning dissemination	86%

These encouraging statistics are diluted by a range of challenges reported, including limited capacity, inadequate geographic and hazard coverage and the difficulty in reaching isolated communities. While these are issues typically associated with low-income countries, elements are found across reporting countries.

Low-income countries in particular were constrained by limited operational and institutional capacity, and challenges of issuing warnings at the local level. Furthermore, the high cost of these systems mean that countries are commonly obliged to find the necessary resources from external sources. Amongst its key international partners supporting its early warning systems, **Palau** includes: the U.S. National Oceanic and Atmospheric Administration (data collection, analysis, and interpretation); the Hawaii-based Pacific Tsunami Early Warning and Pacific Typhoon Warning Centres; and the Weather Offices in Guam and Palau.

Unsurprisingly therefore, there is an observable correlation in the HFA review data between a country's level of economic development and its achievement in developing and implementing early warning systems.

Obliged by law, the state administration, local executive and administrative authorities of **Belarus** provide timely information to the public about possible threats and emergencies through a nationwide alert system. The system entails verification protocols by citizens, businesses and institutions. **Malawi** lists an impressive early warning system overseen by the Department of Climate Change and Meteorological Services (DCCMS) and the Department of Water Service. Although it reports that inappropriate interpretation of warning information is not uncommon, resulting in lesser levels of preparedness.

In establishing a Community Early Warning Systems (SATC) in major urban centers and investing in initiatives to build the capacity of the local population to manage threats more effectively, **Peru** is seeking to better equip its institutions and population with the required information to reduce disaster risk; realizing multi-hazard EWS at the community level is described as a challenge.

Nauru plans to develop an inter-locking early warning system appropriate to its context and developed in consultation with public and private communication providers and the emergency services. The system will be complemented at the community level with the development of response strategies and operational plans and procedures.

In the Future Outlook section, early warning continues to be a clear area of concern for countries with calls for strengthening early warning and preparedness at all levels (**Cambodia**), strengthening disaster monitoring and early warning systems (**China**) in multiple sectors, including hydro-meteorology, agriculture, forestry, oceanography, grasslands, animal epidemics and disease. As countries begin to envisage the post-2015 disaster risk reduction framework, some seek a greater promotion of international and sub-regional early warning systems (**Colombia, Togo**).

Core Indicator 4(PFA2):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.2	3.3

Does your country participate in regional or sub-regional actions to reduce disaster risk?	98%
Establishing and maintaining regional hazard monitoring	67%
Regional or sub-regional risk assessment	62%
Regional or sub-regional early warning	73%
Establishing and implementing protocols for transboundary information sharing	65%
Establishing and resourcing regional and sub-regional strategies and frameworks	56%

Average progress for this Core Indicator 4 has improved throughout the last three reporting cycles. However, while trans-boundary risks are recognized, national risks are more often prioritized (**Burkina Faso**). In other examples, strategy exists at the regional level, but requires resourcing (**SADC**) and greater investment is required for these extra-national initiatives (**Rwanda**). Some countries described their participation in regional and international initiatives as being constrained by lack of funding (**Maldives**), whilst others described the complexities of regional cooperation on DRR in regions where partner countries have other priorities (**Jordan**). On a cautionary note, **New Zealand** observed that in supporting regional responses, there is a risk that domestic response capacity is diminished.

The governments of **Japan** and **Monaco** described their collaboration with other relevant countries to establish an early warning system for tsunami in their region. In the case of the former, the Japan Meteorological Agency operates the Northwest Pacific Tsunami Advisory Center.

Peru reports commitment and engagement with regional and international initiatives. Highlighting a cooperation agreement with Ecuador, the Capacity Development for Disaster Risk Reduction, it notes that more efforts need to be made to put the agreement into practice with more trans-border initiatives. The **Netherlands** describes how a number of international agreements, many of which deal with disaster risk reduction, are

enshrined in Dutch law: these include the European Council Conclusions on developing EU risk assessment and disaster management, the European Water Framework Directive and the European Floods directive.

Belarus reports having signed and effectively implemented intergovernmental cooperation agreements on prevention and response to emergency situations in **Latvia**, **Lithuania**, **Russia** and the **Ukraine**. This agreement regulates the exchange of information on the threat or occurrence of trans-border natural and man-made emergencies, response and the sharing of lessons and best practice.

4.3. HFA Priority for Action 3.

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

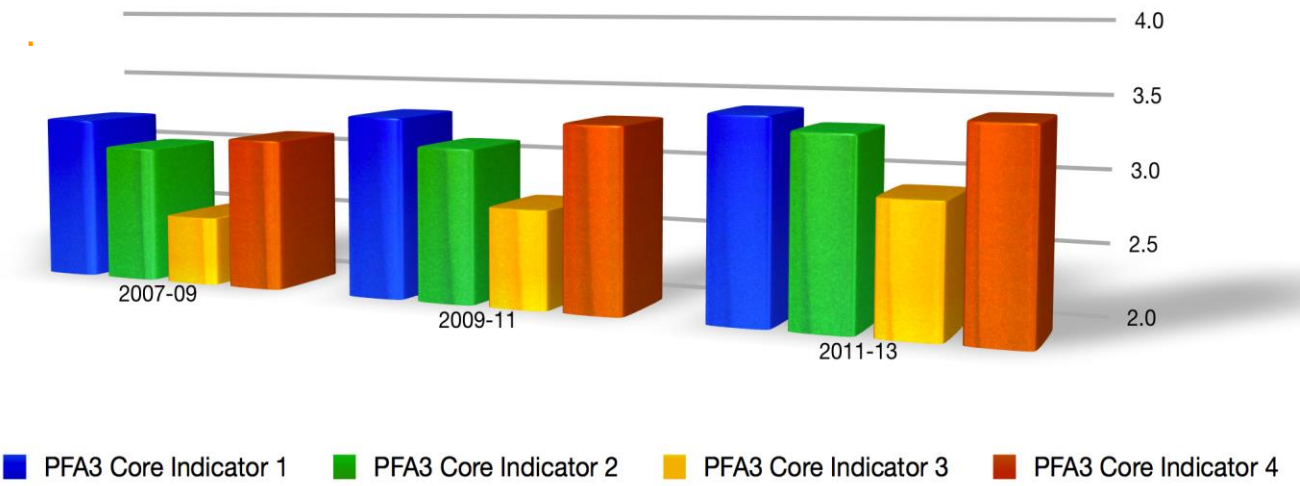

Figure 8. Progress in Indicators 2007–2013 - HFA Priority for Action 3

The **average score for Priority 3 is 3.2**, continuing the modest upward trend on previous reporting cycles, for which average scores were 2.9 and 3.1 for 2007 – 2009 and 2009 – 2011 respectively. Three quarters of reporting countries rated their levels as either "3" or "4" indicating institutional commitment or substantial achievement. The qualitative data from the 2011- 2013 review cycle confirms the similar levels of progress in comparison with previous global progress reviews (GAR 2009, GAR 2011). Despite encouraging responses to the quantitative sections of the progress review, the qualitative reporting reveals significant variation in the scale of progress reported.

Overview of Progress 2007 – 2013: There is significant variation in the extent to which the policies, programmes and initiatives are considered sustainable in achieving the indicated risk reduction objectives. Progress has been limited in the extent to which a nationwide public awareness strategy exists to motivate a culture of resilience. Engaging the public in disaster risk reduction is a common challenge for both high-income and lower-income economies.

Core Indicator 1(PFA3):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.2	3.3	3.4

Is there a national disaster information system publicly available?	66%
Information is proactively disseminated	57%
Established mechanisms for access / dissemination (internet, public information broadcasts - radio, TV,)	77%
Information is provided with proactive guidance to manage disaster risk	61%

Progress in the current reporting cycle has recovered after a decrease in indicator over the 2009- 2011 period.

Overall, countries report success in compiling and disseminating information to their stakeholders. The key challenge remains finding the appropriate means of ensuring the right stakeholders receive accurate and timely information. Context plays an important role in situating this challenge. In lower-income countries, poor infrastructure can become the key bottleneck to progress. While radio might be the most cost-effective and efficient means of providing early warning, the absence of electricity or availability of batteries renders this low-tech solution ineffectual (**Marshall Islands**).

Timor Leste is developing its National Information Management System for Disaster Risk Management and Disaster Risk Reduction, 2012- 2013. It notes that greater progress is challenged by financial and technical capacity to maintain an online system for disaster information. Weak infrastructure and low levels of literacy are key obstacles.

Other country reports highlighted that monitoring continues by various agencies, but that the information is either unavailable to the public or is disseminated in a manner that is poorly adapted to the context (**Djibouti**). There were examples where, despite overall investment, there was no unified national system (**China, Lebanon**). **Bahrain** identified the need to invest in this Core Indicator, but was unable to do so as funds were not available. In examples where countries showed great progress in their efforts to compile and streamline data from a range of governmental and CSO sources (**Colombia, Germany, India**), there was the observation that: 'Although data has been made available in the public domain, its accessibility and actual usage are the two key issues which need to be addressed' (**India**).

Innovation and use of technology are examples that are independent of income levels. The 2011-2013 interim national HFA reports present a wide range of countries using web applications and mobile technology in order to reach the largest possible audience. As an example, the National Telecommunications Authority agreed to provide the Chief Secretary's Office disaster warnings via the cell phone network (**Marshall Islands**).

Core Indicator 2(PFA3):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3	3.1	3.3

Is DRR included in the national educational curriculum?	72%
Primary school curriculum	65%
Secondary school curriculum	56%
University curriculum	61%
Professional DRR education programmes	55%

A steady upward trend is observed in the average progress over the three cycles. The extent to which school curricula, education material and relevant training include disaster risk reduction and recovery concepts and practices varies significantly. While there are successes in developing and delivering DRR curricula material in education, progress is uneven across countries, and in targeting the respective groups of students and professionals. Only 20% of reporting countries were delivering DRR to all of the HFA target groups.

There are multiple reasons for this uneven progress. Some countries have devolved responsibility for curricula development to state/provincial levels (**Pakistan, USA**) thereby increasing the need for national DRR bodies to integrate investment nation-wide. In some countries the priority accorded disaster risk management in the curriculum, as well as the content, were often decided by individual teachers (**Samoa**) or informally developed by teachers (**Fiji**). **Mauritius** improves capacities in DRR through the development of programmes implemented through its 10 regional directorates for education at the primary and secondary school levels.

The provision of DRR and disaster management courses or units by tertiary educational institutions in both undergraduate and post-graduate courses is growing (**Islamic Republic of Iran, Slovenia**, **and Uganda**). Both countries are pursuing a dual-track approach to DRR in education, which is also exploring the inclusion of disaster management elements at primary school level.

Specific national reports revealed innovation within individual countries to educate and train school children, the public and professionals on disaster resilience and safety. There were examples of smartphone educational applications (**Australia**) or the online educational tool, 'What's the Plan, Stan?'[vi] (**New Zealand**). Evidence is provided of curricula integration efforts supplemented by supporting exercises for institutions and communities, wherein complementary training is provided for school personnel, e-support for seminar material and syllabus design, together with children's theatre and simulation exercises (**Slovenia**, **Turkey**). Parallel training initiatives of local and central government staff are in evidence (**Uganda**).

Core Indicator 3(PFA3):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
2.5	2.7	2.9

Is DRR included in the national scientific applied-research agenda/budget?	62%
Research programmes and projects	69%
Research outputs, products or studies are applied / used by public and private institutions	57%
Studies on the economic costs and benefits of disaster risk reduction	34%

The data alludes to a policy- practice gap: while many have budgeted, implemented and applied the results of their research, there is a challenge to use a cost-benefit analysis to demonstrate the importance of DRR investment. The narrative reporting reveals similar challenges to those observed in Core Indicator 1 – difficulties in developing national-level methodologies and tools, the challenge of coordinating multiple actors and of being able to effectively use the results of assessments to bring about concrete change. And as **Sri Lanka** reports, research initiatives can be undertaken in relative isolation, with neither national authorities nor the public benefiting from the results with synergies between uncoordinated research initiatives lost (**Czech Republic**).

A detailed example of how its National Science Foundation (NSF) and other Federal agencies support research and development to improve understanding and assessment of DRR was provided by the **United States of America**. Public research and development of hazard mitigation methodologies and technologies are undertaken to improve the national transportation system's resilience against multiple hazards, with methodologies and guidelines produced to assist transportation owners in assessing risk, planning for disaster response, evacuation and recovery, and designing for extreme events. Local and regional planning is informed by a guide to the research literature on facility vulnerability, risk assessment, loss estimation, and disaster resilience.

Having developed many research programmes and projects through a variety of research councils, universities and government departments, the **United Kingdom** is representative of a number of countries (particularly middle / high income countries). National scientific offices together with security apparatus have the responsibility for research, data gathering and analysis covering all natural hazards.

The absence of an overall body responsible for resource allocation and quality control of multi-risk assessment, and the lack of coordination with private industry initiatives (particularly of the insurance sector) are cited as challenges to be overcome.

The Future Outlook section included mention of this indicator. **India** underlined the need for enhanced application of science and technology. The importance of promoting the use of indigenous knowledge of hazards and disaster reduction was mentioned (**Tanzania**), as was the linking of local historical knowledge with research-based knowledge of future risk (**Norway**).

Core Indicator 4(PFA3):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.3	3.4

Do public education campaigns for risk-prone communities and local authorities include disaster risk?	90%
Public education campaigns for enhanced awareness of risk	85%
Training of local government	84%
Disaster management (preparedness and emergency response)	89%
Preventative risk management (risk and vulnerability)	72%
Guidance for risk reduction	59%
Availability of information on DRR practices at the community level	61%

Despite a modest upward trend in average progress for this indicator, almost half of the participating countries reported success in the six means of verification.

The multitude of efforts being undertaken were identified in the qualitative reporting, with frequent mention of information and awareness campaigns, training exercises and recognition of commitment to responsive and preventive risk management. Yet it was observed that there was a lack of a national communication strategy to hold together this breadth of work (**Bangladesh, Ethiopia**) or to keep all the contributing stakeholders 'on the same page' (**Argentina**). Being restricted in its ability to reach the mass public by awareness campaigns that remained small-scale – as a result of constrained budgets - **Malaysia** called for closer cooperation with national TV networks, information and education ministries for enhanced outreach was imperative.

Uneven development among regions and between rural and urban areas, in some cases accounted for uneven progress (**China**), where wealthier regions benefited from greater resources and capacities. In others, it was the circumstantial nature of central government-led information campaigns that focused predominantly on the prevailing (seasonal) hazard of the moment (**Morocco**); although these are often extended to the communities at risk, they have failed to garner sufficient currency with government decision-makers to be systematised.

For countries where dedicated DRR public awareness strategies are lacking, existing sectoral public education and awareness campaigns, for example in public health, water use and conservation, are seen as opportunities to incorporate DRR (**Nauru**).

Public Awareness was frequently mentioned as a key area for consideration in the development of the post- 2015 disaster risk reduction framework. Recommendations ranged from a general push for raising awareness (**Croatia**), including at the local level (**Cambodia**) to raising specific awareness of the fact that DRR is a public responsibility (**Anguilla**) and is "the job of everyone" (**Finland**). The need for policies that promote public awareness (**Greece**) and socialization with the aim of creating a culture of prevention (**Mexico**) were also identified.

4.4. HFA Priority for Action 4.

Reduce the underlying risk factors.

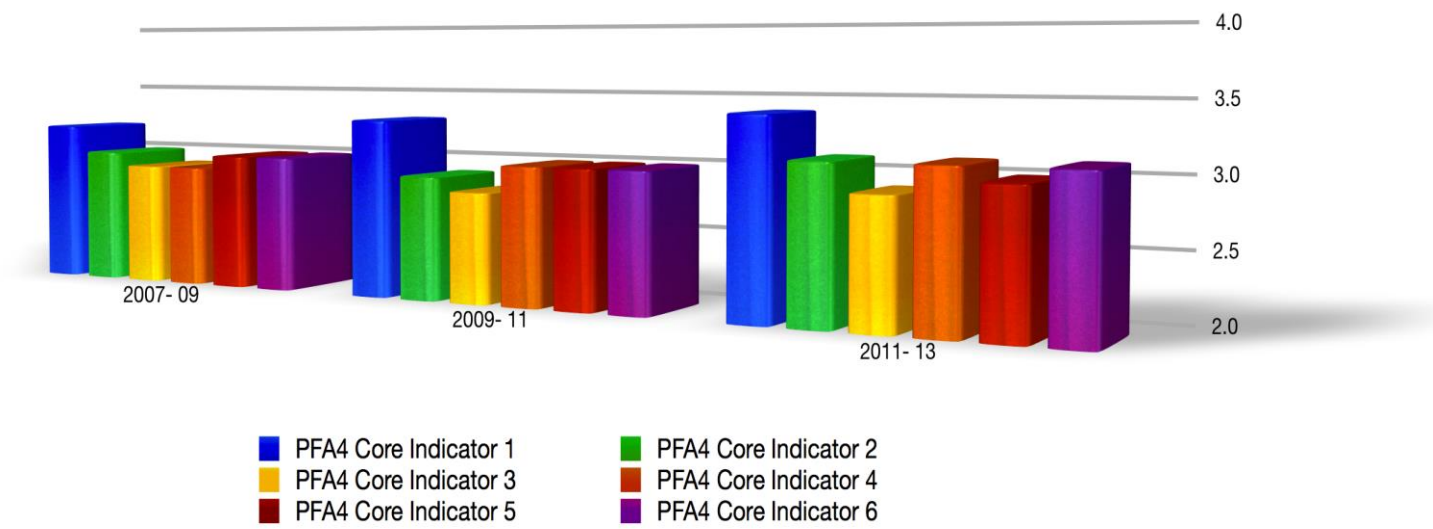

Figure 9. Progress in Indicators 2007–2013 - HFA Priority for Action 4

The **average score for Priority 4 is 3.1**, a marginal increase on the average score of 3.0 reported in both previous cycles. Approximately one third of reporting countries assess their progress as "3", indicating institutional commitment attained, but achievements neither comprehensive nor substantial; a similar percentage assign level "4". It is in this Priority that the highest number of countries report minor progress. Figure 9 illustrates the relatively stable progress levels reported across the Core Indicators over time.

Overview of Progress 2007 – 2013: Progress has been limited with respect to reducing the underlying risk factors. 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.

Core Indicator 1(PFA4):

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.

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.2	3.3	3.4

Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests, etc.)	89%
Protected areas legislation	87%
Payment for ecosystem services (PES)	40%
Integrated planning (for example coastal zone management)	72%
Environmental impacts assessments (EIAs)	93%
Climate change adaptation projects and programmes	87%

While average progress grew marginally in the last cycle, the qualitative reporting reveals successes and challenges similar to those found in Priority for Action 1. There are numerous examples of DRR having been integrated in the overall legislation of environment-related policies and plans, often bringing together issues ranging from natural resources, the environment, wildlife preservation and climate change adaptation (**Australia, Canada, Italy, Rwanda, Saint Kitts and Nevis, United States of America**). The critical challenge remains that of bridging policy and practice. In an approach similar to that of **The Gambia**, **Indonesia** situated the integration of DRR as linked to environmental management and integrated into the Middle-term National Development Plan, further reinforced by regulations contained in nine separate bills. Despite this inter-locking system, challenges still remain in implementation, inter-ministerial coordination and geographic coverage and **Poland** identified that if the risk of conflict between different policies is to be avoided, wider scope and a more inclusive planning process is required. Enforcement is equally cited as a challenge (**Armenia**, **Ghana, and Myanmar**).

Similar to the findings of PFA 1, the connection between the national and the local levels was at times difficult to bridge. **Argentina** has reported success in raising awareness around the links between climate change and DRR, and rallying government and NGOs towards a more proactive stance; challenged to extend that success beyond the national, they are assembling their best practices to encourage knowledge and experience sharing.

Having installed the mitigation of climate risk and sustainable natural resource and land management as a pillar of effective governance, **Mauritania** has updated its legislative framework and enhanced risk information and education efforts to formulate strategies and programmes for the development of productive natural capital, the sustainable management of land and natural resources, soil restoration, the integrated management of water resources, fisheries, forests and ecosystems. The **United Kingdom** undertook the National Ecosystem Assessment in 2011 which explored how ecosystems benefit society and the economy, including through regulatory ecosystem services such as hazard reduction. It analyzed how some of these might change over the next 50 years and proposed actions for integrated management.

Countries do provide examples of national risk management and environmental policies contextualised to local realities: in protecting natural coastal ecosystems, authorities are obliged to determine alternative livelihoods and stimulate the economy of local communities (**Turks and Caicos**); under the 2009 Grenelle Law, administrative authorities in **France** can classify risk-prone natural spaces and forested or agricultural areas as protected zones.

Core Indicator 2(PFA4):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3	2.9	3.1

Do social safety nets exist to increase the resilience of risk prone households and communities?	74%
Crop and property insurance	67%
Temporary employment guarantee schemes	32%
Conditional and unconditional cash transfers	46%
Micro finance (savings, loans, etc.)	56%
Micro insurance	32%

Similarly, a modest improvement in average progress reflects the long term nature of achieving progress against this indicator. Only 10 countries reported having positively addressed all of the means of verification (**Chile, Ecuador, Ethiopia, Fiji, Ghana, Malawi, Republic of Korea, Sri Lanka, Tonga, and Trinidad and Tobago**).

An examination of the qualitative reporting indicated an overall achievement by countries in the development of specific programmes designed to reduce the vulnerability of populations at risk to disaster. A key difference in approach was linked simply to how reporting nations chose to integrate the issue of disaster-vulnerable populations in their policies and plans. Disaster-vulnerability was at times framed as a sub-theme, as in the example of the **Malawi** Growth and Development Strategy, where the focus was on the reduction of the socio-economic impact of disasters. In multiple examples, social safety nets were seen as a broader national issue, and countries did not see the need to focus specifically on populations at risk of hazards (**Belarus, Islamic Republic of Iran, and Lesotho**). In others, including in the **United Kingdom**, the exposure of vulnerable groups is regularly appraised in the context of evolving risks – not least in the context of climate change – to assure that the appropriate social safety nets have been anticipated.

In its analysis of recovery from the 27 February 2010 earthquake and tsunami, **Chile** cites a strong economy and financial surplus to underwrite recovery and reconstruction, as a key success factor. The poor suffered most from the disaster, and despite having implemented three major state aid programs targeting the most vulnerable in the Reconstruction Plan, Chile notes: '…the great challenge before us now is to reduce the vulnerability of economic activities of the poor, creating incentives and subsidies for risk transfer, amongst others'.

A number of countries identify that although sophisticated and multi-faceted social welfare and protection programmes are in place, the targeting of those considered at high-risk from disasters is not considered a priority (**Malaysia, Romania**), and as a consequence, there is a tendency towards financial mechanisms, including those through public-private partnership, in support of relief and post-disaster recovery of communities and businesses.

Core Indicator 3(PFA4):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
2.9	2.8	2.9

Are the costs and benefits of DRR incorporated into the planning of public investment?	56%
National and sectoral public investment systems incorporating DRR	52%
Investments in retrofitting infrastructures including schools and hospitals	52%

Evidence of marginal change in average progress over time, is typical of country experiences in addressing underlying risk to reduce vulnerability and promote continuous functioning of public services and infrastructure, as well as businesses. Fluctuations reflect mixed levels of progress across means of verification.

New Zealand provides illustrative analysis of the impact of wider societal changes on countries' economic and social resilience when it describes how 'relatively [few] emergency events during the late 1980s and 1990s, coupled with significant changes in the ownership and market arrangements for some infrastructure and industries, may have led to increased vulnerability over that period'. **New Zealand** goes on to describe how more recently, 'greater awareness of societal risks from hazards, including business risk, is leading to higher levels of business continuity planning, intra-sector collaboration, and resilience building', but cautions that progress is 'dependent on economic drivers within the economy as a whole, and the recent economic slowdown may have an impact in this regard'.

Many countries report specific measures seeking to assure the continuity of economic activities during disaster, and express difficulties in coordinating the work of different actors to ensure continuity of public services in the event of disaster; a situation that is exacerbated when DRR has been inadequately integrated in the establishment of such services.

Recognising that 'business interruption is a major cause of losses in the wake of disaster events, and that many small businesses close their doors after a disaster, never to reopen' (**United States of America**), a number of countries place strong emphasis on business continuity during disasters (**Australia, Belarus, Japan, Pakistan, Uruguay**). Particular focus is placed on small and medium enterprises - with collaborative efforts with chambers of commerce and the insurance sector in evidence, as well as low interest loans facilitating early recovery. The Canterbury experience is one that highlighted the importance for the **New Zealand** Government and emergency management sector to work with the businesses to regenerate the economy as an essential step in enabling community recovery. Similarly, the Development Bank of **Japan** was motivated to develop a new lending mechanism to promote disaster countermeasures as an incentive for expanded corporate disaster reduction activities.

Progress in encouraging the business community to prepare appropriately and assure adequate resilience varies; the **United Kingdom** reports only 52% of small and medium enterprises report having business continuity plans. This compares favourably to the reality confronted by many countries with limited capacities of both public institutions, and of productive economic entities in DRR, which describe the difficulties they have in assuring continuity and mitigating negative economic impact (**Cambodia**).

Countries recognise the impact that vulnerable critical infrastructure will have on economic activities, and highlight that efforts to modernise and enhance their resilience require significant resources over time; options, including public / private partnerships, are being explored.

The National Security Strategy of the **United Kingdom** is representative of a number of the commitments made by governments to improve "security and resilience of the infrastructure most critical to keeping the country running" and to ensure "that the public is fully informed of the risks". In designing, Sector Resilience Plans, annual assessments of the resilience of specific sectors' critical infrastructure are developed for individual ministries / departments whereupon a programme of measures to address vulnerabilities is formulated.

Among the numerous examples of the integration of DRR in public sector investment provided, investment in public infrastructure - particularly transport, public utilities and energy - featured most frequently. These were closely followed by investments to protect productivity in the agricultural sector. Other examples provided included forestry, tourism, extractive industries as well as more generic references to economic and productive assets, FDI, health and education assets and housing, (non-exhaustive). While this overview shows the breadth of possible domains, only 30% of countries provided data.

Core Indicator 4(PFA4):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
2.9	3	3.1

Is there investment to reduce the risk of vulnerable urban settlements?	77%
Investment in drainage infrastructure in flood prone areas	76%
Slope stabilisation in landslide prone areas	53%
Training of masons on safe construction technology	52%
Provision of safe land and housing for low income households and communities	47%
Risk sensitive regulation in land zoning and private real estate development	27%
Regulated provision of land titling	50%

The marginal upward trend indicates the complexity of making progress in this indicator, and that this will happen only over the long term.

Quantitative reporting by participating countries presents mixed levels of progress, with approximately 50 – 75 percent of countries reporting investment across all means of verification. The area where countries report having made the least progress is in risk-sensitive regulation in land zoning and private real estate development, in which only 27 percent of countries cite success.

At the level of practice, enforcement emerged as a common challenge across reporting countries at all income levels. Many countries have installed legal and regulatory frameworks that incorporate DRR in urban planning and building codes, but this is in part hampered by capability deficits in understanding how to apply hazard risk data in planning processes (**Kiribati**). Enforcement is also complicated by issues of resource constraints and coordination amongst multiple bodies of government. **The Federated States of Micronesia** note that capacities vary by State. Land use planning and building codes are not actively enforced, and while a permit process is in force to regulate development applications, it is insufficiently comprehensive, with some residential structures continuing to be built in landslide prone areas.

As **Hungary** describes, the trade-offs between short and long term interests of both local governments and land / house owners can be an impediment to the development and effective application of legislation and regulation. Despite the provision of funds to local administrations by the Ministry of Regional Development and Public Administration to support retrofitting projects in **Romania**, owners remain reluctant and are weighed down by laborious processes of bidding, contracting and surveying. The aforementioned ministry may pursue a Court ruling against owners who obstruct retrofitting works, employees and/or owners delaying decisions. Furthermore, despite having established the legal basis for the provision of safe land for households vulnerable to floods or landslides, **Romanian** owners have consistently proved reluctant to relocate and abandon land and crops. **Jordan** describes how the application of building codes for seismic and other hazard resilience is hindered by the additional cost of construction.

Despite recognising that in failing to do so, it can serve to build risks, **Côte d'Ivoire** echoes many when it describes how rarely DRR is incorporated in the planning and management of human settlements; particularly when countries are striving to manage the twin challenges of rapid population growth – often in urban areas inadequately served by appropriate infrastructure, and in rural and peri-urban areas where extensive agricultural practices prevail.

Italy noted that their main challenge is the growing magnitude of disasters occurring countrywide. In particular they noted that climate change is altering the relationship between communities and the landscape, particularly for human settlements and economic activities located in remote or dangerous areas.

In seeking to address these challenges and in addition to legislation, regulation and building codes, countries such as **Peru** provide 'economic incentives to encourage investment in prevention measures' and see the insurance industry as influential in promoting resilient design and construction standards.

Core Indicator 5(PFA4):

Disaster risk reduction measures are integrated into post-disaster recovery and rehabilitation processes.

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3	3	3

Do post-disaster programmes explicitly incorporate and budget for DRR for resilient recovery?	59%
Average percentage of recovery and reconstruction funds assigned to DRR (the 13 countries that provided budgetary information)	16%
DRR capacities of local authorities for response and recovery strengthened	56%
Risk assessment undertaken in pre- and post-disaster recovery and reconstruction planning	49%
Measures taken to address gender based issues in recovery	32%

The quantitative reporting indicated uneven levels of progress. Countries report specific measures to enhance the resilience of post-disaster recovery and rehabilitation processes, for instance in water resource management and in public infrastructure (**Cambodia**), or in the preparation of related cost estimates and designs.

The National Disaster Recovery Framework of the **United States of America** enables recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. It guides unified and collaborative development of hazard mitigation programmes incorporated into post-disaster recovery processes in order to avoid repetitive losses and build more resilient communities. Such programmes include for example post-disaster hazard mitigation grants administered by the Federal Emergency Management Agency, and rebuilding requirements under the National Flood Insurance Program.

However, the integration of risk reduction measures into post-disaster recovery is often described as difficult owing, in part, to the urgency attached to providing new shelter and other services to those displaced. As **Kenya** remarks in its National HFA report, 'the relief mindset gives little thought, if any, to long term risk reduction or recovery. Most recovery projects initiated at the community level are not sustainable due lack of financial and adequate human resource capacity to sustain them'.

With such an overt focus on prevention, the **Netherlands** pays 'little attention [to] after care'. Recognising that no preventative measure can provide a 100% guarantee of protection, a Cabinet taskforce on flooding has since advised government to prioritize this item, and a dedicated project was launched in 2010.

Guatemala, Saint Kitts and Nevis and **Tonga** report on specific efforts to budget and plan for local empowerment and gender-sensitive recovery. The Guatemalan multi-stakeholder initiative strengthens local leaders to identify their vulnerabilities and to reinforce community resilience and gender-equitable recovery. However, such examples are presented by the small minority of reporting countries.

Core Indicator 6(PFA4):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3	3	3.1

Are the impacts of disaster risk that are created by major development projects assessed?	77%
Are cost/benefits of disaster risk taken into account in the design and operation of major development projects?	60%
By national and sub-national authorities and institutions	57%
By international development actors	41%
Impacts of disaster risk taken account in Environment Impact Assessment (EIA)	73%

Consistent with other indicators of progress in reducing underlying risk factors, a marginal upward trend is observed. The 2011 – 2013 national HFA reports indicate progress in performing assessments of major development projects. As has been illustrated in other Core Indicators, assessments do not always translate into a programme of action.

As stated in its 2011 – 2013 report, '**China** needs to further perfect its comprehensive evaluation system for significant projects and urgently build the supervision and control mechanism preventing man-made damage to natural environment'. Similarly, **Indonesia** is developing analytical instruments to assess the disaster impacts of major development projects – a function of the pre-requisite for EIA and Strategic Environmental Analysis respectively for individual projects, and for areas with multiple development projects.

However, other countries are confronted with the reality that although EIA are systematically carried out, these assessments tend to focus on social and economic impacts, with little or no regard to disaster risk (**Uganda**) – 'the consequence being that some development projects increase the vulnerability of surrounding communities to disasters', even if the recommendations are adopted. Even in countries where sophisticated mechanisms exist, major challenges exist in ensuring compliance. The Disaster Resilient Audit on Self Certification Basis in **India** is a good example. This certification is applicable from the inception and planning stage of all new centrally sponsored schemes, and is reinforced by instructions from the Ministry of Finance for the inclusion of DRR features in all new projects. Compliance remains inconsistent.

Trinidad and Tobago describes a multi-disciplinary approach to designing major national and sub-national projects. This collects inputs from Technical Advisory Committees (TAC) comprised of Subject Matter Experts (SMEs) from key agencies and stakeholders across the public and private sectors. While the costs and benefits of disaster risk are taken into account in the design and operation of major development projects, the impacts of disaster risk created are assessed with varying levels of consistency. **Armenia** systematically conducts assessments of the impact of disaster on major development projects, but cautions that resource constraints limit the degree to which both assessment and application of the findings are comprehensive. Their findings disaster

impact assessments of the last decade have identified that it is 'large-scale projects [that are frequently exposed] to the most dangerous and frequent natural and man-made disasters'.

DRR compliance of investments by the private sector within the context of the **Nauru** National Sustainable Development Strategy (which reviews all major development projects) is in complement to the incorporation of DRR in current public investment planning.

4.5. HFA Priority for Action 5.

Strengthen disaster preparedness for effective response at all levels.

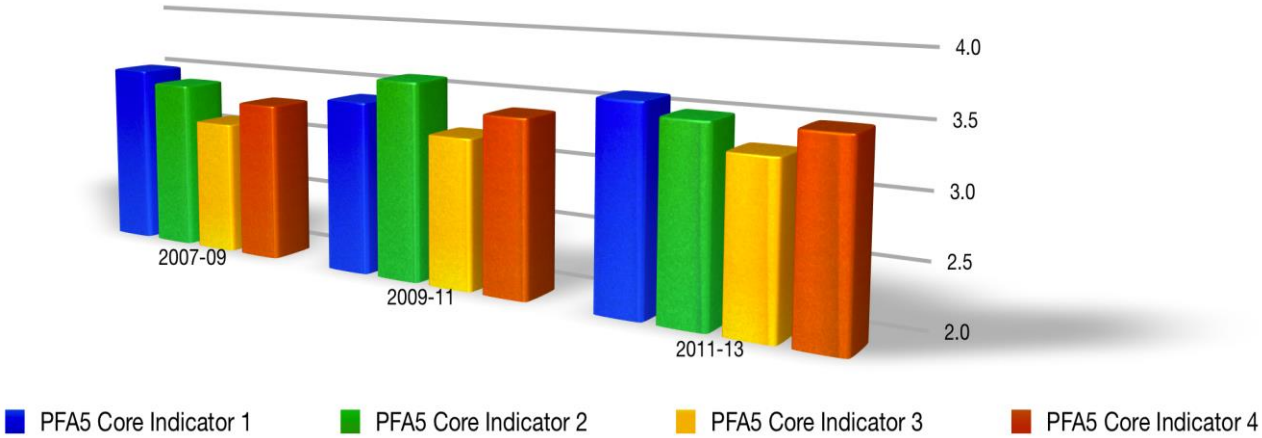

Figure 10. Progress in Indicators 2007–2013 - HFA Priority for Action 5

The **average score for Priority 5 is 3.5**, continuing the overall upward trend of the previous two cycles (average score of 3.3 and 3.4 respectively in 2007 – 2009 and 2009 – 2011). Almost half the countries reporting in the 2011-2013 cycle rated their levels as "4" indicating institutional commitment. Figure 10 illustrates the differences in progress levels reported across the Core Indicators, all of which, other than Core Indicator 2, illustrate an upward trend. As with previous cycles, this Priority for Action exhibits the highest levels of progress of all the priorities.

Overview of Progress 2007 – 2013: 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. The country reports reveal uneven results across all levels from regional to national to local preparedness. Lack of financial resources is often cited as a constraint.

Core Indicator 1(PFA5):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.5	3.4	3.6

Are there national programmes or policies for disaster preparedness, contingency planning and response?	90%
DRR incorporated in these programmes and policies	78%
Policies and programmes for school and hospital safety	67%
Training and mock drills in school and hospitals for emergency preparedness	74%
Are future disaster risks anticipated through scenario development and aligned preparedness planning?	78%
Potential risk scenarios are developed taking into account climate change projections	56%
Preparedness plans are regularly updated based on future risk scenarios	64%

Countries provide generally positive responses to the means of verification for an indicator for which average progress continues to rise throughout reporting cycles. Overall, countries report positively on the development of specific disaster risk management mechanisms, often including legislation and clear policies applicable to all administrative levels and sectoral institutions. Commitments to integrate disaster risk reduction also feature, with almost 80 percent of countries reporting its incorporation in policies and programmes for disaster preparedness, contingency planning and response. The remaining challenges remain the lack of resources, enhanced institutional coordination, information exchange and technical capacities.

Ghana reports the development of its national disaster management policy. The National Disaster Management Organization (NADMO) continues to lead the national contingency planning process, holds responsibility for standard operating procedures for emergency response and ensures participation of relevant institutions to the NADMO Technical Advisory Committee.

In addition to more traditional public and civil society stakeholders in disaster risk management, countries cite attempts to partner with the private sector in managing prevalent disasters (**Islamic Republic of Iran**, **State of Palestine**). In creating the Department of Prevention and Risk Management, **Panama** has an entity that will be responsible for contingency planning for a wide range of events. They have also increased the range of stakeholders in their training and capacity building efforts, including the Lions Club, and telecommunication and power supply companies.

Core Indicator 2(PFA5):

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.

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.4	3.6	3.5

Plans and programmes are developed with gender sensitivities	38%
Dedicated provision for disabled and elderly in relief, shelter and emergency medical facilities	51%
Businesses are a proactive partner in planning and delivery of response	52%

In reviewing progress against this indicator, countries were invited to examine their contingency plans, relief supply stockpiles, search and rescue teams, operations centres and a range of related activities and capacities. Despite fluctuating average progress for the indicator, on average, the number of **countries that reported positively to the different means of verification was above 75%**, with a few notable exceptions indicated in the means of verification illustrated above

The National HFA Review 2011 – 2013 reaffirmed that reporting countries are largely successful in preparing for and drilling contingency plans at all levels. Those countries that reported serious resource constraints were less able to conduct full-scale drills. **Mauritania** is illustrative of the point – although simulation exercises are occasionally undertaken organised by its Direction Général de la Protection Civile, emergency plans and programmes that have been developed have not been activated or operationalised at the national and sub-national levels. Additionally, those countries which face increased frequency and severity of disasters reported that they were often too busy responding to emergencies to develop contingency plans and conduct exercises.

With the National Disaster Management Act (2010) as the primary law for disaster management, **Pakistan** continued its bottom-up consultation approach with provinces and regions to develop annual monsoon preparedness and contingency planning. However, the implementation of the National Contingency Plan was constrained by resource shortfalls and the need to develop local institutional capacities. The **Solomon Islands** reported that greater funding is required for full implementation of its DRM arrangements that align with the DRM Plan and legislation. Such funding would support training needs assessment for preparedness, structural safety of schools, health and community centres and in funding drills on an annual basis.

A number of countries described the roles and responsibilities of non-government entities in assuring the safety of people and assets; **Finland** reports how government has trained the private sector in assuring continued access to goods and services during disaster, and describes the auxiliary role played by the Red Cross in supporting government disaster preparedness planning at the national and sub-national levels.

Core Indicator 3(PFA5):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.1	3.2	3.3

Are financial arrangements in place to deal with major disaster?	79%
National contingency and calamity funds	71%
The reduction of future risk is considered in the use of calamity funds	37%
Insurance and reinsurance facilities	48%
Catastrophe bonds and other capital market mechanisms	17%

Average progress across the indicator shows only a modest increase over time. Progress reported across means of verification, however, varies widely. Although an increasing number of countries are developing risk financing strategies, the availability of resources to develop this further is often cited as problematic.

Although there are a number of countries which have failed to establish viable financial mechanisms to support effective response and recovery, and thus report significant dependence on international funding and partners, the variety of strategies that countries have developed to assure response and assisted recovery capabilities in the aftermath of disaster is wide and varied. Subject to their fiscal flexibility, countries provide multiple examples of complementary financing strategies. In the absence of a disaster relief fund, **Papua New Guinea** is required to divert resources from ongoing programmes, while **Rwanda** has been able to establish budgeted line items for response and recovery amounting to 21 percent of the total 2012 budget of the Ministry of Disaster Management and Refugee Affairs**. Bolivia** has enshrined in law the requirement for a proportion of the national budget (0.15 percent) to be made available immediately post-disaster. In addition to contingency funds, and a Catastrophe Fund established by the Ministry of Finance, **Barbados** has setup an Emergency Fund which has a provision for public and private sector contributions as well as the general public. The private sector is also seen as part of the solution to the lack of a dedicated financing instrument for emergency relief and compensation in **Lebanon**, where, in part as a function of the budget deficit, funding is sourced solely from budget reserves.

Countries report the establishment of specific policies to expand insurance coverage, such as by mandates or compulsory protection, but there remain important challenges in promoting insurance for risk protection, not least the lack of capacity in domestic insurance sectors or limited financial literacy as regards the need for insurance for risk protection.

Countries lacking the resources to ensure social protection during disasters, describe the need for legal frameworks to deepen their insurance sectors and attract foreign capital to underwrite risks. A case in point is the African Risk Capacity (ARC) of the African Union, of which **Rwanda** is a member, which seeks to manage weather risk by transferring the burden to international financial markets. The synergies and advantages of (sub-)regional

cooperation are elements countries speak frequently to, be it as part of a standing Emergency Fund for emergency response (such as that managed by CDEMA), or like **Tonga**, as part of a regional partnership exploring catastrophe risk insurance and financial risk sharing modalities.

High and upper middle-income countries can forego dedicated contingency funds, as they may have the credit strength to open funding lines when necessary. However, volatile capital markets, and increasing levels of indebtedness, have caused reflection in some high-income countries as to the viability of 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. In addition to numerous disaster relief funds and subsidies, **China** has established disaster insurance guaranteed by the government – notably for agricultural and rural house insurance. In the period 2007-2011, China realized almost 60 billion Yuan (approximately USD 9.7 billion) in agricultural insurance premiums and provided approximately 1.8 trillion Yuan risk indemnities (approximately USD 292 billion) to 580 million farming households, However, China echoes some when it states that 'market mechanisms, including disaster insurance' are of limited utility, and that it is 'imperative to expand the financing and investment channels of disaster prevention and reduction'.

Core Indicator 4(PFA5):

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

Average Reported Progress Level		
2007 – 2009	2009 – 2011	2011 - 2013
3.3	3.4	3.5

Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur?	81%
Damage and loss assessment methodologies and capacities available	68%
Post-disaster need assessment methodologies	61%
Identified and trained human resources	72%

Generally positive progress reported by countries in the means of verification, and to a lesser degree the average progress over time of the indicator. The qualitative reporting indicated that while there is success in implementing procedures to exchange information and undertake post-event reviews, coordination remained a challenge. Equally some countries identified the availability of appropriate trained personnel and technologies to facilitate rapid assessment, information transmission, as well as the need to standardise assessment methodologies as requirements to better manage the hazard and post-disaster recovery (**Chile, Niger**). The evaluation of damage and loss both during and after a disaster is required by law in **Romania**; but, as assessments are conducted by sector experts from decentralized public services and with no national methodology in place, the production of integrated and inclusive reports is a challenge.

Countries do provide evidence of standardised assessment processes, for example an instruction was issued in **Serbia** on a unified methodology for the evaluation of damage from disasters, which is accompanied by Standard Operational Procedures for operational units. In November 2012, **Rwanda** implemented its Disaster Management Communication System, which enables the government to generate timely alarms when a disaster occurs and provide a platform to collect relevant data necessary for rapid needs assessments.

Germany has established sophisticated systems and procedures to ensure the exchange of relevant information. Furthermore, interfaces will be built between different systems in order to reduce the resource-intensive investment to port data into a central tool. Significant progress has been made, but they note that the turnover and decrease in numbers of qualified staff is a key constraint. In the absence of a policy on post-event reviews, this task is undertaken on an *ad hoc* basis by individual organisations and authorities.

5. The HFA Progress Review and the post-2015 Framework on Disaster Risk Reduction (HFA2).

5.1. Summary of National inputs to HFA2 in the HFA Progress Review 2011-2013

Having completed the review of progress made in implementing the HFA, countries were invited by the HFA Monitor to provide inputs to the development of the post-2015 framework for disaster risk reduction (HFA2). The feedback provided by countries through the HFA Monitor complement the outputs of two phases of dedicated consultations – the first from March 2012 to the Global Platform in May 2013 which identifies broad substantive issues for HFA2, and the second from June 2013 to the World Conference on Disaster Reduction in early 2015 which will focus on content and format.

This section does not seek to summarize the totality of feedback from countries through both the HFA Monitor and the consultation process – instead this can be found in the consolidated synthesis report produced for this purpose[vii]. Rather, the below provides a snapshot of countries' views as described in respective 2011-2013 HFA progress reports.

The challenge for the HFA post- 2015 is to meet expectations and retain relevance considering the wide range in levels of progress to date, opportunities and challenges. The Future Outlook section of the 2011 – 2013 national HFA Review provided a rich palette of ideas on the form and substance HFA2 could take.

Several thematic issues were identified for further amplification in the post- 2015 HFA.

- Several countries (**Canada**, **Gambia**, and **Panama**) called specifically for a stronger focus on gender post- 2015;
- Greater attention to risk transfer and micro insurance (**Chile**, **Cambodia**);
- Addressing transnational risks (**Colombia**) - including consideration of the effects of international trade regulations on economic and food security (**Solomon Islands**);
- Chemical hazards are also identified as an area of concern (**Turks and Caicos**);
- Reinforcing the roles of specific stakeholder groups, several countries recognised the need to strengthen the engagement with, and reflect the needs of, youth and children (**Gambia**, **Turks and Caicos**), physically challenged (**Panama, Turks and Caicos**) and the elderly (**Turks and Caicos**).
- Capability / capacity of government institutions to manage disaster risk (**Ethiopia**).
- Numerous references were made to strengthening the engagement of the private sector (**Canada, Italy**, **Senegal**);
- Multicultural approaches that focus on sharing the cultural and social features that underpin resilience (**Panama, Solomon Islands**);
- Appeals to improve the knowledge sharing within and between participating nations, through for example the establishment of effective national coordinating structures for DRR (**Solomon Islands, Tonga**) or entities responsible for data collation and storage, overseeing a framework for knowledge sharing (**Tuvalu**);
- Suggestions for clear standards and accountability mechanisms, with a regular audit function and so enhance leveraging capability of countries (**Bahrain**); and,
- Employ human security approaches that link issues of conflict, political security and complex emergencies (**Ghana** and the **Solomon Islands**).

The diverse range of priorities provided pose questions as to the scope that the future framework should have – there is as yet no consensus as to whether it should narrow its thematic focus or to broaden to include additional or new themes.

Given the international nature of the HFA there is an imperative for inclusiveness, whilst simultaneously recognising that 'one size *does not necessarily* fit all'. The opinions expressed in the Future Outlooks section illustrate that the evolution of the HFA must make space for the uneven levels of progress reported by countries since 2007. Calls are made for the HFA2 to accommodate: countries which need more time to implement the current requirements of the HFA; those that hope to sustain, reinforce and continue progress that is comparable with past achievements; and other countries that may wish to focus on niches (local, specific stakeholder groups) or set more ambitious targets in a potentially legally-binding instrument.

Specifically, many countries insisted that they be allowed to complete work initiated on current HFA priority areas (**Cambodia, Comoros**, **Dominican Republic**, **Malawi, Mali**), or to sustain and reinforce achievements of the HFA (**Ethiopia**). Others advocate to maintain the current HFA but reinforce the local context (**Indonesia**) and differentiate action at the local, global and national levels (**Guatemala**). At least one called for a greater focus on Least Developed Countries (**Mauritius**). Although few in number, there were equally calls for the HFA to become a legally binding instrument (**Anguilla**, **Lebanon**) and to establish global targets.

5.2. The HFA Progress Review: From Reporting to Decision-Making

Can the HFA progress review process be more effective in supporting countries' planning and budgetary processes and protocols?

The above alludes to the reality of how the process and resulting report of a national HFA progress review is used: the national HFA progress reporting is often seen as an end in itself, and not a means to an end. The 2011 Evaluation of the HFA Monitor presented similar findings: the HFA Progress Review and Monitor was seen as a catalyst for bringing together diverse stakeholders around the theme of DRR, and not a central decision-making or reporting tool at the national level.

The intended outcomes of the HFA progress review process and Monitor include:

- **Capturing key trends and areas of progress and challenges** at all levels with regard to achieving the strategic goals of the HFA;
- Developing systematic, comprehensive data and information management systems with regard to disaster reduction;
- Identification of existing **problems/ gaps** and increasing their **importance on the political agenda;**
- **Promoting solutions** through new or strengthened policies, programmes, plans, capacities and resources;
- Stimulating **inter-disciplinary interaction and collaboration** across government and non-government institutions and entities;
- Prompting **informed reflection and decision-making** for risk-sensitive strategic and programming planning and investment.

The Future Outlook section of national HFA progress reports provided several proposals as to how nations see the HFA and the accompanying reporting tool evolving:

- It would be more actionable (**Canada**) and simple with common terminology that laymen can understand (**Sri Lanka**);
- The Monitor would be flexible (**Australia**) and easily adapted to national policies/priorities (**Sri Lanka**);
- There would be high level global targets (**India, Australia**) that allow countries to set more detailed targets (**Australia**);
- The post- 2015 disaster risk management framework should be seen not just as guidelines, but as a direct mandate (**Panama**) with a "more binding focus reflecting DRR as a component or pillar of sustainable development and climate change" (**Guatemala**).

The aspiration is that the HFA progress review and reporting will be employed as a decision-support tool by its users. The HFA Monitor should continue to serve as a catalyst for participatory multi-stakeholder discussion, while adding the intended value described above. This poses questions about how to further reinforce the HFA Monitor, as well as the nature of the process and tool in supporting countries' efforts to implement the new framework for disaster risk reduction post-2015, moving from a static reporting element that is caught between national and inter-governmental requirements to a dynamic and central decision-support tool.

Box 2. The Hyogo Framework for Action 2005 – 2015:

Building the resilience of nations and communities to disasters.

Three Strategic Goals

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.

Five Priorities for Action and 22 Core Indicators

HFA Priority for Action 1:

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

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

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

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

Core Indicator 4: A national multi-sectoral platform for disaster risk reduction is functioning.

HFA Priority for Action 2:

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

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

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

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

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

HFA Priority for Action 3:

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

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

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

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

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

HFA Priority for Action 4:

Reduce the underlying risk factors.

Core 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.

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

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

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

HFA Priority for Action 5:
Strengthen disaster preparedness for effective response at all levels.
Core Indicator 1: Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.
Core 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.
Core Indicator 3: Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.
Core Indicator 4: Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.

Additional elements of the HFA Progress Review, as defined in the HFA Monitor.

Drivers of Progress
Countries are invited to assess the reliance of countries on factors which act as drivers or catalysts for achieving substantial progress in disaster risk reduction and sustainable recovery from disasters. These are:

1. Multi-hazard integrated approach to disaster risk reduction and development.
2. Gender perspectives on risk reduction and recovery adopted and institutionalized.
3. Capacities for risk reduction and recovery identified and strengthened.
4. Human security and social equity approaches integrated into disaster risk reduction and recovery activities
5. Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Future Outlook
Added to the 2011- 2013 reporting cycle, countries were presented with four key thematic areas, and encouraged to identify current challenges and in this context describe priority actions to address these issues.
Future Outlook Area 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.
Future Outlook Area 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.
Future Outlook Area 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.
Future Outlook Area 4: The United Nations General Assembly Resolution 66/199, requested the development of a post-2015 framework for disaster risk reduction. A first outline will be developed for the next Global Platform in 2013, and a draft should be finalized towards the end of 2014 to be ready for consideration and adoption at the World Conference on Disaster Reduction in 2015. *Please identify what you would consider to be the single most important element of the post-2015 framework on disaster risk reduction.*

[i] http://www.preventionweb.net/english/hyogo/hfa-monitoring/national/?pid:73&pih:2

[ii] A detailed description of the tool and guidance to its use is also available in an offline template http://www.preventionweb.net/english/hyogo/hfa-monitoring/documents/2011-13-HFA-Monitor-Template_ENG.doc

[iii] March 2013

[iv] the 2011-2013 cycle concludes on 30 April 2013

[v] All information cited in the context of the 2011-2013 HFA Review and progress reporting is produced by participating countries in the form of Interim or Final National Progress Reports 2011-2013. Reports published by governments in the public domain are available via http://www.preventionweb.net/english/hyogo/progress/reports/index.php?o=pol_year&o2=DESC&ps=50&hid=2012&cid=0&x=8&y=8

[vi] Developed by the New Zealand Ministry of Civil Defense and Emergency Management: http://www.whatstheplanstan.govt.nz

[vii] http://www.preventionweb.net/files/32535_hfasynthesisreportfinal.pdf