Preparedness Action in Present and *Futures* Contexts:

Lessons learned and to be learned

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July 2014

Contents

Introduction

The importance of disaster preparedness as an enabler for effective response is increasingly recognized throughout the world at many levels. Through effective preparedness, responses can be quicker, more appropriate to local contexts, and losses and expenditure can be reduced, including financing in times of emergencies.

In recognition of its importance, Priority 5 of the Hyogo Framework for Action (HFA) focuses on s*trengthening disaster preparedness for effective response*. Preparedness represents an important linkage between disaster risk reduction activities elaborated in Priority Actions 1-4, as well as being complementary to emergency management.

Objectives

With this in mind, this chapter has been prepared for the Global Assessment Report (GAR 15) to inform the UN-led policy discussions on the inclusion of disaster preparedness in HFA 2, the successor to HFA 1. The objective of this chapter is threefold:

- Evaluation of progress made on preparedness planning since the inception of the HFA, including discussion of the impact of the HFA on progress;
- Identification of remaining gaps and challenges in preparedness and related actions for HFA 2;
- Provision of recommendations of good practices regarding preparedness planning and related actions.

The review is designed to identify lessons-learned and those that need to be learned for dealing with threats that are known and for those that are ever more complex and uncertain.

Methodology and Structure of the Chapter

The analysis is based on a range of sources. It includes a review of relevant literature and documentation in relation to the implementation of the HFA, 2005-2015, including the findings on the consultations leading to the upcoming World Conference on Disaster Risk Reduction 2015 in Sendai, Japan. Related documentation also informs the analysis including work undertaken by the UN Inter-Agency Standing Committee (UN IASC) on preparedness as part of the IASC Transformative Agenda, along with recent reports on the financing of both disaster risk reduction and disaster preparedness and on disaster resilience in the context of the post-2015 development framework.

Comment [KK1]: Consider revising based on the anticipated date of publication.

The analysis is also informed by seven Input Papers[1] on preparedness that were submitted as a result of a Call for Abstracts for Preparedness Planning for this chapter of the GAR 15 Report. The papers address different preparedness issues and lessons learnt, e.g. preparedness planning, building national institutional frameworks for preparedness, preparedness knowledge

[1] Araujo, R. da Silva Rosa, T. da Penha Smarzaro Siqueira, Reis, M. Regoli, C. and Aguaiar, A. (2013) Communicability Between the National, State and Municipal Level Governments in the Integration of Principles of the Hyogo Framework for Action to Reduce Risks and Disasters: Center for Socio-Environmental and Urban Studies, University of Vila Vehlha-EspiritoSanto, Brazil; Balgos, B., dela Cruz, L., Valenzuela, V. (2014) Preparing Metro Manila Toward Urban Resiliency: Prospects and Retrospect: Center for Disaster Preparedness Foundation, Inc.; Hayashi, Dr. K and Harada, N. (2014) Public Health & Primary Health Care, re-developing and preparation of the training for coming mega-disaster in Japan after Great East Japan Earthquake (GEJEQ 2011): Barefoot Doctors Okinawa and National Defence Medical College; Pathirage, Dr.C., Seneviratne, Dr. K, Amaratunga, Prof. D. and Haigh, Prof.R. 2014. Knowledge Factors and Associated Challenges for Successful Disaster Knowledge Sharing: Centre for Disaster Resilience, University of Salford, UK; Pedroso, F. Teo, J. Seville, E. Giovanazzi, S. and Vargo, J. (2013) Post-Disaster Challenges and Opportunities: Lessons From the 2011 Christchurch Earthquake and Great Eastern Japan Earthquake and Tsunami: World Bank Brazil, Kyoto University Japan, Resilient Organizations, New Zealand; Renscheler, Prof. Dr. S. and Yasumiishi, M. (2014) The PEOPLES Resilience Framework –An Integrated Quantitative Approach to Design and Test Dynamic Evacuation Drills for Permanent and Temporary Shelters: University at Buffalo –The State University of New York, Buffalo, USA; Tabacaru, A and Natalia, C. (2013) The Improvements Achieved by Civil Protection and Emergency Situations Services (SPESS) of Republic of Moldova: State Enterprise 'Basin Water Management Authority' of Moldova.

factors, post-disaster recovery. The seven papers are reflected in the document: as text boxes (Section One) and as case examples (Section Two).

The report is ~~comprized~~comprised of four sections. *Section One* of **Preparedness Action in a Present and Futures Contexts** examines the broad evolution of preparedness, prior to and since the launch of the HFA in 2005, including where there has been a significant degree of disaster preparedness uptake and progress, as well as the barriers and challenges to the implementation of Priority 5.

Section Two presents **five** indicative case examples of multi-hazard preparedness that reflect amongst other things probabilistic risk assessment.

Section Three uses the examples noted in Sections One and Two to assess the current strengths and weaknesses of the current thinking and approach to preparedness in a *futures* context. It identifies preparedness themes and issues that should be taken into account in light of trends and changes in the broader global risk context as well as suggested elements for HFA 2.[2] These relate to increasing exposure to risk as a result of changes in the underlying risk drivers and the impact of those changes on current approaches to preparedness.

The final section, *Section Four* proposes a set of strategic recommendations for promoting preparedness, in the context of the present and the foreseeable future. It is intended to support the strengths of what has been learned to date and to address the gaps from the research finding and conclusions, namely those lessons that still need to be learned.

Intended use of the chapter

The resulting paper will inform the UN-led policy discussion on the inclusion of disaster preparedness in the successor arrangements to HFA 1. It can also serve as a reference for the consultations for the 2016 World Humanitarian Summit, and for countries to help inform policy discussions at the regional, national and sub-national levels on preparedness for future risks.

[2] Preparatory Committee (2014) Suggested elements for the post-2015 framework for disaster risk reduction, UNISDR Secretariat.

Section I: Disaster preparedness – before and within the HFA

The GAR 15 Call for Abstracts for Preparedness Planning indicates that, as a thematic area, preparedness should be treated more broadly than the original inclusion in the Hyogo Framework for Action (HFA) 2005-2015 in order to cover the full spectrum of issues relevant to the topic.

On the basis that disaster preparedness has its origins prior to the approval of the HFA in 2005, Section One summarises some of the key milestones that have shaped the evolution of disaster preparedness within the international humanitarian architecture. The section then looks at selected achievements and gaps under the current HFA.

The analysis offers observations on the prevailing tensions and boundary issues in relation to preparedness, which warrant further analysis and attention under HFA 2. The tensions stem from the fact that within the international architecture two linked but distinct policy frameworks have been created, one focusing on preparedness and another on disaster risk reduction. As preparedness continues to become increasingly linked to a broader DRR/DRM agenda, focused on reducing the underlying risk drivers and building resilience, how does preparedness demonstrate that its purpose, the activities it entails and its approaches are complementary to that bigger agenda and outcomes?

Comment [KK2]: Consider revising the sentence (question) for more clarity.

1.1. The early evolution of preparedness: 1971-1999[3]

UN Resolution 46/182 established the basis for three significant outcomes as they relate to disaster preparedness and how it has evolved today:

1.1.1. Establishment of the international architecture for disaster preparedness

In December 1991 the General Assembly of the United Nations adopted *Resolution 46/182* establishing the Department of Humanitarian Affairs (DHA) in order to strengthen 'the coordination of humanitarian emergency assistance of the United Nations' and ensure 'better preparation for, as well as rapid and well-coordinated response to complex humanitarian emergencies as well as sudden and natural disasters.' This action incorporated the former UNDRO (Office of the United Nations Disaster Relief Coordinator -1971) to become UNDHA (Department of Humanitarian Affairs (1991) which then later evolved to become UNOCHA (the Office for Coordination of Humanitarian Affairs (1998). *Resolution 46/182* called for the creation of the Emergency Relief Coordinator Function (ERC) and the UN Inter-Agency Standing Committee (IASC), and the Consolidated Appeals Process (CAP) as coordination mechanisms to support the ERC. This period also saw the creation of INSARAG (International Search and Rescues Advisory Group, 1991), the UNDAC (UN Disaster Assessment and Coordination mechanism, 1993) and the UN Disaster Management Training Programme (UNDMTP). [4]

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Comment [KK3]: Authors have used single quotes extensively within this and subsequent paragraphs. It is however, not clear whether the intention of these single quotes is to highlight direct quotations from another source (usually double quotes) or simply to highlight the statement. If former, may be it is appropriate to provide the source information, if latter, may be it is worth consider revising this use for better clarity.

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This period, then, established the foundation for a more comprehensive concept for and systematic approach to disaster preparedness and the provision of emergency assistance. It also provided the basis for a more systematic approach to international cooperation to address disaster threats.

1.1.2. Recognition of the key role of governments in humanitarian assistance

UN Resolution 46/182 also underscores the point that the affected state has 'the primary role in the initiation, organization, coordination and implementation of humanitarian assistance within its territory' and calls for states to invest their own resources to assist and protect their citizens in disasters.[5] At the same time it calls on the international community to help countries develop their capacity to respond to disasters, at national and regional levels, as appropriate.

[3] UNISDR (2013) The Post-2015 Framework for Disaster Risk Reduction A prospective retrospective: considerations on, and lessons learned from, the international frameworks for disaster reduction.
[4] The UNDMTP was launched in the 1990s as a joint initiative by UNDHA and UNDP on behalf of the Inter-Agency Task Force. Following the launch of the HFA in 2005 the UNDMTP was re-launched as the Capacity for Disaster Reduction Initiative (CADRI).
[5] Harvey, P. (2009) Towards good humanitarian government: The role of the affected state in disaster response, HPG Policy Brief 37, Overseas Development Institute, London.

1.1.3. Establishment of the foundation for disaster risk reduction

During this same period, and also under *GA Resolution 46/182*, the groundwork for a broader policy framework to deal with the impact of sudden natural disasters was established, with the creation in 1989 of the Secretariat for the International Decade for Natural Disaster Reduction (IDNDR) as part of UNDRO. This led to the first *World Conference on Natural Disaster Reduction of the Yokahama Strategy for a Safer World* in 1994, followed by the adoption in 1999 of the *Strategy A Safer World in the 21st Century: Disaster and Risk Reduction*, named thereafter as the *International Strategy for Disaster Reduction* (ISDR). ISDR placed a clear emphasis on risk management, later re-enforced by the *2nd World Conference on Disaster Reduction* in 2005 through the adoption of the *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*.

The dual emphasis of *Resolution 46/182*, on emergency assistance and on the need to reduce the impacts of hazards and to promote the management of risk, led to the creation of two separate, albeit linked, policy frameworks – one dedicated to emergency response and the second to reducing disaster risk. The *Resolution* called for emergency assistance to be provided in ways that would support recovery and long-term development. Towards that end, the importance of sustained international cooperation and support for rehabilitation and reconstruction after the initial relief stage was emphasized. This concept later evolved into what subsequently had been referred to as the relief to development continuum.[6]

1.2. Preparedness as a concept and its practice in the 1990s

Disaster preparedness minimizes the adverse effects of a hazard through effective precautionary actions, rehabilitation and recovery to ensure the timely, appropriate and effective organization and delivery of relief and assistance following a disaster.

The definition speaks to actions required in times of emergencies for the effective delivery of relief assistance. It calls for practitioners to consider whether the provision of relief assistance is designed merely to ensure the immediate survival of affected communities or to pave the way for recovery in ways that minimise the adverse effects of hazards.

Nine functions were identified as the basis for a preparedness system: vulnerability assessment, planning, institutional framework, information systems, resource base, warning systems, response mechanisms, public education and training and rehearsals. The module indicates that these functions need to be based on multi-hazard vulnerability assessments, planning processes that are led by national governments and engage a wide range of stakeholders, and for preparedness to be seen as an active, on-going process or state.

During this period, governments put in place legislative frameworks, and established a diverse range of institutional focal point mechanisms to coordinate and manage disaster/emergency response in the form of emergency services offices, national disaster management offices and civil ~~defense~~defence offices. Many were assigned to a particular government department, e.g. the Prime Minister's Office, Ministry of Defence or Home Affairs, with differing mandates and degrees of authority. Having established a strong basis for preparedness, the next decade led to a well-established thematic function within the overall disaster lexicon, with its own set of activities and well identified institutional capabilities, designated stakeholders and roles. This period also saw the introduction of different terminology for preparedness, spanning from emergency to disaster management, with the terms often used interchangeably.

1.3. Preparedness within the Hyogo Framework for Action: 2005 to 2015

The inclusion of disaster preparedness within the 2005 HFA as Priority 5 states clearly that including preparedness in the HFA situates the function within 'a holistic disaster risk reduction framework'. 'It represents the important linkage between the disaster risk reduction activities elaborated in Priorities 1-4 and the operational abilities more often identified with emergency or

Comment [KK4]: In my view, the rigour of this section could have been improved if more references were provided from refereed journals, etc.

Comment [KK5]: Source could be provided here.

Comment [KK6]: Consider revising this statement, the definition above refers to the "precautionary actions" rather than the "actions required in times of emergencies" in my view.

Comment [KK7]: Please consider revising for better clarity. The reference to "the module" would benefit from a further clarification.

Comment [KK8]: Could this be supported by examples, references?

Comment [KK9]: As same as the comment 8 above.

[6] The United Nations, 19 December, 1991, UN General Assembly Resolution A/Res/46/182.

(disaster) management.'[7] The HFA also emphasised that the responsibilities outlined in Priority Actions 1-4 are complementary to disaster management.[8] In so doing, it recognized and established the connection between preparedness and the other four priorities of the HFA, thereby situating preparedness in a far broader framework than what had been previously established in the 1990s, which focused on emergency preparedness and humanitarian action. A useful summary of this shift in thinking about preparedness is noted in the *2011 Mid-Term Review of the Hyogo Framework for Action:*

> *'The work on disaster risk reduction began under the auspices of the emergency response community in the 1990s. However, as this work continued, it became increasingly clearer that the framing of disaster risk reduction as a humanitarian question nearly exclusively related to emergency management and humanitarian action was insufficient. Whereas the humanitarian community has played an important role in driving the disaster risk reduction agenda in the 1990s and in helping to raise awareness and to advocate for better preparedness and prevention to save lives, this strong link is now showing its limitations and is indeed now seen as a major challenge to making disaster risk reduction an integrated component of environmental, economic and social development and to understanding the full implication and potentials of disaster risk reduction across sectors other than humanitarian.'*[9]

The *UNISDR glossary of terms* defines preparedness as:

> *'the capacities and knowledge developed by governments, professional response organizations, communities and individuals to anticipate and respond effectively to the impact of likely, imminent or current hazards or conditions'.*

ISDR's explanatory comment on the definition notes that preparedness action is carried out within the context of disaster risk management and should be based on a sound analysis of disaster risks and be well linked to early warning systems. It includes contingency planning, stockpiling of equipment and supplies, emergency services and stand-by arrangements, communications, information management and coordination arrangements, personnel training, community drills and exercises, and public education. It must be supported by formal institutional, legal and budgetary capacities.[10]

This definition illustrates the increasing importance given to anticipation and understanding risk as an important basic component of disaster preparedness. While many of the same functions that had already been established as the basic package for a preparedness system are encompassed in the HFA concept, the HFA calls attention to the need for policies and legal frameworks that reinforce disaster preparedness. Preparedness planning needs to be based on hazard monitoring, forecasting and early warning - all to be contextualized in terms of the relationship between specific types of hazards and particular levels of vulnerability in a given context. The HFA also called for a strong focus on information management and communications, and coordination including local, national, regional and international levels.

The concept of preparedness put forward in the HFA, then, retained the focus of preparedness on saving lives and livelihoods, but at the same time situated the function within a broader DRR/DRM concept, framework and approach:

> *'Strengthened preparedness for hazard events is mainly concerned with two objectives: (1) increasing capacity to predict, monitor and be prepared to reduce damage or address potential threats and; (2) strengthening preparedness to respond in an emergency and to assist those who have been adversely affected.'*[11]

Yet, it is perhaps this very linkage between preparedness and DRR/DRM that can also be considered as a source of tension. On the one hand, preparedness focused historically on the objective of emergency response and saving lives and livelihoods. Yet, on the other hand, was an

[7] UNISDR (2008) Disaster Preparedness for Effective Response: Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework for Action.
[8] UNISDR (2006) Words Into Action: Implementing the Hyogo Framework for Action: Document for Consultation, p.99.
[9] UNISDR (2011) Mid-Term Review of the Hyogo Framework for Action, p.56.
[10] Ibid #6, p.3.
[11] Ibid, #6, p. 1.

emerging pressure for the concept to expand and to align with broader DRR/DRM objectives and strategic outcomes. Thus, as one considers the evolution of preparedness, including where it sits today, is preparedness itself at a conceptual crossroads? To what extent does it retain a narrow agenda and outcome or alternatively expand to engage with a more DRR/DRM oriented agenda - the former finding itself more aligned in what might deemed to be humanitarian action, the latter more attentive to risk management and reduction, resilience and development?

Comment [KK10]: Consider a revision to improve clarity.

1.4. Key progress and challenges: 2005-2015

Comment [KK11]: The rigour and the robustness of this section could have been improved significantly if more references were provided from refereed journals and alike. Having referred to the guidelines, I understand this even if this report is not an academic publication, it follows academic standards and prefers to see refereed citation in use.

The guidance set out by the HFA for Priority 5 includes four core indicators: (1) strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective in place; (2) disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes; (3) financial reserves and contingency mechanisms are in place to support effective response and recovery when required; and (4) procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.

In light of these indicators, *UNISDR's Summary of Reports*, 2007-2013, states that, HFA Priorities 1 and 5 have seen the most progress. HFA Priority 5 'is consistently where countries report the most progress, a trend over the three reporting cycles (2007-2009, 2009-2011 and 2011-2013). The progress that has been reported for Priority 5 indicates there has been improvement in capacities to prepare for and respond to disasters. There is evidence that due to improvements in development conditions as well as preparedness and response, mortality risk is trending down.'[12]

Comment [KK12]: While it is acknowledged that a comprehensive investigation is not pragmatic and not expected, the basis for the selection of 7 areas could have been explained in a paragraph for better clarity and rigour.

The analysis of progress and challenges that follows does not purport to be a comprehensive investigation or synthesis of the vast volume of documentation that has been generated since 2005 in relation to preparedness within HFA 1. Rather, it focuses on a selection of broad recurrent themes as they pertain to preparedness, based on the literature review and HFA 1 consultations. It summarizes progress areas that have been reported, as well as changes and challenges that have been identified with preparedness. It situates the analysis of progress and challenges within the broader framework of preparedness. In so doing, it identifies the specific added-value of the HFA in terms of 'helping to shift the focus from traditional preparedness and relief centric approaches to disaster risk reduction.'[13]

Seven areas of progress and challenges were presented and continue to be relevant:

- preparedness is increasingly recognized as a major government function;
- the leadership role of regional organizations and mechanisms;
- gradual shift towards a more comprehensive national system and approach for preparedness;
- recognition of the importance of fostering DRR capacity, processes and accountability at the local level;
- a shift on the part of the international community towards having a Common Framework; for disaster preparedness and for international cooperation for national capacity development;.
- the increasing role and use of science and technology for preparedness;
- patterns and trends in the financing of disaster preparedness.

Comment [KK13]: It would have been beneficial to look at current academic refereed publications on this issue to broaden the research base. See for example, Smith, E. (2006). National Disaster Preparedness in Australia – Before and After 9/11.*Australasian Journal of Paramedicine, 4*(2). Cheong S-M, 2011, "The role of government in disaster management: the case of the Hebei Spirit oil spill compensation" *Environment and Planning C: Government and Policy* **29**(6) 1073 – 1086

Manyena, Siambabala Bernard, et al. "Disaster risk reduction legislations: Is there a move from events to processes?." *Global Environmental Change* 23.6 (2013): 1786-1794.

1.4.1. The central leadership role of governments for DRR, including preparedness

The importance of government's role in advancing preparedness and risk reduction and making it a national and a local priority have been well established. This is seen to be characterized by high-

[12] UNISDR (2013) Synthesis Report: Consultations on a Post-2015 Framework on Disaster Risk Reduction (HFA 2), p.5.
[13] Ibid #8, p.5.

level buy-in, effective national leadership and the ability to foster understanding and collective ownership for making disaster risk a fundamental part of development policy and practice. The business case for the government's leadership role in risk governance has therefore been well established, in principle.[14]

As noted, in relation to Priority 1, UNISDR's Mid-term Review notes that 'there is clear and documented progress in the achievement of this Priority for Action over the past five years, especially in the development of policy and legislation and in strengthening multi-sectoral institutional systems and platforms.' Reports from biennial self-assessments by countries using the HFA Monitor describe efforts to strengthen their institutional, legislative and policy frameworks, their early warning and disaster preparedness for response arrangements, as well as address risk assessment, education and research issues, and foster a common understanding of disaster risk.[15]

Comment [KK14]: Full citation in the form of a footnote (following the practice so far in the report) is needed.

For example, in 2013 Ghana reported developing its national disaster management policy through the National Disaster Management Organization (NADMO), while the Philippines Disaster Risk Reduction and Management Act of 2010 calls for a major shift away from emergency response to disaster risk reduction and the establishment of Disaster Risk Reduction and Management Office in every local government unit.[16] The Input Paper on Moldova provides another example of national preparedness progress linked to HFA Priority 1.

Box 1: Input Paper: Improvements Achieved by Civil Protection and Emergency Situations Services (SPESS) of the Republic of Moldova

Since gaining its independence in 1991 Moldova has made consistent progress in establishing its institutional arrangements for managing disasters. An initial important legislative step was taken in the Declaration of Independence that transferred all units of Civil Defence under the USSR to the Moldovan jurisdiction of Civil Defense Staff. Subsequent legislation addressed the institutional arrangements for Civil Defense, first situating it under the Ministry of Defense and later transferring it to the Ministry of Internal Affairs. The legislation (On Civil Protection 27-XII) of 1994 further defined the main role and functions of the Civil Defense and Emergency Services Situation (CPESS). Independence has also opened up opportunities to build relationships with a broad set of actors, e.g. agreements between Moldova, Romania and Ukraine for cross-border cooperation for disasters and participation in international and regional simulation exercises organized by the European Union and NATO. Moldova also has a partnership with the US State of North Carolina for joint cooperation.

The Ghana, Philippines and Moldova examples, along with a study of 31 countries' laws,[17] provide a snapshot of national level progress related to HFA Priority 1 and risk governance. The examples illustrate where and how disaster risk sits within governments' priorities and different strategic approaches for addressing disaster risk, all of which, in one way or another, depend on having a strong institutional base for implementation.

The different strategic approaches are reflected in the broad differences between types of legislation. As noted in the analysis of the 31 countries, four types of laws have been identified: laws that focus on preparedness and response (type 1 DRM law), a broad DRM law (type 2 DRM law), or a DRR priority law (types 3 and 4 DRM laws).

The diversity of these types of laws reflects a wide range of factors including national and regional risk contexts, as well as how governments understand the links between hazards, exposure and vulnerability. Culture and values, capacity and national development and economic growth objectives are also determinants of government preparedness priorities, as are institutional and economic resources for financing DRR/DRM. These factors can result in a single law that calls for a civil protection approach and a stand-alone disaster response focal point mechanism to frameworks

[14] UNISDR (2013) Global Assessment Report (GAR), Preface, p. xiv.
[15] Third United Nations World Conference on Disaster Risk Reduction, Suggested Elements for the post-2015 framework for disaster risk reduction, June 2014, p.2.
[16] UNISDR (2013) Implementation of the HFA: Summary of Reports, 2007-2013, HFA Priority 5
[17] UNDP and IFRC (2013) Effective law and regulation for disaster risk reduction: a multi-country report, www.undp.org.

that provide a more integrated system of laws to having a far more comprehensive institutional framework and approach to disaster risk.

Countries with type 1 DRM law are noted to be 'primarily focused on emergency response, though it may also include preparedness, response and recovery. Their objectives and mandates are characterized by an emphasis on rapid response and recovery assistance rather than risk reduction. Such laws tend to be older laws, that have been in force for decades and have not been reviewed, or where the country has limited capacity to update the framework even when a need has been identified, e.g. Iraq (1978), Madagascar (2003) and Nepal (1982).'[18]

Yet, in spite of the progress in this area, the consultations for HFA 2 have identified a number of challenges in relation to risk governance that need to be addressed. While there has indeed been progress from a governance perspective to date, should HFA 2 continue to pursue this theme? To what extent will such existing frameworks need further shaping and strengthening, particularly when it comes to operationalization.

One set of issues raised in both the UNDP and IFRC report and in the consultations for HFA 1 relates to the need for legal frameworks to be conceived to support a 'whole of society' approach by including, for example, provisions for institutional mandates and roles, and local community level engagement and implementation, linked to resilience. Having a strong national focal point and institutional structures to provide leadership and to drive the integration of DRM are recognised for as being important: 'a single agency, such as a national disaster management agency or a civil defense office, is often established as the national focal point for cultivating a 'whole of society' approach' to DRR and providing national leadership and policy direction. However, these offices often need to strengthen their coordination with other sectors and stakeholders, especially those related to development planning and climate change adaptation (CCA). They also need to be given clear legal mandates and authority for DRR, matched with mandated resources and capacity.' [19]

Comment [KK15]: Could the specific references be given in footnotes?

As countries continue to make progress in creating their enabling environment for disaster risk reduction, the mandate and role of the institutional focal point and its authority to drive DRM will continue to evolve. Countries that currently have legal frameworks that are more response than risk management and resilience oriented or that have designated institutional focal point mechanisms with more narrowly defined mandates and roles may need to reconsider whether those established entities can or should assume broader mandates and roles. Alternatively, in instances where governments are seeking to move towards having a comprehensive framework and approach that are oriented to prevent new risk creation or to adopt a 'whole of society' approach, then the structure and authority of the designated entity to lead and drive this shift will need to reflect that outcome. The implications of these shifts in relation to the links with preparedness will need to be carefully taken into account.

Comment [KK16]: Consider revision for better clarity.

1.4.2. The leadership role of regional organization for DRR, including preparedness

In a very basic sense the roles that regional organizations can play to deal with DRR underscores a key and too often overlooked dimension of a 'whole of society' approach to preparedness. The 'cross-border' dimension of regional cooperation is not only critical to support and enhance national level HFA implementation but also - equally important to address - cross-boundary risks in ways that reflect a more complete dimension of potential threats.

Comment [KK17]: More academic references could have been useful to broaden the theory base: for example, see Malalgoda, Chamindi, Dilanthi Amaratunga, and Richard Haigh. "Creating a disaster resilient built environment in urban cities: The role of local governments in Sri Lanka." *International Journal of Disaster Resilience in the Built Environment* 4.1 (2013): 72-94.

Comment [KK18]: Any sources to back this up (to improve the rigour)?

The important leadership role that regional organizations, HFA platforms and intergovernmental mechanisms currently play and can continue to play strongly features throughout the HFA reporting processes. In that sense, 'the HFA has brought about a significant momentum for change at the regional level, regional and sub-regional cooperation around disaster risk reduction has been easier, compared to other fields, and has had an indirect positive impact on countries' relationships.'[20]

[18] Ibid # 17, p. 42. Five countries are reported to have Type 1 DRM Laws: Angola, Iraq, Kenya, Madagascar, Nepal. Iraq and Nepal have draft laws giving high priority to DRR.
[19] Ibid # 19
[20] Ibid #8, p. 30.

Significant progress has been noted with respect to the development of regional frameworks and the fact that regional mechanisms and entities have provided considerable support for these processes. Similar to the ~~DRR~~ legal frameworks for DRR that encompass a wide spectrum of DRR/DRM functions and approaches, regional frameworks are also diverse. Some frameworks include provisions for preparedness, but go beyond having a restricted definition of 'emergency preparedness'. For example, the South Asian Association for Regional Cooperation (SAARC) covers disaster management, preparedness, early warning and recovery and regional cooperation. The ASEAN Agreement on Disaster Management and Emergency Response (AADMER), as noted in Section 2, supports Member States in strengthening sub-regional emergency response capabilities, including the development of Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations.

The agendas of other regional entities include disaster management but with a broader DRR/DRM focus, in line with calls for a more holistic approach. The Central American Policy on Integrated Risk Management (PCGIR) defines in this regard five areas of intervention for the region's DRR agenda: incorporating DRR in investments for sustainable development; economic development and social compensation to reduce vulnerability to the environment and climate change; territorial management; governability and governance; and disaster management and recovery. The South Pacific Geoscience Commission (SOPAC) of the Secretariat of the Pacific Community (SPC) has been instrumental in adapting the HFA to the regional context in the Pacific Disaster risk Reduction and Disaster Management Framework for Action 2005-2015 which both rationalizes and accommodates a focus on disaster management and on improving disaster risk management and policies for sustainable development. While in Africa, in relation to drought, the Inter-Governmental Authority for Developments (IGAD) is noted to be the first African regional organization to make the political shift away from responsive drought management to a resilience approach.

Comment [KK19]: Could the sources be referenced?

Regional organizations and mechanisms will no doubt continue to feature prominently in the next iteration of HFA 2. Capacity enhancement strategies of international actors, in particular, may consider how they can best collaborate with, position and bolster the capacities of regional organizations and mechanisms to strengthen regional organizations' leadership roles for preparedness.

1.4.3. Gradual shift towards a more comprehensive national system and approach to preparedness

Regional consultations for HFA Priority for Action 5[21] reflect in general terms that there has been significant progress in enhancing preparedness. This progress reflects a shift, though in many instances gradual, towards a more comprehensive approach to preparedness.[22.] Such reports, in referring to preparedness, indicate that there is a broad spectrum of ideas and different terminology put forward on its concept and objective. These concepts range from having a preparedness system that has a strong focus on emergencies to systems that are conceived to ensure the effective management of disasters and to fostering resilience.

The 2011 Mid-Term Review of the HFA and the HFA Summary of Reports on preparedness highlight that emergency plans are in place at local, regional and national levels to deal with major disasters and that regular training is being undertaken focusing on emergency management and disaster response. They also refer to progress areas related to the existences of operations and communication centers, search and rescue teams, stockpiling of relief supplies and shelters. This, clearly demonstrates the point that positive changes are afoot in commitments to preparedness and to an appreciation of the need for preparedness to be put into a broader framework:

- The *consultation report from the Asia-Pacific region*, states that 'many countries identify improvements in their preparedness legislation and strategies have response systems that connect at all levels as well as contingency plans, procedures and resources to deal with disasters. The increasing complexity of disasters, especially those that are cascading,

Comment [KK20]: Could the full source be given?

[21] 6th Asian Ministerial Conference on Disaster Risk Reduction: Bangkok Declaration on Disaster Risk Reduction in Asia and the Pacific, (2014); GFDRR /World Bank and UNISDR (2014) *Natural Disasters in the Middle East and North Africa.*

[22] Ibid #19, p. 11. 'Good progress is reported on establishing the institutional framework for preparedness and response. Many countries now have clearly defined national, sub-national and local level mechanisms to manage disaster response'

technological or involve system failures, highlights the importance of maintaining readiness and capacity to mount effective disaster response. The call for needing to shift from seeing disasters as external shocks to recognizing that risks are a result of and inherent in unsustainable development policies and practices;'[23]

- The 2014 *Regional Review of Natural Disasters in the Middle East and North Africa* (MENA) notes the progress that has been made at the regional level with respect to the shift on the part of governments and regional entities away from response to preventive risk management. 'This shift has been driven by both the rise in human and economic losses from natural disasters and the growing understanding that effective DRM could lead to more resilience economies and livelihoods.' The report identifies progress that has been achieved with discrete preparedness activities, e.g. the 'Making Cities Resilient' campaign, or the fact that disaster loss databases have been established in 8 MNA countries.[24] The report also notes that DRM is still equated with emergency management and that the identification of capacity development for preparedness, response, reconstruction and long-term planning by thematic areas and sub-specialization has yet to take place;

Comment [KK21]: Ditto

- *The Africa Regional Strategy for Disaster Risk Reduction* cites as one of its strategic priorities, the integration of disaster risk reduction into emergency management and response. With respect to the indicators for this objective, the reports notes that in terms of preparedness for effective response and recovery, institutional capacities have been strengthened in most countries as a result of emergency planning exercises, contingency funding mechanisms and improved information management systems. The report too cites a comparison between the current situation and that of 2008, noting that 'a large number of countries in the region have prioritized disaster preparedness, resulting in demonstrable progress.'[25] Note is also made on the need to fully establish DRR practices within disaster management institutions and operations and to ensure that disaster recovery provides the opportunity to address the causal factors of risk and for this to be reflected in disaster management policies and plans.

Comment [KK22]: Ditto

The examples suggest that countries are giving more priority to the need for anticipation and to ensuring that measures are in place in advance of an event. This is further illustrated in two of the Input Papers prepared for this chapter, which address the importance of preparing and drilling contingency plans and providing training at all levels.

Comment [KK23]: Could this further be emphasised by giving references to the current academic thinking and theories?

Box 2: Input Papers: The PEOPLES Resilience Framework –An Integrated Quantitative Approach to Design and Test Dynamic Evacuation Drills for Permanent and Temporary Shelters and; Public Health & Primary Health Care, re-developing and preparation of the training for coming mega-disaster in Japan after Great East Japan Earthquake (GEJEQ) 2011.

The two Input Papers speak to the value and importance of having systematic training frameworks and programs in place before disasters and for ensuring that lessons learnt in disasters are factored into training initiatives and systems.

The PEOPLES Resilience Framework puts forward a holistic or whole systems model approach for the design of realistic, scenario based planning approaches that should be considered for shelter planning and evacuation drills. The Framework includes seven dimensions and indicators for the functionality of a shelter system at the community level: Population and Demographics, Environment/Ecosystem Services, Organized Governmental Services, Physical Infrastructure, Lifestyle and Community Competence, Economic Development, Social-Cultural Capital. It is designed so it can be used and adapted by a wide range of actors and institutions for planning and testing of plans and for designing and

[23] Ibid #22, Asia Pacific Consultation (2014) Bangkok.
[24] GFDRR and UNISDR, Natural Disasters in the Middle East and North Africa: A Regional Overview, January 2014, p. 20. These 8 countries include: Djibouti, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and the Republic of Yemen.
[25] Ibid #25. p.109.

modifying shelter and evacuation drills.

The Input Paper for Japan, after the Great East Earthquake, 2011, details how Japan is addressing problems and lessons learnt in relation to issues surrounding the well–being of Japan's aging population and their basic human rights in times of disasters. In preparation for future humanitarian disasters two mechanisms have been created, one under the Ministry of Health to establish Disaster Health Emergency Assistant Team (DHEAT) and the second under the National Centre of Neurology and Psychology for the Disaster Psychological Assistant Team (DPAT). Standing training activities feature strongly in both mechanisms to ensure that a wide range of actors are conversant with their roles and has the necessary skills to undertake those tasks in times of emergencies and in coordination with other actors.

HFA's Mid-term review 2011 also notes the links between HFA Priorities 3 and 5 in relation to information and knowledge management and the fact that progress appears to be mixed: 'countries reported progress in developing school-based programmes which included disaster risk reduction in school curricula and in the production and dissemination of public information material. Yet, even when public awareness of natural hazards increases, there is no clear evidence that enhanced awareness translates into concrete action.'[26] And, while progress is reported with the use of new channels of communication and the improved use of more traditional channels for awareness raising and exchange as well as with the proliferation of 'lessons learned' and 'good practices', difficulties nevertheless persist in translating enhanced awareness and good examples into concrete action.[27]

Comment [KK24]: This is more related to "education and training' than "knowledge management and information management" in my view. Could this be placed appropriately?

Box 3: Input Paper: Knowledge Factors and Associated Challenges for Successful Knowledge Sharing

The Input Paper on *Knowledge Factors*[28] addresses some of these very 'real' challenges in relation to knowledge factors and management. It identifies eight key inter-related knowledge elements pertaining to disaster management that can serve as the basis for building a knowledge base and identifying good practices relating to different types of disasters. These elements include: Technological, Social, Environmental, Legal, Economical, Operational/Managerial, Institutional and Political. While referred to in the Paper as knowledge factors they correlate with the basic building blocks for an effective preparedness system which will be influenced positively or negatively, in many respects, by the eight factors. The paper notes that having a more systematic approach to better understanding how the knowledge factors operate in different risk contexts can help ensure learning from the experience of disasters and build a collective knowledge base that translates into understanding and action to implement both prevention and response strategies for a better future.

Despite such clear indications of progress, there are nevertheless several priorities that will have to be included in HFA 2's scope. For example, the Literature Review for the Mid-Term Review of the HFA calls attention to the gaps in the variation in scope and geographical coverage of contingency plans, the lack of inclusion of recovery or recovery dimensions in contingency plans and the static nature of the plans that are not updated as risk patterns change or changes in capacity at different administrative levels evolve. The development of mechanisms for ensuring appropriate action for early warning and for better linkages between preparedness and resilience is regarded as increasingly important. So, too, is the growing emphasis given to the importance of promoting preparedness activities in an integrated manner.[29]

The documentation suggests that, at least with respect to terminology, there seems to be a broadening of terms and concepts associated with preparedness as can be seen with reference, for example, to its link to understanding risk, resilience and calls for the integration of DRR into emergency management and response. Whether this represents more a rhetorical than a strategic

Comment [KK25]: Which documentation? This paper, reference 29 or any other?

[26] Ibid #8, p. 24.
[27] Ibid#19, p. 8.
[28] Pathirage, C., Seneviratne, K, Amaratunga, D., and Haigh, R, (2014) Knowledge Factors and Associated Challenges for Successful Disaster Knowledge Sharing, (Centre for Disaster Resilience, University of Salford) .
[29] Germany Federal Foreign Office (2013) How can preparedness for disasters and humanitarian emergencies be improved? Chair's Summary.

or an operational shift is beyond the scope of this analysis. Clearly, however, there are realities and complexities that have to be considered and overcome when moving beyond rhetoric into effective action. Some of these are suggested in the following Section 2. That these can be overcome is proposed in Sections 3 and 4.

1.4.4. Recognition of the importance of fostering DRR capacity, processes and accountability at the local level

Comment [KK26]: Again, more attention to a broader refereed literature base would have been beneficial to improve the robustness of the points raised.

HFA 2 consultations and review processes have consistently called attention to the fact that progress has been primarily focused at the national level. The importance of building leadership for DRR at the local level and for stronger links between the local, regional and national levels has been consistently recognised. In some instances, the results of these consultations have led to calls for the local level to be the starting point for prioritization and coordination of government and local institutional DRR activities. These include calls for investing in building capacities at local and community levels, with particular emphasis on their respective roles in local planning and decision-making.[30]

Calls for greater emphasis on the localization of DRR encompass preparedness as a major element of a sub-national, local system for DRR. For example, as part of the Pacific DRR and DM Framework for Action in relation to disaster management, the Framework calls for 'strengthening emergency management preparedness, response and coordination capabilities to ensure that effective emergency response, communication and coordination processes are established and that existing resources are utilized in the most effective way.'[31]

The increasing recognition of the importance of sub-national and local DRR under HFA 1 has also led to an understanding of the challenges involved in adopting a more decentralized approach to disaster risk reduction in different national and sub-national contexts. The MENA region, for example, notes the fact that MENA countries 'are still among the most centralized in the world with some of the lowest total government expenditures.'[32] However, in Algeria, Egypt, Morocco, Tunisia and the Republic of Yemen, a slow but progressive decentralization has begun which is seen as a shift towards strengthening cities and their capacities to manage their own development, including reducing disaster risk. Quite consistently, issues related to sub-national budget allocations, financing and the need for funding for emergency response and recovery overall as part of preparedness strategies at the sub-national and lower administrative levels were noted as gaps that need to be addressed.

Box 4: Input Paper: Preparing Metro Manila Towards Urban Resiliency

In the Philippines the *Risk Analysis Project (RAP) of Greater Metro Manila* (estimated population of 12 plus million people), is an initiative to put in place disaster risk reduction plans in sixteen, cities and one municipality of Metro Manila and to work with up to thirty communities where there has been rapid, uncontrolled urbanization. The plans called for in the project are expected to be products of risk assessments which are an inclusive part of the 2010 Philippine Disaster Risk Reduction and Management Act and the complementary Climate Change Act of 2009. The approach calls for Metro Manila to shift its preparedness planning approach and process away from having a reactive, emergency and disaster response focus to having a more integrated approach to risk reduction. The paper indicates how known challenges in disaster preparedness planning will be addressed in Metro Manila, including establishing end-to-end early warning systems, integrating the psychosocial in preparedness planning and integrating DRR and climate change adaptation into development planning and developing scenarios suitable to local contexts that require collaboration from diverse stakeholders.

[30] Ibid # 28, p.2.
[31] Regional Framework: *The Pacific Disaster Risk Reduction and Disaster Management Framework for Action, 20015-2015:* Building the Resilience of National and Communities to Disasters (Regional Framework) at a national level within Pacific Island countries.
[32] Ibid #28 p. 27.

For HFA 2, the consultations note that the relationship between central and local governments regarding disaster risk reduction has to be an important element,[33] as does managing the relationships. In specific relation to preparedness, the 2013 Platform report indicates:

> *'communities in urban areas are suffering the burgeoning effects of urbanization while rural communities suffer from isolation. Both, however, can benefit from local early warning systems and need to be educated in disaster preparedness and response, using those systems. This education must be done using simple, accessible language that connects directly with the particular circumstances of each community. Likewise, local risk information needs to be improved, along with disaster damage and loss data, and public access to this information must be changed.'*[34]

These sorts of gap areas suggest that efforts to enhance sub-national preparedness under HFA 2 need to devote more emphasis on addressing and fostering the involvement of local communities and the most vulnerable. At issue, however, as noted in the 2013 Global Platform report, is how to help communities and vulnerable populations move from simply responding to disasters to taking a more proactive, prevention and preparedness oriented stance. The implications of this when it comes to national, sub-national and local emergency preparedness processes and mechanisms need to be understood in relation to the mandates and authorities of disaster management entities and their capacities to adopt more inclusive and holistic approaches to working with a broader range of preparedness issues and actors. Also, as noted, is how to best ensure that national, sub-national and local preparedness plans have a clear interface with national disaster risk management plans and institutional focal points.

1.4.5. Advances in science and technology for preparedness

Comment [KK27]: This is another area where the section could benefit from reference to contemporary thinking and arguments in refereed academic literature.

Science and technology play an essential role in disaster risk reduction, 'not only for predicting events but also as the basis for creating technology that can make risk reduction more effective.'[35] Risk assessment and early warning are two noted areas of progress under HFA 1, linked to HFA Priority 2: Understanding Risk, Early Warning Systems. The Mid-term review of the HFA describes progress on risk assessment at the regional and national levels, with '46 out of 83 countries reporting having multi-hazard risk assessments underway in 2009.'[36] Among the most significant development in risk knowledge is the growing understanding of extensive risks that are highly localized, frequently occurring disasters. These all too often are under-supported by national and international efforts, despite the fact that they reflect issues such as climate change, threats with persistent and accumulative effects and those that are trans-boundary.[37] Nevertheless, despite these concerns, countries are still perceived to be increasingly taking steps to develop coherent and integrated disaster risk reduction and climate change adaptation plans.[38]

With respect to early warning systems, 'significant progress has been made (64 out of 83) countries reporting that risk-prone communities receive timely and understandable warnings of impending hazard events (2009-2011 HFA Monitor reporting cycle.)'[39] The link between the role of technology in risk communication and early warning is also noted, though the progress is limited to early warning for high visibility hazards, with less progress on more frequent but less spectacular hazards.[40] Noted progress areas include advances in the availability of open source and open access science-based risk information and knowledge and with capacity for early warning and for having systems that provide timely information at multiple levels, and with communities having access to the right technology and training. New technology, particularly social media, presents new opportunities for connecting people to the growing flow of risk information and for capacity development.

Despite progress in both scientifically-based risk assessments and the traditional community level vulnerability and capacity analysis assessments (VCAs) there has been a lack of progress in

[33] UNISDR (2013) Post-2015 Framework for Disaster Risk Reduction (HFA 2): Report from the Global Platform Consultation.
[34] Ibid #28, p. 3.
[35] Ibid #28, p. 7.
[36] Ibid #8, p. 23
[37] Ibid #12, p. 5
[38] UNISDR (2013) Annual Report, p.. 5: This includes 20 countries in Europe, 9 in Asia and the Pacific, and 1 in the Arab region.
[39] Ibid #8, p. 24.
[40] Ibid #19, p. 7

bringing the two together and reading the needs of those at risk. Data sharing and harmonization of data management systems are noted to be major challenges along with a lack of networking and collaboration across various players in risk assessments. [41] The consultations for HFA 2 call for the science community to find better and faster ways to interact with the potentially vulnerable, and then to communicate findings to policy makers and planners. Science, it is felt, has to come out of the universities and into the communities.[42]

This suggests that those with preparedness roles will need to establish far broader contexts for identifying the types of risks and drivers of risk that will need to be addressed in the future. It also has implications for *who* should participate in preparedness. There is a clear need for engaging with a far more diverse set of actors, including not only scientists but also those communities who depend upon scientific findings and solutions. There is, in other words, a need for far greater interface between those with 'emergency management' roles, those in the natural and social sciences and those in vulnerable or potentially vulnerable communities. Successful pilot initiatives trialled independently and under HFA 1 to improve dialogue between scientists and policy makers and planners and with communities offer promising practices for bridging current communication gaps between science and end-users.

1.4.6. UN Common Framework for Preparedness and National Capacity Development

As this analysis notes, the concept of preparedness put forth in the HFA has been significantly taken up and advanced by governments and regional organizations as well as at the level of the broader international community. The work of the IASC in the past decade under the umbrella of *The Transformative Agenda*[43] has been particularly instrumental in fostering a re-think about preparedness in relation to the HFA and UNISDR's definition of preparedness.

This work has included the development of the *Common Framework for Preparedness* that seeks to support the development of preparedness capacity in a far more anticipatory and coherent manner, using a systematic country level approach.[44] It situates preparedness within an overall, nationally led, disaster risk management context, which includes prevention, mitigation, preparedness, and response and recovery measures. *In toto,* the Framework suggests that the concept of a more restricted approach to emergency preparedness approach may be changing.

> *The Framework states that the overall objective of preparedness is to reduce the humanitarian, social, economic and environmental impact of an emergency on affected populations and help them recover and continue with their lives as quickly as possible and effectively as possible. Preparedness is an integral part of Disaster Risk Management, itself an essential strategy for strengthening the resilience of nations and communities.*

Comment [KK28]: Could the specific reference be given?

With that broader objective for preparedness, the Framework identifies the key components which would include: (1) multi-hazard risk profiles, linked to wider country assessments and development processes and country capacity; (2) risk monitoring, early warning and early action; (3) planning, including the integration of preparedness for response and recovery plans with wider international planning and funding instruments; and (4) advanced preparedness actions including contingency planning and scenario specific simulations.

The Framework recognises the need for the international community to adopt a more pro-active and coordinated role for the provision of support to governments to develop their national preparedness measures and capacity – as designated in *Resolution 46/182*. It also recognises the fact that assistance over the years to states by the international community has been disjointed (UN, NGOs, those in the Red Cross/Red Crescent movement, donors and multilateral development

[41] Ibid #19, p. 7.
[42] Ibid #12, p. 11. .
[43] UN IASC (2012) Transformative Agenda, includes a set of actions that collectively represent a substantive improvement to the current humanitarian response model. These include: a mechanism to deploy strong, experienced senior humanitarian leadership, the strengthening of leadership capacities and rapid deployment of humanitarian leaders, improved strategic planning, enhanced accountability, streamlined coordination mechanisms.
[44] UNIASC (2013) *The Common Framework for Preparedness* builds on the ISDR definition for preparedness provided above with the qualification that preparedness should apply to all kinds of emergencies, including from natural, biological and technological hazards and complex emergencies. The overall objective of preparedness is to reduce the humanitarian, social, economic and environmental impact of an emergency on affected populations and help them recover and continue with their lives as quickly and effectively as possible.

banks), and that the international community has failed to adapt its thinking and approaches to preparedness to meet the needs not only of today, but also tomorrow.

In many respects the Framework potentially paves the way for an expanded concept and new paradigm for preparedness at the international level with respect to how it is conceived, structured, undertaken, resourced and measured. That said, as consultations on the Framework and the reports on DRR and preparedness financing (see 1.4.7) have noted, greater conceptual clarity will be needed around the broader goals of DRR/DRM. Issues of resilience, a 'whole of society' approach and disaster risk reduction must ultimately be integrated into preparedness. This clarification should have as its outcome a clear position in relation to issues surrounding the concept for and strategic outcome of preparedness that are noted in this analysis. Also at issue is how best to prioritize countries for support. In that context, one will have to judge the practicality of having a unified architecture and approach for fostering multi-stakeholder cooperation on the part of the international community when it comes to support for national governments and the uptake of the Framework more generally.

The Framework also calls for adopting a development approach to capacity building, and includes a Common Framework for National Capacity Development for Emergency Preparedness. Having a common understanding of capacity for preparedness and a shared set of principles and approaches for capacity building is also important in order to shift the focus away from mechanistic approaches to training and supply driven initiatives to a more long-term process that is based on national leadership for increasing national and regional capacities – initiatives that external actors' would support, but not lead.

The consultations all indicate that 'capacity building of government institutions is a continuous process and qualified local experts are rare, even among top decision-makers. Therefore it is important to build capacity at the national level and for project to address capacity gaps to national coordination structures.'[45] For these issues to be taken up and successfully resolved, it will be important for preparedness to remain a key component of the successor HFA framework and to include the adoption and roll-out of the Common Framework in Priority 5 of HFA 2.

1.4.7. Financing of Preparedness

Comment [KK29]: This also could have been benefited from reference to a broader literature base

Throughout the implementation of HFA 1, the issue of financing has been noted as an area of concern. Consultations for HFA 2 stressed the need for more reliable funding and resources for disaster risk reduction, and for reviewing existing financing and fiscal instruments. These approaches would include support for development cooperation as means to underpin risk-sensitive public and private investments.[46]

In relation to international funding, the consultations called for more financing to support international cooperation, including the United Nations. At the national level, the consultations note the lack of references on national financing for disaster risk reduction. The discussions raised the possibility for HFA 2 to refocus on the question of national financing for disaster risk reduction, including possibly adopting or adjusting the targets suggested by the 2009 Global Platform for Disaster Risk Reduction, namely '10% of humanitarian relief funds to disaster risk reduction work', '10% of post-disaster reconstruction and recovery projects and national preparedness and response plans' and at least 1% of all national development funding and all development assistance funding to be allocated to risk reduction measures.'[47] As the consultations highlight, efforts to address the financing for disaster risk reduction, however, need to better understand and take into account patterns and trends at both the international and national levels, for DRR including preparedness.

Two recent studies[48] provide considerable insight into the financing patterns for DRR and for preparedness and can inform future dialogue, decision making and priority setting in relation to charting the way forward with respect to how to address the broader financing issue. The report on

[45] UNDP/BCPR (2013) Issue Brief: Disaster Preparedness –UNDP in Action.
[46] Ibid # 12, p. 22-23.
[47] Ibid #1, Page 10.
[48] Kellett, J and Caravani, L. (2013) *Financing Disaster Risk Reduction: A 20 year story of* international aid, GFDRR and ODI; Kellett, J. and Peters, K. (2014) Dare to Prepare: Taking Risk Seriously, ODI.

Financing DRR indicates that 'The evidence of the 20 year trends in international DRR financing is worrying' in that it has only recently started to stabilize, that it is a fraction of overall aid, less than 40 cents in every $100, the financing is considerably fragmented, it has been concentrated on a relatively small number of middle income countries, and that the priorities of international financing are not matched to either needs or capacity of recipient countries. It calls for better tracking of the financing for DRR at the international level and to better understand national financing of DRR and the interplay between national and international sources. It further notes that 'the future is not just about more money from donor governments but also about better financing – more integrated and suitably coordinated and certainly better targeted.'

The *Dare to Prepare* study examines the state of play and international architecture towards understanding what makes for effective financing for emergency preparedness. It defines preparedness as:

> *Emergency preparedness aims to build the resilience of states and societies by strengthening the local, national and global capacity to minimise the loss of life and livelihoods, to ensure effective response to crises.*

Comment [KK30]: Could the specific reference be given?

The activities that comprise 'emergency' preparedness span the responsibilities of both development and humanitarian actors, as part of a portfolio approach. The report notes how the suite of activities required creating and sustaining a system of preparedness that works in tandem with one another. For example, 'early warning systems will not be effective unless they are supported by a contingency plan that clearly delineates roles and responsibilities.'[49]

The study advocates that preparedness has the potential to 'reshape the way the aid system approaches crises with investments in preparedness as the basis for reducing the cost of response over the long-term and the ever increasing burden on the humanitarian system. It advocates for emergency preparedness to be framed as part and parcel of a risk-based approach to international aid and to be supported by all, including national stakeholders and governments, as well as international humanitarian and development actors.' With respect to the tensions identified in this chapter surrounding the boundaries of preparedness, this perspective appears to offers an option that more closely links preparedness to humanitarian and DRR/DRM outcomes. The report notes that increasing commitment in the way that preparedness is funded needs to be accompanied by measures to understand the cost-benefit and economics of preparedness and the need for better guidance to track investments in emergency preparedness.

Both reports highlight the challenges in financing of DRR and preparedness, and also offer recommendations for change. The fact that the studies have been undertaken can at the same time be viewed as a positive indicator that there is an increased awareness of the need to rethink DRR financing overall as well as the current framing and financing and for preparedness. In light of the upcoming negotiation of the various global frameworks and agendas (post-2015 development framework, 2016 World Humanitarian Summit), the timing of these reports and discussions would seem to be highly opportune.

[49] Ibid # 48, p. 8.

Section 2: Multi-hazard Risks: Lessons from the present

As Section 1 suggests there has been clear progress in the evolution of preparedness planning. To that extent many aspects of HFA are serving as guides to governments, regional and international organizations, as noted in that Section 1's 2005–2015 review. Even before the 2005 Hyogo Framework for Action, however, the importance of preparedness was recognized. As opposed to the past decade though, pre-HFA initiatives seemed to be given relatively little priority. The past decade has witnessed greater commitment at various levels, and more and more actors outside governmental and intergovernmental bodies accept the importance of preparedness as means to ensure their respective 'core interests.'

2.1. Practicalities of preparedness in a rapidly changing risk context

Amidst the progress, there, too, have been persistent constraints. Some of these have been addressed, and some to date continue to pose barriers. With that in mind, Section 2 suggests four thematic issues and relevant cases that reflect the interplay between both: multi-hazard risks and assessment;

Comment [KK31]: Only three noted below (is the fourth one related to 2.1.1?). Again the basis for these four (three) areas could have been explained in a paragraph for better clarity.

- multidimensionality of preparedness planning;
- communications between experts and the vulnerable;
- institutional constraints and perspectives

2.1.1. Multi-hazard risks and assessment

Comment [KK32]: This section mainly covers PRA in my view. Could the discussion be more wide and more focused on "multi hazard risks and assessments"?

Increasingly the preparedness challenge is to relate to the multi-hazard nature of risk, and to see preparedness as something required to meet ever more complex types of intersecting hazards. As the types of risks and their dimensions and dynamics increase – in some instances, exponentially – the challenges that face those whose roles and responsibilities are concerned with preparedness intensify commensurately. Technological failures, cybernetic collapse, 'superbugs', nuclear tailings, artificial intelligence and an ever-expanding array of rarely considered potential crisis drivers demand that new ways of identifying and anticipating risk be developed.[50] And, furthermore, the interactive nature of such risks, for example, with natural hazards will require a conceptual approach limited in many instances by the weaknesses of the ways that risk often is measured – probabilistic risk assessment (PRA) – and by the institutions that are in charge of identifying and measuring risk.

The Fukushima-Daiichi power plant crisis assessment

The 2011 Fukushima-Daiichi nuclear power plant tragedy is an all too evident case that suggests PRA's limitations in a world of ever more complex, multi-hazard risks.

Approximately four years before the unfolding tragedy at the Fukushima-Daiichi nuclear power plant in 2011, a similar incident occurred at Japan's Kashiwazaki Kariwa reactors in the wake of the Chuetsu earthquake. In the aftermath of that earthquake radioactive materials escaped into the sea when ground subsidence pulled underground cables downward, and created an opening in the reactor's basement wall. Quoting a Tokyo Electric Power Company official, one researcher suggested that 'it was beyond our imagination that a space could be made in the hole on the outer wall for the electric cables.'[51]

When in 2011 the Fukushima-Daiichi disaster unfolded, the initial trigger was a combined earthquake and tsunami, which subsequently affected the nuclear power plants. Yet, not only were the links between the three crisis drivers made in the preparedness planning process, but as eventually became evident essential aspects of the government's preparedness plans proved to be

[50] Rees, M. (2004) Our Final Century: Will the human race survive the 21st century?, London, Palgrave. p.74

[51] See: http://thebulletin.org/beyond-our-imagination-fukushima-and-problem-assessing-risk-0

deeply flawed because of the failure to take into account the combined crises' effects on issues such as communications.[52]

The PRA upon which the preparedness plans for risks associated with the nuclear plant were based has subsequently led to heated controversies over PRA methodology. The issue for analysts is the extent to which seemingly extraneous factors can be captured in PRA calculations. When it comes to ever more complex and multi-hazard risks, to what extent can one incorporate such extraneous factors and determine the weight to give them? According to one analyst, the inherently linear approach to risk assessments cannot account for the indirect and non-linear characteristics inherent in ever-more complex systems nor their related feedback loops.[53]

As noted in one criticism of PRA when it comes to dealing with complex systems,

> *These risk assessments do a poor job of modelling human actions and their impact on known, let alone unknown, failure modes. Also, as a 1978 Risk Assessment Review Group Report to the NRC pointed out, it is 'conceptually impossible to be complete in a mathematical sense in the construction of event-trees and fault-trees… This inherent limitation means that any calculation using this methodology is always subject to revision and to doubt as to its completeness.'*[54]

In the immediate context of the Fukushima-Daiichi incident, another critic noted that one of the failings of the nuclear plant's design was the assumption that natural events such as an earthquake and a tsunami were handled and calculated as separate not inter-related events, and that the knowledge from earth science had not been understood enough at the time (or were not available).

In addition, the PRA methods used for taking into account some natural events can be criticized. Indeed in the particular case of earthquakes for instance there is a high uncertainty when performing the seismic hazardous analysis (e.g. the maximal seismic magnitude which can occur in a certain zone of seismic activity) since it depends on earth science practices. This uncertainty can become so high for the very large earthquakes at very low probabilities that it has an impact on the probabilistic risk assessment of the plant's design.[55]

Comment [KK33]: Nuclear power plants?

Neither of these criticisms should lead one to conclude that PRA, *per se*, is not a useful tool. It clearly has helped to enhance decision-making with regard to dealing with issues of variability and uncertainty, although decision-makers in the US's Environmental Protection Agency still find PRA's technical analysis difficult to interpret.[56] There, too, are issues that hark back to the concerns expressed in the aftermath of the Fukushima crisis. As noted in a 2009 analysis of multi-risk assessments true multi-risk analysis is a widely inter-disciplinary field: 'specialists of each national and anthropogenic hazard needs to work together in order to understand the long-term evolution of the governing physical system and the various trigger mechanisms.'[57]

And, yet herein, lies the problem, how wide does one and can one cast the net for potential factors that may compound the impact of any single set of risks, or determine the possible interactions amongst threats and their 'cascade effects'? This challenge remains for PRA methodologies.

2.1.2. Multi-dimensionality and preparedness planning

Comment [KK34]: The definition of "multi-dimensionality" within the context of preparedness seems have considered in few different perspectives. It would have been better for the reader if this term within the context of preparedness is explained in a paragraph at the beginning.

Preparedness means many things to many organizations, and it is a recognition of this multidimensionality that in many respects will determine a broader commitment to preparedness planning and practice. The business community is an adherent to a particular perspective on preparedness, focused principally on sustainability and supply chain management. They though, are not alone. Military establishments are increasingly looking at preparedness in terms of societal

Comment [KK35]: Any evidence (reference to substantiate this?) Does the business community take the sole (or strong) perspective of sustainability and supply chain management within the context of preparedness?

[52] Appleby, L. (2013) Connecting the last mile: The role of communications in the great east Japan earthquake, London, Internews Europe.

[53] Ramalingam, B. (2013), Aid on the Edge of Chaos: Rethinking International Cooperation in a Complex World, London, OUP.

[54] Ramana, M. V. (2011). 'Beyond our imagination: Fukushima and the problem of assessing risk'. *Bulletin of the Atomic Scientists*.

[55] Diaz Maurin, F. (2011) 'Fukushima: 'Consequences of systematic problems in nuclear plant designs', *Economic and Political Weekly*, Vol.XLVI #13.

[56] Risk Assessment Forum PRA Technical Panel Working Groups (2007) Using Probabilistic Methods to enhance the role of risk analysis in decision-making with case study examples. See: http://www.epa.gov/ttn/ecas/ria.html

[57] Marzocchi, W. et al, (2003) Principles of Multi-risk assessment: Interaction amongst natural and man-induced risks, European Commission/European Research Area, Brussels. p.3

stability and security, in this instance reflected in the case study below on the military and private sector's involvement in pandemic preparedness in southern Africa. Communities in various countries – as will be suggested in the Kenya case study, below – often link preparedness measures with economic decisions. In other words, both cases emphasise that preparedness is pursued in multidimensional ways for a multitude of reasons.

A SADC perspective

In May 2012 a group of senior representatives from member-states of the Southern African Development Community (SADC) gathered in Johannesburg, South Africa, to consider what needed to be done to prepare for the potential threat of pandemics. The Pandemic Preparedness and Response Exercise (P2RX) was organized by the World Food Programme, the United Nations Office for the Coordination of Humanitarian Affairs and SADC. The exercise more specifically was designed to begin the process of developing national and cross-regional pandemic preparedness plans by simulating the effects of a severe pandemic in the southern African region. While focused on pandemics, the approach and its underlying assumptions were regarded as the sorts of preparations that would be required to deal with any significant risk or set of multi-hazard risks.

The P2RX dealt with a range of key multi-sectoral themes in a 'whole of society' setting, including issues pertaining to access to food and humanitarian assistance, implications for the maintenance of critical services such as supply chain systems, the importance of civil-military coordination, the role of the private sector, plans for effective emergency telecommunications and coordination. While the last – coordination – was obvious, its implications for a 'whole of society' approach reflected the challenges that would have to be faced in attempting to satisfy a wide spectrum of interpretations about the consequences of such threats.

In that sense the P2RX effectively demonstrated the multi-dimensional nature of risk. DAMCO, one of the world's leading providers of freight forwarding and supply chain management services, made it very clear that a pandemic would fundamentally disrupt its ability to continue shipping and container services. In terms of its core business interests, DAMCO would no longer be able to function in southern Africa and probably in other areas of Africa, and that aspect of its supply management would come to an end. This would of course have a significant impact upon the World Food Program's ability to support efforts to provide relief assistance.

And, even if there were food available in the ports – a prospect deemed unlikely by DAMCO – the possibility of delivering food across borders was replete with uncertainties. States may well close borders, and indeed might well restrict food. In any event, the logistics requirements – trucks, drivers, handlers – that organizations such as WFP would have would prove to be 'problematic'. Similarly, ABSA a South African member of the Barclays Bank group, made it clear that the likelihood of the availability of cash and most banking services would be severely undermined in the course of a pandemic crisis. To that extent, the banking and finance communities' core business interests would be seriously threatened.

Comment [KK36]: Please revise for better clarity.

It was not insignificant that one of the critical players in the scenario exercise was the military, in this case the United States Africa Command. Their role as facilitators and instructors were circumscribed by their expertise in civil-military coordination, logistics, medical services and – perhaps most important of all – disaster preparedness planning. For all the ambivalence that surrounds the relationship between the military and traditional humanitarian actors, when it came to preparedness planning, it was felt that few could be more effective at dealing with the threat of multi-hazard risks than the military. From a multidimensional perspective, the *raison d'etre* that explained the military's willingness to engage in the P2RX simulation exercise was its conviction that a pandemic threat was part of its core business – a pandemic could directly and indirectly affect the security of the United States.

Comment [KK37]: Could this be explained a bit? Scenario exercise in the sense of an activity? If so was it part of the case study?

In that sense, the military, like the private sector, increasingly recognizes the importance of identifying risks and preparing for them from a perspective of their own respective core interests. However, while this multidimensionality of preparedness may be increasingly appreciated, the means for systematic and consistent multidimensional preparedness planning is sadly lacking.

Even established platforms for pursuing these types of objectives all too often fail to meet the mark.[58]

A Kenyan perspective

The importance of seeing preparedness from a multi-dimensional perspective is further illustrated by recent studies that were undertaken in Kenya by a group of scientists, government officials, community representatives and local and international non-governmental organizations in 2012. The purpose of the studies was to assess the potential benefits of enabling appropriate application of weather and climate information within the drought prone region of Kenya's Mbeere District for local communities.[59]

Underpinning the study's research were two inter-related areas of enquiry. The first had to do with the extent to which 'dialogue approaches employed within exchange activities have supported understanding and discussion on the respective uncertainties… of weather and climate indicators'. The second concerned the extent to which 'the farmers' confidence in scientific forecasts increased, especially when compared to some of the more unreliable local indicators.'[60]

According to the results of the Kenyan demonstration study, the issue of risk and preparedness intersected for the communities when it came to livelihood decisions. In other words for the farmers in the Mbeere District, risk and preparedness were interpreted in terms of livelihood-related decisions - their cropping practices, application of fertilizers, weeding and harvesting and the selection of crop and seed types. Both the SADC and Kenya cases in turn reflect a more general message, namely, the importance of appreciating the multi-dimensional ways that risk and preparedness are perceived by different sectors, and the importance when it comes to risk identification and preparedness planning of acknowledging that the two come together when the respective core interests of different sectors become a platform for developing a 'whole of society' perspective.

2.1.3. Communications between experts and the vulnerable

In the world of preparedness, institutional hazards may be all too closely intertwined with hazard identification planning. Few would deny the importance of communications as a core aspect of effective preparedness. Exchange of information, monitoring, updating, assessing and revising preparedness plans are all central components for effective preparedness – preparedness as a process and not as an end-state. The interaction between local communities in Senegal and the government's central meteorological services provide some positive and valuable lessons in that context, particularly when it comes to overcoming potential barriers created by 'experts'.

Comment [KK38]: Any references?

Interactive communications in Senegal

'Seasonal forecasting in West Africa in general suffers from a large degree of uncertainty,' notes a 2012 study on operationalising climate science. 'In particular there is a great variation in rainfall patterns across countries, and the start of rains in localized areas are often not at the same time as larger-scale onsets… As a result forecasts for the country as a whole only provide an unrepresentative average… This means that communities often do not receive forecasts that they can trust and therefore apply, increasing their vulnerability to the impacts of floods and droughts.'[61]

[58] Burke, J. and Oglesby, R. (2012) Platforms for Private Sector-Humanitarian Engagement, London, Humanitarian Futures Programme. See: http://www.humanitarianfutures.org/publications/platforms-for-private-sector-humanitarian-engagement/

[59] Visman, E. with Christian Aid, Christian Community Services Mount Kenya East, Kenya Meteorological Department, University of Sussex, UK Met Office and Humanitarian Futures Programme, King's College London (2012) Operationalising climate science: An exchange between climate scientists and humanitarian and development policy makers: Kenya Demonstration Case Study, London, Humanitarian Futures Programme. See: http://www.humanitarianfutures.org/wp-content/uploads/2013/10/Operationalising-climate-science-Kenya.pdf

[60] Ibid, # 62.

[61] Visman, E. with Christian Aid, Christian Community Services Mount Kenya East, Kenya Meteorological Department, University of Sussex, UK Met Office and Humanitarian Futures Programme, King's College London (2012) Operationalising climate science: An exchange between climate scientists and humanitarian and development policy makers: Senegal Demonstration Case Study, London, Humanitarian Futures Programme. See: http://www.humanitarianfutures.org/publications/operationalising-climate-science-an-exchange-between-climate-scientists-and-humanitarian-and-development-policy-makers-senegal-demonstration-case-study/

The communications challenge when it came to conveying information about the consequences of climate change to communities was in a very fundamental sense about trust and the assumptions that should underpin that trust. In a 2011-2012 exchange study that focused on livelihood decisions in three Senegalese communities, i.e. Djoly, Fasse-Thieckene and Malem-Thieurigne, investigators sought to determine ways to implement dialogue approaches for risk communication effectively. Based upon a range of meetings, workshops and community assemblies at central and local levels, there were four steps that were proposed to enhance information flows and the practical use of such information, in this instance, for agricultural production:

- ***support face-to-face dialogue between the providers and users of climate change***. The importance of social media and networks were acknowledged in various ways, including SMS for transmitting warnings. Be they SMS or mobile phones, reliability was often a factor, and, for example, no provision had been made for providing communities with solar rechargers. Yet, despite such technologies, the reality was that periodic face-to-face dialogue was essential between the providers of climate change information, ie, the Senegalese Meteorological Office, and the users. Such exchanges would inevitably be irregular, but would have to take place at the outset of establishing inter-active procedures for dialogue. In the context of dialogue, it was also recognized that a major factor hindering the process was language. Central authorities were more inclined to use French while the community languages in this instance were predominantly Wolof;
- ***contextualise and enhance knowledge of available scientific information about weather and climate change impact in ways that are understandable for communities***. As noted earlier, communities in Senegal had all too often been presented with forecasts that were an unrepresentative average. Users of climate change information were often presented with data that were in a form at the time not useful for their decision-making needs. Seasonal forecasts, for example, often concentrated on rainfall totals rather than information of importance for crop production and food security. With that in mind, 'participatory downscaling' aims to support communities' efforts to translate national and regional climate and weather information into a range of outcomes at the local level that is useful for long and short-term decision-making;
- ***promote understanding of the levels of certainty within both community and scientific sources of climate information.*** There is a concern amongst 'experts' that ambiguous information about possible events will create anxieties that would hinder 'early-warning, early action' preparedness models. In this context, it is interesting to note that the trial communities were able to cope with uncertainty and ambiguity, but were resentful of a failure to provide information. Of importance in this context were the benefits that researchers found of 'shared understanding of uncertainties.' That is to say, that those experts from the Meteorological Office and community participants were able to develop trust through shared exchange of 'uncertainties' as well as certainties; and of key importance was the two way flow of information and feedback loops between the centre and the community;
- ***interactive approaches to information exchange.*** While trust was being established through dialogues between central authorities and the trial communities, there was an emerging problem with the prospect that local and regional authorities might be bypassed when it came to a sustainable communications model. There was concern that to address such potential problems, information flows and dialogues would eventually result in a process that was linear and sequential. To the contrary, findings suggested that these communication flows could be undertaken in parallel, and a critical factor in the multidimensional flow of information was the importance of ensuring that information was 'translated' to meet the needs of different levels. This could be done simultaneously.

Comment [KK39]: Was this paramount to the reliability of communication? Any evidence?

2.1.4. Institutional constraints and perspectives

The nature of organizational behaviour too often presents major barriers to effective multi-hazard identification and appropriate preparedness planning. Organizational propensities to focus on uncertainty control, the use of standard operating procedures to deal with complexity and the relative isolation of specialists limit organizational abilities to deal with the multidimensional risk.

ECOWAS, cross-directorate dialogue and risk preparedness

The Commission of the Economic Community of West African States (ECOWAS) in late 2013 began to realise that its own 'stove-piped' approaches were proving a major barrier for fulfilling one of its core functions, namely, dealing with longer-term disaster risk reduction. With that in mind the Commission instituted a major initiative to promote institutional 'cross-directorate dialogue' – an initiative that would challenge some core institutional instincts.

As the Commission began to increase its focus on longer-term disaster risk reduction in 2011, it was evident that the sorts of risks which member-states would have to face were on the one hand intensifying and on the other becoming ever more complex. The region's increasing industrialization offered up the prospect of greater numbers of threats stemming from the interface between technological and natural hazards. Growing dependence upon cybernetic systems meant that a 'cybernetic collapse' would 'close down' many essential services across large swathes of West Africa, and clearly a significant oil leakage off the coast of one West African state could imperil the livelihoods of fishermen and the viability of coastal towns of a host of others.

When considering ever more complex crisis drivers, it is evident that preparedness, too, requires a perspective that is multidimensional, reflecting expertise from a wide range of sectors and specializations. The dilemma all too often is that reflected in organizational dynamics where there is a true paradox between the role of an organization to resolve complex problems and the ways that it does so.

For ECOWAS, these plausible risks triggered an interest in promoting 'cross-directorate dialogues,' or, systematic exchanges of information about potential threats across what many organizations would call 'departments.' The initiative that was launched in 2013 was timely, and one that in principle could be a further step in the Commission's efforts to help member-states prepare for an increasingly uncertain and complex future. Yet, the institutional barriers to effective cross-directorate dialogue were far more fundamental than had initially been assumed. The challenges to share information on a regular basis to ensure a multidimensional perspective on forthcoming threats were considerable, and goes to the heart of organizational dynamics that efforts in DRR cannot ignore.

By definition, an organization is designed to deal with complex problems on a continuous basis. It achieves this function by 'factoring,' or decomposing complexity into manageable component parts, each component part to be handled by specialists. Specialists define and respond to a problem based on their expertise and, in theory, their individual solutions are coordinated by a supervisory rung higher up the organizational ladder. However, for components within the organization as a whole, it is regarded as impossible to treat each problem introduced into the organization as 'brand new' or one that would have to be reassessed at each organizational stage. Therefore, the solution for dealing with complexity on a continuous basis is to allow specialists to frame policies without exploring the consequences of such policies with other specializations. The standard and all too familiar term for this is 'stove piping.'

When it came to ECOWAS's efforts to address longer-term DRR, four consistent issues kept arising in the course of a study that began in 2011:[62]

[62] Humanitarian Futures Programme, King's College, London. *FOREWARN: A joint project for addressing longer term Disaster Risk Reduction,* ECOWAS and HFP from 2011-2014, covering, *inter alia*, long-term risk identification, new forms of partnerships and collaboration for risk mitigation and preparedness, cross-directorate collaboration, cross-border border risk analysis and monitoring, science and humanitarian policy interaction at community and government levels and regional organization exchange programmes.

- ***lack of adequate strategic focus.*** The ECOWAS mandate is extensive, covering a range of topics from peace and security, human development to agricultural cooperation and institutional capacity building. The ECOWAS system includes not only the Commission, but also 16 separate components headquartered throughout ECOWAS member-states. While recognising the scale and diversity of the ECOWAS system, one at the same time, also has to note that there have been no attempts to develop a strategy that brings some of the system's key objectives into an operational framework. For several respondents at the director level to a 'cross-directorate dialogue' study within the Commission, this lack of an operational framework is the most consistent explanation for the failure to have effective sharing of expertise on a consistent basis within the Commission;
- ***dissipating decision-making***. There, too, were concerns that without an overarching operational framework, the emphasis on cross-directorate information exchange, or, dialogue was a way *to avoid* making decisions. There was a clear sense that once subject matter moved away from the responsible expert or from the responsible department, there would be less motivation or incentive to pursue decisions;
- ***confusion about roles***. One telling example about the complexities associated with cross-directorate dialogues centred on the term, 'knowledge management,' and the ways that that it led to a confusion of roles and additional dysfunction. Knowledge management is interpreted within the Commission – depending upon who is using the term – as either a technical issue, dealing with the communication systems or reflecting issues of knowledge substance. In either case,

Integrated planning processes – The Brazilian model

The challenges that face preparedness efforts clearly include the engagement of various rungs of authorities that need to be involved in the preparedness planning and response process. This was evident to researchers in Senegal, and was clearly the case in Brazil. According to Article 2 of Brazil's National Policy for Civil Defense and Protection (PNPDEC), 'It is the responsibility of the federal government, the states, the Federal District and the municipalities to adopt the measures needed to reduce risks from disasters.'[63] As researchers in this instance noted, the PNPDEC also stresses the need for cooperation between private as well as public bodies, but also requires the participation of potentially vulnerable communities.[64]

Based on a 2013 analysis of Brazil's compliance with HFA principles, there can be little doubt that authorities at many levels are aware of the importance of disaster risk reduction and preparedness, but not necessarily aware of the HFA, *per se*. There appears to be appropriate interaction between federal, state and municipal authorities - the rhetoric is clearly in place, but constraints, that at the same time, diminish the overall impact. More specifically, there are four factors that have preparedness implications that reflect challenges that continue to be faced by Brazil and in many instances beyond:

- ***emergency response versus preparedness.*** According to researchers there is a general proclivity amongst state and particularly municipal authorities to give great priority to emergency response than to preparedness. To that extent, despite the attention given to DRR in theory, there is an institutional priority that puts preparedness planning not only in second place, but seems to divorce it from risk response. This sort of prioritization also reflects the fact that there is no strategic or operational consensus about the concept of preparedness and DRR, and there appears to be a lack of attention given to reconciling

[63] Reference to PNPDEC found in Otoni de Araujo, R. et al, (2013) Communicability between the national, state ad municipal go vernments in the integration of the principles of the Hyogo Framework for Action to Reduce Risks and Disasters, Center for Socio-Environmental and Urban Studies, University of Vila Velha-Espirito Santo, p.10.
[64] Ibid #65, p.10

such differences, but also a propensity to isolate preparedness to matters of 'civil defense' rather than a more all encompassing, 'whole of society' approach;

- ***contending focus and capacities.*** There appears to be differences in the understanding of preparedness as well as a capacities gap about structuring preparedness measures. Findings would seem to suggest that at the federal level, there is a greater awareness and emphasis upon pushing preparedness and risk reduction policies, but that in many instances, the preparedness focus differs at various institutional levels, i.e., state level focus on broad climate change issues, municipal level concerns with floods. Again, at the municipal level, there is an apparent capacities gap, there is a basic lack of knowledge about how to transmit information effectively and ways to organise relevant workshops for preparedness training;
- ***scope of inclusion.*** There is a recognized need for institutional strengthening at local levels, and for that reason municipal authorities are also encouraged to embrace the capacities of other sectors to enhance preparedness planning and implementation. In that sense, Brazil recognises the need for a more comprehensive and inclusive approach to preparedness planning. And, yet reportedly 'formal voluntary' organizations do not engage in any consistent and systematic way in preparedness planning. More significant is the fact that those who were interviewed for the study on Brazil's compliance with the HFA acknowledged the importance of the private sector, and they, too, seem not to be effectively involved;
- ***financial disconnects.*** According to researchers, all too often there is a basic lack of capacity at the municipal level to use funds provided at the federal level for preparedness activities in a timely and appropriate way. The complexities involved in getting resources through the maze of institutions to the local levels for preparedness planning and implementation is frustration enough. The fact that the municipal authorities do not 'have strong institutional capacity… to make use of the funds… So what happens is often that you release funds and they go unused for one or two years at the door of the municipality.'[65] There is a recognized need for the creation and implementation of rules that make it imperative for such authorities to use available resources appropriately and in a timely way.

Over the past decade many lessons have been learned about dealing with preparedness from multi-hazard and multidimensional perspectives, and much too has been learned about ways to promote effective communications and even ways to overcome certain types of institutional constraints. At the same time, there are persistent weaknesses that have not been addressed. The examples in Section 2 support both contentions. Both at the same time open up the issue of the sorts of lessons that still need to be learned when it comes to dealing with future risks.

To what extent do the lessons that have been learned, and indeed those that have not been learned going to affect the ways that we deal with future types of risks? To what extent will there be different sorts of lessons that will need to be learned as one begins to consider longer-term disaster risks? This will inevitably be a concern for HFA-2, and is the subject of the following section, Section 3.

Comment [KK40]: Frustrating?

Comment [KK41]: The discussions on the lessons learnt and the case studies in general add significant value to the section. The readability and the structure of the sections could have been improved though, especially considering the potential non-technical readers of the GAR report. The analysis of the cases could have been structured in such a way that the issues are highlighted with reference to current thinking about the preparedness presented in broader literature and link that with specific highlights of the cases presented.

[65] Ibid # 12, p.19

Section 3: Preparedness in a *futures* context

Section I of this analysis underscored two fundamental and inter-related points, namely, that preparedness, *per se*, is at a conceptual and operational cross-road. This cross-road is a result of where and how preparedness sits within a broader and evolving agenda for DRR/DRM and the goals and outcomes it seeks to achieve. It is also due to a changing crisis landscape, with risk drivers becoming more complex and so, too, their dimensions and dynamics.

The cases that were noted in Section 2 do not argue for or against these findings. Though these cases were not selected specifically to test Section 1's propositions, they nevertheless suggest issues that have to be resolved – whichever route preparedness ultimately takes – to institute effective preparedness regimes. They offer illustrative examples of issues that have to be recognized and resolved to ensure that preparedness works. They also establish the basis for approaches that will have to be considered when coming to terms with more as well as different types of risks.

Comment [KK42]: Would it not be beneficial if some of the cases were selected to argue for / and or against the propositions presented in Section1?

With that in mind what sorts of adjustments will be required to deal with such risks, and how will these fit into the forthcoming HFA-2?

3.1. Looking towards HFA-2

The challenges presented by preparedness – as a conceptual framework and as a construct for developing relevant planning and implementation processes – are many. Some of these have been highlighted in this analysis's first two sections. However, in many ways these reflections on the past and present will lose some of their relevance in preparing to mitigate and respond to future risks. In various ways the past will not look like the future, and the implications of trends for preparing for the future may in some instances lose their relevance. From this perspective, it is suggested that, as one looks to HFA-2, additional, more futures oriented perspectives on preparedness should also be added to the agenda – an agenda that clearly can accommodate both present and future, and that focuses on resilience at local, national and international levels:

- by preventing the creation of new risk by the adoption of risk-informed growth and development pathways that minimise increase in exposure and vulnerability;
- by reducing existing risk through the action that addresses and reduces exposure and vulnerability, including preparedness for disaster response; and
- by strengthening resilience by social and economic measures that enable countries and people to absorb loss, minimise impact and cover.

3.1.1. New concepts and dimensions of risk and preparedness.

There can be little doubt that the types, dimensions and dynamics of risk are growing, in some instances exponentially. The events triggered by the interaction between natural and highly sophisticated technological crisis drivers at the Fukushima-Daiichi plant might well be considered a foretaste of an ever more hazardous future. That future risks might also have to be understood from a far more multidimensional appreciation of interests than had previously been the case was evident from SADC's efforts to prepare for pandemics; and, the paradoxes of preparedness when dealing with multi-hazard risks in complex socio-economic systems seemed all too evident once again in the Fukushima-Daiichi context.

In other words, new concepts and dimensions of risk and what one means by preparedness would seem to require in the first instance an appreciation of what has been called 'the multidimensional problem space,' or the interactive nature of risks in terms of multiple time scales, triggers, interactions and impacts. Linearity is not the critical focus; complexity is.[66] More and more, those with roles and responsibilities designed to deal with preparedness are moving towards a range of tools intended to think more holistically about potential threats and means to address them.

[66] Ibid # 55.

Scenario and simulation exercises are becoming a norm amongst planners and policy-makers as means to test the '*what might be*'s'.

A growing number of organizations are also attempting to foster an ethos of anticipation, promoting the belief that speculation is a valued organizational objective, and that an organization needs to discard the traditional screening devices and standard operating procedures that all too often determine and limit understanding of risks and solutions. Preparedness frameworks that stem from a more complex problem-solving model do not, however, guarantee success. Though it is more than likely that the approaches that will result in such frameworks will provide a broader understanding of the root causes of risks, their associated impacts and range of potential responses, there is no guarantee that they will prove unfailing.

Nevertheless, organizations that begin to view risk from the multidimensional problem space perspective will more than likely be more adaptive – better able to adjust to situations that may not have been foreseen, but that will require creative solutions.

A more holistic approach to preparedness requires policy-makers and planners to recognise that they will have to accept that the issues with which they have to deal, now and in the future, will in various ways be significantly different than those of the past. They will require approaches that have to accept inherent uncertainty and issues all too often ever more complex. Growing awareness of the need to accept such complexity and uncertainty will be essential for determining the parameters of risk, potential impacts and solutions. As stressed in a 2014 review of complexity's use in preparedness planning, complexity does not need a complex solution – the insights from effective local initiatives making small changes (e.g., planting drought-resistant crops and planting later against drought) shouldn't be overlooked. The problem in using a more anticipatory basis for dealing with preparedness is ultimately institutional. In the first place, the organization is unclear about what it wants to address, and secondly the organization feels that challenging the *status quo* is in itself risky.[67]

Accepting the complex nature of risk does not preclude the importance of also seeing preparedness through a more immediate perspective of saving lives and livelihoods. Using a house as an analogue, the overall security of a house against risk will depend upon a 'whole of society' approach. Building codes, abilities of builders, surrounding infrastructure, the neighbourhood, finances of its occupants and life styles will all be factors that will determine the types and levels of risks and possible preparedness measures.

And, at the same time, the house may well need a fire extinguisher to deal with a threat that is a small subset of a more overarching preparedness construct. The issue is not about ignoring the need to save lives and livelihoods through immediate means to put out the fire, but rather to understand the broader context, which may have made that highly focused preparedness measure relevant.

3.1.2. Resilience as the overarching paradigm.

A more holistic approach for dealing with risk is, in the final analysis, the most appropriate construct from which to identify risk and vulnerability to risk. Yet, this broad conceptual framework at the same time needs objectives that reflect ways in which that framework should be implemented. Such an objective is resilience.

Resilience requires a clear articulation of the roles and contributions of preparedness in the context of the three strategic goals:

- promoting resilience in the context of different components of preparedness, and in doing so, ensuring clarity on what resilience entails, its entry points and opportunities. Ultimately, resilience needs to be defined in terms of specific targets with clear indicators for preparedness, in this specific context, for HFA 2;

[67] *Preparing for the Futures* project, Complexity Theory and Pandemics, King's College, London, 17 July 2014. The remarks come from a representative of a major donor institution, commenting on the use of complexity theory for preparedness planning.

- new thinking and approaches that move beyond rhetoric (e.g. resilience, 'whole of society', holistic) and translate such well intentioned ideas into action;
- identify current funding mechanisms and approaches for preparedness, and in so doing, to ensure that financing for resilience is more consistent and predictable to better support preparedness (see 3.1.5, below).

The importance of these resilience objectives has to be seen in terms of the inter-relationship between economic growth and development and risk. This inter-relationship is well established. As noted in a 2009 report by Munich Re.

Comment [KK43]: Does this relate to the subsequent paragraph?

Disasters can have significant impact on countries' development. Between 2000 and 2009 Munich Re estimates economic losses from disasters were $670 billion.[68] Some small countries have sustained losses through disaster of several times their GDP, setting them back years. Vietnam loses over 1% of its GDP annually dealing with disasters. Floods and droughts can have knock on effects in terms of food production and international trade.

A World Bank study in 2004 found that disasters slow economic growth in the long term as well as short term.[69] That study suggested that its prediction was particularly relevant for those countries that depend on agriculture. However, as demographic shifts lead more and more people into urban and peri-urban areas with new forms of livelihoods, the focus on types of countries that are particularly vulnerable to disasters' economic impacts will have to adjust accordingly. Nevertheless, in the foreseeable future, poorer countries are doubly affected, as they have less ability to cope financially with the cost of disasters, and their economies are worse affected overall.

That said, disasters also affect the economies of middle-income countries as they tend to have manufacturing sectors, for example, connected to agriculture. And, increasingly, as disaster threats become more global and more prevalent, the ability of some of the richest countries in the world will also feel significant direct and indirect effects from disasters on their economies.[70]

The World Bank recognises that one of the four dimensions of economic loss and ultimately poverty is, exposure to risk and income shock at household, community and national levels. As noted earlier in this chapter (see Section 1), there is growing government acceptance of what has been described as the 'whole of society' approach to preparedness. Despite important progress, too little is routinely done from a development and economic sustainability perspective. And, with that in mind, the 'whole of society' framework needs to be operationalized through resilience strategies.

Comment [KK44]: Reference?

Clearly linked to the components of a 'whole of society' framework, a resilience approach will include working at regional, national, community and household levels. At national level there needs to be more work on disaster management: work on legal frameworks, on planning, and work on bolstering the departments that respond after disasters, such as national disaster management agencies. Civil society organizations that respond to disasters should be supported to play their role too. All of this is not new to governments, but as the 2013 UNISDR reports make all too clear as does the Brazilian case study in Section 2, above, the rhetoric still remains too distant from practice.

At community and household levels there needs to be work on mechanisms and institutions to respond (such as civil contingency committees), and on infrastructure that can withstand disasters, or play a dual role like schools that are used as cyclone shelters. Governments and civil society organizations also need help to provide social protection mechanisms. One could argue that the aftermath of Hurricane Sandy on the US east coast was a reflection of that gap as was Hurricane Katrina several years before. It, too, is interesting to see countries such as Ethiopia trying to build resilience measures by focussing more on safety nets and micro-insurance.

[68] Quoted by Kunreuther in, 'Encouraging investment in adaptation measures through multi-year contracts'. A paper for the 2010 World Economic Forum Humanitarian Council.
[69] Benson and Clay, E (2004) The economic impacts of disasters. World Bank.
[70] Flood defence and retrofitting buildings for earthquakes in the US found an average cost benefit of one to four.

Growing awareness about the need to develop resilience strategies is reflected in many ways. A case cited in the UK government's 2011 Humanitarian Emergency Response Review is in itself telling:

> *In the aftermath of the 9/11 atrocities in the US, the UK put in place a 'national resilience plan,' recognising that it did not have the wherewithal to deal with such a disaster. This plan sets out protocols for incident control, establishes the capacities needed for response and ensures training, equipping and regular practising. Many countries have national disaster protocols, but they are not resourced or planned in detail.*[71]

3.1.3. Planning processes.

With resilience as the overarching paradigm for preparedness, planning processes have to reflect different types of risks – new and old - and different types of sectors, including their respective perspectives and needs. The challenge will be to ensure that these strands come together in a coherent and complementary way for humanitarian, DRR and development concerns, and that the national level will be the appropriate place to bring this together, with the inclusion of community and local bodies and with the support of regional and international organizations.

As one prepares to lay the groundwork for resilience strategies, there are at least two critical elements in the process that need to be born in mind. The first has to do with the spectrum of actors that need to be involved in the planning and implementation process; the second concerning appropriate 'platforms' for planning and implementation.

Spectrum of actors for resilience.

Implementation for preparedness from a 'whole of society' perspective requires resilience measures that incorporate the interests of 'whole of society', including those from the private sector, science and technology research centres, government departments, including those from the military and local authorities, perhaps the Diaspora, and where relevant regional and international organizations. Though seemingly evident, it is often surprising how limited the interaction between different sectors is, such as the private and public sectors, when it comes to addressing risks that could impact upon them in a variety of ways.[72] In part this reflects an issue of 'language,' or the failure to understand a range of major and minor issues, from the objectives, which drive them to the vocabulary each uses to explain their approaches and 'tools'.[73]

Related to the issue of language is the assumption that the starting point for cooperation is often that of shared objectives, that, for example, the term 'preparedness' is universally understood and wanted. Yet, it is increasingly evident that attempts to cooperate, whether it be in dealing with risk and preparedness or disaster response, are constrained or fail to be systematized because the starting point for cooperation does not reflect the 'core business' of different sectors. What was regarded as an issue of resilience-based preparedness for preparedness specialists on the island of Fiji was not readily accepted until representatives of the hotel chain at issue understood that the risk was about *business sustainability*.[74]

An understanding of the 'core business' of respective actors is often the basis for a consistent and systematic approach to resilience planning – so evident when exploring preparedness efforts under the rubric of *multidimensionality* in Section 2.

Platforms for planning and implementation.

When it comes to resilience planning and preparedness and response, too little attention is given to means and approaches for multi-sectoral engagement. As noted in the previous section (see: 1.4.3.-1.4.4.), there are major moves afoot to engage central and local authorities and communities

[71] Department for International Development, (2011) Humanitarian Emergency Response Review.

[72] Zyck, S. and Kent, R. (2014), Humanitarian crises, emergency preparedness and response: the role of business and the private sector - Final report, London, ODI.

[73] Kent, R. and Crabtree, C. (2013) The Virtuous Triangle and the Fourth Dimension: The Humanitarian, Private and Military Sectors in a Fragile World, London, Humanitarian Futures Programme.

[74] UNISDR (2013) Global Assessment Report -2013. Available at: http://www.unisdr.org/we/inform/gar

at various levels – vertically and horizontally. Governments, as suggested in 1.4.6, also accept the importance of bringing diverse actors together. Despite these initiatives, there is a gap that needs to be filled. It is increasingly evident that there is a need to have a clearer idea about the form and format – 'the space' – to enable such interaction to take place in systematic and consistent ways.[75]

An analysis of the use of 'platforms,' or 'intermediary organizations, networks, alliances and temporary coalitions,' has demonstrated how public and private sectors can successfully foster risk reduction and preparedness.[76] There is not a 'one-size-fits-all' model, but there is an abiding principle that seems to make platforms function effectively, namely, a specifically defined set of objectives that addresses the multidimensional needs of relevant sectors, and therefore brings diverse actors together, both physically and virtually. Such sets of objectives would include:

- forum for anticipating how global and regional trends will impact and influence political will and resource availability, in this instance for DRR. In a related vein, serving as a source of timely and relevant information on threats, both known and uncertain, to support better advocacy on preparedness;
- with such objectives in mind, using social media and virtual offices to support advocacy activities and communication with members;
- identifying innovative tools and practices deemed to be added value to all platform members, including piloting, adapting, and scaling-up, disseminating and measuring the impact of innovative practices;
- towards these objectives, promoting a convening and facilitating role that will address the multidimensional interests of diverse participants.[77]

3.1.4. Monitoring mechanisms

Monitoring mechanisms and the concept of platforms are closely inter-related. For both to be effective, a multi-sectoral approach is required for risk identification, the potential consequences of such risks and appropriate solutions. To be effective, both, too, will have to take into account the opportunities and disadvantages presented by virtual as well as by conventional means of monitoring.

From a resilience perspective, conventional approaches to preparedness and response monitoring will not only have to widen its ambit, but will also have to adopt a longer-term time perspective. Potential interactions of a wider variety of an expanding number of risks will have to begin to monitor and assess potential probabilities as well as plausible timescales. The difficulty of such perspectives was noted in Section 2.1.3, when considering PRA in the case of the Fukushima-Daiichi crisis. Though there is no easy answer to what should be the starting point and scope of preparedness monitoring, it is nevertheless worth putting this issue into the context of scenario and simulation exercises, as noted in 3.1.1, above.

These sorts of initiatives when linked to 'big data' correlations and related improvements in PRA will provide greater clarity about the starting points and interactive scope of monitoring. Equally as relevant are the sorts of dialogues, described in 2.1.3 in the Senegal case, between different sectors and different levels. Always bearing in mind the multidimensional interests involved, the starting points and interactive monitoring will have to be sensitive to multidimensional as well as multi-hazard risks. And, once again, the proposed roles of 'platforms' should further enhance the monitoring base.

When it comes to preparedness, open source intelligence has now also made it possible to establish systems that will provide information can be shared. Such capacities have been recognized as effective means for monitoring, and will increasingly be important to determine

[75] Ibid #74
[76] Ibid # 60
[77] Ibid # 60, p 48.

possible threats and opportunities to offset them. This sort of preparedness has taken many forms. Easy access to information about preparedness is in and of itself a significant change. Social media has resulted in bringing together the public and private sectors with civil society, resulting in sustained stakeholders training and collaboration.[78]

Risk monitoring mechanisms will also be used for early action decision-making, while it, too, will be used increasingly to hold those with preparedness responsibilities to account. Monitoring and accountability will interrelate more and more because information that flows through virtual and physical platforms will have to be increasingly taken into account by policy-makers and planners. An emerging dimension of accountability in the preparedness context is not merely about the effects and impacts in the aftermath of relief operations. It is also about holding to account those with planning and decision-making roles and responsibilities for the actions they could and should have taken to prevent or prepare to deal with risk.

Monitoring systems not only will have to adjust to new dimensions and starting points, but they, too, will have to be considered as a plausible means to hold policy-makers and planners to new types and levels of accountability.[79]

3.1.5. Financing for preparedness

Five years before the 2010 Haitian earthquake, a US committee focused on establishing a successful relief fund in times of domestic disasters emphasized that 'you will miss a critical resource if you opt not to use the Internet.'[80] In the wake of a series of crises from the 1998 floods in Grand Forks, North Dakota, to the ravaging 1999 Hurricane Floyd, to the 2001 terrorist attack on the US East Coast to the 2003 Hurricane Isabel, there had been a consistent increase in the use of the Internet to raise funds to respond to disaster needs. Frequently such funds were directly intended to address gaps that those in state institutions and in federal agencies such as the Federal Emergency Management Agency could not.

These incidents are by no means used to suggest that preparedness and resilience should be funded via the Internet. They do suggest, however, that new means need to be developed – be they virtual or traditional – to ensure that adequate levels of funding can meet the ever more complex requirements to promote resilience and, in so doing, ensure preparedness.

To date, the 'financing pots' for preparedness have been diffuse. All too often, as noted in Section 1.4.7, financing is considerably fragmented. As opposed to the present situation, preparedness in the future will have to have clear financing pathways. When it comes to available DRR financing, itself, future funds will have to extend significantly beyond present targets, many of which are middle-income countries. Given the growing range of the sectoral specific preparedness interests of a wide range of actors, their own concerns should be reflected directly or indirectly in money or in in-kind contributions.

In other words, a more holistic approach to disaster preparedness will at the same time have to reflect a 'whole of society' financial and in-kind commitment.

Section 3 has sighted some valid points looking into the future of disaster preparedness and built upon what has been discussed in sections 1 and 2. I believe this section can be even better in terms of the presentation and structure of arguments and specifically in terms of its rigour. References could have been made to more academic peer reviewed publications especially about the challenges and current thinking in areas such as modelling and scenario planning.

[78] Kent, R. (2014) 'Positive and Negative Noise in Humanitarian Action: The OSINT Dimension', in Hobbs et al. Open Source Intelligence in the Twenty-First Century: New Approaches and Opportunities, London, Palgrave

[79] Humanitarian Futures Programme (2014) Stakeholders Forum. See: http://www.humanitarianfutures.org/wp-content/uploads/2014/01/Discussion-Pack.pdf

[80] Miller, W et al, (2005) Reaching out to those in need: A guide to establishing a successful Disaster Relief Fund, Z. Smith Reynolds Foundation and the Duke Energy Foundation, 2005, p. 17

Section 4: Lessons to be learned in an HFA-2 context

This report reviewed the evolution of preparedness since the 1990s and provided a snapshot of the progress and achievements that have been made in relation to preparedness, prior to and within the HFA as well as some of the enduring conceptual, instrumental and organisational challenges that still need to be addressed. That HFA Priority 5 is noted to be one of the key progress areas of HFA 1, which is significant and certainly worthy of more analysis towards understanding (1) why there has been significant progress in order to build a more common knowledge base on how preparedness is understood and practiced, and (2) whether preparedness is evolving as a result of being linked to a broader agenda and strategic outcome and, if yes, in what ways.

That said, as this report also notes, preparedness poses and faces many challenges - as a conceptual construct and in relation to ensuring readiness for response in an increasingly complex risk context. Therefore, in thinking about how best to situate and advance preparedness under HFA 2, one needs to understand not only the past and the present, but also to recognize that much of what we experience now will not look like the future. From this perspective, as one looks to HFA 2, preparedness needs to be grounded in where it has come from and how it has evolved, and also where it needs to go. In many respects, this future agenda will be dictated and influenced by the three goals for HFA 2, as noted in Section 3:

- Prevent the creation of new risk by the adoption of risk-informed growth and development pathways that minimize increase in exposure and vulnerability;
- Reduce existing risk through the action that addresses and reduces exposure and vulnerability, including preparedness for disaster response;
- Strengthen resilience by social and economic measures that enable countries and people to absorb loss, minimize impact and recover.

4.1. Preparedness pathways for HFA-2

Based upon the above goals as well as the findings and conclusions Sections 1-3, Section 4 identifies a number of opportunities to help strengthen and support the inclusion of preparedness in HFA 2: These include the following:

1. Preparedness within HFA 2

The inclusion of preparedness under HFA 1 and the progress it has achieved has sent a strong message that preparedness is an integral part of DRR and that having a common approach for DRR is important. Preparedness should continue to be positioned within HFA 2, and its role and contribution to the three goals should be clearly articulated.

2. Risk Resilience in relation to DRR and HFA 2

Resilience has widely featured in HFA 1 but all too often reflected in rhetoric rather than practice. If resilience as a framing concept or as an outcome is to feature more prominently in HFA 2 then it needs be conceived in a way that facilitates a transition from rhetoric to operationalization. A starting point is a clear, simple overarching concept and slogan for what resilience or disaster resilience means for DRR/DRM, including for preparedness. This should serve to clarify the link of resilience to HFA 2. The concept needs to be accessible to diverse actors and translatable in different contexts.

With respect to preparedness and resilience, the fact that preparedness has a clearly defined set of components, objectives and outcomes could make it easy to establish how, for example, early warning and early action contribute to disaster resilient communities. Yet it is also

important to acknowledge that there is considerable confusion, scepticism and, for that matter, rejection of the utility or practicality of making resilience an integral element of humanitarian, development and disaster risk reduction. HFA 2 is well positioned to foster dialogue across agencies and at different levels to arrive at a more common position on the link of resilience to DRR/DRM, and to establish clear pathways to link actions between the five Priorities for Action under a broader 'umbrella' of resilience.

3. The roll-out of the IASC Common Framework for Preparedness

The Framework needs to be reviewed in light of the issues raised in this paper as well as the emerging agenda and the three goals for HFA 2. It will need a comprehensive roll-out strategy and monitoring and learning components. Governments and regional organizations need to have an active voice in determining how issues related to demand and uptake as well cooperation between international, regional and national levels should best be configured. The IASC needs to ensure that there are clear entry points for the engagement of different international organizations, and that their work aligns with the priorities of governments and UNCTs.

The *Common Framework for National Capacity Development for Emergency Preparedness* needs to be based on an approach to capacity development that shifts the emphasis away from the current approach to capacity development (CD) that emphasises training and supply driven activities. CD services and activities should be modelled along development principles and approaches, e.g. long-term timeframes, processes that are nationally led and owned, strategies that are context specific and change oriented, and external actors functioning in support roles but not leading the process. CD support for enhancing the disaster resilience of governments should be seen as an integral element of international assistance, framed around their own risk contexts, and preparedness priorities, agendas and locally led processes.

4. Financing of preparedness

The recommendations found in the 2013 ODI/GFDRR study on *Financing Disaster Risk Reduction* and the subsequent ODI Study *Dare to Prepare*: taking risk seriously provide pathways to finance DRR and preparedness more effectively. These reports and their recommendations need to be implemented in order to arrive at a clearer and common position and approach to ensure that the funding architecture, based on new as well as forms (eg, technology-based instruments) is more harmonized and serves as a catalyst for innovation and investment in preparedness through diverse resilience friendly financing approaches and mechanisms. Efforts at the global level should be complemented by regional and national level exercises in order to build a more informed picture of financing mechanisms and approaches for preparedness and the gaps that exist.

5. The link between preparedness and different global agendas

Preparedness should also be integral to the deliberations underway for other global frameworks, including the post-2015 development agenda, the 2016 World Humanitarian Summit and the Universal Legal Agreement on Climate Change 2015. The value of preparedness to the success of these different frameworks needs to be clearly articulated. That said, challenges with respect to the overall objective, terminology, approaches, functions and

financing of preparedness will need to be addressed. Relevant change strategies will need to be far-reaching and futures sensitive if substantial progress is to be achieved.

6. Wider community of expertise to deal with ever more complex risk threats

Dealing with ever increasing complex risks and the changing dimensions and dynamics of risk drivers demands that risk becomes embedded not only in emergency preparedness, but also becomes an integral aspect of development planning processes. This would involve a significant re-think of current concepts about risk as well as planning processes and their objectives. It also calls for a re-configuration of assumptions about who leads and participates in these processes and their respective roles and contribution, including the incentives for them to engage. This means that risk needs to be seen as part of a wide range of planning processes. In the context of HFA 2, HFA Priorities 4 and 5 offer the potential to be catalysts for significant change and innovation in relation to risk preparedness and widening the base of actors who participate in these processes. HFA 2 needs to advocate for a broader concept of and more inclusive approach to disaster risk planning.

7. Enhancing the role and capacities of regional entities and platforms

In relation to preparedness, the role of regional mechanisms in supporting member states to anticipate and plan for new types of risk and to address regional and trans-boundary should be strengthened. Additionally, their role in fostering cooperation between diverse actors through platforms that can bring together DRR, humanitarian, development and 'new' humanitarian actors could also be further cultivated.

More regular and systematic exchange and cooperation between regional mechanisms would also be beneficial around themes with respect to how they foster localized, tailored solutions within national neighbourhoods, or how they can serve as a catalyst to address new and emerging regional threats and adopt collaborative approaches to addressing them.

8. Enhancing capacities of existing platforms

A wide range of platform mechanisms have been created at different levels to foster coherent action and collaboration for disaster risk reduction. As part of the roll-out of the *IASC Common Preparedness Framework*, regional and national platforms for preparedness should be mapped towards understanding their current roles and how they can be further strengthened to serve as a bridge for preparing for emergencies and development, inclusive of diverse actors and their roles. Platform functions should include brokering collaboration, strengthening networks and promoting linkages between platforms.

9. Revise the 2008 Preparedness for Effective Response Publication

This publication should be revized and updated. Based on experience gained in HFA 1 the publication should be able to articulate clearer links between preparedness and the other 4 HFA Priorities for Action in relation to the three goals. The publication should make explicit the concept of preparedness in relation to the notions of resilience, a 'whole of society' engagement, a holistic approach to managing risk, and the link of preparedness to DRR/DRM's strategic outcomes related to sustainable development and economic growth, so the alignment is clearer. Practical guidance should be developed to support the uptake of the Preparedness

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for Effective Response (version 2) so that it can be easily adapted and contextualized by governments. The publication should include a set of broad targets and indicators for preparedness monitoring systems for HFA 2.

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Comment [KK45]: These need to be linked with the within-text references. Either by using the footnote numbers or adopting a system such as the Harvard referencing system.

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