TERMINAL EVALUATION of the

STRENGTHENING THE DISASTER MITIGATION AND MANAGEMENT SYSTEMS IN MONGOLIA PROJECT, Phase II

for

UNITED NATIONS DEVELOPMENT PROGRAMME
MONGOLIA

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October 25, 2007
**LIST OF TERMS, ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Aimag</td>
<td>Province</td>
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<tr>
<td>Soum</td>
<td>County</td>
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<tr>
<td>Bagh</td>
<td>The smallest administrative unit within a soum</td>
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<tr>
<td>Ger</td>
<td>Traditional round felt tent and abode of many rural Mongolians</td>
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<tr>
<td>Dzud</td>
<td>An extreme winter weather condition or disaster characterized by very low temperatures, often with extreme snow fall that cause harsh conditions for people and animals.</td>
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<tr>
<td>MNT/ Tugrug</td>
<td>Mongolian Tugrug – national currency</td>
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**Abbreviations and Acronyms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AEMD</td>
<td>Aimag Emergency Management Division</td>
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<tr>
<td>CBDM</td>
<td>Community Based Disaster Management</td>
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<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<tr>
<td>DRM</td>
<td>Disaster Risk Management</td>
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<td>DRR</td>
<td>Disaster Risk Reduction</td>
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<td>DRRPC</td>
<td>Disaster Risk Reduction Partnership Council</td>
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<td>FAO</td>
<td>Food and Agricultural Organization</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>IFAD</td>
<td>International Fund for Agriculture and Development</td>
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<tr>
<td>ILO</td>
<td>International Labor Organization</td>
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<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
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<tr>
<td>MNE</td>
<td>Ministry of Nature and Environment</td>
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<td>MOA</td>
<td>Ministry of Agriculture</td>
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<tr>
<td>MOECS</td>
<td>Ministry of Education, Culture and Science</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NCDB</td>
<td>National Civil Defense Board</td>
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<tr>
<td>NEMA</td>
<td>National Emergency Management Agency</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>SBCD</td>
<td>State Board for Civil Defense</td>
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<tr>
<td>SRD</td>
<td>State Reserve Department</td>
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<tr>
<td>TOR</td>
<td>Terms of Reference</td>
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<tr>
<td>UNCT</td>
<td>United Nations Country Team</td>
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<td>UNDAC</td>
<td>United Nations Disaster Assessment and Coordination</td>
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<tr>
<td>UNDAF</td>
<td>United Nations Development Assistance Framework</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>UNISDR</td>
<td>United Nations International Strategy for Disaster Reduction</td>
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<td>WHO</td>
<td>World Health Organization</td>
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EXECUTIVE SUMMARY

The UNDP Mongolia/National Emergency Management Agency (NEMA) Project “Strengthening The Disaster Mitigation and Management in Mongolia, Phase II” required a Terminal Evaluation to be conducted. UNDP Mongolia selected independent consultants to conduct this review and assessment of the project’s implementation and accomplishments against the expectations and objectives contained in the Programme Document\(^1\). If the Government of Mongolia is interested in further strengthening of the national disaster management system, the results of this terminal evaluation of the Project Phase II may provide useful information for the design of a subsequent project.

The broad terms of reference given to the Evaluation Team were to coordinate and conduct the evaluation with participation from stakeholders and partner organizations. The Team was responsible for the analysis of qualitative and quantitative information provided to it. Team members reviewed programme documents and financial statements, conducted interviews with project and government officials, researched the current status of selected subjects pertinent to project accomplishments. Team members spent nine days in combined field visits to Bulgan Aimag and Jargaltkhaan and Binder Soums of Khentii Aimag including interviews with eight herder groups at bagh locations.

The Team then produced a draft terminal evaluation report on 18 September and provided initial briefings to the primary stakeholders of the Project present in Ulaanbaatar. The main stakeholders of this evaluation are the Government of Mongolia represented by NEMA, UNDP, and the Government of Luxembourg which has been a primary source of support for the present Project. The terminal evaluation was conducted in Mongolia from August 27 to September 19, 2007.

The major objective of the evaluation has been to determine the extent the project achieved its objectives and by so doing has improved the disaster management and preparedness situation in Mongolia. The evaluation has identified key lessons for improving future initiatives, expressed in the form of conclusions and recommendations.

The overall expected outcome of this project is the improvement of the risk reduction and disaster management capacity of the Mongolian disaster management system at the national and local levels. The capacity of the NEMA offices responsible for emergency management and operational capacity of local offices will be enhanced by new technologies and training provided by the Project. To ensure the sustainability of the project activities at the grassroots levels after completion, local or national NGOs will continue the project strategy and actions.

This assessment process has been guided by the primary objectives expressed for the project: i) support for the implementation of new legislation for disaster risk reduction, including an assessment of the National Framework for Action; ii) the degree to which capacity of NEMA was strengthened through project activities; iii) the extent to which a “National Partnership for Disaster Risk Reduction” was created. Significantly, this latter objective had two distinct areas of emphasis for review: evidence of enhanced cooperation between the National Emergency Management Agency and other government departments, the wider involvement of other professional, non-governmental, civil society and international organizations etc.;

\(^1\) Strengthening the Disaster Mitigation and Management in Mongolia. (Phase II), Programme Document, UNDP.
and the relative success of support provided to community based disaster management initiatives focused on herder groups in selected pilot soums.

The programme has been implemented by four key partners, which all formed a part of the evaluation review process:

- The National Emergency Management Agency in Mongolia, through staff based in the national headquarters in Ulaanbaatar and offices in nine districts of the Capital area, and at the Emergency Management Division offices located in the 21 aimags of the country.
- The United Nations Development Programme (UNDP) offered technical and administrative support through the Environment Practice office.
- Government officials at national, aimag, and soum levels provided support in the development and incorporation of disaster risk reduction and management initiatives;
- A selected number of pilot rural herder groups received community-based disaster management training and used small grant funding to create income generation or risk reduction initiatives to strengthen local capacities to mitigate the consequences of local hazards.

**Overall Conclusions**

The Strengthening the Disaster Mitigation and Management System in Mongolia Phase II Project has achieved a successful result. The well-prepared, detailed, and effectively presented information provided to the Evaluation Team attests to a careful and assured administration and management of the project. This observation is further documented by the favorable review of available financial and management audit reports provided to the Team.

The identification of the three appropriately related project objectives have outputs which consistently address multiple disaster mitigation and management needs in a rapidly changing Mongolia. As each one focuses on a distinct target audience or set of intended partners, this approach has provided a useful basis for many activities across a wide spectrum of interests. It has however, also highlighted the distinctive conditions and needs that characterize both urban and rural populations, their livelihoods and the disaster risks which they face.

Individual elements of the project strategy have been pursued during 2005-2007 and they have created better and wider awareness of disaster and associated development issues to more people in Mongolia. Good progress in implementation is evident over the course of the project through review of the annual and quarterly work plans which document accomplishments for various time periods. The expected delivery of goods and services has been realized. In as many instances as the time has allowed, the expected quality of services and existence of material support has been verified.

Several of the activities demonstrate work-in-progress, such as the preliminary methodological studies to address urban risk assessment requirements and the pilot efforts to encourage the development of herder groups and the increase in their resilience to disasters through small capital grants. The quality of these initial efforts is promising for future application of the expanded or more substantive outputs in future project phases.

The Project made a significant contribution to NEMA’s coordinated process of developing a draft National Framework for Action on Strengthening the Disaster Reduction Capacity in 2006-2015, facilitating the conduct of the prior national hazard assessment, and supporting
the National Conference for is subsequent endorsement in June 2006. This was accomplished to a high standard and very much reflects the latest in international thinking that relates disaster reduction to national developmental strategies. However, even as it is beyond the responsibility of the Project itself, it remains critical for the Government of Mongolia to fully adopt such a longer termed strategy if the intended accomplishments of NEMA and disaster reduction capacities in Mongolia are truly to be realized to beneficial effect.

A primary aspect of all project activities has been to build capacity within NEMA throughout its various functional services, and importantly at its local units established in aimags and Capital districts. There is significant evidence of growing understanding and wider application of expanded disaster and risk management concepts and language, both within NEMA and among the people associated with its activities.

NEMA management have conveyed a shared commitment to welding the multiple functions of civil protection, emergency material reserves, and fire-fighting into a solid and capable national emergency management agency. It is also evident that the role of the Phase II project has had an important influence in being able to highlight and provide support to some of the more strategic functional areas such as training, information and communications, and addressing some of the many material requirements necessary for NEMA’s growth. While institutional capabilities and expanded engagement in the disaster management and risk reduction have grown with support from these functions, other areas such as public awareness and limitations in material equipment require further and more strategic approaches. Both areas are important for wider public support to the subject and to enable NEMA to demonstrate operational effectiveness across its expanded roles.

The success of the overall development objectives of the Project depends on the realization of partnership in several dimensions. Some project activities sought to expand relationships across additional professional disciplines with wider official government and ministerial association, including with more non-governmental, civil society or private sector involvement, as well as indications of growing Mongolian involvement in a wider regional disaster and risk management institutional environment. While there have been some productive associations, the Evaluation Team observed that these expanded relationships will benefit from a more sustained and strategic approach to realize wider forms of partnership over a longer period of time.

This can be enhanced by NEMA designating several key areas or required activity where they believe other potential partners possess a particular technical or institutional expertise to supplement NEMA’s own capabilities. This may hold particular value for addressing new and emerging hazards. Partnership needs to be encouraged not only through NEMA outreach efforts but equally from concerted and sustained efforts within the wider international and donor community.

The specific partnership services directed to assist herder groups in eight high-risk soums are considered to be highly effective as an impetus to herder group formation, creating effective locally determined and applied disaster risk reduction strategies. The small grants provided as incentives in support of livelihood expansion, income diversification, the development of additional local community coping mechanisms and self-managed risk reduction funds are considered as a useful and economical means to further local involvement in disaster mitigation practices.
Several lessons were learned, or at least working intentions confirmed, through the accomplishments of the Phase II project. In proceeding from the solid and well-considered legislated foundation of the Mongolia Disaster Management Law of 2003 as amended in 2005, the structure of the project and its methodical sequential emphasis of its various objectives demonstrated the value of addressing disaster and risk management through a consistent strategy. By spreading its activities over several ground laying areas such as in influencing NEMA’s own expanded roles and relationships, as well as its improved communications capabilities, the project has likewise provided a basis for later concentration on key areas of activities in later phases of the Project. One such key lesson learned with considerable satisfaction has been the benefits to be derived from investing the time and physical effort to identify and then motivating local communities with slight incentives to develop their own disaster resilience through their own efforts and resources.

The Phase II has provided considerable insight into the roles to be played by risk assessment processes and the related need to differentiate the respective livelihood and risk considerations in urban and rural locations in Mongolia. This will likely require some reconsideration for the relative roles of NEMA and its respective partners as the capacities to address emerging disaster risks and sustainable livelihoods extend beyond the more traditional roles and activities associated only with civil protection, firefighting and emergency reserve stocks. With the growing impacts of climate and environmental concerns on likely hazards, as well as the need to address growing incidence of social and economic vulnerability on different segments of the population, the close association between disaster risks and sustained investment in national development becomes ever more critical. As embodied in the Phase II Project, success will depend very much on the range and effectiveness of partnerships that can be cultivated.

**Recommendations**

The following recommendations are made to maintain the momentum evident in developing the wider understanding of mitigation and disaster management throughout Mongolian society. They are expressed in four key areas which can provide focus for future concentration of attention and resources. These are augmented by two additional crucial areas of capacity-building that cut across all subject areas, with expected accomplishments that can only be realized through cumulative effects over time.

1. **Develop a Multi-Year Phased National Implementation Plan to Support the National Framework for Action**

Suggested activities include:

- Government of Mongolia to adopt a National Framework for Action (NFA), as suited to its particularly needs and structures. As the current draft NFA is drawn to an international standard, it can become the basis for successful resource mobilization, provide a rationale for partnership, and emphasis for community-based disaster risk management principles.
- Develop a five-year national implementation plan, with annual work programmes subject to annual review and adjustments.
- Establish a National Platform structure for managing and realizing a national implementation plan, as a basis for coordinating multi-disciplinary association, national partnerships, and inputs for distributed activities at aimag, soum and bagh levels of activity.
Translate *Words Into Actions* into Mongolian to provide a common, agreed standard of national relevance, based on international standards and emphasis but expressed according to Mongolian specific needs and interests.

- Convene a National Conference by July 2008 to adopt a national implementation plan.
- NEMA supported to design and conduct an impartial review and analysis process, chaired by an independent and respected figure, of post-disaster operational and policy review to improve future disaster management capacities and abilities.
- Pursue means by which and national disaster management strategies and implementation plans interface and complement any emerging national development strategies or “National Development Plans”

2. Create a Resource Mobilization and Material Support Strategy for National Disaster Mitigation and Management

Suggested activities include:
- Creation of a systematic, strategic and sustainable resource mobilization and material acquisition policy and plan related to the NFA. Ideally this would be keyed to functions outlined in annual implementation plans.
- Conduct inventory, scale, prioritize, rationalize needs with external technical assistance that can forge preliminary linkage with potential sources of supply.
- Identify material needs by function such as fire-fighting, SAR, ICT, health or chemical decontamination, etc. and develop a functional approach to needs, moving away from generic requirements so as to better target possible sources of interest and support.
- Develop strategic resource mobilization plan related to such functional requirements, to seek materials from both established and non-traditional donor sources.
- Undertake a material cost-benefit/effectiveness study of wider distribution and more localized availability of basic types of emergency equipment linked through improved communications *versus* centralized stores of heavy or more technical equipment with correspondingly higher maintenance, readiness, utilization and rapid dispatch support requirements.
- Identify and obtain technical support required as part of material solicitation packages.

3. Prepare an Urban Disaster Risk Analysis and Management Plan

Suggested activities include:
- Conduct a comprehensive technical risk analysis of needs with priority attention given to earthquake risks in the capital area and related contingency preparedness planning.
- Conduct a seismic analysis of priority buildings, facilities, schools, health facilities, including key public and private sector industries, utilities and services for ability to withstand damage in the event of a major earthquake.
- Initiate study of building codes and enforcement standards, setting the standard for later updating or development.
- Establish an effective public awareness program on potential seismic hazards and associated risks (including interruption of utility services) to create effective response mechanisms for all people to lower their personal risk in the event of an earthquake or utility failure.
• NEMA to identify and partner with a Mongolian research institution to initiate and maintain a study brief with periodic specialist and annual reports on emerging or potential national disaster risks.

4. Expand Support for Community Based Disaster Risk Management

Suggested activities include:
• Expand herder group activities in two additional soums in each of the four existing pilot aimags and identify two soums in two new pilot aimags, using the risk criteria from Phase II Project to identify new sites in Phase III Project.
• Encourage expanded herder-to-herder methods to advocate and share beneficial experiences on group formation.
• Identify or outsource project management capacity to administer small grant incentives in line with NEMA /National Platform oversight. Seek wider NGO involvement or mutual support.
• Develop roving training capacities for specific technical advice and administrative training at soum and bagh levels to enhance capacities of existing herder groups.
• Encourage herder groups to pursue organizational development practices that can lead to their obtaining official NGO designation under Mongolian law.

5. Cross-Cutting Capacity Building – National Level Partnerships

Suggested activities include:
• Identify and invite specific agencies to partner with NEMA on designated project activities or functions in which they share mutual interests.
• Recruit a “Partnership Coordinator” to work with NEMA staff to link mutually supporting interventions, cross-referenced studies, resource applications, training opportunities, and shared technical assistance with national and regional partnership.
• Support NEMA to conduct and host incoming study tours for other selected countries for mutual review of mitigation and disaster management experience, and to showcase Mongolia’s own sustained efforts – at all levels of activity.
• Develop and publicize an international climate change and rural risk analysis research project in association with a regional institution, such as the NEMA/ADPC Memorandum of Understanding agreed in July 2007.

6. Cross-Cutting Capacity Building – Information, Education, Communications

Capacity building is critical, especially within NEMA, if the broader mandate is to succeed in shifting to a risk management culture. Suggested activities include:
• Develop a structured risk management skills development programme for NEMA headquarters and field staff to enable people to work more widely and effectively with other stakeholder organizations. This may be developed as a specific section of the national implementation plans, with annual emphasis given to specific functions.
• Conduct a study and gap analysis to create a sustained training plan for NEMA at the headquarters and aimag levels over a five year period.
• Develop a basic body of NEMA training materials, including technical support provided by partner organizations/ministries for building training material resources.
• Detail and disseminate regionally and internationally the Mongolian disaster risk management institutional process since 2000-01 to attract wider awareness for more support, partnership opportunities, and resource mobilization.
• Develop existing education standards into national curricula course materials for primary and secondary school students with the Ministry of Education.
• Develop teacher training course (for above) on “Protecting where we live, and how we live”, with two tracks – urban and natural/rural habitats – with the Ministry of Education.
• Study possibility of distance education training possibilities from Ulaanbaatar to aimags and soums through a pilot programme.
• Develop roving training capacities to enhance capacities of existing herder groups. Produce video packages for herder groups.
• Complete internet and computer access connections to remaining aimags, accompanying it with increasing use for routine communications, reporting, and also to disseminate good practices, educational materials.
• Extend ICT usage in NEMA through purposeful and developed intra- and inter-organizational exchange of experience and communications on a routine basis.
PART I. INTRODUCTION

Disasters and Development Relevance

Over the past 15-20 years the subjects of disasters and their increasingly costly consequences on human life, social impacts and economic losses have grown throughout the world. These effects have also become a major factor in determining the effectiveness of investments made in national growth and development generally and lifting millions of people beyond poverty. The UNDP Development Report for 1998 at the time highlighted these crucial links between disasters and development, and the subject has since become a mainstay of both developmental and humanitarian thinking. The subject was further elaborated in the UNDP publication Reducing Disaster Risk: A challenge for development, (2004).

The declaration by the United Nations General Assembly of the International Decade for Natural Disaster Reduction (1990-1999) and its successor organization since 2000, the International Strategy for Disaster Reduction (ISDR) marked further milestones in international advocacy for disaster reduction. The Yokohama Strategy and Plan of Action (1994), and more recently the Hyogo Framework for Action (2005-2015): Building the Resilience of Nations and Communities to Disaster (HFA) provide guidance for motivating national governments to adopt long term and sustained commitments to building societies safer from disaster risks. Crucially the subject is placed in the context of countries’ national development interests, as well as efforts to intensify the productive synergy to be gained from the abilities and resources throughout the United Nations system and support drawn from wider international assistance programmes.

In the past decade alone, the occurrence of disasters caused by hazards of natural origin and related environmental and technological hazards and risks globally have doubled, with economic losses soaring to more than six times the losses incurred in the 1960s. Several major disaster events have shocked the world by their massive devastation, loss of life, and severe socio-economic consequences. The Indian Ocean tsunami in December 2004, displayed the force of uncontrollable natural forces that killed at least 230,000 people, overall affecting people from more than fifty countries. Less than six months later, despite national wealth and advanced technology, the more evident failures of planning and the absence of necessary resources to address known disaster risks in the city of New Orleans in the United States of America resulted in many avoidable losses from the seasonal hurricane storm Katrina.

Before 2005 had ended and immediately prior to the onset of winter conditions over 100,000 people perished in the strong earthquake in Pakistan and Indian Himalayan mountains from collapsed structures and more from later exposure. Despite widespread international and local efforts, over two million people remained without proper shelter and had few basic necessities, because of the magnitude of needs and difficult access.

From elsewhere in Asia, new forms of rapidly transferable diseases of humans and animals, such as Severe Acute Respiratory Syndrome (SARS) and Avian Influenza have alerted all countries of the world to new disaster threats requiring careful planning, and improved

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2 It is this expression from the Hyogo Framework for Action 2005-2015 (in footnote 3) that was adopted by 168 countries at the UN World Conference on Disaster Reduction (Kobe, Hyogo, Japan) in January 2005. This is therefore the basis used to denote the scope of the disaster risks considered in this report.

readiness. Conditions of rapid industrialization, or alternately the deteriorating conditions of older and dated industrial plants or poorly maintained physical infrastructure pose other disaster risks, especially in expanding urban environments.

Most importantly, these events and existing conditions have underlined the necessity of governments and populations adopting measures that can protect their natural and physical assets, in both rural and urban environments as they equally develop their resilience and different types of livelihood protection.

Disaster threats and means of providing better protection from them now demand levels of technical involvement and social engagement far beyond earlier efforts conceived primarily for responding to urgent needs of rescue and assistance only after a disaster occurs. Importantly disasters and their consequences have become globally significant, requiring ever wider political, professional, and practical relationships linked through mutual benefits of fostering the exchange of knowledge and experience.

Governments have recognized the significance of these trends. While working to ensure the most effective means of disaster management and specialist emergency services, they are increasingly adopting measures that address wider economic necessities and growing social expectations of revising national disaster protection strategies. This also has been encouraged by more international support drawn from both developmental and humanitarian resources for countries’ own efforts most suited to their particular conditions, needs and circumstances of disaster management and protection.

**Mongolian Disaster Management Background**

During this same period, Mongolia has itself been experiencing a number of rapid and important changes that have enhanced development opportunities, at the same time that they have placed in higher relief the importance of disaster conditions and needs. Since its adoption of a democratic governance system and the development of a competitive market economy, Mongolian authorities have been extremely receptive to reconsidering previous approaches to disaster management. The increasing economic opportunities in Mongolia and likelihood for more diverse forms of public, professional and private relationships have similarly encouraged the adoption of more comprehensive approaches to disaster management and sustainable national developmental interests.

Against this background UNDP with the support of the Government of Luxembourg has been instrumental in initiating a commitment in association with other organizations to support the evolution of Mongolian policies and institutional capabilities in disaster management and protection objectives. While immediate humanitarian concern was motivated initially by the devastating personal losses of the combined severe dzud during 1999-2000 and 2000-01, the costs to the country and the growing exposure of much of Mongolia’s population to future disaster risks stimulated further commitments to disaster mitigation and management. This has been pursued with considerable consistency over the past five years despite the extensive variation in the large land area of Mongolia, and the widespread distribution of its 2.4 million inhabitants, distributed almost equally between urban and rural habitation and livelihoods.

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4 A severe winter storm peculiar to Mongolia, characterized by very low temperatures with related harsh and icy conditions and the possibility of extensive snow. Dzuds threaten both human and animal existence, often accompanied by lasting economic consequences.
These issues were first addressed by UNDP in a prior project of Strengthening the Disaster Mitigation and Management System in Mongolia, Phase I (MON/02/305) from July 2002 – July 2004. The successful completion of this first phase was marked by significant Mongolian efforts to revise the national law on Disaster Management (2003) and to commit itself to a more comprehensive civilian approach to addressing disaster issues. This led to the further assistance from UNDP with the generous support of Government of Luxembourg in the project, Strengthening the Disaster Mitigation and Management System in Mongolia, Phase II (MON/05/305), running from May 2005 to December 2007. (henceforth referred to as “the Project”).

Project Phase II Terminal Evaluation

As envisaged by the Programme Document of MON/05/305, and detailed in the annexed Terms of Reference, this report presents the findings of an independently conducted Terminal Evaluation of Phase II of the Project. It is anticipated that these observations and recommendations can inform and further encourage additional joint efforts to develop Mongolia’s national capabilities and its resilience to disaster risks. As the country’s economic opportunities increase, and as more Mongolians become exposed to a variety of disaster risks, this Terminal Evaluation seeks to stimulate an increased integration of disaster risk subjects in the wider context of Mongolia’s national development plans and objectives.

The evaluation was conducted in Mongolia from 27 August to 19 September 2007 with a first (working) draft report submitted to UNDP on 18 September. The current Final Draft Report was finalized on 26 October 2007. The evaluation was conducted by an independent team (henceforth “the Team”) composed of two international consultants and one national Mongolian consultant with reference to the Terms of Reference contained in Annex I.

The Team was very ably supported logistically and programmatically by the Phase II Project leadership and staff members, with considerable dedication and enthusiasm for the subject. The direction and senior management of the National Emergency Management Agency (NEMA) headquarters in Ulaanbaatar, as well as the UNDP Country Office and Project staff concerned provided considerable access, insight and guidance to the work of the Evaluation Team.

A considerable amount of historical, descriptive, reporting and summary documentation (in English) was provided to the Team for review, as listed in Annex IV. Every request for additional information or clarification from Mongolian-sourced documentation was gratefully provided and delivered by Team, Project or NEMA associates. Interviews were conducted by various Team members (almost all through translation) among Project principals, and representatives of other selected government ministries (Agriculture and Animal Husbandry; Education, Culture and Science; Institute of Meteorology and Hydrology of the Ministry of Nature and the Environment), with some additional technical or organizational representatives located at national and aimag levels of responsibility.

There were other, more limited opportunities for dialogue with senior government officials, technical / professional and project supervisory personnel, and civil society / local leaders, and individual representatives of herders’ groups in selected outlying rural areas. This was possible during two field trips undertaken by two Team members and two project staff in

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5 See Annex 1.
each instance. One trip visited Bulgan Aimag center and one nearby herder group; the other field trip visited one soum center (Binder), four baghs, eight different herder groups within Jargaltkhaan and Binder soums in Khentii Aimag.

A smaller number of additional contacts and opportunities for discussion were initiated by Team members with NGOs, the Red Cross society, other selected UN or bilateral development assistance agencies, and a few individual technical professionals active in related fields in Mongolia. A list of all people interviewed is contained in Annex III.

PART II. THE PROJECT AND ITS DEVELOPMENT CONTEXT

The Project, Phase II

As summarized in the Project Document, the Project is to improve the disaster management and protection capacities of the Mongolian disaster management system at the national and local levels. This should be accomplished though institution building to assist the government to change its disaster focus from one of civil defense to a non-military led disaster management and risk reduction structure. Strengthening these capacities should be achieved through disaster mitigation and risk reduction partnership between Government, donors, NGOs and people at grassroots or local levels of involvement. These accomplishments should be based on the principles of cooperation, coordination, determination of priorities and the related allocation of scarce resources for disaster management and risk reduction at all government levels, and at the grassroots level for rural herders and local residents.

It has anticipated that the capacity of NEMA management and the operational capacities of local offices concerned will be enhanced by their access to new technologies and various types of training provided by the Project. Overall outcomes of the Project activities are expected to contribute to the promotion of poverty alleviation, environmental conservation and sound governance in the country.

The Phase II Project identified three specific intermediate objectives:

1. Support for the implementation of new legislation for disaster risk reduction;
2. Provide capacity building support to the National Emergency Management Agency and its local units;
3. Support further development and expansion of the National Partnership for Risk Reduction and community based disaster management

These objectives relate to the following primary target groups for the Project:

- **Local populations** shall gain from community-based disaster response capacity and disaster preparedness training at the grassroots level through NEMA Disaster Management.

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Management Center staff. Benefits will accrue to rural nomadic herders that are susceptible to natural disaster risks.

- **Local government** will benefit through new disaster response capacity at the aimag level, from transport disaster preparedness planning and from disaster response exercises performed at the local government level.

- **Central government** will benefit by refocused national disaster concerns from civil defense to disaster management and risk reduction through technical and financial assistance from international donors.

- **Civil society** will be strengthened as the capacity of national NGOs and civil society representatives increase their involvement in disaster mitigation and risk reduction partnerships and through their active participation in planning and implementing disaster management activities.

As the Implementing Agency for the project, the National Emergency Management Agency, its associated officials and departments at its headquarters in Ulaanbaatar, in all 21 aimags of the country and working in association with the representatives of Ulaanbaatar Capital District has been dedicated in efforts to fulfill the responsibilities mandated by Mongolian law and administrative instruction.

In noting this observation, the Team is particularly indebted to the efforts and report of the previous UNDAC Mission to Assess Mongolia’s National Disaster Response Capacity (27 June – 9 July 2004), and the following UNDAC “Mission Review 2004 Recommendation Matrix Document” of 2-6 October 2005. Taken together these documents provide an excellent wider perspective of NEMA growth, development and challenges from a time during the early period of the current Phase II Project.

This earlier information provides useful operational insight into NEMA’s evolution since its creation and also serves as a baseline that extends beyond the scope of the present UNDP Project-specific Phase II evaluation. Some of the UNDAC Team’s most relevant recommendations also reinforce some of the key objectives of the Phase II Project design. These particularly concern the benefits of broadening and deepening the opportunities and practice in “cooperation and partnership”. This has clear meaning for the future as different programme emphasis and operational needs vary between national and the more widely dispersed activities taking place through aimags, soums, baghs, and with community-based involvement.

**Mongolian Stakeholders’ Developmental Interest in Disaster Risk Reduction**

For UNDP Mongolia, mainstreaming disaster risk reduction is undertaken by its incorporation in the Common Country Assessment/UN Development Assistance Framework (CCA/UNDAF) process and subsequent follow-through by the UN Country Team (UNCT). The CCA/UNDAF process is undertaken by the UNCT in close collaboration with the Government of Mongolia, NGOs and civil society, and the private sector. A tangible way to include disaster risk reduction into sustainable development planning at country level has been to integrate disaster risk reduction elements into the CCA/UNDAF process.
The UN Resident Coordinator and the UNCT can promote effective national disaster risk reduction capacity through support for the following actions, which to various degrees have been reflected in both the design and implementation of the Phase II Project.

- Strengthen awareness of roles and responsibilities among all stakeholders and assist them building the skills and capacities to carry out assigned functions.
- Assist with assessing existing capacities, gaps and needs as requested by a country authority.
- Identify relevant actions to assist with the implementation of the Hyogo Framework.
- Assist with setting-up national strategies, policies and plans to develop institutional and technical capacities in the field of disaster reduction, as identified in the Hyogo Framework.
- Establish links and exchanges between different levels of action (local and intermediary as well as national, regional and international), or by fostering collaboration and dialogue among national platform members.
- Strengthen decentralized local governance systems for disaster risk reduction and by encouraging the clear identification and allocation of decentralized responsibilities.
- Ensure the link between national needs and UN assistance in disaster risk reduction at national and community levels.

The national impacts of the successive drought and dzud disasters in Mongolia in 2000-2002 greatly influenced the initial efforts to revise the approach to disaster management in Mongolia. This was evident in the passage of the Disaster Management Law of 2002. The subject of strengthening “the national system for disaster preparedness and response management” also was one of the five primary goals identified in the UN Development Assistance Framework for the period 2002-2006. This emphasis was further reinforced by reference in the UN Multi-Year Funding Framework (MYFF) for Mongolia (2004-2007) under service line 4.5 of Goal 4 in which crisis prevention and recovery is identified specifically to address natural disaster reduction.

It was during this period that the Phase II Project was designed and its objectives identified, as may be clearly seen by the relevant core results identified in that MYFF:

- Disaster risk reduction to be incorporated into development planning;
- Sector-specific national and/or regional expertise to be developed covering disaster preparedness planning and/or mitigation of risks and vulnerabilities; and
- Human-made vulnerability factors that shape risks to be corrected and relative disaster vulnerability significantly reduced.

As the project concludes at the end of 2007, the current UNDAF 2007-2011 notes other current developmental trends in Mongolia that are creating a cultural transformation as globalization and urbanization impact the society, encourage growing expectations, but also introduce new or different types of risk into the Mongolian way of life. As such, some of these same issues also reflect the potential of significantly changing the nature of disaster impacts on national development. The consideration of both current and emerging disaster risks need to evaluate the very different types of exposure by various segments of the population. Effective disaster risk reduction strategies need to relate to peoples’ livelihoods, which in most cases are heavily influenced by the rural or urban locations where they live.
These changes highlight the foresight and relevance of the Phase II Project, as much as they call for more sustained efforts to mainstream disaster mitigation and management into developmental endeavors. It is noteworthy that other current UNDP programmes such as those devoted to improved rangeland and pasturage conditions as well as a significant emphasis given to water availability in support of rural livelihoods further illustrate the close linkages and compatibilities between developmental needs and conditions pertinent to disaster conditions and risk reduction.

Despite positive trends in economic growth there are other current development factors that impact the highly insecure lives led by thousands of Mongolians. Factors contributing to people’s vulnerability include Mongolia’s landlocked status, a limited capacity to prevent and manage natural hazards, high rates of unemployment, slow expansion of job opportunities, low and fluctuating sources of earning.

Major demographic shifts are being witnessed as a result of rising urbanization, with imbalances in the distribution of population across the country. Growing disparities between rural and urban areas and among residents of urban areas (between residents of ‘ger neighborhoods’ and others) are a disturbing feature of Mongolia’s advancement. This increasing migration and especially movement towards the cities has resulted in increased urban vulnerabilities as well as a limited expansion of local livelihood opportunities through traditional means in more outlying areas.

When coupled with the already harsh, and evidence of increasingly more varied climatic conditions on which rural populations must rely, the resilience of populations and livestock becomes more tenuous. Such disparities are reflected in many dimensions including diminished access to water, land and pasturage in outlying locations, or poor and unequal access to basic services in underserved sub-urban and rural areas. Limited access to information, adequate urban housing or the assurance of safe and well-maintained infrastructure or a protected natural environment are issues that apply to many Mongolians throughout the country.

Despite economic expansion in recent years, poverty remains widespread with about a third of the population living below the poverty line. There is a rising demand for quality health coverage and while there have been notable accomplishments in recent years, a major challenge remains to provide improved access to education and job opportunities throughout the country, especially for women and young people. More job opportunities will need to be created through industrialization that combines improved local business capacity with international expertise and technology. As both mining activity and industrial plants increase there are potentially significant impacts on environmental conditions or greater risk of disastrous accidents that could threaten the livelihood of many more Mongolians.

Growing ecological vulnerabilities and their socio-economic impact require a concerted and continuing attention. Previous disaster protection and locally applied risk reduction mechanisms such as livestock shelters, fodder stockpiles, sufficient access to economical veterinarian services or sustained water sources need to be restructured or reconfigured to enhance people’s resilience. New risk reducing mechanisms are required in order to sustain the semi-nomadic way of life and the rural economy.

These shortcomings have been compounded by the absence of community-based organizations that can play an active role in local natural resource management. There are
encouraging signs that herders’ groups and other forms of locally-initiated “self-interest”
groups are experimenting with means to increase their shared sense of resilience. These
include established forms of voluntary organization, registration as officially recognized
NGOs or through locally established and self-managed disaster risk (or reserve) funds.

There are other positive trends such as efforts which continue to strengthen institutions of
democratic governance ensuring greater transparency, accountability and better
mainstreaming of democratic principles across all levels of society. This identifies new
opportunities of public participation through a variety of civil society organizations and the
wider relevance of media, weather and marketing information or other forms of economical
public communication and modern information services.

**Government of Mongolia Commitment to Disaster Management Issues**

Political and economic changes that swept Mongolia since 1991 have had a significant
development impact on the lives of Mongolia’s most vulnerable population. While some of
the services to the herder sector such as veterinary services, breeding programs, marketing
channels, credit facilities and pasture diminished, opportunities for private ownership had a
dramatic increase on the numbers of livestock with corresponding pressure being placed on
water points and adequate pasturage. The dzud that occurred in 1999-2000 and 2000-2001
devastated 20 per cent of the national herd. More recently, noticeably changed climatic
conditions including intermittent and currently more prolonged drought conditions were cited
by herders as reducing the periods of restoration of both herds and livelihoods.

While structural changes in the sector were going to take years to achieve, it was against this
background that the Government of Mongolia examined other natural and human induced
hazards such as forest and steppe fires, animal and human epidemics, toxic chemical spills or
other industrial accidents including radiation leaks. Recognition also began to be taken of an
aging urban infrastructure quite exposed to threatening seismic conditions, particularly in the
rapidly expanding capital area of Ulaanbaatar. It was this national awareness translated into
policy commitments at the highest levels of government that motivated a systematic
development of a new natural disaster management system in Mongolia.

The National Conference on Strengthening the Disaster Mitigation and Management System
in Mongolia, convened on December 4, 2001 in Ulaanbaatar was attended by over 70 senior
Government of Mongolia officials and parliamentarians and over 50 international participants
from multilateral and bilateral agencies, donor agencies and NGOs.

This conference demonstrated the need for the following major steps that remain hallmarks of
the present Phase II Project, and which were further emphasized in the subsequent national
conferences for disaster management and protection held in May 2004 and June 2006:

- To change the focus, legal structure and institutional framework at the central and
  local government level from civil defense to disaster mitigation and management.
- To provide technical support to a newly created disaster mitigation and
  management agency from other qualified and complementary agencies of
  government.
- To provide support to aimags with existing search and rescue units, and to aimags
  implementing new units, with training and equipment to expand search and rescue
  capacity to disaster response capacity; and grassroots disaster preparedness
  training.
To plan and implement a Disaster Mitigation and Management Partnership between Government, donors, NGOs and the grassroots population.

Later actions occurred during the previous Phase I of the project to accomplish some of these fundamental changes, including the passage of the Mongolian Disaster Management Law of 2003 that created the National Disaster Management Agency. Later amendments to that law in 2005 during Phase II of the Project have since renamed the agency as the National Emergency Management Agency (NEMA), and placed its three main service areas of civil defense, state material reserves and fire services all under the single authority of a newly designated Minister of Emergencies. These changes have proven to be significant for the accomplishments, as well as highlighting some continuing challenges, of the Phase II Project.

International Context of Strategic Disaster Mitigation and Management

Mongolia’s efforts to update the national approach to disaster mitigation and management have very much reflected wider regional and international developments, clearly evident in the development and implementation of the Phase II Project. At the Asian Regional Conference for Disaster Reduction organized under the auspices of the International Strategy for Disaster Reduction (ISDR) in August 2004 in Beijing, delegates affirmed that:

“Governments have unavoidable responsibility for motivating and providing protection against disasters. However, success will depend ultimately on effective measures undertaken by Governments and the coping capabilities of local people themselves. Indeed, it is people’s increased understanding, active participation and sustained actions that will enable them to live with risk in more resilient communities.”

These views were later advanced at the UN World Conference on Disaster Reduction held in Kobe, Japan in January 2005 where the growing understanding and acceptance of the relationships between disaster and risk management and sustainable development was further emphasized. The resulting *Hyogo Framework for Action 2005-2015: Developing the resilience of nations and communities to disasters* (HFA) was adopted by the 168 countries present, including the Government of Mongolia.

This conference, occurring only weeks after the dramatic consequences of the Indian Ocean Tsunami of December 2004 was a timely example of international impetus being provided to the conceptualization and later activities of the Phase II Project. It also set an international standard and suggested an approach which countries were encouraged to consider in devising their own national strategies for disaster mitigation and management, while simultaneously making key linkages between disaster risks and the achievement of the Millennium Development Goals (MDGs) within the same period, by 2015.

The timing of introducing the early stages of the Mongolian Phase II Project with this landmark international event, enabled the country to become one of the first countries actually to implement some of the internationally endorsed standards of disaster risk reduction. In that respect, the Phase II Project has proven to be extremely timely and a very positive example of a concerted national strategy to advance comprehensive disaster and risk management.
PART III ANALYSIS AND FINDINGS

The analysis and findings below are derived from the basis of the background information already outlined and are made in consideration of the documentation provided and enquires made by the Evaluation Team. Analysis and commentary about the project formulation takes account of the coherence and appropriateness of design of the project formulation and its relative sequencing with the previous Phase I of the Project in terms of intended strategy and overall goals. Further analysis focuses on the implementation of the specific intermediate objectives with results indicated relative to the expected outputs as originally outlined in the Phase II Project Document.

Project Formulation, Goals and Strategy

As the Phase II Project was conceived during the later part of 2004 and shaped further by both international and domestic events related to changing views about disaster management emphasizing mitigation and risk reduction, its formulation was able to draw on several crucial features of the time. The successful conclusion of Phase I of the project in 2004 provided a firm foundation in the new Mongolia Disaster Management Law of 2003, later amended in January 2005. These actions signaled the creation and additional detailing of the National Emergency Management Agency that was able to merge three previously separate disaster management related functions, each managed by a different government ministry. The designation of high level authority for the subject in a Minister for Emergencies further elevated the subject in terms of public visibility and policy relevance.

In continuation of the earlier phase of the Project, both of these institutional developments reflect a desirable dedication in Phase II to continue to expand the understanding and scope of disaster management in Mongolia to include growing disaster awareness, developing local resilience and relating the subject to wider professional interests beyond only specialized emergency services. Internationally the World Conference on Disaster Reduction, and the widespread adoption of the resulting Hyogo Framework for Action in January 2005 provided additional guidance and impetus to these forward looking initiatives already underway in Mongolian strategic thinking for developing national capacities, being cognizant of the diverse livelihoods in the country and making better use of its national resources.

As the Phase II Project began in May 2005, it was well positioned to take advantage of its three primary objectives in support of its overall developmental goal to strengthen disaster mitigation and management in Mongolia. Similarly, the means outlined at the outset of the Phase II Project and the subject activities discussed below together address the overall developmental goal. Three years on, they are fully appropriate to current international thinking. The Project does indeed give emphasis to “strengthening appropriate government institutions at the central and local levels to allow the Mongolian Government to change its current focus from civil defense to disaster management and risk reduction ... etc.” However, with the rapidly changing socio-economic conditions of the country and a robust political environment, there are also continuing challenges to identify, adapt and address additional disaster risks.

The Project has been structured wisely to progressively relate legislation to established practice, and to increase institutional capacities through a variety of training and material input for NEMA in its headquarters and the outlying aimag and soum locations. Throughout the Project this mutually supporting set of related intentions has allowed for the phased
consolidation of NEMA activities, even as translating new concepts into practice remain a continuing process. Perhaps the most important conceptual element of the Project has been the ambitious attempt to expand partnership opportunities in both wider organizational or professional relationships at the same time that efforts encourage more localized and voluntary community-based measures of disaster resilience.

The emphasis of both the Phase II Project concepts and their ability to span contemporary disaster and developmental concerns are well considered, coherent and consistent. With the added advantage of its timing dating from 2005, the engagement of these concepts not only continue the excellent rating of the previous Phase I Project, but they also place the Phase II Project design in the forefront of early efforts globally to tailor individual country disaster management programmes to meet the objectives of the Hyogo Framework for Action.

The fact that the project relates legislation, institutional capacitation and wider partnership further demonstrates the sound thinking behind the project’s conceptual formulation. However, it must also be said that this same broad approach, reflected in the eleven different elements of the Project Document has proven to be ambitious when considered in terms of implementation and some of the more modest results as discussed below.

Management and Project Implementation

Following from design intentions of the Project considerable attention has been given to the sequencing of the various project objectives, and the need for prior needs or prerequisite abilities to be addressed. While the results of the individual programme objectives are discussed separately below, it is important to appreciate the strategic considerations of the phased approach to overall project implementation, and the instruments put in place to manage it.

Roughly the first half of the Phase II Project period from mid-2005 through the later part of 2006 was devoted primarily to activities associated with the first objective of implementing new legislation for disaster reduction. One aspect of this involved the arrangements necessary for the physical and operational consolidation within NEMA of the three previously distinct functions associated with civil defense, state emergency reserves, and the fire services. This was undertaken in parallel consideration of their respective roles, needs and involvement anticipated in Phase II Project activities. These needs shaped the particular attention given to preliminary planning of training activities that addressed different audiences in disaster and risk management concepts, administrative and managerial abilities, support for special technical emergency skills, and means of local engagement and organization for greater opportunities of participation and resilience. However, the development of the National Framework for Action from 2005 (later changed to 2006) to 2015 became the most strategic element essential to eventual successful implementation of the project.

Initial and preliminary contact related to building partnership was identified during the first half of the Project and was much pursued in respect of conducting a national hazard assessment during the first half of 2006 but remained for more attention during the later half of the project from mid-2006 into much of 2007. This later period also included concentrated
efforts on training activities and arrangements to obtain selected items of material and equipment for strengthening NEMA capacities.

As the Phase II Project Team members are all located within the NEMA headquarters building, physical access, communications, and managerial arrangements for this nationally executed UNDP project have been good. As the Project developed from 2005 to 2007 and its activities have become more numerous, management coordination arrangements have similarly increased. An expanded Steering Committee composed of the Project Principals from UNDP, NEMA, Project Team and other interested ministries has met in 2006-07, and a Tripartite Meeting was instituted in June 2007 to review progress and to chart future programme strategies.

There has also been a strongly shared commitment of all of the Project Principals to focus on issues of sustainability and maintaining previous momentum, especially considering further concentration on perhaps fewer areas of activity envisioned in a successor Project Phase III contemplated from 2008. The official adoption of a national strategic document, such as the draft NFA, becomes crucial to provide sustained vision and purpose.

The considerable amount of well-prepared, detailed, and effectively presented information provided to the Evaluation Team attests to a careful and assured administration and management of project implementation. Good progress in project implementation is evident over the course of the project through the development of annual and quarterly work plans which have been reviewed, and the documentation of accomplishments associated with them for various time periods. To a very significant extent the expected delivery of goods and services has been realized, and in as many instances as the time of the evaluation has allowed the expected quality of services and existence of material support has been verified. This observation is further documented by the favorable review of available financial and management audit reports provided to the Team.

However, there are some aspects of project implementation that need to be noted with more subtlety. These consist of the successful completion of activities or the physical delivery of intended equipment as planned by the project, even as their supply may account for only a partial realization of wider project objectives. Nonetheless, it is important to note that with the broad range of activities contemplated in the project design, and spanning the many primary target groups outlined above in Section II, successful implementation can be considered only in terms of being initial, ground-laying, preliminary or partial - even as it has fulfilled the expectation of programme activities.

This relates especially in matters associated with capacity development and the assessment of associated training activities which must necessarily extend beyond the number of people who participated in short or introductory training courses. In a similar preliminary role, the project has supported some very useful and professionally accomplished methodological studies, such as those related to future exposure and requirements for assessing urban risks. Another excellent study was completed through a partnership with the Ministry of Education to identify the standards necessary for developing a comprehensive educational curriculum that incorporates disaster-related subject matter. Support to pilot projects which encourage community based initiatives that can increase disaster resilience is a third key and particularly successful element of project implementation that also signals possibilities for expansion.
Each of these examples has contributed favorably to the expressed project outputs, but they cannot be considered by themselves as completely satisfying the more sweeping expectations of the wider project objectives. While the quality of these initial efforts is promising for future application of more substantive outputs in later project phases, it will be necessary to adopt a more precise understanding of the efficacy of the multiple factors involved, or the time required, to ensure the substantive results contemplated by project implementation.

There is a similar problematic concern in terms of the provision of supplies and equipment and the extent to which the material itself is able to contribute to realizing wider Project objectives. Details will be cited below, but there is the potential for tenuous expectations that the provision of equipment or supplies will necessarily address prior limitations by themselves. This issue is mentioned as a factor of Project management assumptions, which can certainly be addressed in fuller elaboration of associated training, maintenance capabilities, or a more systematic approach to phased or more strategic procurement issues.

Clearly there are crucial and well-justified material requirements, such as the updating of information and communications technologies. However, in some instances there may be need for more rigor in querying the rationale for specific items. One such questionable example is the intended installation and use of warning sirens in urban locations as a means of developing public awareness of disaster risk issues, rather than as an expression of already developed sensibilities. There has also been a strongly felt need for emergency assistance, fire-fighting and special rescue equipment which may not be so justifiable without a more strenuous questioning of existing supporting infrastructure or current training and maintenance capabilities.

**Results – Outputs**

The results of the Phase II Project are presented here with respect to the Intermediate Objectives and their associated outputs expressed in the project document. While space does not allow for full elaboration, selected examples and specific observations of the Evaluation Team are included here to validate the observations which are made.

**Objective 1: Support Implementation of new legislation for disaster risk reduction**

The Phase II Project was fortunate in being able to benefit from the momentum established in the first period of the project with its definitive newly legislated basis for enhanced disaster management in Mongolia. At its outset in mid-2005, the Phase II Project could capitalize on the newly created NEMA and additional partnerships to begin translating that official commitment into a strategic process of phased implementation. The development of a framework for action was a well considered mechanism to provide an expanding vision and a number of practical activities to translate policy understanding into institutionalized capacities.


The support provided by the Project in the preparation of the draft National Framework of Action (NFA) under the coordination of NEMA proved to be an essential foundation for the Project’s later efforts. The Project, its staff and consultants whom it engaged made high quality contributions to both the development process and the professional content of this essential document. The draft NFA is very comprehensive and of a high international
standard with regard to addressing comprehensive disaster risk reduction in a strategic manner, linked to national development objectives.

Its later presentation and adoption at the National Conference on “Strengthening Disaster Protection Capacity in Mongolia 2006-2015” in Ulaanbaatar in June, 2006 also laid the basis for the further development of more partnership possibilities. With the preliminary multi-disciplinary national hazard assessment exercise coordinated by NEMA conducted with the participation of line ministries beforehand, followed by the extensive and high level participation involved, the National Conference is considered by the Evaluation Team to have been an important milestone event in creating wider national ownership to the expanded concepts of disaster mitigation and management in Mongolia.

The NFA does however remain to be formally adopted by the Mongolian Government. Following the National Conference in June 2006, the NFA was re-titled as the National Framework of Action for Strengthening the Capacity for Combating Disaster (2006-2015), and some question has been raised as to whether it may be most suited to be considered as a “Programme” rather than as a “Framework”. While some uncertainty remains as to the current state of its deliberation within government procedures over the past 18 months it continues to be the subject of various views and further refinement from different government departments or legislative authorities.

The realization of future opportunities for expanded and more sustained support to Mongolia’s disaster mitigation and management strategy will be greatly increased once the strategic national framework, (or similar multi-year programme strategy) is officially adopted. It can them provide a basis for a longer termed vision and provide the strategic rationale to allocate roles and responsibilities for disaster and risk management across all sectors and strata of society. This can then allow for the development of subsequent implementation plans, for which the Project has already provided preliminary thinking, and the process will itself provide additional opportunities to invite more partnership endeavors.

Output 1.2: Trained master trainers to introduce Framework of Action at the grassroots level

Even though the NFA remains to be adopted officially by the Government of Mongolia, much of what it represents, and the concepts on which it is based, have been embodied throughout the activities of Phase II Project. Training in disaster management concepts and the issues addressed in the NFA have been incorporated in many of the Project activities conducted at national, aimag, soum and local community levels of involvement. These are briefly referred to in the outputs associated with the intermediate objectives 2 and 3, discussed below. NEMA has also pursued its own training capabilities, as indicated by the Project support in building the agency’s own training facility. Initial steps taken to build disaster management and risk related subjects into the national school system illustrates another avenue for disseminating the substance of the NFA to the public over time. Disseminating disaster risk and livelihood resilience issues are central to the entire motivation to test and further develop the formation and initiative of herder groups to develop their own resilience to disaster threats. While this output has not yet produced designated master trainers of the NFA specifically, the subject has been well served nonetheless by the activities of the Project, and the extensive efforts of both project and NEMA staff. It is anticipated that the imminent adoption of the NFA, or a similar comprehensive national strategy for disaster
management, will enable a concentration of exposure to explicit Action Framework issues at grass roots levels in subsequent project phases.

**Objective 2:** Support for capacity building to the newly established NEMA and its local units is provided.

This has been a particularly wide ranging area of activity throughout the three years of the Phase II Project, although concentration on training, expanded communications and the provision of selected types of supporting equipment have been primary areas of emphasis. An important aspect of all project activities has been to build capacity within NEMA throughout its various functional services, and importantly at its local units established in Capital Districts, aimags and as feasible their extended influence to soum levels of engagement. Based on the Evaluation Team’s observations there is significant evidence of growing understanding and wider application of expanded disaster and risk management concepts and language, both within NEMA and among the people associated with its activities.

This reflects favorable progress in the wider dissemination of interest and correspondingly expanded range of people associated with disaster issues in their own professional or locally applied experience. It is particularly encouraging that in some respects the more comprehensive understanding of modern disaster risk issues may actually be more discerning and acute in those local and more outlying rural areas where efforts have been concentrated. This is in contrast to rather persistent traditional emergency service thinking, rescue and relief emphasis more commonly encountered within the urban environment of Ulaanbaatar and in some indications of NEMA Headquarters. It must be noted though that the senior-most NEMA management is clearly instrumental in seeking to develop a more comprehensive approach to disaster management and risk-related issues.

**Output 2.1:** Capacity of NEMA is strengthened as a comprehensive disaster management system through merging functions inherited from the three former separate organizations

Discussions with senior NEMA leadership and Department and Division Heads conveyed a shared commitment to welding the multiple functions of civil protection, emergency material reserves, and fire-fighting into a solid and capable national emergency management agency. It is also evident that the role of the Phase II project has had an important influence in being able to highlight and provide support to some of the more strategic functional areas such as training, information and communications, and addressing some of the many material requirements necessary for NEMA’s growth. The NEMA Head of Policy and Planning made an important point in noting that the creation of the multifunctional agency allowed for the first time a coherent and comprehensive planning process able to be guided by a singular strategic vision. Fortunately, the Evaluation Team believes this has been greatly encouraged by the consistent and systematic continuity of Phase I, Phase II and an anticipated Phase III of the Project.

Certainly challenges remain in this integration process, and the multiplication of expectations and requirements from the three functional areas of activity. A persistently noted limitation compounded by the various service functions is the many material and equipment needs of NEMA departments. This problem remains particularly acute in the fire-fighting and special rescue services. While it is noted that the Phase II Project has been able to make some
important contributions to making some progress on these challenges, the needs extend beyond the reach of a single external assistance project alone.

One such example of a partial and contributory effort of the Phase II Project is its contribution to a series of activities that have resulted in a more substantive State Reserve function embodied within NEMA. During 2006, the Project conducted a policy study on the State Reserve System, followed by a national consultation workshop attended by 60 managerial staff of the State Reserve Department and local branches. This process provided inputs to a wider exercise of NEMA’s drafting a new law on the subject jointly with other national experts. It was submitted to Cabinet Secretariat by NEMA and then approved and passed into law by Parliament in July 2007. Some commentators noted that both the preparation and passage of the law was rapid, thereby underlining the importance of the subject to the nation. However some other viewpoints noted how the management of such a sizeable and important resource could either strongly validate the merged emergency responsibilities of NEMA, or else could compromise the more operational and wider policy advocacy roles envisioned for the agency.

Another planned study was conducted by the Phase II Project on the estimated financial requirements for a comprehensive national programme on disaster management and reduction until 2015. While it marked a useful initial indication of potential roles, responsibilities and associated resource requirements, averaging about 3 billion Tugruks (ca. US $ 2.5 million) annually, the exercise may have been premature before the adoption yet of a national strategic framework for disaster management and reduction.

Output 2.2: Improved disaster management and risk reduction information system

There has been significant expansion of information and communications capability within NEMA because of Phase II project support, with the entire headquarters and officers in 75 per cent of the aimags connected electronically by HDSL modem or dial-up communications connections, with corresponding training. The remaining aimags are expected to be connected within coming months, marking a significant tangible and strategic accomplishment of the Project. A critical aspect of this project result is that information and telecommunications technology has been recognized as a strategic instrument for building a comprehensive NEMA, in addition to its more traditional applications in facilitating early warning and conducting practical rescue or emergency assistance activities. Additionally, three NEMA staff have received specialized training in disaster management communications outside of the country.

This successful activity now provides the backbone for much improved communications, and should be used to weld a more effectively integrated NEMA. It was not possible for the Evaluation Team to determine the extent to which the communications links are already used routinely either to provide data and information from the field to Ulaanbaatar, nor the extent to which it is yet utilized by NEMA Headquarters to disseminate additional information such as training materials, etc. for wider distribution beyond operational communications. Wider use of mobile telephone technology offers continued opportunities to be explored further by NEMA, with particular relevance for improved disaster early warning and reporting from
local communities, baghs and soums. The senior NEMA manager concerned emphasized the value of the Project support in enabling him initially to harmonize the NEMA institutional needs with the various annual Phase II Project plans, but most importantly to progressively build the possibility of his own investment plan so as not to remain dependent on Project resources. Already this has shown results with additional interest being pursued with both the Korean and Japanese international technical cooperation assistance agencies (KOICA and JICA, respectively).

Additional value has been delivered to the Capital Area and the NEMA Headquarters in Ulaanbaatar by the Phase II Project support to upgraded communications capabilities and provision of equipment. It has equipped and allowed for the operation of a central Emergency Operations Center able to be connected to Emergency Management Departments created in all 21 aimags and other locations of emergency operations. By relating these improved communication resources with two ambulances supplied by the Project, the Ulaanbaatar Capital Area now has a 24 hour public Emergency Call Center and ambulance service operated by NEMA. These services provide the secondary advantages of wider public recognition of NEMA and disaster awareness visibility.

While spanning the interests of knowledge management, information dissemination, and public awareness, it should be noted that the Project website managed by NEMA is very good. With content provided largely by the Project, it contains much current and useful material about disaster management in Mongolia. The website is maintained in both Mongolian and English languages with much of the material developed or translated by project staff. The usefulness of the site may be verified at http://www.mongoliadisaster.org A 30 minute documentary film about herder groups’ implementation of community-based disaster reduction practices was being finalized at the time of the Evaluation. Although it was not available for review at the time, having met and interviewed some of the participants of the film, there is reason to believe that it will be an effective means to communicate with other local rural or herder communities through peer-based communication.

By contrast, some of the intended more structured aspects of public awareness in the Phase II Project have been more modest. The Project did prepare a draft proposal for a National Public Awareness Plan and also provided a limited amount of related technical equipment, but this area of developing a more systematic and sustainable public awareness programme within NEMA requires additional attention. The Phase II Project equipped a very basic television facility to create public information videos for public broadcast and eight 30 minute videos were prepared about various disaster events using NEMA materials. These were shown to some popular appeal if rather less educational content, but the cost of transmission by either public or private broadcasters prevented further use. A tragic fatal helicopter crash in July 2007 cost the lives of 11 NEMA firefighting staff and also put the audio visual equipment beyond use.

The effectiveness of other proposed public awareness devices, such as the use of public sirens in the Capital Area, has been questioned in the absence of a more systematic or sustained public information and education programme. The Evaluation Team agrees with this assessment while noting more generally that the systematic attention devoted so far by NEMA or the Project to implementing a well-conceived and adequately financed public

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9 An informal discussion with a telecommunications specialist advised that by the end of 2007 almost 80 per cent of the population and 60 per cent of the households in Mongolia will have access to a mobile telephone. The urban population largely concentrated in Ulaanbaatar, accounts for about 50 per cent of the total population.
information programme appears to be quite modest and largely *ad hoc* in realization. During discussions on the subject with Project and NEMA staff, most comment was focused on the perceived need of “getting the media to report things accurately” amid wider controversies and the strong public interest generally surrounding emergency events, such as occurred during the fatal helicopter accident.

**Output 2.3: Capacity of human resources involved in disaster risk reduction is strengthened**

In NEMA headquarters a professional training facility has been constructed and equipped with more than 50 trainers having initially received training. Some basic training materials have been developed for the purpose as other international titles have been translated into Mongolian. While some thought is currently being given to eventually developing a “Disaster Management College” within NEMA in the future, the Evaluation Team rather believes that such an activity may be better considered as an opportunity for possible outsourcing through partnership with a training institution, such as the Education Institute of the Ministry of Education.

Six senior NEMA staff have received disaster management training from overseas institutions and study tours also were financed by the Project as a means to expand their disaster management perspectives. Within Mongolia, Project staff have been very active throughout much of 2006 and 2007 conducting or organizing a various training programmes throughout the country and NEMA departments. Training programmes on disaster management subjects have been conducted for Emergency Management Directors, Governor’s Officers, and Heads of Public Relations in all 21 aimags and the 9 Capital Districts of Ulaanbaatar. Technical instruction has been provided to firefighters on a regional basis, while Project Coordinators and Leaders of herders groups have received community-based disaster management training in all of the eight pilot soums.

The evaluation team routinely encountered people who had participated in these various training activities. They spoke enthusiastically of the value of the training in their work as well as for advancing their personal opportunities. Particular value of the Project’s training was expressed at aimag level as was demonstrated convincingly in Bulgan Aimag with the participation of multiple representatives from other ministries or government departments. The well developed, multi-sectoral and comprehensive disaster preparedness plans that have been developed for all the soums in Bulgan Aimag testify to the further application of the capacities which have been created through this training.

This suggests that following the initial and fairly widespread coverage of basic classroom training or disaster subject exposure, there can be added value in concentrating on particularly vulnerable or exposed areas of need, or interest. This corresponds to an additional desire for more training that was frequently expressed, often with suggestions for specific subject areas or for specific levels of interest. This highlights a growing future requirement for training emphasis on technical matters with particularly local or small scale relevance. These include diverse subjects and imply the need for outreach and facilitated technical partnerships to address such areas being raised in association with disaster and livelihood development implications. Additional training subjects brought to the Evaluation Team’s attention included such subjects as local small-scale hydrology or mini-irrigation techniques, conservation of micro-environmental ecosystems, veterinary practice and fodder improvement, as well as small business practices like accounting and localized marketing.
A new, forward looking and younger cadre of staff who are becoming more engaged in building capacity for resilience (urban and rural, as the situations warrant), both within NEMA and working in partnership in other relevant ministries describe a growing and wider emerging audience for the future. Among some of the herder group representatives, it was noted that the interest and leadership was pronounced among mostly the younger generation (around 30-35 years of age), although with an occasional “elder” providing encouraging views of opportunity from the sidelines. The positive experience, and this investment in future returns should encourage additional, if more specific types, of building capacity beyond these initial Phase II activities.

**Output 2.4: Survey and recommendation on establishing emergency operational centers in different regions of the country**

While there is a reference to “NEMA decision on establishing emergency management centers finalized (3rd quarter 2007) in the Proposed Exit Strategy approved by the Project Steering Committee meeting of 8 June 2007”, this subject has not been brought to the attention of the Evaluation Team. The Team has not been able to identify specific activities related to this proposed output, nor is it elaborated in any of the other annual reports on accomplishments. There are some other related activities already referred to that may have assumed some of the originally intended activities. As mentioned elsewhere, Emergency Management Departments exist in all 21 aimags, and there are additional regionally based specialist rescue units located in four aimags. Early warning communications capacity has been provided throughout the country through the expanded information services referred to above. In this regard further information services and database development originally considered for implementation at soums was cancelled by the project because the existing telecommunication infrastructure was deemed to be insufficient. As such the funds originally earmarked for this activity was reallocated to funding the small grants and community based training activities associated with Objective No. 3.

**Output 2.5: Improved Training and equipment for local search and rescue, and firefighting units.**

The Project provided training for almost 300 firefighters drawn from 18 aimags in five regional training short courses during 2005 and 2006. Training consisted of both the broader aspects of disaster management and various types of disaster hazards, as well as adding to their specialist response skills. Off-road, specialist emergency, search and rescue trucks were provided by the project to Special Rescue Units composed in five aimags and in the Ulaanbaatar Capital Area. Two ambulances were also provided for the 24/7 Emergency Service operated by NEMA in Ulaanbaatar.

While the project has provided some operational materials and equipment to support the various outputs, the items were in direct support of individual project activities. They have therefore only addressed a small part of a much more serious requirement which exists within NEMA. This pressing need for even the most basic emergency management equipment and protective clothing was observed first hand and heard repeatedly in interviews with NEMA staff at all levels of responsibility. These observations echo remarks of the UNDAC Assessment Mission when it noted, “It is essential that more modern and up-to-date

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10 Project MON/05/305 Steering Committee Meeting report, 8 June 2007.
equipment is provided if the fire and rescue teams are to be able to carry out their important task in an efficient and effective manner.”\textsuperscript{11} This was reiterated 15 months later in 2005 when a follow-up report commented, “The [UNDAC] Team recognized the professionalism and commitment of the organization but feel that [NEMA] are somewhat inhibited in carrying out their very important task by the lack of basic tools and personal protective equipment.”\textsuperscript{12}

While this issue is beyond the specific responsibility of the Phase II Project alone, this subject is so central to NEMA’s expected institutional effectiveness, that the matter can only impede other areas of anticipated accomplishment identified under this expected output. This persistent shortfall of even the most basic emergency management and firefighting equipment, and an almost total lack of protective clothing, has become even more acute since the UNDAC observations quoted above. The dependence on occasional gifted material from sympathetic countries, or ad hoc availability of individual items such as one or two satellite telephones, parachute equipment, etc. seriously constrains much of the otherwise expected operational capabilities of NEMA.

As noted further by the UNDAC Assessment Missions in 2004 and 2005, a much larger and more serious unmet need for the identification, analysis and systematic resource mobilization process remains. The Evaluation Team can only endorse this view as it was repeatedly made aware of this continuing problem. The subject is an important one and needs to be addressed on a much more systematic and sustained basis, that is able to take full account of the additional essential supporting requirements for human and technical abilities to maintain and use the equipment across NEMA’s functional services and locations. This need is particularly acute in the extremely limited availability and often very dated nature of essential equipment in the Special Emergency Services.

**Objective 3: Support the further development and expansion of the National Partnership for risk reduction and community based disaster management**

The importance of the National Partnership is essential for an overarching policy of disaster risk management to proceed in association with sustainable development, poverty reduction, environmental stewardship, social justice and gender equity and humanitarian and civil society growth. Such dimensional growth does not occur automatically or without sustained institutional efforts. It is crucially important that a growing appreciation of partnership and the value of dialogue between key stakeholders be incorporated as fundamental and sustained elements of the emerging disaster risk management strategy. Partnerships do need to be more widely explored and cultivated between government and civil society.

**Output 3.1: Enhance cooperation between NEMA, government agencies, international donors and national and international NGOs as well as grassroots communities.**

The Project focused attention on the development of the Disaster Management and Risk Reduction Partnership (DMRRR Partnership) to improve cooperation and establish


\textsuperscript{12} UNDAC Mission Review Report, October 2-6, 2005.
coordination between parties involved in disaster management in Mongolia. A National Conference on “Strengthening Disaster Protection Capacity in Mongolia 2006-2015” held in June 2006 in Ulaanbaatar, with participation at the highest level of government with the Prime Minister, the Minister for Emergency Management, Members of Parliament, UN Resident Coordinator and senior government officials in attendance. Presentations were made by representatives from key ministries, UN agencies, NGOs, soum governors and leaders of herder groups. The conference was organized as a joint activity of the UNDP project and NEMA, and had as one of its major initiatives the presentation of the National Framework of Action (NFA). It also presented an accompanying national hazard assessment exercise which involved efforts of several technical ministries.

The preparation of the NFA was coordinated by NEMA and also benefited from the international expertise provided by a consultant engaged by the Project. As anticipated, the NFA was reviewed by this expanded community of actors engaged in disaster management who proceeded to approve the Framework as being suited to Mongolia’s future disaster management strategic planning. The political and public interest shown in the process was encouraging as it also demonstrated the value of partnership in disaster management practice. Further discussions among participants solicited additional views that later enabled Project staff to draft a tentative implementation plan, although the realization of such later stages of engagement must await the formal adoption of the NFA by the Mongolian Government.

The Project encouraged the development of Disaster Risk Reduction Partnership Councils in NEMA at the national level and within the Emergency Management Divisions at the aimag and soum levels. At the national level, the Minister for Emergency Management is responsible for the development of the partnership structure and regulations including the creation of a disaster risk fund to provide financial support for partnership councils at all levels. Since the National Conference in 2006, the Project has been able to develop working relationships on specific activities with some other ministerial inputs, and NEMA has initiated other wider professional contacts within the Asian region.

In this regard the Project, the Evaluation Team has noted the mutually productive association the Project has developed with the Institute of Hydrology and Meteorology of the Ministry of Environment and Natural Resources in the provision of data and forecasting information. Similarly, the Education Institute of the Ministry of Education, Culture and Scientific research has collaborated closely with the Phase II Project in producing an exemplary set of Standards for introducing disaster hazard and risk-related subjects into a revised national educational curriculum throughout all primary and secondary education programmes as an integral part of the national programme of “Education for All”. Additional interest has been expressed by the Education Institute to assume a greater degree of involvement in the development of professional training programmes with NEMA.

Regionally and internationally, there have also been some initial partnerships developed by NEMA and with the association of Project relationships. One such example is the recently agreed Memorandum of Understanding signed between NEMA and three other Mongolian official institutions with the Asian Disaster Preparedness Center in Bangkok, Thailand to cooperate on early warning arrangements, climate change adaptation, disaster preparedness and mitigation. ¹³ NEMA also conducted a disaster management exercise for civil protection

¹³ The MoU was agreed in July 2007 among ADPC, NEMA, the Mongolian Ministry of Food and Agriculture, Ministry of Nature and Environment, and the National Agency for Meteorology, Hydrology and Environmental
agencies from eleven countries under the auspices of the International Search and Rescue Advisory Group (INSARAG) in Ulaanbaatar in mid-2007. The fact that the exercise was developed around a chemical emergency in an industrial urban setting highlighted growing attention being given to future types of possible urban disasters.

**Output 3.2:** Increased disaster resilience of communities and improved information technology for disaster risk reduction at the grassroots level.

The Risk Manager Information System to assist local decision makers to develop local disaster preparedness plans was finalized. The local Disaster Risk Reduction Partnership Committees have been established in the eight targeted project soums where over 40 herders and farmers groups are operating. Thus, the designed Community Based Disaster Management Pilot Model has been tested with positive results. After an initial familiarization period that was facilitated by improved information and communications access, voluntarily established and self-managed herders groups are gaining strong support from the Disaster Risk Reduction Partnership Committees.

The Evaluation Team was able to witness the enthusiasm and enterprise displayed by eight herder groups, and to learn from extended discussion with their members of tangible and credible improvements in their resilience to both disaster risks and their livelihood conditions. As the benefits are realized, the members have been able to increase their recognition and their participation in public decision making at the soum and bagh levels.

**Output 3.3:** Community based disaster management initiatives in cooperation with existing herders and farmer groups developed and launched.

Community-based disaster management pilot models are established and tested in eight soums of four aimags. Recommendations on replication of these pilot models were submitted to the Government. Representatives from Khentii, Khovd, Zavkhan and Bulgan aimags participated in the Community *Naadam* (festival) Eight herder groups and two facilitator–moderators were selected by the UNDP task team for this event. The community Nadaam festival encouraged herders’ and similar farmers’ group participants to showcase best practice through cultural events and exchange their own innovative technologies that have been found useful to their own livelihood and disaster management activities. The groups presented examples of their local initiatives and explored how other communities might learn from each other and to apply those lessons. Herders groups and moderators have also discussed the policy towards increasing community involvement in key political decisions, and in one case have developed their own organizational structure to the extent that it has been officially granted NGO legal status.

The Project provided small capital grants to the herders groups as organizational incentives averaging between $1400 and $2000 for each group, since the third quarter of 2006. These grants have been valued as an economical and stimulating incentive for groups to develop their own additional resources in order to address their common needs, in several instances by the motivation to establish their own disaster risk or reserve funds capitalized by

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Monitoring. The Government of Mongolia has a long-standing collaboration with ADPC through its participation on its Regional Consultative Committee on Disaster Management.
members’ own contributions. In other instances local enterprises have been developed to raise funds for common benefit to the herder group.

One such positive example is the “Mandalkhaan” herders group from Binder Soum of Khentii Aimag. They have developed four different project activities that range from a resource generating curd production and marketing activity, to the identification and protection of micro-environments that can foster new fruit and vegetable production. Their enterprise and dedication was recognized at the Community Naadam as one of the best ten groups. Some soums have organized Mini-Community Naadams in their areas to demonstrate their best practices. The Project appointed eight local coordinators in October 2005 and encouraged them to exchange information and their experiences.

Livelihood Questionnaire

A total of 31 households from Jargaltkhaan soum and 38 households from Binder soum participated in a “Livelihood Level” questionnaire conducted by the Project in mid.2007, which examined seven indicators to determine livelihood levels of families before and after their participation in the Project. Ninety-five percent of targeted households completed the questionnaire prepared by the Project’s livelihood consultant. A second round of questionnaires shall be completed by the Project in other participating soums before the end of the Phase II project.

Level of livelihood improvement. The chart below indicates that 90 percent of the responding herder households have observed an increase in their annual household income following participation in their herder group activities organized by the Project. Only four families expressed dissatisfaction with the project.

Income generation activity. Income diversification activities varied among households according to the responses received. The opportunity for herder households to diversify their income base is dependent on the frequency and duration of their residence in a specific grazing area and the marketing opportunities prevailing in the area. These included such enterprises as establishing local, shared fruit or vegetable plantations, making or selling products from animals such as wool matting or leather, processing and marketing of food products such as dry curds, preserved vegetables, and prefabricated or community building and construction services.
Livestock increases. During participation in the Project, 69 households reported an increase of 2016 animals in the number of small livestock (sheep and goats) and 577 more among large livestock (horses, cows and camels). Herders are seeking to improve the breeding quality of their livestock in both Jargaltkhaan and Binder soums in order to better withstand local hazard conditions. One group in Binder soum has agreed to graze their animals collectively and accordingly by type of animal, so as to relate the feeding habits of the different animals to the most optimal pasturage conditions.

Assets purchased after the project. The questionnaire tracked major asset procurement by the herder households during the Project. A total of 69 households indicated that they had obtained additional assets listed in the table below for their personal use or to be shared among other group members (e.g. there were no tractors before the Project, but are now 12 of them are shared at the time of enquiry).

![Graph showing asset purchases](image)

Drinking water supply. The questionnaire found that most herder families collect water for their livestock and for household usage from wells in addition from nearby lakes, rivers and natural springs. At total of 32 families indicated that they rely on the use of natural water sources while 43 families rely on water from existing wells. Respondents expressed a need for more public wells to prevent livestock losses during period of prolonged drought.

Heating fuel supply. Herder families noted that 33 households use firewood collected from forest resources, 43 households use animal dung, 2 families use electricity and 4 families burn coal for heating their households. As the majority of families are using renewable natural resources, an opportunity exists to support initiatives to introduce alternative heating sources such as natural gas, solar energy and other source of heating.
Disaster preparedness and capacity building. Most all households in the group have comparatively high levels (85-95%) of traditional knowledge on disasters as the result of project training and knowledge sharing being adopted from generation to generation. Joint action has been able to capitalize on this common knowledge as the shared use of small tractors has increased the preparation and early storage of winter hay has increased production as much as 15 times that possible through individual family manual preparation.

Disaster message dissemination mechanism shows a medium degree (65-80%) of preparedness with most herders spreading disaster information messages by vehicles or by horseback. The absence of cellular phones and other types of communication to herder or distant communities impedes the spread of early warning of disasters and the arrival of external assistance. Disaster risk reduction partnership activities has shown a high level (75-100%) of capacity building to respond to simple localized fire fighting using manual fire fighting equipment.

**Output 3.4:** Assistance provided NEMA in implementing public disaster awareness programs to improve public disaster preparedness, risk reduction and increased resilience of the communities to different disasters.

In order to support community based disaster management and initiatives from herders’ and farmers’ groups, the Project is producing documentary films to promote community based disaster management among herder groups. Also the Project produced six video clips to generate public awareness of the operations of the National Emergency Management Agency, improve public disaster preparedness, and advocate the benefits of disaster risk reduction partnership and cooperation among organizations and communities. The film clips will promote multilateral partnership among the organizations working in the disaster risk reduction sector and shall benefit herdsmen in disaster prevention and preparedness activities.

**Output 3.5:** Methodology of risk assessment of urban areas developed, tested and recommended.

The examination of urban disaster risk assessment methodologies was conducted by ENVIRON LLC during a three-month period beginning in late April 2007. The research study conducted activities including:

- The development of assessment methodologies for urban disasters including earthquake, floods, landslides and industrial accidents was completed through a literature review of international best practices and comparative studies of risk assessment methodologies practices in other disaster-prone countries. The general methodology has been structured to be applicable for disaster risks in Mongolia.

- The legal environment relating to disaster risk reduction has been reviewed and analyzed in terms of completeness, consistency and efficiency to met current demands. The study proposed recommendations to fill identified gaps in the legislation.

- The study assessed the level of urban risks associated with specific hazards and defined normative threshold values of acceptable levels of risk.
The methodologies developed were tested in some sub-districts and industrial sites of the Bayangol district of Ulaanbaatar city. Principal findings include a high flood risk for the population in Bayangol district residing in the flood channels and other illegal settlements. Seismic risk assessments of residential and commercial buildings and schools found that a quarter of the buildings have a high seismic risk with 47 percent assessed with a low risk. Landslide risk was evident as families had settled into locations prone to surface slope destabilization. Industrial threats of chemical and oil leakages with the possibility for resulting fires or explosions were rated as a high risk using the assessment methodology.

The study concluded with recommendations to undertake a scientific disaster risk assessment in high risk urban environments, to modify risk assessment legal systems and to create partnerships with key state agencies to support mitigation and information exchange to lower the risk levels of urban hazards. These recommendations reiterate the UNDAC Mission’s assessment of a severe earthquake occurring in the midst of winter as being a worst case example, as well as noting the real and growing risks of urban industrial accidents.

PART IV LESSONS LEARNED

The experience gained during the implementation of the Phase II Project has demonstrated the value of the following lessons. While none of these lessons is unique to Mongolia, the experience in developing an expanded national disaster and risk management strategy in the country over the past five year attests to their relevance and validity for further accomplishments.

Benefits of a Sustained, Multi-year Disaster Risk Management Strategy

Rapid social and economic changes coupled with altered demographics in Mongolia is having profound effects on people’s livelihoods and also the growing number and different types of disaster risks to which they are exposed. First stimulated by the combined effects of the drought and dzud in 2000-2001, the strategic orientation of the Project during its successive phases has demonstrated the cumulative value to be received from a methodical, phased, and multi-year approach to creating institutional abilities amongst a growing number of collaborators while also contributing to a popular understanding of disaster and risk management.

The efforts to merge multiple disaster management functions within NEMA under the authority of a Minister for Emergencies, has been an important step in proceeding from the earlier focus on civil defense emergencies to a wider engagement with mitigation and disaster risk management. By its work to extend a wider awareness and progressive involvement in managing disaster risks throughout the society, NEMA and its partners provides a foundation on which to build greater protection for the nation’s assets.

Motivating Public Interest to Mobilize Local Community Resources

The Mongolian spirit for survival and self-determination that has been so strongly evident throughout its history and vividly demonstrated in recent years must be recognized as a significant contributing factor in the successful implementation of the Phase II Project. The
Evaluation Team has been impressed with people’s insight into disaster hazards, particularly those in the outlying rural areas where people are more dependent on their natural environment.

Their voluntary and dedicated efforts to create new forms of mutual support to shared needs has demonstrated both industriousness and resourcefulness, that is too easily overlooked. Despite a high opportunity cost to initiate a programme given the necessary investments of time and difficulties of physical access, the interest and abilities which do exist in local communities may be able to be more effectively unleashed through the wider use of modern communications and direct peer-to-peer exchanges. The use of even small incentives have demonstrated a very encouraging return for communities to assess their disaster and livelihood risks and then to seek new ways to increase their own resilience through resources within the local communities.

**Different Types of Disaster Risk Exposure in the Society**

As an emphasis given to reducing the physical, social, economic and environmental vulnerability remains the bedrock foundation of successful disaster risk reduction, it is important to be able to make distinctions among different segments of the population, where they live and the livelihoods on which the people depend. The findings of this evaluation suggest that the variety of disaster risk exposure experienced in urban and rural environments is sufficiently different for future disaster management planning to adopt altered approaches for each. The success of the community-based pilot projects bears this out.

In order to apply this lesson, more attention can be given to the risk identification and assessment process. As it needs to be a collective activity to be successful, it can provide additional benefits by motivating different communities of interest to participate in disaster risk reduction activities, particularly at local levels. By encouraging more opportunities for public participation and dialogue it is inherently educational. It also allows people to express their various needs and emphasis, allowing better focus on relative strengths or needs in various contexts. One such example is that fire-fighting and emergency rescue service capabilities may be more relevant in urban environments, while a greater concentration on changing climate implications would focus more on support to rural economies, etc. Such a distributed outlook of needs and responsibilities can also lead to the identification of additional productive partnerships that can be developed for specific purposes.

**Relevance of Disaster Risk Reduction and Sustainable Developmental**

Taken together the foregoing lessons underline the combined relevance of environmental protection, poverty reduction, sustainable development and contemporary disaster risk reduction are all intimately connected in addressing the risks of the 21st century. This equally illustrates the need, as well as the opportunities for any disaster management strategy necessarily to seek and engage multiple partners for the various abilities that each possesses. The needs of growing societies and the rising expectations of their populations have grown beyond the former acceptance of valuing skilled disaster services only after a disaster has happened, especially as there are now numerous examples and approaches by which personal livelihoods can be made more resilient and physical assets can be better protected in advance.
It is crucial to build such an understanding and involvement throughout programme sectors of government by mainstreaming disaster-related interests, and by seeking to engage an ever expanding role of professional skills and abilities that extend much beyond traditional sense of emergency services. This is associated with the related principle that disaster risk reduction is integral to development policy and planning. As such, additional commitments, and resources, are necessary at national, regional, bi- or multilateral and international levels of responsibility for activities to be planned and implemented in a sustained manner.

PART V. CONCLUSIONS

The following comments summarize the conclusions of the background and analysis elaborated above, and support the recommendations for future consideration, which follow.

Project Formulation, Goals and Strategy

The Phase II Project has been well-conceived with the intention of extending the previous accomplishments of Phase I with the specific intention of devising a national strategic policy for disaster management and risk reduction, developing capacity within NEMA, and encouraging wider development of partnerships throughout the country in various supporting fields of endeavor. The Project has admirably sought to identify the latest elements of international thinking in the subject and to associate that in its most appropriate means to the specific structures and requirements of Mongolian conditions.

The emphasis given to the appropriately related project objectives have outputs which coherently begin to address multiple disaster mitigation and management needs in a rapidly changing Mongolia. As each one focuses on a distinct target audience or set of intended partners, this approach has provided a useful basis for many activities across a wide spectrum of interests. As such the strategy needs to be appreciated as having been one of breadth, and has served well as a basis for more concentrated engagement in subsequent projects.

Despite the necessity of a much longer period of time to develop them more fully, the determined intentions of the project to advocate partnerships in both inter-sectoral and inter-organizational dimensions, as well as the important encouragement for including community based approaches to rural locations and individual family livelihoods have proven to be particularly important strategic elements in the project formulation. The success of the latter aspect of community-based engagement is particularly rewarding and should be an important area of emphasis in future projects.

Management and Implementation of the Project

Individual elements of the Project have created better and wider awareness of disaster and associated development issues to more people than before, although the effort clearly remains a work in progress. There is admirable recognition of the changing role of disaster management and the expanded concepts involved amongst those people most closely associated with the Project. While this testifies to the effectiveness of the range of project interventions and newly developed roles, such as in the pilot herder groups and community-
based disaster management programmes, it also signals that there is considerably more work required to reach a larger extent of the public and decision-makers.

**Implementation of new legislation for disaster risk reduction supported**

The Project was able to benefit from the legislative foundation of the very well conceived Disaster Management Law of 2003 as revised in 2005, and the decision to create the merged disaster management-related responsibilities in NEMA. That enabled the Project to proceed with a number of initiatives even as the culmination of some of them was ultimately dependent on additional Government commitments. Despite the important preliminary and collaborative work that has been accomplished through the Project, a fully coherent and committed strategy of national disaster and risk management will remain uncertain until there is the official adoption and adequate resourcing for a national framework or similar programme able to provide longer-termed vision, and specifically phased opportunities over several years for engagement throughout various governmental and civil society structures concerned.

Support is required from all concerned Project stakeholders to ensure that the momentum to create a disaster resilient society is not impeded by further delays in the adoption of the National Framework (or similar strategy) and the development and implementation of a subsequent coordinated action plan. This is important for instilling a wider acceptance of disaster mitigation and management throughout the society, but it can only be realized effectively with a sustained effort of outreach, engagement and organizational cooperation over time.

**Support for capacity building to the newly established NEMA and its local units**

Project staff and NEMA management were dedicated in their many efforts to undertake nearly all of the activities envisioned in the Phase II project to strengthen NEMA capabilities, even as some have demonstrated more explicit results than others.

The number and variety, as well as evident beneficial effect of training activities at NEMA Headquarters, in Ulaanbaatar, but also throughout all of the 21 aimags in the country is noteworthy. This training has had a significant effect on altering professional thinking about the changing concepts of disaster and risk management among the officials involved and also amongst the targeted local communities. It is anticipated that similar awareness raising will continue and also expand into new areas of professional activity and wider public familiarity, particularly in urban environments. For those people already involved in Phase II activities, there is evident interest for additional and more specific forms of training or professional capacity building, tending towards either more technical or specific subjects and for subject matters which have greater relevance in terms of small scale relevance or local application. This is consistent with the view of more disaggregated approaches to the various disaster people are exposed to in various locations or livelihood settings.

The expanded availability and use of information and telecommunications services within NEMA specifically and in the country more generally have been a particularly valued element of Project activities. The newly engaged resource also offers considerable promise for extended access to and from more distant areas and improved early warning capabilities.
It also offers the possibility for new and cost effective means of education and public information about disaster and risk management issues. With these added resources, and a growing body of collaborators, they may provide the basis for a more consistent and planned approach to a sustained public awareness programme within NEMA than has so far been possible with the Project, despite some singular activities.

While the project was able to provide some material support to NEMA in selected areas, such as the communications equipment and ambulances for Capital City emergency call center, etc., the more fundamental specialist emergency equipment needs of NEMA far exceed the project’s capability to address. While this subject remains beyond the overall role of the Project itself, the problem of greatly insufficient technical equipment is of such duration and is so basic to the perceived expectations of NEMA’s credibility and public viability that it needs to be urgently and seriously addressed through widely supported efforts. There may be additional value in undertaking a re-evaluation of what emergency services are most critical or which can most realistically be provided to the extent that they pertain either to largely urban or rural risk profiles.

**Further development and expansion of the National Partnership for risk reduction and the pilot development of community-based disaster management.**

The future success of the overall development objectives of the Project depends on the further realization of partnership in several dimensions. Some project activities sought to expand relationships across additional professional disciplines, with wider official government and ministerial association, and more non-governmental, civil society or private sector involvement.

There have been some excellent individual examples of partnership, as well as indications of growing Mongolian involvement in a wider regional disaster and risk management institutional environment, but a more sustained and strategic approach is required to realize wider forms of partnership. The approach of NGOs and the private sector has been forthcoming, but more often in a passing manner or as invited participants to meetings rather than as a fully developed set of shared responsibilities or a formalized work programme. This can be enhanced by NEMA designating several key areas or required activity where they believe other potential partners possess a particular technical or institutional expertise lacking within NEMA. This may have particular value for new and emerging hazards.

Additional partnership development will certainly require a longer time frame than originally contemplated, and must necessarily involve more specifically intentioned efforts through designated project activities. Partnership needs to be encouraged not only through NEMA outreach efforts alone, nor strictly on an ad hoc basis related to specific project activities. It can equally be encouraged and fostered by more sustained efforts of the wider international and donor community in which the United Nations system can have considerable influence.

By contrast, the concerted effort of the project to develop greater partnership with specifically targeted pilot herder groups and local communities has shown considerable success. The Phase II services to assist herder groups in eight high-risk soums has shown to be highly effective in herder group formation, creating effective disaster risk reduction training materials and strategies, grant management in support of livelihood expansion or diversification and the development of self-managed risk funds.
In future, such community empowerment can become a key arena for NEMA and other stakeholders where building community resilience through strengthening traditional warning systems and expanding indigenous coping capacities is an unrealized opportunity, with particular appeal for support to socially marginalized or impoverished people.

The availability of local disaster risk reduction funds have proven to be useful motivators for community planning processes and resulting joint efforts to undertake mitigation initiatives at the community level. The success of the Project in enabling these accomplishments should be expanded in future, and additional means considered that can allow a variety of other herder groups or local community practices to become more widely in touch with one another. This is an area where closer association with NGOs and the Mongolian Red Cross partnership arrangements could be productive.

**Strategic Considerations for Disaster Mitigation and Management in Mongolia**

The Phase II Project has been successful and has accomplished much of what it intended, even as its efforts were spread very widely over numerous activities, with many different collaborators, delivered in all parts of the vast country. There is now a need to consolidate this initial ground-laying and build further on the initial institutional capacities that have been supported. This applies both within NEMA as well as in disaster-prone communities themselves. Future project emphasis can focus on fewer areas of more strategic emphasis.

In this regard it may be important to moderate unrealistic expectations of capabilities that necessarily require a much longer period of time to mature and become evident, beyond occasions of a single week’s training. There may be added benefit in reassessing better ways of delivering services or support for either distanced communities, or alternately those agglomerated in larger urban contexts.

In this regard, it may be useful to rationalize and focus on the most strategic areas of support for strengthening NEMA capacities, with particular reference to moving in a direction of wider convening and motivating the involvement of a wider community of interests. Such a consideration highlights the benefits of a well-structured hazard and risk identification process, with the variations expected in either rural or urban environments. This is suggested as it has meaning for a better definition of respective needs, different types of mobilizing public and professional involvement, and can identify extended capacity building opportunities as well as more carefully described material requirements.

**PART VI RECOMMENDATIONS**

The following recommendations are made to maintain the momentum in developing the wider understanding of mitigation and disaster management throughout Mongolian society. They are expressed in four key areas for future concentration of attention and resources. These key areas can be supported by the two additional crucial elements for capacity-building that cut across all subject areas, with their accomplishments to be realized through cumulative effects over time.
Develop a Multi-Year Phased National Implementation Plan to Support the National Framework for Action

Suggested activities include:

- Government of Mongolia to adopt a National Framework for Action (NFA), as suited to its particularly needs and structures. As the current draft NFA is drawn to an international standard, it can become the basis for successful resource mobilization, provide a rationale for partnership, and emphasis for community-based disaster risk management principles.
- Develop a five-year national implementation plan, with annual work programmes subject to annual review and adjustments.
- Establish a National Platform structure for managing and realizing a national implementation plan, as a basis for coordinating multi-disciplinary association, national partnerships, and inputs for distributed activities at aimag, soum and bagh levels of activity.
- Translate *Words Into Actions* into Mongolian to provide a common, agreed standard of national relevance, based on international standards and emphasis but expressed according to Mongolian specific needs and interests.
- Convene a National Conference by July 2008 to adopt a national implementation plan.
- NEMA supported to design and conduct an impartial review and analysis process, chaired by an independent and respected figure, of post-disaster operational and policy review to improve future disaster management capacities and abilities.
- Pursue means by which national disaster management strategies and implementation plans interface and complement any emerging national development strategies or “National Development Plans”

Create a Resource Mobilization and Material Support Strategy for National Disaster Mitigation and Management

Suggested activities include:

- Creation of a systematic, strategic and sustainable resource mobilization and material acquisition policy and plan related to the NFA. Ideally this would be keyed to functions outlined in annual implementation plans.
- Conduct inventory, scale, prioritize, rationalize needs with external technical assistance that can forge preliminary linkage with potential sources of supply.
- Identify material needs by function such as fire-fighting, SAR, ICT, health or chemical decontamination, etc. and develop a functional approach to needs, moving away from generic requirements so as to better target possible sources of interest and support.
- Develop strategic resource mobilization plan related to such functional requirements, to seek materials from both established and non-traditional donor sources.
- Undertake a material cost-benefit/effectiveness study of wider distribution and more localized availability of basic types of emergency equipment linked through improved communications *versus* centralized stores of heavy or more technical equipment with correspondingly higher maintenance, readiness, utilization and rapid dispatch support requirements.
• Identify and obtain technical support required as part of material solicitation packages.

Prepare an Urban Disaster Risk Analysis and Management Plan

Suggested activities include:
• Conduct a comprehensive technical risk analysis of needs with priority attention given to earthquake risks in the capital area and related contingency preparedness planning.
• Conduct a seismic analysis of priority buildings, facilities, schools, health facilities, including key public and private sector industries, utilities and services for ability to withstand damage in the event of a major earthquake.
• Initiate study of building codes and enforcement standards, setting the standard for later updating or development.
• Establish an effective public awareness program on potential seismic hazards and associated risks (including interruption of utility services) to create effective response mechanisms for all people to lower their personal risk in the event of an earthquake or utility failure.
• NEMA to identify and partner with a Mongolian research institution to initiate and maintain a study brief with periodic specialist and annual reports on emerging or potential national disaster risks.

Expand Support for Community Based Disaster Risk Management

Suggested activities include:
• Expand herder group activities in two additional soums in each of the four existing pilot aimags and identify two soums in two new pilot aimags, using the risk criteria from Phase II Project to identify new sites in Phase III Project.
• Encourage expanded herder-to-herder methods to advocate and share beneficial experiences on group formation.
• Identify or outsource project management capacity to administer small grant incentives in line with NEMA /National Platform oversight. Seek wider NGO involvement or mutual support.
• Develop roving training capacities for specific technical advice and administrative training at soum and bagh levels to enhance capacities of existing herder groups.
• Encourage herder groups to pursue organizational development practices that can lead to their obtaining official NGO designation under Mongolian law.

Cross-Cutting Capacity Building – National Level Partnerships

Suggested activities include:
• Identify and invite specific agencies to partner with NEMA on designated project activities or functions in which they share mutual interests.
• Recruit a “Partnership Coordinator” to work with NEMA staff to link mutually supporting interventions, cross-referenced studies, resource applications, training opportunities, and shared technical assistance with national and regional partnership.
• Support NEMA to conduct and host incoming study tours for other selected countries for mutual review of mitigation and disaster management experience, and to showcase Mongolia’s own sustained efforts – at all levels of activity.
• Develop and publicize an international climate change and rural risk analysis research project in association with a regional institution, such as the NEMA/ADPC Memorandum of Understanding agreed in July 2007.

Cross-Cutting Capacity Building – Information, Education, Communications

Capacity building is critical, especially within NEMA, if the broader mandate is to succeed in shifting to a disaster and risk reduction culture. Suggested activities include:

• Develop a structured risk management skills development programme for NEMA headquarters and field staff to enable people to work more widely and effectively with other stakeholder organizations. This may be developed as a specific section of the national implementation plans, with annual emphasis given to specific functions.
• Conduct a study and gap analysis to create a sustained training plan for NEMA at the headquarters and aimag levels over a five year period.
• Develop a basic body of NEMA training materials, including technical support provided by partner organizations/ministries for building training material resources.
• Detail and disseminate regionally and internationally the Mongolian disaster risk management institutional process since 2000-01 to attract wider awareness for more support, partnership opportunities, and resource mobilization.
• Develop existing education standards into national curricula course materials for primary and secondary school students with the Ministry of Education.
• Develop teacher training course (for above) on “Protecting where we live, and how we live”, with two tracks – urban and natural/rural habitats – with the Ministry of Education.
• Study possibility of distance education training possibilities from Ulaanbaatar to aimags and soums through a pilot programme.
• Develop roving training capacities to enhance capacities of existing herder groups. Produce video packages for herder groups.
• Complete internet and computer access connections to remaining aimags, accompanying it with increasing use for routine communications, reporting, and also to disseminate good practices, educational materials.
• Extend ICT usage in NEMA through purposeful and developed intra- and inter-organizational exchange of experience and communications on a routine basis.

It is anticipated that the insight which has already been displayed by Mongolians in relating their awareness of current and evolving disaster risks to the needs and rapidly changing expectations of the country’s population in the cities and in the countryside, will continue to develop, and sustain national and local capacities for a safer Mongolia. The Phase II Project has made a significant contribution to this process and the methodical approach it represents can easily serve as an inspiration and productive example for other countries in addressing their own specific disaster reduction interests.
ANNEX I

TERMS of REFERENCE

TERMINAL EVALUATION

“Strengthening the Disaster Mitigation and Management System in Mongolia” Project
(MON/05/305 Phase II)

I. Background

The Strengthening the Disaster Mitigation and Management System in Mongolia” Project (Disaster Project) in the current Phase II (2005-2007), is the successor of the Project Phase I (2002-2005). One of the major accomplishments of the first project phase is the creation of the National Emergency Management Agency (NEMA). Prior to the creation of NEMA, a civil institution, the State Board of Civil Defense was in charge of emergency related matters. The Project contributed largely to the transformation of the national organization for disaster response from a military to civil organization and laid the groundwork for the current project phase. The Project Phase II is aiming at strengthening NEMA for reaching internationally recognized standards for disaster protection in Mongolia (e.g. Hyogo Framework). In its approach the Project is very comprehensive reaching from national to local level (Aimag, Soum, and Bagh). It integrates the civil society in disaster preparedness efforts through Community based initiatives on a local level and NGOs as recognized partners for cooperation.

The Strengthening the Disaster Mitigation and Management System in Mongolia Project started in 2005 with the main objectives were to:

1. To develop the National Framework of action for 2005-2015 on disaster risk reduction
2. To strengthen the capacity of the newly established National Emergency Management Agency and its local units (training, equipment, and communication)
3. To establish a National Disaster mitigation and Risk reduction Partnership
4. To design Community-based disaster management pilot models and test them in selected Soum for replication

The Project has been funded largely through the Government of Luxembourg and the United Nations Development Programme (UNDP). It started in mid 2005 and will to end in 2007.

II. OBJECTIVES OF THE EVALUATION

The UNDP country office in Mongolia is initiating this evaluation to determine to what extend the project has achieved its objectives and has improved the disaster preparedness situation in Mongolia. This includes the assessment of the National Framework of Action, the degree to which capacity of NEMA was strengthened through the Disaster Project’s activities, to which extend the National Disaster mitigation and Risk reduction Partnership was created, if the pilot models on Community-based disaster management are successful and recommendable for replication.

If the Government of Mongolia is willing to proceed with further strengthening of the Disaster and Emergency management system relying on the basis laid by the Disaster Project, a new project could be envisaged. The clear guidance for future actions for sustained results of the current project in respect to disaster management by the terminal evaluation would be of great importance. The main stakeholders of this evaluation are the Government of Mongolia represented by NEMA, and UNDP, and the Government of Luxembourg.

III. EXPECTED OUTCOMES FROM THE EVALUATION

The key outcome of the Evaluation will be the Terminal Evaluation Report. The first draft of the evaluation shall be submitted to UNDP CO Mongolia at the completion of the country evaluation mission. Any feedback provided by the National Project Director (NPD from NEMA) or UNDP will be incorporated into the draft by the evaluation consultants within 10 working days of receipt of the feedback. The mission should submit the revised final report in an electronic form to UNDP Mongolia.

The following topics should be necessary components of the evaluation report:

1. Executive summary
The recommendations shall in particular include suggested headings and other relevant information for a future project proposal. The report has to be submitted in English. It shall not exceed 50 pages in total.

IV. SCOPE OF THE EVALUATION

The evaluation team should review the relevant legal and policy documents, which were developed by the project facilitation and assess the changes in the capacity of the government institutions. Interviews and meetings with various stakeholders, professionals and field visits of the Project target areas will add important information to the evaluation. The key stakeholders to be interviewed include:

1. NEMA
2. UNDP
3. Representatives of the local Government Authorities at both aimag and soum levels
4. Local Partnership Council members
5. Community groups, herder families (including non-beneficiary households)

Review of the following documents will be mandatory for the evaluation team:

- Project document
- Steering Committee Meeting Minutes
- Tri-Partite Review Meeting Minutes
- Audit Reports
- Annual Reports
- (Annual) Financial Reports
- Mission Reports
- Outcome Evaluation Report
- Law on Disaster Protection of Mongolia
- Report of UNDAC mission
- Follow-up report to UNDAC Mission
- All Annual Work Plans of the project
- Donor reports
- Other Reports, Meeting Minutes, Correspondence and TORs as needed

V. Roles and Specific tasks of the EVALUATION TEAM

This evaluation shall be done through an independent team of consultants consisting of two international experts and two national consultants. One of the international experts shall be appointed as the team leader. Specific role and responsibilities:

The team leader shall be responsible for overall quality and timely completion of the evaluation with the submission of the Final Report. Specifically, the team leader shall ensure adequate delegation and clear division of tasks/responsibilities among individual members of the terminal evaluation, overall coordination/planning of the team work, and liaison with the project team, UNDP and NEMA in terms of substance and logistics of the mission arrangements. S/he will also ensure that comments on the first draft report from different stakeholders are well incorporated in the final version of the report.

The other consultants will work under the direct supervision of the team leader; support the overall evaluation process in accordance with each member’s roles/responsibilities assigned by the team leader. The national consultants will provide support in providing with country specific expertise and input, reviewing documents which are available only in Mongolian language, translating necessary documents and interpreting during the interviews, meetings and other relevant events for the international team members.
General tasks for the team members:
1. Conduct meetings with all relevant parties to the subject (meeting arrangements by the project team)
2. Review necessary documents
3. Conduct field visits for assessing the project results
4. Interview relevant stakeholders from the project and NEMA, local organizations, communities
5. Provide input in drafting the final report

VI. Duration and Timing

The evaluation mission shall be undertaken in the time period from 27 August till 17 September, 2007 (the mission will include weekends).

Tentative implementation arrangements:

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<th>No.</th>
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<th>29 Aug 5 Sep</th>
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<th>9-13 Sep</th>
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<td>2.</td>
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<td>3.</td>
<td>Meetings with Stakeholders in UB</td>
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<td>5.</td>
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VII. Required Qualifications

The international experts should have an advanced university degree and at least 5-10 years of work experience in the field of disaster management, sound knowledge about results-based management (especially results-oriented monitoring and evaluation). S/he should be familiar with UNDP projects and strategies and have sound familiarity with Mongolia, ideally with the project and its related field/sector. The national consultants should have a university degree and at least 5 years of working experience in the relevant field. S/he should have excellent knowledge of disaster and emergency management system in Mongolia, current problems in the sector with working knowledge about the global agreements on disaster risk reduction, common practices and ongoing efforts in the region, and preferably be familiar with UNDP strategies in disaster and risk reduction areas. Proficiency in English is a key requirement for the national consultant.
ANNEX II

COMPOSITION of the EVALUATION TEAM

Mr. Terry Jeggle, Team Leader

Mr. Jeggle is a Senior Advisor with the UN International Strategy for Disaster Reduction (ISDR) based in Geneva, Switzerland. He was previously a Sr. Officer with the UN International Decade for Natural Disaster Reduction. He has been associated with development, disaster and risk management activities and organizations around the world for more than 35 years and has worked with officials and institutions in more than 50 countries. He has edited two UN publications for ISDR on disaster risk management, also previously having served as the Director of the Asian Disaster Preparedness Center in Bangkok, Thailand and as a Country Director with the NGO, CARE earlier in his career. Mr. Jeggle may be contacted at: Telephone (41-22) 917-8452. Email: jeggle@un.org

Mr. Earl James Goodyear, Ph.D. International Consultant

Dr. Goodyear has over thirty-five years experience in the design, negotiation, coordination and evaluation of global economic and social development programs and emergency relief to rehabilitation and recovery interventions. Expertise in the creation and strengthening of sustainable developmental institutions contributing to civil society, strategic planning and coordination of multi-sector economic development programs and the design, training and management formation of institutions and policy on disaster preparedness, prevention, mitigation and response. He has worked with international humanitarian organizations, OFDA, IFRC, DFID, OCHA and UNDP in over 50 countries and just completed a one-year assignment with UNDP-Pakistan as the Senior Recovery Programme Advisor. Dr. Goodyear is an independent consultant, based in the United States. His contact information is as follows: 3273 Aldoro Avenue, Spring Hill, Florida, 34609, USA. Telephone: (352) 686-9041. Email: Redseadiver2000@yahoo.com

Ms. Purevsuren Lamjav, MS., National Consultant

Ms. Purevsuren has been a consultant for the last ten years for the United Nations, Non-governmental organizations and private companies on management, human rights and tourism issues. She has previously worked with the U.S. Embassy as a Commercial Assistant, the US Agency for International Development Mongolia Privatization Programme as the Public Relations Officer, a correspondent for The Economist and the Globe and Mail and as the event manager for the UN Center for Human Rights. Ms. Purevsuren has a MS in Applied Mathematics and a degree from the UK in International Human Rights. Her contact information in Ulaanbaatar, Mongolia is: Telephone: (976) 99787813 and Email Puje@hotmail.com

Acknowledgement

The Consultants wish to acknowledge the outstanding contribution and support offered by the Project team: Mr. Boldbaatar Sh., National Project Manager, Mr. Naranbat, Project Secretary/Translator, Ms. Munkhjin B., Project Partnership Consultant, and Mr. Ganbaatar and Mr. Dandarchuluun, Project Drivers.
### Annex III

**List of Persons Interviewed**

<table>
<thead>
<tr>
<th>Name / Title</th>
<th>Organization / Location</th>
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<tr>
<td><strong>MON/05/305 Project Principals</strong></td>
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<tr>
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<td>Tel: 976-51-262416</td>
</tr>
<tr>
<td>Mr. Namsrai, Deputy Director, NEMA, and Chief, Special Rescue Service Mr. Batchuluun, Deputy Chief, Emergency Management Department Mr. Sugarbat, Chief, Policy Implementation and Coordination Department Mr. Baatarzorigt, Chief, Monitoring Division Mr. Ariundalai, Chief, Communications and Information Division Mr. Uuganbayar B., Chief, Strategic Policy and Training Division Mr. Baterdene D. Chief, State Reserve Department Mr. Amarsanaa, Senior Officer, State Reserve Department</td>
<td>National Emergency Management Agency (NEMA)</td>
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<tr>
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<tr>
<td>Ms. Shoko Noda, Deputy Resident Representative</td>
<td>UNDP Mongolia</td>
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<td>Ms. Tungala U, Environment Practice Manager</td>
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<td>Mr. Joscha Stillner, UNV Programme Officer</td>
<td>UNDP Mongolia</td>
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<td><strong>Government Officials</strong></td>
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<tr>
<td>Mr. Mishigjav Buurunkhii, State Secretary,</td>
<td>Ministry of Education, Culture and Science, Government of Mongolia,</td>
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<tr>
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<tr>
<td>Dr. D. Azzaya, Director, Institute</td>
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<td>Field Visit Contacts</td>
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<tr>
<td>Coordinator for Herder Groups</td>
<td>Bayan-Burd Herders Group, Binder Soum</td>
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<tr>
<td>Mr. L. Mendsaikhan Leader, and members</td>
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<td>Mr. Kh. Ononchuluun, Mr. B. Dorjsenbe, Mr. Enkhbat, and members</td>
<td>Mandalkhan Herders Group, Binder Soum</td>
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<tr>
<td>Mr. N. Batbileg Leader, and members</td>
<td>Mankhaadai Herders Group, Binder Soum</td>
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<td>Mr. Jamsranjav Badamdorj, Deputy Governor,</td>
<td>Office of the Governor, Govt. of Mongolia, Bulgan Aimag,</td>
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<tr>
<td>Mr. Uuganbayar, Head, Emergency Management Division Mr. Altanhundaga, Deputy Head, Emergency Management Division</td>
<td>NEMA, Bulgan Aimag</td>
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<td>Ms Maygmar, Head, Health Department,</td>
<td>Ministry of Health, Government of Mongolia, Bulgan Aimag</td>
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<td>Ms. Tsengelmaa, Head, Veterinary Services,</td>
<td>Ministry of Animal Husbandry, Govt. of Mongolia, Bulgan Aimag</td>
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<tr>
<td>Mr. Dashzeveg, Project MON/05/305 staff, Local Coordinator for Herder Groups</td>
<td>Saikhan Soum, Bulgan Aimag</td>
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<td>Mr. Tsren-Ochir, Project MON/05/305 staff, Local Coordinator for Herder Groups</td>
<td>Teshig Soum, Bulgan Aimag</td>
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## LIST of REFERENCE MATERIALS REVIEWED

### Strengthening the Disaster Mitigation and Management System in Mongolia Evaluation Mission

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<td>Exit Strategy of UNDP Project “Strengthening The Disaster Mitigation and Management System in Mongolia”.</td>
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<td>Steering Committee Meeting Report – Government of Luxembourg and UNDP Funded Project MON/05/305 Strengthening the Disaster Mitigation and Management System in Mongolia. June 8, 2007</td>
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<td>Power Point notes: Implementation and Achievement UNDP Project “Strengthening the Disaster Mitigation and Management System in Mongolia”. Sh. Boldbaatar, National Project Manager.</td>
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<td>Annual Project Report 2005. Strengthening Disaster Mitigation and Management System in Mongolia. 00046121.</td>
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<td>Monitoring and Evaluation Report on Disaster Risk Reduction Partnership Counsel and Herder’s Group’s Activity of Bulgan Aimag, Soum Saikhan. Munkhjin B. July 22, 2007</td>
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