

Strategy Report on
Disaster Risk Management,
Reduction and Response
in Mongolia

By Terry Jeggle, Independent Advisor

**For The UNISDR/North-East Asia Office,
Inchon, Republic of Korea,
&
The Office of the United Nations Resident
Coordinator in Mongolia**

Ulaanbaatar, Mongolia - 20 May 2013

Table of Contents

PURPOSE	Page 1
PART I MONGOLIA'S DISASTER RISK MANAGEMENT	
PLANNING CONTEXT	Page 2
PART II PROGRESS TOWARDS DISASTER RISK	
MANAGEMENT IN MONGOLIA	Page 5
Early Needs and Progress: Benefitting from Experience	Page 5
Foundations for Future Accomplishment, and Resulting Needs	Page 7
Current Policies and Future Programme Opportunities	Page 9
Building Blocks to Pave the Way for Enhanced Disaster Risk Management	Page 10
Crucial Issues to Advance Disaster Risk Management Capacities and Practice	Page 13
Looking Ahead	Page 17
PART III CONCLUSIONS AND RECOMMENDATIONS	Page 18
Primary Conclusions and Recommendations	Page 18
Conclusion 1	Page 18
Conclusion 2	Page 19
Conclusion 3	Page 19
Conclusion 4	Page 19
Conclusion 5	Page 20
Strategic Proposals for Enhancing Disaster Risk Management	Page 20
Proposal 1	Page 21
Proposal 2	Page 22
Proposal 3	Page 24
Proposal 4	Page 26
ANNEX 1 People Interviewed about Mongolia Disaster Risk Management Issues	Page 28
ANNEX 2 Current Internationally Supported or Considered Disaster Risk Management Projects and Programmes in Mongolia	Page 31
ANNEX 3 Summaries of Mongolian Ministries and Agencies' DRM Interests Associated with Disaster Risk Management	Page 35

Strategy Report on Disaster Risk Management, Reduction and Response in Mongolia

Terry Jeggle, Independent Advisor, 20 May 2013¹

PURPOSE

This paper is the concluding report in satisfaction of the UNISDR/North-East Asia Office consultancy in support of the Office of the United Nations Resident Coordinator in Mongolia on Disaster Risk Management, Reduction and Response in Mongolia. It has been contracted through UN-ESCAP for the period from 21 April to 20 May 2013. The present report builds on the initial Strategy Paper on Disaster Risk Management, Reduction and Response in Mongolia of 7 May 2013 and is based on interviews with key actors in Mongolia engaged in the institutional mechanisms, policy and regulatory frameworks and current practices associated with disaster risk management, reduction and response in Mongolia.²

The report summarizes the current DRM situation in Mongolia and draws conclusions based on initial scoping assessments of the advisor. These observations underpin recommendations for further strategic policy and programme development in the country consistent with Government interests and through United Nations and wider international organizations' involvement to strengthen the DRM and specifically disaster risk reduction (DRR) capacities of the institutional mechanisms, policies and regulatory frameworks in Mongolia. The author has based his analysis on present circumstances in the subject area since 2005, and its projected from current conditions and suggested trends at the present time forward to anticipated needs and conditions up to 2020.

Information was obtained from background documentation provided by the Office of the United Nations Resident Coordinator in Mongolia (UNRC) and interviews conducted between 24 April and 20 May 2013 with people listed in Annex 1. The discussion also draws on the author's personal familiarity with the subject in Mongolia since 2004.

The report is composed in three parts with annexes: Part I presents elements that the author believes state a case and provide a foundation for advancing DRM policies and practice in Mongolia by capitalizing on current national conditions, or which otherwise need to take account of demands imposed by increasing disaster risk factors. Part II reflects on previous experience in emergency preparedness and response and the development of transitional elements that have informed and compose a strategic policy for national enhancement and expanded capacities for comprehensive DRM practice. This addresses matters of institutional growth and the development initially in the area of disaster preparedness and response but more substantively looking ahead in terms of disaster risk management and reduction. Part III

¹ The report includes crucial additional information that became available during the week of 20 May 2013, including reference to essential outcome documentation from the 4th Session of the Global Platform for Disaster Risk Reduction held from 21-23 May 2013 in Geneva, Switzerland.

² The abbreviation DRM is used in this report to mean the broad responsibilities of "disaster risk management" encompassing the various roles and responsibilities associated collectively with disaster management operations and disaster risk reduction policy and practices associated with disaster-related preparedness, risk reduction, response and recovery professional contexts. If a particular aspect of these service or policy functions is intended specifically, it will be identified by the more specific description, consistent with definitions in the UNISDR Terminology on Disaster Risk Reduction (2009), accessed on 5 May 2013 at <http://www.preventionweb.net/english/professional/publications/v.php?id=7817>

provides conclusions and recommendations derived from the scoping phase of formulating a DRM Strategic Development Process. Annexes provide additional summarized supporting information.

The process remains a work in progress and requires further input from both government and interested institutional parties. It will be refined further through additional information, deliberation, and critique leading to the preparation of a proposed Action Plan and later consideration at a multi-stakeholder meeting planned for later June, 2013.

The opinions expressed are the author's own and do not reflect official opinions of any United Nations system organization, official nor any Government of Mongolia organization or official, except as may be referenced in official Government of Mongolia or other organizations' public documents. The author acknowledges the full measure of cooperation received from United Nations staff, programme associates and Government of Mongolia officials with appreciation for their willing interest, knowledge and dedication to the subject.

PART I MONGOLIA'S DISASTER RISK MANAGEMENT PLANNING CONTEXT

As a landlocked country three times the size of France (1,553,560 sq. kms) exhibiting considerable diversity in landscape and geophysical conditions, frequent temperature extremes and about 2.8 million people, the country presents daunting DRM policy and operational challenges.³ Nearly 70 per cent of the population resides in urban areas, with about 1.2 million or 40 per cent in the capital area of Ulaanbaatar. There are nearly a million more people who are dependent on the natural environment as they move with their herds as pastoralists. These physical, social and economic conditions in contrasting human habitats are sharpened by strong cultural identities which define Mongolians' rapidly changing requirements for productive livelihoods, human security and physical protection from disaster risks.

The country is exposed to several types of serious natural hazards. Parts of the country and particularly the densely populated capital area are subject to potentially severe seismic activity. The occurrence of unfelt seismic activity has been increasing since 2005 and particularly since 2009 to the extent that the Capital Area of Ulaanbaatar (UB) is surrounded by four faults able to produce earthquakes of Magnitude 7 (M7).⁴ Based on a 2000 simulation, the National Academy of Mongolia estimated that 300 buildings and 60,000 residents would be affected if a M7 earthquake were to strike UB City. With the rapid expansion of the city, the potential losses would be far greater at the present time.

The periodic and particularly severe Mongolian *dzud* is a natural hazard that combines extreme weather conditions which decimate herds which are already weakened by summer drought conditions. With losses of 25 per cent of the national herd in the 2009-10 dzud, many herders' livelihoods were threatened. This led to increased migration off the land to the rapidly growing urban areas. Droughts, floods (in urban and rural areas), steppe and forest wildfire, storms and agricultural vermin are other hazards that combine climatic effects, changing environmental

³ Demographic figures are approximations extrapolated from the 2010 Mongolia census figures as reported by the National Statistics Office of Mongolia, http://www.nso.mn/v3/index2.php?page=news_more&id=772 (Accessed 2 May 2013).

⁴ This and the immediately following seismic information is from the "Progress Report 1 on The Project for Strengthening the Capacity of Seismic Disaster Risk Management in Ulaanbaatar City, Mongolia", by the Asian Disaster Reduction Center, and Tokyo Electric Power Services Co., Ltd. (September 2012), p. 1-1.

conditions, and increasingly challenging economic conditions that characterize a perilous hazard-scape in Mongolia.

These natural hazards have different consequences affecting various parts of the country and different segments of the population to a wide degree of exposure and vulnerability to disaster risks. They all pose recurrent threats and represent potentially costly consequences, which are not likely to lessen in coming years. Furthermore, much of the country's landscape and natural resources of land and water are fragile and are particularly subject to progressive degradation or reduced availability. This can be caused by the consequences of changing climatic conditions, human behaviour or economic growth and development decisions. As there is no private land ownership in the country, the only regulation of its use is by customary practice which can be intensely guarded for personal or local advantage, or otherwise can invite abuse.

In addition to these prevalent natural hazards, and readily identified disaster events, other socio-economic and geophysical conditions are creating additional or potential disaster risks that will assume greater importance in coming years. The UNDP Country Programme Action Plan for 2012-2016 noted this issue well when it stated,

*“With the help of UNDP and other partners, the Government of Mongolia has made significant progress in the area of disaster risk management in the last decade. Much of Mongolia's initial focus has been on improving capacities for emergency response. The longer term challenge is addressing the socio-economic, environmental and developmental drivers of risk.”*⁵

This statement sets out the basis for current opportunities. More importantly it highlights the extensive and pressing need for the country to significantly expand its understanding of contemporary DRM and the policy commitments and investment that will be necessary to identify, monitor and address its exposure to future disaster risks. The rapid socio-economic and demographic changes in the country, as well as greatly increasing resources available for national growth and development require that future disaster risk considerations cannot be assessed on a linear scale from previous events, but must be approached from new, multiple and combined perspectives.

Much of the built environment of major urban areas is dated or of varying physical condition or seismic resilience. A rapid increase in urban migration and growth of the informal or under-serviced “ger districts” around the perimeter of Ulaanbaatar now account for fully 60 per cent of the city's population. Besides creating new and unmanaged risks, the ger districts also exert additional pressure on physical environments and require much more urban infrastructure which remains unmet. Urban migration has created further demands on services, infrastructure, and natural environments of cities, particularly in Ulaanbaatar. The population density of the capital has increased from 162 to 264 persons/sq.km between 2000 and 2010, an increase of 52 per cent in only 10 years.⁶ The combination of the harsh and demanding physical environment, rapidly changing economic opportunities identified with urban or commercial activities and altered social conditions between rural and urban habitation will only intensify future drivers of risk in Mongolia.

As the country's wealth increases and annual GDP has grown rapidly between 12 and 18 per cent over the past three years, more assets are concentrated in specific locations. If these are not protected from unmanaged disaster risks, the economic and related social costs of future

⁵ “Inclusive Sustainable Growth, Country Programme Action Plan 2012-2016”, Government of Mongolia, and the United Nations Development Programme, (January 2012), p. 16.

⁶ 2010 census, as reported by National Standards Organization, *op. cit.*

disasters will increase. Although the severe 2009-10 *dzud* reduced the national herd by 25 per cent from 40 million to 30 million head of livestock, favorable rainfall in 2011 and 2012 encouraged unrestrained restocking which was further motivated by prevailing cultural and economic practices. The national herd was restored to 40.9 million head by the end of 2012, and an additional 13 million head of livestock are expected to be added during the course of 2013.⁷ While some commentators note that the available pastures can support such sizeable herds in gross terms, the unequal distribution of animals across the country as well as unregulated land usage and free migration creates areas of serious overgrazing and land degradation. With insufficient veterinary services, a prevalence of foot and mouth disease or the inability to conform to required international marketing standards, economically viable trading options in animal products are seriously constrained.

As livestock populations multiply, they place even greater pressures on sustainable land use and the natural resources on which herder livelihoods must depend. Even as agricultural diversification is being considered on some more productive lands, there are significant marketing or processing challenges to be overcome before sustainable rural economic alternatives can sufficiently provide for what has become a declining rural population.

There are additional emerging or “slow-onset” risks to people’s livelihoods which can affect the land and natural resources of the country. As they do not easily fit traditional views of common disaster events they can easily become relegated to individual technical disciplines and insufficiently considered in wider developmental or risk reduction strategies. Since climatic conditions vary across the country, it is difficult to speak of sweeping changes from meteorological norms, alone. Nonetheless, much of the country experiences very high evaporation-transpiration rates from rising temperatures that some commentators believe could make as much as 80 per cent of the country so arid as to be nonproductive by 2050.⁸ Other concerns are expressed about different parts of the country where there is increasing snowmelt, uncontrolled or underutilized surface water runoff and a rapid depletion of ancient underground water reserves. The recent increase of large mining operations with their possible threats to deplete water resources in already arid or environmentally fragile areas of the country has become a serious concern among established rural communities.

The rapid growth of the mining industry in Mongolia currently accounts for between 22 and 24 per cent of GDP despite employing only 3 per cent of the formal labor force.⁹ Despite the rapidly rising revenues derived from mining, the industry is likely to have significant environmental consequences. By contrast agricultural production which engages 33 per cent of the country’s labor accounts for 14 per cent of GDP today, compared to more than 40 per cent in 2007.¹⁰ Considering the risks posed to pastoralists discussed above, it is important to note that nearly 80 per cent of this agricultural contribution to GDP is derived from animal products.¹¹ These radically changing economic conditions suggest that they will have far-reaching effects on individual livelihoods as well as affecting the habitats where people live. These economic developments will impact the relative vulnerability and future exposure to new and different types of risks in specific geographical locations and population segments of the

⁷ Verbal information provided by the Livestock Policy Implementation and Coordination Department, Ministry of Industry and Agriculture.

⁸ This information and following observations were provided in interviews by the National Meteorological and Environmental Monitoring Agency, and also referred to in discussions at the Ministry of Industry and Agriculture and provided by FAO.

⁹ Information provided in interviews at the Ministry of Mining

¹⁰ GDP figures from Ministry of Economic Development

¹¹ Information provided in interviews by Ministry of Industry and Agriculture

country. These combined social, economic and geophysical features define the disaster hazards and risk management landscape that Mongolia is facing today.

These disaster risks do not replace nor diminish the legitimate concerns and emergency needs to prepare for and to respond to the more easily identified disasters caused by dzud, earthquakes, floods, droughts, wildfire, animal and human diseases among others. However, the intensive and rapid economic growth, significant migration and unregulated expansion of urban environments, increasingly economically-challenged rural livelihoods, and likely consequences of changing climatic conditions will all require strategic intervention, expanded professional relationships and sustained official coordination.

In looking to the future, it is clear that policy requirements, operational abilities and institutional capacities of disaster and risk management must continue to strengthen emergency preparedness and response abilities for known disasters. But the greatest demands for the future are the expanded understanding, official leadership and strategic professional engagement to establish and sustain a full time commitment to identify, assess and then manage these and other future disaster risks. Without doing so, they will only grow into increasingly more serious disasters with lasting negative consequences for Mongolia.

The next section notes some of the preliminary attention given to these changes with incrementally increasing abilities proceeding from national emergency management abilities and institutional capacities. It is noteworthy that high level authorities and recent legislative action has begun to acknowledge these more comprehensive approaches to DRM, even as demonstrated practice is in early stages of implementation. This presents a welcome opportunity for building strategically to address future requirements, but there is also a broad recognition for greater inter-ministerial and cross-sectoral coordination mechanisms.

The work will require new forms of association among technical professionals and social structures which have not typically been involved with disaster or crisis management. Activities necessarily involve all ministries and departments of government, at national, *aimag*, *soum* levels and in urban municipalities. They equally cut across development sectors, and involve many technical, educational and subject specialists – but especially the communities and people who are most immediately affected. These observations equally apply to various development initiatives within the United Nations system and those being pursued by international organizations and through bilateral assistance agencies.

PART II PROGRESS TOWARDS DISASTER RISK MANAGEMENT IN MONGOLIA

Early Needs and Progress: Benefitting from Experience

Mongolian authorities have been aware of the need to modernize and reconfigure the national approach and commitments to DRM since the early 2000s. While this was stimulated at least in part by the destructive and costly *dzud* in 2001-02, the process also has benefitted from significant changes in governance and the growth of Mongolia's emerging economy. As with any major alteration of long-established practice, the process has taken some time, but it also has been systematic, deliberate and consistent in intent.

As in most countries, disaster management organization and practice in Mongolia emerged historically from initial commitments to establish specialized emergency preparedness and response services such as fire-fighting, search and rescue, emergency communications and

logistics, and operational resources required for the timely distribution of emergency relief assistance, medical care, etc. The vast size of the country and very sparse population distribution across wide areas of the country presented both operational challenges and high costs to provide urgent emergency services. From the author's viewpoint the country has demonstrated a firm commitment to develop a national approach to disaster management planning and operational capabilities since initial efforts were reflected in the Mongolian Law on Disaster Protection of 20 June 2003 which created the National Emergency Management Agency (NEMA).¹²

At the highest political levels of responsibility matters of disaster management are apparently addressed through a State Security Council. The roles and responsibilities of this State apparatus have not been able to be addressed as information is not publicly available for obvious security reasons. However, it is understood that there is also an inter-ministerial State Emergency Council (SEC) chaired by the Deputy Prime Minister which is convened for national coordination purposes only when there is an immediate crisis or disaster threat. It does not appear that the SEC is involved in the monitoring of risk conditions in the country or to assess the changing needs and requirements for future DRM requirements. While a few passing references were made in the course of some interviews to a State Earthquake Council existing under the auspices of the State Security Council for contingency planning purposes, the existence or role of this mechanism has not been able to be verified nor elaborated in any discussions.

Since the creation of NEMA, Mongolian authorities have progressively sought to recognize changing conditions in the national "hazard-scape" and consistently pursued a series of opportunities to benefit from international initiatives and institutional capacity building, even as the emphasis remained largely focused on preparedness and response capabilities. This progress has sought to maintain a balanced, but also distinctive appreciation of the different requirements first in disaster preparedness and response requirements in rural areas through local authorities in *aimags* and *soums*,¹³ as well as in the nine districts of the capital area of Ulaanbaatar municipality.

This has all been encompassed in the national operational authority of NEMA which was established by combining the previously distinct services of Civil Defense, Fire Fighting and State (material) Reserves. NEMA also was provided with the mandate to improve coordination and increase technical capacities and material support to fight disasters caused by known hazards. Since 2005 there has been a consistent effort to raise awareness to wider issues of disaster risks and preparedness or prevention and mitigation thinking. This has resulted in broader outlooks at national level and in selected pilot activities involving training of local authorities in selected aimags and working with herder communities in some targeted soums.

Early efforts to develop a national preparedness plan and plan of action tried to associate additional DRM involvement through international initiatives, and to expand the subject in additional development sectors within Mongolia. The international adoption of the Hyogo Framework for Action, 2005-2015 (HFA) at the World Conference on Disaster Reduction in Kobe, Japan in January 2005 provided important impetus and guided Mongolian national efforts. This initially included the United Nations Development Programme (UNDP), the International Federation of Red Cross and Red Crescent Societies (IFRC), some non-

¹² It has been explained to the author that "disaster protection" best conveys the sense in English which "disaster management" connotes in Mongolian.

¹³ These Mongolian terms are equivalent to provinces and districts, respectively. *Baghs* are small communities led by locally respected leaders.

governmental organizations (NGOs) and Mongolian technical consultants working with international development agencies or in local project activities.

An evaluation of NEMA's performance is beyond the scope of this report although it can be noted that there have been periodic joint reviews of its operational needs and abilities conducted including an extended UNDAC Assessment Mission by the UN Office for the Coordination of Humanitarian Affairs (UN-OCHA) in 2004 and a follow-up review of recommendations in 2005.¹⁴ Subsequently during 2010 within the context of Phase III of the UNDP Project for "Strengthening the Disaster Mitigation and Management System in Mongolia", a study reviewed the search and rescue capabilities of NEMA and proposed standard operating procedures for the most frequent disasters in Mongolia.¹⁵

Considering the scope of its mandate and the spread of its operational territory, these and other reviews have indicated a progressive growth in the operational abilities of NEMA and its growing working relationships with government ministries and aimag authorities. This has been accomplished despite the fact that the agency has continually been challenged to have the full range of specialized emergency equipment and protection material required by the many contingent requirements of a fully equipped disaster management agency. This was the subject of a specialized study conducted in 2009 on the national disaster management capacity and procurement needs of NEMA¹⁶ and remains a continuing need. By most accounts NEMA has sought to improve its operational abilities within the extent of the material and technical resources it has had to work with. During the very serious dzud response and recovery in 2009-2010, NEMA maintained good working liaison and relationships with other ministries and aimag authorities, working diligently to deliver relief materials under extreme conditions, but the magnitude of the task illustrated some systemic limitations in coordination capacities.

The operational experience and some continuing managerial challenges over the past decade have provided considerable insight which is timely.¹⁷ This is now being consolidated and seriously considered by NEMA with respect to reviewing its legislated mandate while facing future disaster management needs. As the responsibilities of disaster risk management expand and the subject becomes more closely associated with addressing the multiple roles of emergency preparedness, risk assessment and the more elaborated and technically demanding risk management, the expectations for NEMA's expertise and technical requirements are growing rapidly.

Foundations for Future Accomplishment, and Resulting Needs

As NEMA developed its own institutional abilities, some special initiatives were created to address current emergency preparedness priorities which arose. This brought wider interests and national prominence to such issues as the need to monitor avian influenza. This was most notable in responding to the dzud response and recovery activities with NEMA exercising coordination among the ministries concerned. These roles extended to aimags working through the authority of governors with varying degrees of interest, abilities and resources. These efforts to broaden and develop the community of DRM interests within government and

¹⁴ "UNDAC-OCHA Mission to Mongolia Report – Assessment of Natural Disaster Response Capacity, June 27- July 9, 2004"; "UNDAC Mission 2004 Recommendation Matrix – UNDAC Mission Review October 2-6, 2005".

¹⁵ Hayden, P., Resolve-Network, "Mongolia Development of Search and Rescue SOPs Final Report", UNDP, 2010.

¹⁶ Weiske, P. "RMMAPP Report on National Disaster Management Capacity and Procurement Needs", UNDP-NEMA, July 2009.

¹⁷ This has included numerous changes in management during the period, including the assignment of at least five managing directors of the agency, with various professional backgrounds.

beyond culminated after several years with the adoption of the State Disaster Protection Policy and Programme by the Mongolian Parliament in May 2011.¹⁸

A primary and sustaining feature of Mongolia's evolving approach of more comprehensive DRM was the UNDP Project on Strengthening NEMA Capacities in Disaster Management. It has proceeded consistently through four phases from 2002 now committed through 2016 with continuing support from the Government of Luxembourg and UNDP. The project proceeded with beneficial effect from its first phase of introducing and elaborating wider professional definition of DRM roles and activities. These efforts promoted the acceptance of operational roles for "disaster management/protection" that extended beyond the earlier requirements for only civil defense, accident rescue or the allocation and distribution of emergency assistance from state reserves at the time of a disaster. These concepts were expressed in policies and draft national action plans drawing on concepts guided by the HFA as interpreted for Mongolian needs and conditions consistent with the Mongolian Protection Law.

Successive second and third phases of the project were implemented through NEMA at national and aimag levels between 2005-2007 and 2008-2011. The project planned and conducted training activities, and fostered local capacities in disaster management understanding and abilities. This included support and training for local officials in disaster protection at soums through the use of information materials, local meetings and community-based activities. These efforts stimulated wider involvement and support for pilot projects in local emergency preparedness implemented by community and herder groups with small cash grants. Additional studies and technical activities were supported to improve rescue and response capabilities, to assess technical equipment inventory and to propose possible procurement opportunities.

Both of these project phases also introduced new subject areas of expanded DRM relevance such as conducting a study of climate change effects on disasters in rural areas, and to commission a study of hazard-specific urban risk assessment methodologies. Throughout these various activities there was a continuous effort to obtain, translate and distribute information about additional disaster management experience from elsewhere. Public information and DRM educational materials also were produced by the project. The benefits of this methodical and considered approach helped to strengthen some NEMA capacities while also trying to create a better understanding about the importance of enhancing Mongolian commitment to emergency preparedness and disaster management abilities. These efforts to create a more sustained commitment to addressing disaster risks before a disaster happens and opportunities to involve more partners in DRM activities remain persistent challenges. The accomplishments, as well as future requirements in DRM have been documented in multiple reports.¹⁹

Unfortunately, the project has not always had the full impact which it could have had if there had been more sustained and conscientious support of the development sectors for the importance of addressing disaster risks in the course of Mongolia's development. There also were some constraining features in internal government procedures to build on the project's efforts, failing to take them to a higher level of institutional commitment.

¹⁸ Resolution of the State IkhKhural of Mongolia, No. 22, of 13 May 2011.

¹⁹ "Terminal Report Strengthening the Disaster Mitigation and Management System in Mongolia, Phase III (2008-2011)", UNDP Mongolia (2011); Vernoooy R. and Erdenechuluun T., "Terminal Evaluation Report, Strengthening the Disaster Mitigation and Management System in Mongolia, Phase III (April 2008-December 2011)", UNDP Mongolia (2011); Galperin, A. Mission Report Mongolia 17 May-10 June 2009" for UNDP National Programme on Strengthening Disaster Protection Capacity, 2009; Jeggle, T., Goodyear, E. and Purevsuren L., "Terminal Evaluation of the Strengthening the Disaster Mitigation and Management Systems in Mongolia, Phase II", UNDP Mongolia, (2007).

Within the United Nations system and among the wider international disaster and development communities in Mongolia, there has been a similar escalation of disaster-related responsibilities and preparedness activities. It has been largely stimulated by the shock expectations and consequences following the 2009-2010 dzud and also the growing realization of looming risks focused on the rapid growth of urban population and especially the multiple risk drivers impacting Ulaanbaatar. The United Nations Country Office has organized a Humanitarian Country Team built around the principles and operational guidelines of the cluster system with distributed agency responsibilities appropriate to their overall programming mandates,

Under the Resident Coordinator's direction, UN-OCHA has been able to provide support and guidance to establish and install a minimal preparedness plan for disaster response in the country.²⁰ In addition to an UN-OCHA mission to advance this process in March 2013, a Regional Consultation Committee Meeting of the Asian Disaster Preparedness Center hosted by NEMA at the same time provided more exposure to experience in other Asian countries. The United Nations Inter-Agency Standing Committee has also contributed to the process of building Country Office capacities in disaster preparedness through the preparation of a Inter-Agency Contingency Plan.²¹ While attention is being encouraged for more commitment to disaster preparedness, much still remains to be done to associate the subject more fully in the context of on-going programme activities. In a situation not unlike the rising demands being experienced by NEMA, with some exceptions such as the programme above, the UN system in Mongolia remains focused primarily on disaster preparedness and readiness arrangements shaped by known and familiar hazards, and less motivated by more penetrating disaster risk analysis. This is evident from the few UN programmes reflected in ANNEX 3 which currently address DRM issues explicitly.

There are examples of studied and consistent approaches which have been pursued effectively in other countries as they progressively expanded original disaster management organizations into much more comprehensive DRM national strategies with wider operational capabilities.²² In nearly all of the countries cited, progress has been achieved by governments, the UN system and other international organizations working together with a common purpose and through activities agreed relative to the organizations' respective strengths or advantages.

In Mongolia much of the policy consideration for evolving DRM to its current level of engagement has been well considered, even as some of the implementation has taken time to realize to a moderate extent. The present favourable policy environment and dominating socio-economic realities present future demands that cannot be ignored and renewed opportunities for advancement that should be seized. Efforts will however still be required to weld more effective coordination and collaboration arrangements over time.

Current Policies and Future Programme Opportunities

Against this background of DRM interests and abilities to meet present and future needs, it is encouraging to note the adoption by the State *IkhKhural* (National Parliament) of Resolution 22 on the State Disaster Protection Policy and Programme (13 May 2011). It provides a basis for expanded institutionalization of DRM, especially in terms of placing the subject within "annual

²⁰ The progress in this on-going process is reflected in Pendleton, A. "Final Mission Report of Mongolia Response and Preparedness Planning, 21-28 March", UN-OCHA, 14 May 2013.

²¹ "IASC Inter-Agency Contingency Plan for Mongolia, from January-December 2011, December, 2010.

²² Bangladesh, Chile, Cuba, Ecuador (particularly the city of Quito), India, Indonesia, Madagascar, Mozambique, Republic of Korea, South Africa (both nationally and especially the city of Cape Town), Sri Lanka, Uganda, Vietnam, among other countries have all progressively reformulated their national approaches to DRM through a deliberate, broadly-based and consistent, multi-year process.

national Socio-Economic Development Guidelines and the State Budget”.²³The General Guidelines on State Disaster Protection Policy are even more explicit in terms of potential expansion of DRM policy commitments: (emphasis added, not in original):

- “2.1. Strengthen disaster management system and support efficient involvement of local governance, agencies, private sectors and local citizens in Disaster Protection Activities;
- 2.2. Conduct risk assessment of natural, manmade and technical disasters by each type; organize campaign on reduction of disaster vulnerability at national level;
- 2.3. Empowering government and private sector’s engagement, strengthening the disaster risk insurance and legal environment of disaster humanitarian aid coordination and review the disaster terminology understanding;
- 2.4. Penetrate modern methodology and technology of survey of hazardous phenomena and potential disasters as well as forecasting and information dissemination and improve early warning system;
- 2.5. Strengthen the capacity of human and technical resources for disaster response;”²⁴

The fact that these guidelines are restated as the Government programme’s strategic objectives provides further basis for developing the necessary policies and operational capacities for their realization. Additional details specified in the Programming Implementing Activities (Part 3) and Programme Funding (Part 5) provide the authorization and direction that had previously been less explicitly agreed or adopted as national policy. This provides an important stimulus for renewed progress in creating national DRM capabilities. The Implementation Management and Structure (Part 4) and Implementation Stages and Outcomes (Part 6) designate NEMA to “coordinate and monitor the programme implementing activities nationwide and provide inter-sectoral engagement”. The first phase of implementation is proceeding from 2011 to 2015.

This explicit statement of forward-looking objectives, designated authorities and elaborated actions to be pursued with budgeted state and local resources – with supplemental international assistance also encouraged, is a significant basis on which to build a future strategy for enhanced national and local DRM commitments. There is evidence that these initiatives are proceeding, and importantly that initial financial resources are available within Government allocations and with supplemental support indicated by several international organizations.

Building Blocks to Pave the Way for Enhanced Disaster Risk Management

It is fortunate and timely that the fourth phase of the UNDP project “Strengthening local level capacities for disaster risk reduction, management and coordination” will be implemented from 2013 through 2016. It has been structured to build on previous project activities and developed capacities to facilitate a decentralized approach to disaster management by working through sustainable prevention, response and coordination mechanisms to reduce the vulnerabilities of both urban and poor populations. This current orientation has the distinct advantage of being implemented through NEMA which has now adopted a much wider appreciation of the multiple roles which are required to obtain these objectives. In policy terms, current political conditions and community-focused development grant procedures being pursued by Government are creating more conducive opportunities for improved coordination and integration of disaster risk management into national and local community development planning and resulting activities. However, they also signal new directions and added

²³ Approval of the State Disaster Protection Policy and Programme, Mongolia State IkhKhural Resolution 22, 13 May 2011. Point 2

²⁴ *Op. cit.*

responsibilities which will require revised or expanded legislation and significantly enhanced managerial capacity and coordination arrangements.

It is equally important to note that there are additional internationally supported disaster risk management programmes and projects underway in Mongolia which encourage and are supporting these same development interests. Primary initiatives are listed in Annex 2. Further discussion below suggests that there are potentially more benefits to be realized by encouraging and enabling closer association among them, although this will need to develop over some time and with concerted efforts by the various organizations concerned. There are currently apparent gaps and some potential overlaps that a more consciously determined set of strategic relationships and improved sharing of information could lessen. A senior government official observed during a recent discussion that it would be “useful and more effective” if [some internationally-supported initiatives either underway or being planned] could be harmonized or pursued in closer association by the supporting organizations”. Without suggesting a merger of these programmes, in terms of strategic planning and operational synergies this casual observation has some merit.

It is clear that as these disaster risk management programmes expand, so too will the involvement of a wider range of technical, operational and policy-driven interests. Presently, these are most often found within government ministries, departments and agencies, but more under-utilized professional resources undoubtedly exist within Mongolian universities, scientific institutions, information management providers and private sector or commercial interests. A conscious effort is needed for official DRM strategies to identify and solicit the participation of these additional technical, scientific and educational attributes.

Experiences elsewhere in other countries have demonstrated that strong commitment, informed direction and guidance from the highest levels of government are critical in all successful cases. These attributes have proven to be essential for highlighting the importance of DRM concepts and practices for national development. This integrated approach and mutually reinforcing efforts need to be addressed on a continuous basis by monitoring evolving risks throughout the society rather than only preparing for urgent responses to possible disasters. Both preparedness and risk management functions are important, but they also are distinctive and require different operational structures and technical abilities. Firefighters have to be skilled and have the specialized equipment to fight fires, but they are not the most suited agency to project future urban risk issues, essential infrastructure requirements and public health concerns of a rapidly expanding urban environment. This example illustrates the type of dual responsibilities which must be accommodated in future disaster risk management strategies.

It is relevant to note that while all countries have designated authorities and operational structures for responding to crisis events and disasters on an urgent basis, very few States have yet seriously accommodated the pressing requirements for sustained monitoring and managing of national risk dynamics before they become manifested as a designated “disaster”. In the author’s view, there are even fewer examples of a previously existing “national disaster management authority” (or agency) which has successfully been reconstituted, sufficiently resourced and granted the political authority necessary to absorb the much greater and widely diverse responsibilities associated with DRM. The fact that DRM is increasingly understood to be couched in terms of a country’s economic growth and national development contexts which exhibit the contrary potentials of either creating more risks or applying necessary resources to managing those risks makes the organizational development decisions particularly challenging.

The contrasting political, economic, and human security issues involved require decisive leadership. High-level direction of a national comprehensive DRM strategy insures the allocation of resources necessary for sustained accomplishments, continued learning and the growth of institutional abilities (“capacity development”). It is equally crucial to maintain the cross-sectoral and integrated activities (“mainstreaming”) that can provide a wider “whole of society” involvement in sustained and effective DRM.²⁵ The first criteria are based mostly on official direction and planning devoted to multiple operational abilities. The prevailing and expected future risks must be assessed, and the resulting priorities for managing them decided. The latter emphasis of “mainstreamed sustainability” and ultimate effectiveness of DRM actions rather reflects a broader and on-going commitment to developmental growth with increasing investment to ensure that resilient conditions exist throughout the society and are pursued in all ministerial activities.

Based on background material provided and interviews for this review, Annex 3 summarizes the relative familiarity and range of interests that selected government ministries and agencies or departments conveyed. Interviews disclosed varying levels of understanding about disaster and risk management concepts and how they related to the offices’ specific subject areas. Initial comments tended to respond to issues related to primary hazards or disaster events which have affected Mongolia like dzud or concerns about possible damaging earthquakes that could affect Ulaanbaatar. Comments about “preparedness” broadly considered but not always so specific in reference suggested a generalized identification with more traditional considerations of disaster management responsibilities, whether they were cast in terms of policy or implementation responsibilities.

However with further discussion and after some queries about changing socio-economic, demographic or developmental conditions in recent years projected into future contexts, respondents adopted broader views about disaster risk circumstance even though such specific terminology may not have been used so readily. There were important exceptions to this observation though, in some but not all strategic planning and policy departments. Compared to similar discussion the author had in 2007 there was a much more informed and vivid recognition of urban disaster risks in Ulaanbaatar evident within NEMA, the Ulaanbaatar Municipality and the Ministry of Construction and Urban Development. This observation was noted by other respondents too, as for example in discussions with NEMA and among the technical experts working on the JICA Seismic Risk Assessment Project for Ulaanbaatar City.

There are other important “anchoring” offices that are crucial for any future DRM strategic planning. The Ministry of Health expressed an appreciably broad reference to a variety of disaster risk issues with potential health impacts and had developed multiple relationships with other sectors or ministerial interests. These ranged across both preparedness and future risk management considerations in addressing potential operational needs and health-related requirements in such areas as environmental issues, agriculture and animal husbandry, food

²⁵ It is important to stress that how high-level commitments are structured within countries is a matter to be determined by the political culture and governance structures of individual countries. Two different but equally effective arrangements of high-level political authority mechanisms to direct national DRM strategies are evident in Japan and Indonesia. The Japanese Cabinet Secretariat is the dominant and inclusive mechanism that is utilized, regardless of the political composition of the Government in power. The Indonesian direction and oversight for national strategic DRM policy and country-wide implementation across ministries and government jurisdictions rests in the Office of the Vice-President. The defining legislation provides that this structure prevails as a matter of national relevance regardless of the political composition of the incumbent Government. Switzerland has adopted a similar legal arrangement by which the direction of the national DRM strategy is supervised and regulated by a permanent inter-parliamentary committee that transcends ruling government assignment or alteration even though DRM regulations are routinely debated and decided by parliament.

safety, industrial and infrastructure concerns, national standards and inspection criteria, water and sanitation, communicable diseases, etc.

Although working in a different domain, the Climate Change Coordination Office similarly has established many productive links with multiple ministries and agencies, which is also evident from the elaborate presentation in the National Action Programme on Climate Change. The Agency for Meteorology and Environmental Monitoring frequently was mentioned because of its extensive and valued documentation, historical trend analysis, data access and advanced forecasting or modeling capabilities which serve many different ministry and sectoral interests.

These sectors and no doubt others not yet identified will become increasingly important as the outlooks and operational considerations for DRM will certainly increase. Means should be cultivated that can identify and engage key individuals and leading organizations to drive more comprehensive approaches for disaster risk management. While many of the subjects are technical ones, there are also additional needs to be determined related to management practice, organizational development issues, data and information usage and exchange within what should become an expanding community of DRM interest and operational abilities.

Success depends heavily on the combined values of official DRM awareness and direction and also through increased citizen participation. This latter requirement will need to be accomplished through local officials, NGOs or other forms of voluntary community groups and extended family relationships. A convincing public commitment to DRM activities depends on people's recognition of their own disaster risks *before* a crisis occurs or through *local sensitizing* of DRM values as a part of their livelihood or development opportunities. These approaches have been part of UNDP's previous DRM strengthening project activities, and also are reflected in other DRM activities being conducted for example by IFRC and Mongolian Red Cross Society, World Vision, Mercy Corps among others. The World Bank also supports similar activities which increase the resilience of local communities through diversified livelihood opportunities such as through their Sustainable Livelihoods Programme.

It is relevant to note from the contents of both annexes 2 and 3 that as preparedness and DRM protection functions diversify and become established as continuing responsibilities with more ministries and through other social institutions or development activities involved, it is less likely that the specific word "disaster" is contained in the programme names. The project descriptions instead seek to reflect developmental attributes such as greater resilience or sustained well-being on a continuing basis and expressed through various development sectors. This is an important feature to encourage as more comprehensive disaster risk management is projected into the future.

Crucial Issues to Advance Disaster Risk Management Capacities and Practice

Discussions with senior NEMA officials have conveyed a strong interest in proceeding to advance DRM practices and abilities with international support and technical assistance particularly in the following areas:

- Planning and developing capacities for conducting disaster risk and vulnerability assessments in all aimags, (starting with five during the course of 2013).
- Coordinating and developing effective collaboration with expanded DRM and technical inputs from other ministries, departments, agencies and other parties concerned (e.g. international organizations, commercial and private sector interests, NGOs, etc.).
- Identifying aspects of the existing Disaster Protection Law (2003) that should be considered for restatement or revision to address current needs and future national

DRM policy, coordination and implementation issues better and for improved effectiveness.

Previously, there were preliminary suggestions from some DRM practitioners and policy experts for the Government to consider the creation of a DRM “national platform” as a primary coordination mechanism. During the period of earlier deliberation about the national Mongolian disaster protection policies prior to the passage of the State Disaster Protection Policy and Programme in 2011 this was expressed as a potential “Disaster Risk Reduction Partnership Council”. The concept reflected some generic elements of national platforms encouraged by the HFA, but adapted to be more suited to Mongolian conditions. Options suggested that such a national coordinating mechanism possibly could be associated in some manner with the State Emergency Commission (SEC). The concept was not adopted at the time nor was an alternate inter-ministerial DRM coordination arrangement formulated by Government beyond the already existing reference to NEMA’s coordination responsibilities outlined in the State Disaster Protection Policy and Programme.

The subject continues to resurface but when arose with NEMA representatives they conveyed the government view that such a “national platform arrangement is not appropriate to be considered at the present time”. They added that, “perhaps it will be decided by higher levels, or through something else, later”. Nonetheless, enhanced DRM coordination arrangements are widely noted as being important, especially in operational terms at the time of crisis. Other challenges are recognized in matters of inter-ministerial coordination and relating to the development of sectoral DRM policies.

From an outsider’s perspective, the author believes that similar reflection is necessary and desirable with respect to the exchange of intended DRM programme development and strategic thinking among primary donor and international organizations, too. Competitive “positioning” or respective programme influence, unilateral organizational expectations of project management, or efforts to maximize access to external resources from bilateral donor agencies may unwittingly be contributing to a less than desirable degree of “donor cooperation” for what is acknowledged to be common objectives.

These coordination issues are central to advancing more strategic and sustainable national DRM policies so they remain an area for further review and elaboration. Some discussions have suggested that official and national coordination issues need to be modified in the Mongolian Protection Law, considered further by the Mongolian parliament or addressed through other governmental mechanisms. The essential role of official and institutionalized DRM coordination certainly has been elevated in attention, if not yet fully clear in its comprehensive aspects or fully elaborated in practice.

The subject is referred in various contexts in most interviews as being “an important issue” and necessary for further development of the country’s DRM capacities. A government official even commented that it would be “useful and probably more productive” if the various primary international organizations could harmonize or even implement their similar programmes better, too, rather than conducting or running them in parallel despite their similarly intended effects.²⁶

²⁶ The word “coordination” was most frequently heard in interviews when discussing the issues related to internal Government responsibilities. By contrast, when similar subjects related to more harmonization and mutually supporting objectives of programme interests among external or international organizations, the word “cooperation” was more often used. There may be value in appreciating this nuanced reflection of relative degrees of collaboration and mutual support. It suggests directed effectiveness determined and applied through some

There are additional operational issues which will need to be considered as nationally relevant DRM commitments are better understood with different roles and responsibilities applying to preparedness and risk management activities at national, aimag, soum and municipality levels of involvement. As DRM proceeds to involve more implementing ministries, agencies and departments supplemented by other private sector, civil society, local community, and international organizations there will be pressing needs to address a more holistic and less fragmented approach to the subject. As DRM coordination presently has been designated as NEMA's responsibility, there is much to be done to realize these growing DRM/DRR roles beyond the previously identified activities which NEMA pursued in emergency operations.

There is no question that there are DRM initiatives underway, and some are very good ones, but justifiable questions need to be asked about who, where and how they are being tracked, related and evaluated. Strategic DRM is a full time responsibility with a continuing series of activities closely associated with national development. It is dynamic and needs to be motivated by monitoring risk conditions in time, space and from various subject perspectives (e.g. health, climate, infrastructure, etc.). Therefore there is a need, expressed in NEMA's own words, "to clarify the roles and responsibilities of all other ministries, departments, etc. so that within new plans it will be clear 'who will do what'". The author suggests adding "when" and "where" to fully round out the implications of DRM responsibilities.

Specific examples can reflect the growing demands of more comprehensive DRM coordination responsibilities. The first is the far-reaching consequences of climate change and related adaptation activities which would be spread over several operational ministries (e.g. agriculture, industry, health, water, energy, etc.) which extend beyond the interests of only the Ministry of Environment and Green Development. The extent of the policy implications and necessary operational responsibilities are spelled out in the National Action Program on Climate Change.²⁷ However, the realities of structured implementation among the many actors identified remain more uncertain, in part because of the wide distribution of responsibilities. This may be a similar case were there to be an equivalent study of the many related expectations for integrating comprehensive DRM practices in the context of sustainable development.

A second example relates to the public risks that would become urgent with a worsening regional exposure to avian influenza or other epidemic diseases that would impact the social and economic functioning of the society. In anticipation of such a case NEMA is in close contact with the Ministry of Health and other ministries concerned such as the Ministry of Industry and Agriculture. A task force has been composed under the direction of the State Emergency Commission, coordinated by NEMA and technically headed by the Ministry of Health with linkages to other relevant ministries and agencies.

This is an important and positive approach to a specific threat, but it also raises a question about less explicit concerns or in the case of more slowly evolving risks. The implications of expanding ger districts in the capital area of Ulaanbaatar is such a case, even though the current conditions may not yet be deemed to be of "disaster" proportions. While it is recognized that the primary ministries are involved with their respective planning and operational

authority in the first instance, compared to a more willful and voluntary intention to realize a desired opportunity of working together for shared objectives while retaining individual identities among the international organizations. In both cases motivation will be required if greater coordination and cooperation are to result.

²⁷"National Action Program on Climate Change", attachment to Mongolian Parliament Resolution No. 2, February 2011.

engagement in such areas as construction and urban development, it is less clear how broadly applied the technical monitoring and risk assessment procedures are. Critical risk perspectives can also relate to health, sanitation, land use, water, other essential services, environmental consequences, transportation, fire and seismic exposure, etc.

On another level, the coordination roles of the capital city governor and the mayor's office related to assessment of earthquake risk, infrastructure and engineering mitigation responsibilities, public information and awareness and capacity building also includes other municipality departments. The completion of the first phase of the JICA-supported Project for Strengthening the Capacity of Seismic Disaster Risk Management in Ulaanbaatar City is one such example.²⁸ The World Bank's intention to support technical assistance for Flood Risk Assessment in the Municipality of Ulaanbaatar is another.²⁹ Beyond collaborative preparedness and emergency management responsibilities which are well established between NEMA and officials in the various districts of Ulaanbaatar and in sectoral departments, it is less clear how and to what extent such specific coordination relates to NEMA interests and assigned responsibilities for DRM in UB on a routine basis. There are related issues such as who is responsible for what in terms of coordination, policy determination and implementation responsibilities for *potential* flooding in the capital area (e.g. the accumulation of flood risks unrelated only to hydrology, before an actual flood occurs), or the worsening consequences of air pollution, land-use management, enforcement of building codes, etc.

Initial interviews with strategic planning departments of several ministries and the Capital Area of Ulaanbaatar indicate that there are numerous actors involved, so the situation may actually reflect one of more rather than less engagement. However, this also obscures the extent to which risk-related issues or more specific DRM is currently included in the various mandates and responsibilities. Similarly, current distinctions between matters of emergency preparedness and disaster management on one hand, and sustained development planning and investment in DRM without reference to a specific disaster event on the other, are much less obvious.

These are some of the issues of emerging risk governance that are distinct from coordinating crisis operations at the time of a disaster. They also extend beyond normal humanitarian focus and therefore need to be considered how they should be addressed within the assigned roles of the UN Humanitarian Country Team. So far its emphasis has been driven by a concentration on preparedness and emergency response within the contexts of the various humanitarian clusters. While that is necessary and important to a point, a singular humanitarian emphasis obscures the wider relevance of DRM risk matters in wider UN system and agency programme interests.

It is evident that the Food and Agriculture Organization (FAO) was intimately involved and worked closely with the (then) Ministry of Food, Agriculture and Light Industry, and NEMA during the dzud emergency and recovery during 2009-2010.³⁰ Similarly, the World Health

²⁸ See "Progress Report 1 on The Project for Strengthening the Capacity of Seismic Disaster Risk Management in Ulaanbaatar City, Mongolia", by the Asian Disaster Reduction Center, and Tokyo Electric Power Services Co., Ltd. (September 2012). Beyond the primary Mongolian counterpart authority of the Ulaanbaatar City Emergency Management Department of Ulaanbaatar, the project has been conducted in association with eight Central Government agencies and departments, seven departments of Ulaanbaatar City, and the Mongolian Academy of Sciences.

²⁹ See Annex 3.

³⁰ See "The Mongolia Dzud Appeal" by the UN Mongolia Country Team (May 2010); "The 2009-2010 Dzud Winter Disaster in Mongolia: Lessons learned" by UNDP, NEMA and the Swiss Development Cooperation (SDC) (Dec. 2010); "Country Report Climate Risk in Mongolia" by Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) Climate Risk Management Technical Assistance Support Project, UNDP Bureau of Crisis Prevention and Recovery (BCPR) and (BDP). 26 July 2012, as revised 20 May 2013. All of these

Organization is very much involved in supporting the many emergency preparedness and disaster risk management initiatives of the Ministry of Health often in association with other extended ministry relationships.³¹ Beyond the commonly recognized disasters, both WHO and the Ministry of Health departments are attentive and expanding their institutional capacities to monitor, assess, prepare for and manage risk concerns associated with air pollution, food safety, urban risks and exposure, zoonotic diseases, communicable diseases, avian influenza and other possible pandemics, the public health considerations of water and sanitation, as well as the emergency requirements for assured emergency care and treatment at the time of a mass or prolonged emergency.

Looking Ahead

These related conditions suggest that a core issue for future planning and capacity building of strategic DRM in Mongolia is that currently there may be more rather than fewer initiatives underway to address future DRM requirements even if they are not cast exactly in those terms. However the expanded involvement in different sectors and the anticipated participation of more ministries and agencies with risk factors, further attention will be necessary to consider the “management architecture” in Mongolia. A similar consideration will apply in spatial terms too, as social and economic conditions and the rapidly changing demographic characteristics of place and livelihoods alter the hazard-scapes, and people’s exposure to risks and vulnerabilities in rural and urban environments. Individual projects and activities are addressing some of these needs, but to varying extents and not always with the wider knowledge of other entities.

Annex 3 summarizes a simplified view of government ministries’ and selected agencies’ (or departments’) interests and current involvement in DRM issues. The summary is based on initial interviews and any cross-referenced observations encountered in the present scoping exercise. These summary comments are neither comprehensive nor definitive, but are cited only as an initial attempt to suggest the emerging DRM landscape in the country. This outline may assist efforts to identify key institutional organizations and commitments to DRM policies and implementation in various sectors.

It is premature to discuss detailed views of individual ministry or departmental engagements at the present time, but it is anticipated that as efforts develop to foster a better networked group of interests important for DRM that major actors and primary sources of information, technical resources or well-placed programmes will become more evident. This is a primary step in trying to compile and determine where DRM strengths and capacities exist and to motivate more opportunities of welding them into a consortium of interests dedicated to advancing DRM policies and capacities in Mongolia. Further distinctions need to be made between policy and coordination roles and other operational abilities. They may apply differently or have an altered influence at *aimagor soum* levels, or in the urban districts of Ulaanbaatar.

Fortunately there is an opportune political environment and growing financial and technical resources in Mongolia to advance future DRM strategic planning, programme design and phased implementation with a growing number of potential partners. There is the important foundation of the past ten years of preparedness and disaster management for NEMA, senior levels of Government and the international community to build upon. Future needs will be as

reports elaborate that the risk drivers and prior conditions for dzuds are complex and the disaster results from more than only severe climatic conditions.

³¹ See for example the Thematic Platform on Emergency and Disaster Risk Management for Health, A Report for the 4th Session of the Global Platform on Disaster Risk Reduction and Draft Action Plan for the Thematic Platform (2013-2014), the World Health Programme, Emergency Risk Management Department, May 2013.

much about developing wider conceptual approaches to DRM, managerial arrangements, and building institutional capacities among a growing professional community of practice as they will be about also improving preparedness for already recognized disasters. The following sections propose key strategic approaches for further discussion and refinement into a set of related action plans. There are many willing and active partners, and resources too, but more DRM relationships need to be realized and sustained over the next five to seven years.

PART III CONCLUSIONS AND RECOMMENDATIONS

The background information provided to the author and the observations conveyed in interviews lead to the conclusions stated below. Each one is followed by strategic recommendations to enhance future approaches to national disaster risk management. It is expected that further discussions among the principal authorities concerned in Government and with primary international development organizations can engage a common process to be pursued vigorously with the mutual recognition of coordinated and distributed responsibilities. While there appears to be a general willingness on all sides to do this, there are opportunities now to consider additional mechanisms that can both motivate and accomplish this intention.

The preparation of a joint action plan to be implemented over a phased period of time is suggested as a means to develop a consortium of interests to focus on priority subjects and to identify existing resources and capabilities including commonly accessible information and relevant data. Ideally such efforts to commit such shared interests for common purpose can support national objectives for enhancing Mongolia's disaster risk management capacities fully integrated within the country's development expectations.

There is an urgency to proceed with the determination and acceptance of strategic decisions about future DRM directions in Mongolia as several international development and disaster risk agendas are converging during 2015. Every indication suggests that "The Future We Want" as universal global development commitments after 2015 will seek the close association of green development, environmental management, climate change mitigation and adaptation with disaster risk reduction to further community resilience and human security. With its own dynamic growth and priorities Mongolia is well-positioned to capitalize on these combined initiatives, but it will benefit from adopting a broader involvement of disaster risk management across the society. To be successful and suited to future requirements ahead, revised DRM approaches will need to be defined from current risk drivers rather than only by preparing for the familiar disasters of the past.

Primary Conclusions and Recommendations

Conclusion 1.

Mongolia has established a basic recognition and commitment to disaster protection and has progressively developed institutional capacities based on legislation over the past decade. However even as preparedness and emergency management abilities have increased and NEMA's designated role provides a useful national foundation for the subject, much of the national DRM thinking remains focused on preparing for or responding to recognized disaster events. This is insufficient to meet future needs, but NEMA's recognition to define these issues more effectively in a changing Mongolian environment is a decided asset that should be supported.

Much greater attention will be required to identify, assess, continuously monitor and manage emerging disaster risks in a more comprehensive and strategic manner. This will depend on a wider and more encompassing understanding of disaster risk management, throughout the society than presently exists.

Conclusion 2.

The rapidly changing socio-economic conditions in the country, combined with the distinctive and area-specific geophysical and climatic characteristics of both urban and rural human habitats require that future DRM strategies be pursued on a continuing basis, and within the development agendas of different sectors and ministry activities (i.e. “mainstreaming” principles). It is similarly anticipated that DRM will become more widely represented within and among various UN and international organization programming strategies.

Expanded inter-sectoral and trans-disciplinary involvement in DRM planning and activities will require the participation of more varied professional interests and ministerial or agency actors. This implies systematic attention to building a coherent community of interests that spans government and external organizations, working towards common objectives through the actors’ different and distributed abilities and resources.

Conclusion 3.

Expanded management coordination of national DRM purpose and priorities, and organizational cooperation in mutually reinforcing programme and resource commitments will become necessary as more DRM relationships are established to address key objectives or specific programme accomplishments. NEMA provides an important base from which to proceed and should be supported, but as it is presently constituted it cannot realistically be expected to fully address or coordinate all aspects of comprehensive DRM. While inter-ministerial policy coordination, preparedness and response at the time of crisis or disaster is vested in the State Emergency Council, a similar capacity for strategic planning, direction and coordination of on-going expanded DRM functions should be encouraged.

Appropriate means for the coordination of strategic approaches to DRM across development sectors and to insure the effective incorporation of multiple external resources and technical assistance should be encouraged. Similar cooperation arrangements can be fostered among international organizations, technical assistance agencies and development banks through the creation of a “Development Risk Consortium” to advance common DRM interests for greater synergy and effectiveness.

Conclusion 4.

Important future directions for DRM are expressed in the State Policy and Programme for Disaster Protection,³² although additional operational arrangements, technical abilities and capacities will likely be necessary to fully accomplish those functions. These include activities related to comprehensive risk assessments, creating greater resilience among local communities (e.g. “community-based disaster risk management”), expanded outreach and involvement of civil society, and the expanded use of early warning system or advanced risk monitoring technical capabilities.

³² See the General Guidelines on State Disaster Protection Policy above, on page 10.

Specific types of capacity development will be beneficial for advancing Mongolia’s demonstrated abilities in more comprehensive DRM. A pre-requisite for developing a multi-tiered level of national capacity development for DRM is to conduct capacity assessments and related skill requirements for different aspects of DRM service functions intended to meet the distinctive needs for both urban and rural populations. Additional learning resources and capacities can be sought through the identification and wider involvement of technical, scientific, academic and research abilities. Consolidated data, information and knowledge management systems are another primary requirement.

Conclusion 5.

Political interest and initial financial resources appear to be available to initiate what should be a multi-year approach to achieving more comprehensive DRM in the context of Mongolia’s current development objectives. However, it is important that political commitments remain or are elevated to a high level of national authority and that external funding commitments be assured so that momentum can be sustained. Disjointed or periodic project approaches pursued separately within individual sectors, or by isolated funding initiatives divorced from the commonly agreed needs could be duplicative or wasteful.

A multi-year “development action plan for DRM” may be considered as a useful mechanism to set targets for both financing and accomplishments. It will provide a basis for adopting and pursuing a more strategic vision of the subject, provide a framework for both existing and future participants, and invite a more consolidated resource stream from multiple sources. Such arrangements have been pursued successfully in other countries which have previously embarked on transforming their national commitments for a safer society over several years.

Strategic Proposals for Enhancing Disaster Risk Management

Considering the previous discussion, four strategic proposals are recommended to enhance DRM planning, policy development and implementation. They relate to each other and together they form a set of relationships that span preparedness or disaster management requirements while emphasizing the development of more comprehensive DRM roles and responsibilities. The proposals proceed from concepts expressed or implied in Mongolia’s disaster protection legislation, but they will also inform possible modifications that may be necessary to address future needs. To be effective the proposals will require the fullbacking of high-level national leadership and sustained resource commitments.

The proposals recognize that comprehensive DRM must extend to sub-national and local jurisdictions (e.g. *aimags* and *soums*), as well as being associated with established governmental structures in capital city, metropolitan and other urban areas. However, it should be noted that individual activities that could be implemented under the various proposals may have greater or lesser emphasis in different habitats given the subjects involved. The primary point is that the proposals apply to advancing DRM throughout the country and have various emphases. Each will therefore depend on a different mix of primary actors and are able to be shaped by the particular needs of the subjects to which they apply. They are essentially strategic tools to create or improve comprehensive DRM capacity throughout the country.

The success of the proposals will depend on the full understanding and participation of local communities and the people as they are the ones who are ultimately affected by, and sometimes partially responsible for, the disaster risks affecting their lives and livelihoods. People’s

participation will be encouraged by the free and open exchange of information which is essential among all participating parties. Cumulative technical data as well as operational monitoring of effectiveness are critical for successful implementation so there is a need for standard procedures for information and knowledge management to be built into action plans.

Proposal 1

Emphasize and collectively reinforce a wider understanding of DRM and its expanded relevance to national development objectives. This will include DRM's association with, but also recognized distinctions from, preparedness and crisis management in considering their respective roles and responsibilities of planning, coordination and implementation. The process also can take stock of collective views that can contribute to future modification of disaster protection and risk management legislation.

This will necessarily involve an expanding range of participating authorities, international development organizations and implementation agencies or government departments working in close association with national development objectives. A better understanding of DRM will result from an extended and consistent approach grounded in Mongolian risk conditions, government development emphasis and informed international DRM concepts. The realization of effective DRM practice goes beyond matters of terminology and definition. Ideally it will encompass an expanding range of interested parties, diverse skills and abilities and a rich set of interacting professional and governance relationships.

The United Nations Development Assistance Framework (UNDAF) for 2012-2016 recognizes "reduced risks and consequences of natural and man-made disasters at national and community levels" as a key outcome of its strategic priority focused on the environment, climate change and risk reduction.³³ In addition to "the need for greater disaster preparedness, coordination and management at all levels", the framework recognizes the strong need to integrate ("mainstream") the Hyogo Framework's disaster risk reduction principles into sector policies and programmes. The UNDAF also calls for an improved understanding of climate change and the importance of its adaptation for vulnerable sectors and communities.

The promotion of a wider understanding of DRM and its particular relevance for ensuring the continued national benefits of development accomplishments should be guided by the primary elements, international practice and regional experience in DRM/DRR such as those conveyed through the biannual sessions of the Global Platform for Disaster Reduction.³⁴ The "Synthesis Report Consultations on a Post-2015 Framework on Disaster Risk Reduction" is a primary reference which identifies key concentration areas for enhancing future DRM.³⁵ Some of the areas of emphasis which can be particularly useful to guide Mongolian efforts include the enhanced understanding of risk, DRM emphasis for local governments and citizens, economic opportunities and private sector investment, leveraged benefits of integrated approaches to DRM, and advances in science and technology. The report also provides a synthesis of international discussions of DRM policy makers and practitioners regarding local action at community levels, integrated approaches to DRM, and the creation of more effective enabling environments to advance DRM in practice.

³³ Outcome 8 of Priority 3 of the "United Nations Development Assistance Framework, 2012-2016", Government of Mongolia and United Nations, 2011.

³⁴ The most recent 4th Session of the Global Platform was convened in Geneva, Switzerland from 21-23 May 2013, and was attended by three senior Mongolian officials involved with national DRM policy development and implementation practice.

³⁵ Synthesis Report Consultations on a Post-2015 Framework on Disaster Risk Reduction (HFA2), UNISDR, April 2013.

The latest biannual Global Assessment Report on Disaster Risk Reduction 2013³⁶ is an extremely valuable resource for evolving national strategies for DRM/DRR. With a wide-ranging commentary on the economic rationale and development imperatives for comprehensive DRM this is a definitive volume for making the business case for disaster risk reduction. The document should be circulated and considered widely in Mongolia with particular relevance for NEMA, the Ministry of Economic Development, The Ministry of Environment and Green Development, the Ministry of Finance as well as other line ministries already engaged in disaster risk management.

By working together with NEMA, the United Nations and other primary international organizations such as the World Bank, the Asian Development Bank, the IFRC and others should establish means to expand the understanding and future responsibilities of DRM among current and future practitioners in the field drawn from within and beyond Government. This can best be pursued by initiating a series of meetings and events both among and within the various organizations involved with the subject in Mongolia to share information about current activities and future opportunities to advance DRM policy and practice. Experience can be shared and concerns voiced while expanded organizational contacts are likely to develop combined interests, concentrate resources, identify information and reference material. The United Nations and NEMA will host an initial one day “DRM Stakeholder’s Meeting” during the week of 17 June 2013 to initiate a process of wider DRM participation and shared interests. By approaching this opportunity jointly, the participants would hope to compound their respective DRM interests while also providing additional access to speakers, subject experience, and resources that none would otherwise possess alone.

Proposal 2

Develop and support a “Consortium for Disaster Risk Management” that provides an organizational structure for the various parties from positions of Government responsibilities and external or international interests. The proposal would rest on the ability to identify and engage key collaborators among leading individuals and dedicated organizational interests and abilities to advance enhanced DRM in Mongolia.

Ideally such a consortium should be informed initially by and through designated Mongolian authorities, but should be established in such a way as to include wide representation of disaster and development risk management interests from official, professional, civil society and international actors. An example of the concept, its intended role and purpose can be seen from the Nepal Risk Reduction Consortium (NRRC). Some of its ideas may be adapted to meet Mongolia’s interests and needs for developing a comprehensive DRM strategy.³⁷

Not to be confused with the idea of a “national platform”, the NRRC was formed in May 2009 by primary development assistance organizations and international disaster risk management frameworks committed to supporting the Government of Nepal in its efforts to develop a long-term Disaster Risk Reduction Action Programme. As the founding organizations ADB, IFRC, UNDP, UN-OCHA, UNISDR and the World Bank worked together with the Government to establish three mutually desired objectives. This collective approach was conceived first to support the Government of Nepal in developing its long-term DRR Action Plan building upon a

³⁶ Global Assessment Report on Disaster Risk Reduction 2013 From Shared Risk to Shared Value: The Business Case for Disaster Risk Reduction, United Nations, 2013. <http://www.preventionweb.net/gar/> (accessed 23 May 2013).

³⁷ For additional information, see <http://un.org.np/coordinationmechanism/nrrc>

newly created National Strategy for DRM. Second, the participants wished to initiate and advance a multi-stakeholder participatory process between the Government and civil society. Third, the consortium could identify and seek to obtain resources for mutually recognized short- and medium-term DRM/DRR priority activities.

Consortium members identified five flagship areas for their combined action. These were i) selected project activities that spanned specific national DRM/DRR priorities; ii) emergency preparedness and response improvements; iii) a primary flood management programme; iv) integrated community-based or local DRM/DRR programme initiatives; and v) policy and institutional support for the development of national DRM/DRR capacities in Nepal. Through their joint commitments the members of the consortium have provided or leveraged resources to support a three year budget of \$148 million.

There could be additional opportunities to progressively build key associated relationships among ministry or sectoral elements crucial for Mongolian DRM conditions. These should be based on the shared objectives of leading government and other institutional actors who are engaged in different dimensions of over-arching DRM subject areas (e.g. health, climate change, urban risks, information and data management, etc.). Alternatively, the shared operational interests could be furthered by a greater degree of integration between risk identification, risk communication and development activities involving various sectors (e.g. community-based resilience activities, enhanced public participation mechanisms, or specific types of 'capacity-building', etc.). While these initiatives relating to operational or implementation responsibilities would result from core needs or expertise essential for DRM, the subjects would have wider relevance to various ministries or departments. The operational concerns also should be adjusted depending on whether the programmes were to be focused on either national, aimag or UB district levels of involvement.

Several key subject based DRM consortia may be stimulated and encouraged by the particular government authorities or ministries concerned and jointly encouraged by other international, NGO, academic/technical, commercial or private sector interests. The Ministry of Health has initiated a simplified concept of this idea by bringing various departments within the Ministry of Health dealing with different disaster risks in their routine programme responsibilities to relate on a continuous basis with the Office of Emergency Medical Services and Disaster Management. Increased intra-ministerial risk concerns, have been mirrored by additional external association and shared interests with other risk-related offices in other ministries. These include networked relationships with the State Inspection Agency (for matters of food safety), the Ministry of Industry and Agriculture (for zoonotic disease issues), with the Municipality of Ulaanbaatar (for urban and public health concerns), with NEMA (for widespread preparedness and contingency planning), etc. It is expected that similar outreach relationships also are pursued by the Climate Change Coordination Office in the Ministry of Environment and Green Development.

Interviews suggest that in addition to NEMA and the offices mentioned above, there are other authorities which are well-placed to expand wider DRM commitments to their existing inter-disciplinary developmental roles. The National Agency for Meteorology and Environment Monitoring is a primary provider of information, data and technical monitoring abilities of environmental, climate, meteorological hazards, and other emerging risks. The Strategic Policy and Planning Department of the Capital Area of Ulaanbaatar and the multiple technical abilities within the Ministry of Construction and Urban Development are highly attentive to various aspects of urban risk and development. No doubt there are other critical DRM capacities which exist within development contexts which can be linked to future DRM commitments.

A specific activity of this proposal would be to organize a series of “DRM Dialogues” for technical and programmatic practitioners convened jointly by NEMA, UNDP and the World Bank. The series would consist of six to nine, linked, two-day workshops over a nine to twelve month period with a designated ministry invited to be the agenda planner for each event. Subjects would be over-arching elements of DRM which are neither single hazard- nor specific ministry-determined issues and they would need to address DRM practice in multiple dimensions. Primary emphasis would be given to the growth and transition of DRM practice in developmental contexts, and related to matters of the combined roles and responsibilities required for strategic subject planning and practical DRM accomplishments. The overall objective would be to create a more knowledgeable and professionally connected community of DRM practice

The workshops would involve senior officers engaged in programme implementation with applied DRM experience in their respective fields. It is intended that participants would be drawn from different institutional bodies or offices, but with all of them associated with DR. They would be expected to provide relevant subject resources, reference material and implementation experience. An external international or regional expert would be invited to provide wider professional insights and experience. Agendas would include common description of primary subject roles or elements, while encouraging shared knowledge of participants’ different activities, techniques or methodologies, information/data and professional resources related to the subject. The dialogues would be expected to expand wider professional understanding and implementation of DRM in practice, with common approaches and shared institutional values in various ministries or departments at national, aimag/soum, or in capital area districts. The combined workshops will encourage and motivate enhanced professional networks engaged with DRM, with the benefits of added inter-disciplinary experience.

Proposal 3

Pursue risk assessment processes as a primary, shared activity with common purpose, but different emphases considering the variety of disaster risks in Mongolia. Risk assessments are essential for any coordinated, strategic and effective DRM programme. The process of designing and conducting them has proven to be an excellent mechanism to expand and focus a professional community of multiple interests working towards a commonly recognized need or disaster risk.

The subject already is highlighted as a primary objective of the Mongolian State Disaster Protection Policy and Programme and it is a priority interest of NEMA. Assessing risks was also highlighted as a primary future emphasis of the global HFA process as the 4th Global Platform noted that “the dynamic aspects of risk require more holistic and comparable methodologies for risk assessment that can be used for improved and science-informed decision-making”.³⁸ However it is also an extended and complicated process that involves a number of organizational, technical and analytical abilities. Often disaster risk assessments are understood only, or largely in terms of specific hazards rather than considering multiple risk drivers or the combined exposures to risks of a specific population or geographical location. Other instances of risk assessments concentrate primarily on engineering or the physical nature of exposure without giving due regard to the different types of vulnerability or the relative exposure determined by socio-economic, or environmentally determined conditions of the

³⁸ Draft Chair’s Summary of the 4th Session of the Global Platform for Disaster Risk Reduction, “Resilient People, Resilient Planet”, Geneva, 21-23 May 2013.
http://www.preventionweb.net/files/33306_chairsummarypostdraft1.4.pdf (accessed 23 may 2013).

potentially affected people and places. A well-structured risk assessment also identifies essential resources or local abilities which exist among the focus group concerned, but which may not have previously been associated with risk management opportunities.

There are several disaster risk assessment initiatives underway to assess different hazard risks in Mongolia. They appear to be proceeding for different purposes, and are being conducted by various agencies or organizations, with different methodologies and for a variety of purposes. It is unclear how many are focused primarily only on exposure to hazards or assessing the predominant aspects of physical exposure indicated mostly by engineering techniques and criteria. Socio-economic criteria and vulnerability assessments are less frequently included in risk assessments, in part because vulnerability is particularly difficult to measure and evaluate. It is also common that when multiple risk assessments are being conducted by different parties for various reasons and to inconsistent standards, there is a high likelihood that multiple datasets and different information sources are used. There are some indications that some of these problems may be current in Mongolia.

Such variations can easily introduce wide-ranging and perhaps even contradictory conclusions. If different parties, or ministries use, or interpret various risk assessments in isolation, or for different purposes their value is greatly diminished and may also be compromised. While specific cases have not been identified, there also can be a potential concern that when multiple risk assessments are being conducted by different parties, biased results may be produced in the interests of a particular professional sector or economic interests without due regard for the need of open and perceptive approaches to the subject. Differing views about economic opportunities and environmental or health concerns related to human security can invite very different value streams which influence conclusions.

By contrast there is considerable experience elsewhere that illustrates how well-planned and coordinated comprehensive disaster risk and vulnerability assessments can be a highly beneficial process. They can advance strategic interests and expand levels of participation across multiple programme sectors, operational ministries and departments. If they are well-conceived, comprehensive and with the inclusion of viewpoints from various population groups and local communities most immediately affected they can be very useful for determining various policy options and priority concerns. Invariably new sources of information, unexpectedly existing technical abilities, newly collaborative working arrangements, and wider degrees of public input and participation are generated by deliberate and well-considered disaster risk assessment processes.

Therefore this proposal for a strategic approach to conducting risk assessments in Mongolia should be viewed as much for its beneficial attributes as a matter of organizational development, capacity development and expanding professional relationships relevant for strategic DRM objectives. Risk assessments also need to pursue the additional tangible benefits of generating information and analytical assessment of relative risk severities, population vulnerability and exposure, and various policy options, costs and benefits. The conduct of these related assessments highlights the need for essential information and data, which is often scattered among different departmental locations. Risk assessments also encourage the use of updated technologies such as GIS applications, remote sensing, contemporary modeling techniques and even electronic or crowd-sourced information. These innovations can provide a more efficient and effective analysis to the work while also increasing technical capacities.³⁹

³⁹ The facts that 74 per cent of the Mongolian population aged 6 and above use cell phones, and 31 per cent of the entire population use the internet on a regular basis suggest new possibilities for information use in public

In the course of interviews the author became aware of the recent completion of a “Vulnerability and Capacity Assessment” (VCA) by the IFRC and Mongolian Red Cross Society (MRCS) in all 21 aimags and the nine districts of Ulaanbaatar Municipality. The final report will become available in late June 2013. The community-based VCA technique is well-established internationally, and is highly regarded as being both participative and reliable in reflecting communities’ views. The technique is particularly valued in developmental terms because it solicits communities’ views of their respective vulnerabilities to various risks identifying what they consider to be their own capabilities for addressing those risks.

A VCA is not a comprehensive risk assessment, but it is an essential component of one, and provides crucial information that is often overlooked in more limited hazard assessments. Significantly the IFRC/MRCS assessment process involved ten independent academic specialists to insure the full expression of public and social considerations in the analysis.

A coordinated effort led by NEMA to take stock of the various risk assessments completed, underway or contemplated would be useful to determine the extent of their compatibility or remaining gaps that need to be filled. The process will be an opportunity to engage the various parties involved both inside and working in support of government DRM objectives, and begin to grasp the range of existing information and useful data sources. A future risk assessment work plan then can be composed to drive a coordinated set of assessments that can be structured to take advantage of the complementary process elements described above.

Proposal 4

The period between 2013 and 2015 is very advantageous to introduce and support a longer-term dialogue and collective engagement process for advancing a comprehensive national multi-year DRM strategy. The Government could use this period of international emphasis of associating climate, environmental, development and disaster risk management for combined effect and the further direction of resources for the next stage of strategic planning and setting implementation priorities for coming years.

There are various mechanisms that could be considered by Government, with anticipated collective support by the international community. There would be multiple economies of scale involved as “The Future We Want”, international climate agreements and resource commitments, and the advanced negotiation of a revised Hyogo Framework for disaster risk reduction will all be proceeding with shared objectives for implementation after 2015. The Government may consider appointing a time-bound “special commission” or a “joint council” involving NEMA and other relevant agencies and ministries to direct the process together and to heighten the visibility of DRM renewal within wider national development interests. Possibilities that have been used effectively elsewhere include similar national commissions under the equivalent bodies as the State Emergency Council, the Office of the Deputy Prime Minister, or possibly a joint-party Parliament Committee.

The post-HFA dialogue process and the key outcomes from the 4th Session of the Global Platform for Disaster Reduction can provide guiding direction and beneficial opportunities for Mongolian officials to share in wider international and regional experience.⁴⁰ The indication that the HFA 2 will focus on implementation “with a need to govern disaster risk reduction and

expression related to DRM activities. *Source:* National Standards Office, http://www.nso.mn/v3/index2.php?page=news_more&id=772 (Accessed 2 May 2013).

⁴⁰<http://www.preventionweb.net/globalplatform/2013/> (accessed 23 May 2013).

resilience with clear responsibilities, enabling local action and addressing climate risks ...” make it particularly compatible with some of Mongolia’s DRM interests. Its additional encouragement “to address the causes of risk by including the roles and contributors of stakeholders” can provide additional impetus to the risk assessment proposal suggested above.⁴¹

Appointing such an arrangement would provide an agreed timetable and enable benchmark events to be set. These may include such events or output goals as revising future DRM legislation, committing to a national risk assessment strategy, or other crucial accomplishments. This can be based on a continuing review of Mongolian experience in various ministries and different sectors related to all aspects of DRM, serving as a further opportunity to update the collective knowledge of current DRM activities, and building a wider community in the process.

The evidence of national commitment to address Mongolia’s growing disaster risks can only benefit from the current programme opportunities and international support for the subject. Both the current timing through 2015 and the availability of policy and technical resources are conducive to creating a revitalized and forward-looking disaster risk reduction strategy to insure future national development accomplishments.

⁴¹ The Way Forward in the Draft Chair’s Summary of the 4th Session of the Global Platform for Disaster Risk Reduction, “Resilient People, Resilient Planet”, Geneva, 21-23 May 2013. http://www.preventionweb.net/files/33306_chairsummarypostdraft1.4.pdf (accessed 23 may 2013).

ANNEX 1

People Interviewed about Mongolia Disaster Risk Management Issues

by Terry Jeggle, Advisor to UN Resident Coordinator in Mongolia (as of 20 May 2013)

Government of Mongolia Officials

National Emergency Management Agency (NEMA)

Mr. T. Badral Deputy Chief of NEMA
Ms. Altanchimeng S. Head of International Relations Division
Mr. Batmend R. Director, Policy Planning and Cooperation Department
Mr. Boldbaatar B. Head of Policy Department
Ms. Ch. Tuya NEMA Liaison Officer with National Agency for Meteorology and Environmental Monitoring

Ministry of Construction and Urban Development

Mr. G. Mergenbayar Director General, Strategic Policy and Planning Department
Mr. Tsedensamba B. General Director, Department of Construction and Building Materials, Policy Implementation and Coordination
Mr. Bor T. Senior Officer, Construction and Building Materials, Policy Implementation and Coordination Department
Ms. E. Dondmaa Senior Officer, Urban Development and Planning
Ms. A. Lkhamserjid Senior Officer, International Cooperation Division (contact and translator)
Ms. Batkhishig Senior Officer, Labor and Safety Hazards
Ms. D. Erdenechimeg Senior Officer-in-Charge, Sector Training, Labour Force and Specialist

Ministry of Health

Mr. J. Khatanbaatar State Secretary for Health
Dr. Ch. Bayarmaa Officer-in-Charge, Emergency Medical Services and Disaster Management

National Agency for Meteorology (Hydrology) and Environment Monitoring

Mr. Tseesodroltsoo D. Deputy Director General

Ministry of Industry and Agriculture

Mr. Ganibal N. Director General, Livestock Policy Implementation and Coordination Dept.

Ministry of Economic Development

Mr. Batkhurel G. Head of Integrated Planning Division

Ministry of Environment and Green Development

Mr. B. Gantulga Director General, Department of Policy Implementation
Mr. D. Dagvadorj Special Envoy for Climate Change, Chairman of Climate Change Coordination
Ms. T. Battsetseg Officer of Climate Change Coordination Office

Ministry of Education and Science

Ms. B. Nasanbayar Director, Department of Strategic Policy and Planning

Ministry of Mining

Mr. Ch. Otgochuluu Director General, Department of Strategic Policy, Planning
Mr. Tsogtbaatar Sr. Officer for Mine Safety

Secretariat of the Governor for the Capital Area of Ulaanbaatar

Mr. Bayarbaatar S. Director, of Strategic Policy and Planning Department

United Nations System and Agencies

Ms. S. Sinanoglu	United Nations Resident Coordinator and Resident Representative, UNDP, Mongolia
Mr. Martin R.	Programme Analyst, Office of the UN Resident Coordinator
Ms. Tsetsemaa A.	UN Coordination Specialist, Office of the UN Resident Coordinator
Mr. Erdenebulgan D.	Administrative Liaison Assistant, Office of the UN Resident Coordinator
Mr. V. Sidlauskas	Security Adviser, Department of Security, United Nations in Mongolia
Mr. T. Eriksson	Deputy Representative, UNDP
Ms. Bunchingiv B.	Environment Team Leader, UNDP
Ms. Ariuntuya O.	Technical Officer, Emerging Disease Surveillance and Response, WHO
Mr. Buyannemekh C.	Emergency Focal Point, Project Manager, FAO
Mr. J. Marinos	Information Management Officer, UN-OCHA, Regional Office, Bangkok

International and Bilateral Organizations

World Bank

Mr. Boldbaatar Sh.	Consultant for Support to Disaster Risk Management, World Bank, Mongolia, (Former Chief Technical Advisor for UNDP Project Strengthening NEMA, 2005-2011)
Ms. Toyoko Kodama	Operations Officer, Infrastructure Unit, Sustainable Development Department, East Asia and Pacific Region. (Washington D.C.)

Asian Development Bank

Mr. R. Schoellhammer	Country Director, Mongolia Resident Mission
Ms. Ongonsar P.	Environmental Specialist
Ms. Itgel L.	Senior Social Sector Officer

International Federation of Red Cross and Red Crescent Societies (IFRC)

Mr. T. Danielsson	Head of Delegation, IFRC, Mongolia
Mr. Enkhjin G.	RRCR Project Manager, Acting Principal Adviser of Programs Development & Coordinator

Japan International Cooperation Agency (JICA),

Project for Strengthening the Capacity of Seismic DRM in Ulaanbaatar City

*Mr. M. Arakida	Project Director (*absent at time of visit, to be followed-up)
Mr. S. Fukushima	Deputy Leader, Seismic Risk Assessment, Earthquake and Structural Engineer
Dr. Y. Ogawa	JICA Expert, Building Administration and Seismic Resilient Urban Planner

Individual Personal Contacts

Mr. Batjargal Z.	Independent Advisor, organizational development, meteorology, disaster risks
Prof. Oyun R.	Independent Consultant on climate change, environmental management and disaster risk management, JEMR Co.
Prof. Tsedev P.	Researcher, Center for Military Education and Training, Mongolian Institute for Defense Studies
Mr. TuulChantsal	Electronics engineer and businessman
Mr. Hans-Jurgen Fulle	Technical Advisor, Cropping, Ministry of Agriculture

Mr. Fabien _____ Technical Advisor, Cropping, Ministry of Agriculture

***Pending Interviews**

National Emergency Management Agency (NEMA)

*Mr. T. Dulamdorj Chief, National Emergency Management Agency

Ministry of Ministry of Education and Science

*Prof. N. Begz Director, Institute of Education and Curriculum Development
(Not available until mid-June)

National Academy of Science

*To be determined

Technical University of Mongolia (other higher education institutions to be identified)

*To be determined

Ministry of Population and Social Services

*To be determined

Ministry of Roads and Transport

*To be determined

Mongolia General Department of Inspection

*To be determined

World Bank

*Ms. C. Geevers Country Director, World Bank, Mongolia

“German International Cooperation” (GIZ)

*To be determined

Swiss Development Cooperation (SDC)

*To be determined

World Vision

*Mr. V. Edwards Country Director, Mongolia

*Ms. U. Nyamaa Humanitarian and Emergency Affairs Officer

Mercy Corps

*To be determined

ANNEX 2

Current Internationally Supported or Considered Disaster Risk Management Projects and Programmes in Mongolia - 20 May 2013

Organization	Description of Activity	National or Local Partners	Start & End Dates	Contact person, details
Asian Development Bank (ADB)	<i>Initial consideration</i> Planning possible DRM programme including support and technical assistance in areas of urban risk and development, environment, health etc.	Ministry of Economic Development, Ministry of Construction and Urban Development Municipality of UB, NEMA	Tentative 2013 -2016 (depending on finalized programme)	Mr. R. Schoellhammer Country Director, Ms. Ongonsar P. Environmental Specialist
IFRC/MRCS	Mongolia-wide Vulnerability Capacity Assessment – Conducting nation-wide assessment of vulnerabilities and capacities at community levels in 21 aimags and 9 districts of UB. The principal objective is to determine actual vulnerabilities and locally considered capabilities or resources from a community perspective. A comprehensive report is expect on/about 21 June.	MRCS, NEMA,Local Government	July 2012 - June 2013	Thor Danielsson, Country Representative
IFRC/MRCS	Primary and secondary school risk reduction, disaster preparedness and response - About 60,000 school children and 4,000 staff from up to 50 public primary and secondary schools in Ulaanbaatar will be trained in school-based programmes on behavioral change and earthquake disaster preparedness.	MRCS, NEMA,Local Government, Ministry of Education	July 2012 - June 2013	Thor Danielsson, Country Representative
IFRC/MRCS	Disaster Risk Management Legal Framework - Strengthen the legal and policy framework in Mongolia relating to DRM initiatives - including providing support to the development of an enhanced National Disaster Response Law from international experience.	MRCS, NEMA	May 2012 - June 2014	Thor Danielsson, Country Representative

IFRC/MRCS	Community-Based Disaster Preparedness – Community-based programmes strengthening community resilience to disasters (70% urban population throughout Mongolia, 30% rural areas) targeting 18 aimags and Ulaanbaatar City.	MRCS, NEMA, local government	June 2011- May 2015	Thor Danielsson, Country Representative
JICA	Seismic Disaster Risk Management in UB City. Phase I: Comprehensive seismic risk assessment including the production of a risk map, a risk management plan, building construction guidelines, capacity development, public awareness activities.	Emergency Management Department of UB, Ministry of Construction and Urban Development	March 2012 - June 2013	Team Leader: Mr. Arakida (masaru.arakida@gmail.com) Project office: +976-9591- 9514/+976-9591-5911
UNDP	Improving Emergency Management Capacities at both policy development and community levels	National Emergency Management Agency (NEMA)	2002-2016	Ms. Bunchingiv B. bunchingiv.bazartseren@undp.org Mr. Martin Ras martin.ras@one.un.org
UNESCO	Earthquake Risk Reduction in the Northeast Asia Region – A sub-regional network to initiate cooperation on earthquake data analysis in the Northeast Asia Region, jointly promoted by UNESCO, the USGS and Earthquake Administration / Geological Surveys (comprising DPRK, Japan, Mongolia, China, the Republic of Korea and the Russian Federation). First meeting held in China. Members agreed to meet biannually to update the seismo-tectonic maps of each country, to evaluate seismic movements in the sub-region and combine information for regional and global databases and mapping	Department of Seismology Research Center for Astronomy and Geophysics, MAS of Mongolia; and U.S. Geological Survey (USGS)	Started in 2010	Dr. Ramasamy Jayakumar, Programme Specialist for Natural Sciences, UNESCO - Beijing (r.jayakumar@unesco.org)
UNFPA Gender Based Violence sub- cluster (led by UNFPA)	Improve preparedness on GBV prevention and service provision during the emergencies through awareness raising, capacity building, and establishing coordination mechanism among partners. Annual work plan is being carried out based on the sub cluster contingency plan	National Center against Violence	Jan-Dec 2012	Ms. Uranchimeg Bavuudorj, UNFPA Ms. Eri Taniguchi, UNFPA Ms. Khureltsetseg B., NCAV

UNFPA Protection Cluster	Protection cluster is carrying out work plan based on goals and objectives specified in a contingency plan. Includes training on protection, gender, introduction of international laws, humanitarian framework, policies, procedures, standards, tools and good experiences from other countries.	Ministry of Population and Social Welfare	Jan – Dec 2012	Ms. UranchimegBavuudorj, UNFPA; Ms. Dolgorsuren, Min of Population and Social Welfare
UNFPA Child Protection sub-cluster	Child Protection sub-cluster aims to improve preparedness for child protection in emergencies through capacity building of member organizations, introducing key protection concerns for children, international standards and tools, methodologies and experiences from global are of child protection network. Annual work plan is being carried out based on the sub cluster contingency plan	National Authority for Children (NAC)	Jan – Dec 2012	AmraaDorjsambyy, UNICEF, Ms. Myagmar NAC (262814)
USAID/OFDA	Incident Command Systems Training for the National Emergency Management Agency in Mongolia.	U.S. Forest Service	FY 2012	Alyson McFarland - USAID/Mongolia amcfarland@usaid.gov
World Bank	Technical assistance to the Municipality of Ulaanbaatar on flood risk management , focusing on development of a risk map, DRM plan, and dissemination (PHRD).	Municipality of Ulaanbaatar	Jun 2012 – Dec 2014	Toyoko Kodama tkodama@worldbank.org
World Bank	Construction and rehabilitation of priority flood protection channels in selected ger areas (USIP3).	Municipality of Ulaanbaatar	mid 2013 - 2016	Toyoko Kodama tkodama@worldbank.org
World Bank / European Union / Japan	Pastoral Risk Management component of Second Sustainable Livelihoods Project. Supports herders by providing tools for planning risk management activities and investment funds (grants) for infrastructure.	Ministry of Finance, with Min of Industry and Agriculture,	mid 2008 to mid-2013 Third phase planned from mid-2013 - 2017.	Andrew Goodland; Charles AnnorFrempong; ErdeneOchirBadarch
World Bank / European Union / Japan	Livestock Early Warning System	Ministry of Finance; Mercy Corps; National Dept. for Meteorology and Environmental Monitoring	Mid-2008 to mid-2013. Third phase planned from mid-2013 – 2017.	Andrew Goodland; Charles AnnorFrempong; ErdeneOchirBadarch

World Bank / SDC / Japan / Korea	Index-based Livestock Insurance Project: providing commercially rated insurance to herders for dzud losses; has reached nationwide level as of 2012	Ministry of Finance; Financial Regulatory Commission; local insurance and intl.reinsurers	mid 2005 - March 2014 (May be extended)	Andrew Goodland; Charles AnnorFrempong; ErdeneOchirBadarch
World Bank / Japan (PHRD)	Technical assistance to support information system for dzud-related disasters , including linking Livestock Early Warning System	Sustainable Livelihoods Support Office, (Ministry of Finance); NEMA	Jun 2012 - Dec 2014	Andrew Goodland; Charles AnnorFrempong; ErdeneOchirBadarch
World Bank – Global Facility for Disaster Recovery and Reduction (GFDRR)	<i>Under preparation</i> National DRM Stocktaking for wider GFDRR commitments - Strategic requirements in areas of administration, legal revision, budgetary requirements, possibly risk communications.	National Emergency Management Agency NEMA	Est. 3 rd Qtr. 2013 – mid-2014	Boldbaatar Sh. bshagdar@worldbank.org Toyoko Kodama tkodama@worldbank.org
World Vision Intl. Movement (WVIM)	Improving herder resilience to natural disaster project in Zavkhan province	Province NEMA Province Veterinary Soum Governor Office	2012-2014	Ulziimaa.N - WVIM HEA PO
World Vision Intl. Movement (WVIM)	Community Based DRR National Programme (program is drafted not yet approved by Government)	NEMA	2013-2015	Ulziimaa.N - WVIM HEA PO
World Vision Intl. Movement (WVIM)	CP DRR National Programme (not yet approved by Government)	National Agency for Children	2013-2015	Dashdorj.G WVIM HEA CBO
World Vision Intl. Movement (WVIM)	CP DRR Training of Trainers , training	WVIM, including participants from Save the Children, NEMA and UNFPA	2012 August	Ulziimaa.N - WVIM HEA PO

ANNEX 3

Summary of Mongolian Ministries and Agencies' DRM Interests Associated with Disaster Risk Management

considered by UN Advisor Terry Jeggle, as of 20 May 2013

Ministries and agencies or departments listed are those officially designated as State Protection Services under Mongolia Government Resolution 186 of 2012, *except for those additionally relevant DRM entities which are printed in italics*. Based on contacts or existing programmes, **ministries and agencies/departments printed in bold are considered to be active partners** in an expanding community of disaster risk management practice.

Ministry / Agency or Department	Interviewed, or Contacts	Explicit DRM Familiarity and Interest	Involvement, Activities	Subjects to Pursue, Follow-up	Additional Comments
<i>National Emergency Management Agency (NEMA)</i> <i>Not a ministry but an agency under the Office of the Deputy Prime Minister</i>	Yes. Several opportunities, plus attendance at some interviews	Yes, improved awareness over recent years, and with the mandate to pursuing wider coordination roles and further definition of DRM needs and responsibilities. More engagement with other ministries operationally and in seeking wider policy coherence.	Planning for national risk assessments in all aimags. Acknowledges need for law modification to meet current and future DRM needs. Anticipates support for capacity development – and material support for emergency operations.	Plan a Stakeholder meeting in later June. Obtain NEMA outcomes and potential Mongolian input from attendance at UNISDR Global platform. Begin inter-ministerial discussions and possible presentations from primary (or hoped for) champions and leaders.	Director and Head of International Division to attend UNISDR Global Platform. No wish for “national platform” at presently. National coordination of DRM is a central issue; need for mainstreaming is noted, but with few tangible directions currently identified.
Min. Health	Yes	Yes. Significantly. Extensive relationships within various health sectors and associated ministries and agencies with health related risk activities	Involved with avian flu monitoring and preparedness risk assessment and preparedness	Attentive to safer health facilities as well as effective preparedness for need in times of crisis	
Min. Construction & Urban Development	Yes	Yes. Very much engaged across departments and with key strategic activities. Entire team presented for interview meeting. Attentive and engaged on several fronts.	Working closely with UB Municipality and UB Strategic Planning. Also multiple inter-ministerial roles and contacts. Appears to be well-informed, strategic	Follow linkages between MC&UD with other associated departments in UB e.g. water and sanitation supply, health, environmental aspects,	Extensive integration of multiple risk factors throughout strategic urban planning, services provisioning, construction standards, and earthquake risk

			and very much engaged in multiple aspects of urban disaster risks.	etc.	potentials.
Min. Environment & Green Development	Yes	Theoretically yes, but initial impression was not encouraging. DRM inferred as being irrelevant to their mandate, beyond wildland fire suppression capabilities. Failed to express relevance to wider DRM roles and purpose.	Problematic, besides attention to “wildfires”.	Need better grasp of productive interface with NEMA and disaster risk issues, distinct from crisis management.	
Meteorology and Environmental Monitoring Agency	Yes.	Significant. Very active, respected and valued for inter-disciplinary data and electronic, GIS and monitoring abilities. Also engaged in early warning and climate relevance.		Wider roles of actors related to water are spread over numerous departments and agencies.	Primary technical data supplier
Climate Change Coordination Office	Yes	Yes, significantly. Values importance and close synergy with DRM.	Very conversant and experienced in the international discussion of DRM and CCA.	Strong recognition of relatedness between CCA national action and DRM practice	National Climate Action Plan
<i>Min. of Economic Development</i>	Yes	Risk awareness yes, but primary current focus is preliminary while attention focused on mining resources and macro-economic issues. May be theoretically supportive, if non-committal in substance.	Conducted initial developmental needs “preferences” in 320 soums, so involved with community participation processes – if not in terms of risk drivers or local identification of risks and threats.	Try to cultivate wider perceptions and seek to engage, slowly. Ascertain validity of “risk assessments” in aimag and soum communities.	New Ministry. High priority but still formulating itself. Identifies coordination of development needs (especially in terms of economic and budgetary planning), but less so with “disasters” or risk issues. There may be some potential interest in “risks”, but not well-developed, yet.

Min. Industry & Agriculture	Dept. of Animal Husbandry, Yes. Agriculture, No. Initial contact with FAO staff for dzud, rural livelihood and economics briefing. No contact with Industry.	Animal husbandry and Agriculture, yes. But, difficult to imagine a close or activist engagement with DRM in contrast to magnitude and priorities of other ministry responsibilities. Industry DRR awareness not known.	Focused on rural needs and conditions, and dzud, but also aware of the changing economics of agriculture and animal husbandry commerce, as well as effects on herder communities.	Many complicated and difficult issues. Importance of land, and extreme sensitivities of its management or regulation is a major issue with significant political and policy implications. In terms of disaster preparedness, dzud issues seem simple in comparison.	Unusual combination of interests in ministry, but reflects shifting views of economic growth and national interests. Has definite bearing on future risk factors and human security, particularly of rural population and for urban migration. Potentially an area of important and rapid changes.
<i>Ministry of Education & Science</i>	Yes, Education No, Science	Yes, aware, but clearly busy with many other things. Sees self as involved, but inferred as a peripheral player.	Over-committed in many aspects of national growth and development. Sympathetic to risk issues, but pre-occupied.	Need to access higher education and university references. DRR subject appears totally absent. No identified basis for national academic DRM research, other than within ministry activities. Needs further enquiry.	Science seems sidelined, except in terms of specific technical knowledge related to individual hazards. Not clear extent of policy influence, but likely to be slight ?
<i>Institute of Educational Curriculum Development;</i>	Postponed until June	Recommended and may be relevant.	Supposed to be excellent but very committed to national curriculum reform activities..	Try to develop a working relationship, shared interest and possible material access.	Create access and engagement of science. Identify DRM research interests.
<i>National Academy of Sciences</i>	Requested	NEMA has MoU for research activities. Unknown. Need a contact			
<i>Department of Seismology</i>	To request	Unknown. Need a contact			
Min. Mining	Yes	Expressed interest concentrated on mine safety and emergency preparedness for accidents and rescue.			Obviously important, but must be low initial priority. DRM is not the highest motivation.
General Dept. of Inspection	Brief contact at Min. Health meeting	Important, in determination, adoption and monitoring of compliance to standards.		Developed programme in food safety, through all aspects of sales,	To determine DRM roles in urban context and risk drivers.

				production, processing, importation and trade	
Min. Population & Social Welfare	No	Unknown			
Min. Energy	No	Unknown			
Min. Road & Transport	No	Not established			
General Dept. of Police	No	Informed by NEMA as having strong interests in emergency preparation	Involved in emergency operation preparedness & disaster event mgmt.		
Dept. of Information Technology, Posts & Communications	No	Unknown			To be determined
Dept. of Nuclear Energy	No	Unknown			Low initial priority
National State Media	No	Unknown.		To be pursued at later date.	
Secretariat of Capital City Governor – Ulaanbaatar UB departments mirror subject interests reflected in the "State Protection Services" at Capital Area level, but may reflect preparedness and event response. The Governor of UB is also the Mayor of UB.	Yes. Anticipate further and expanded contacts.	Yes, promising and willing to learn more. A crucial player with 60+% of national population; Serious future risk potential and positive indications of approaching a wide range of urban issues. But there is also a lot to do. Well connected with key ministries.	Completed Phase I Japanese earthquake risk assessment of UB infrastructure. Technical engineering emphasis – of Japanese technology and services.	Need to determine extent of wider DRR awareness within other UB departments. Interested in further discussions and experience elsewhere. Shared additional references and Synthesis paper for HFA2 dialogue.	Director General of Strategic Policy and Planning of UB Administration attended UNISDR Global Platform. Should become a central actor, associated with most other major international DRM initiatives, WB, ADB, etc.