FIFTH ISLAMIC CONFERENCE OF ENVIRONMENT MINISTERS

Draft Executive Work Plan for the Implementation of the Strategy for Disaster Risk Reduction and Management in Islamic Countries

ICEM-5/2012/3.2

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Introduction

The 4th Islamic Conference of Environment Ministers adopted the Draft Islamic Strategy for Disaster Risk Reduction and Management and requested the Global Facility for Disaster Reduction and Recovery (GFDRR) to support the development of the executive work plan to implement this strategy.

This work plan responds to demand by Islamic countries. Ownership by the governments of Islamic countries, fully taking into account and building on ongoing work, is one of the guiding principles of the present document.

A two-step approach is recommended. Given the large number of countries represented in the Organization of Islamic Cooperation (OIC), the broad variety in their vulnerability profiles as well as the different stages of implementing comprehensive risk mitigation strategies, the work plan foresees implementation over two phases.

Phase One of the work plan will (i) strengthen DRR capacity in Islamic countries; (ii) improve understanding of risks and access to data (iii) advance regional initiatives for disaster risk reduction; (iv) promote disaster risk financing and insurance strategies; (v) help countries prepare for disasters and strengthen post-disaster response and reconstruction capacity; and (vi) lay the groundwork for the second phase implementing comprehensive disaster risk management programs at the national level.

Phase I: Tentative Budget		**USD 146.25 million**
I	**Capacity Building and Knowledge Exchange**	**USD 38.25 million**
II	**Understanding Risk and Information Sharing**	**USD 30 million**
III	**Regional Risk Reduction Activities**	**USD 22 million**
IV	**Disaster Risk Financing Strategies in OIC Member Countries**	**USD 12 million**
V	**Post-Disaster Response and Emergency Interventions**	**USD 36 million**
VI	**Development of National Programs**	**USD 8 million**

Phase Two will see the implementation of disaster risk management program in all Islamic countries that are at risk from natural hazards and require support to increase their resilience capacity, tailored to the specific context of each country. Based on the analytical work of phase I, a dialogue will be held to identify risks, prioritize actions, agree on a strategy and coordinate with all stakeholders.

The below table shows the cost of implementing programs in all countries, however, the final number of national programs may be smaller, as determined by a detailed assessment of each country's vulnerability and capacity.

Phase Two: Tentative Budget	
57 Countries	USD 5 - 10million per country
Preliminary Total	**USD 285 to USD 570 million**

Implementation will take place be according to individual country circumstances. A 3 year implementation period is foreseen for phase 1 (2013-2015). The second phase, the actual implementation of the national programs, is initially planned to take place over a 5 year period (2016-2020). However these are approximate figures, as overall implementation time will vary from one country to the next depending on the extend of the work required, the capacity and the individual advancement of each country's DRM agenda.

Background

1. The impact of disasters is growing over time in parallel to the expansion of human activity. Growing urbanization increases exposure and vulnerability of large numbers of people to natural hazards. Between 1970 and 2010[1] disasters caused more than 3.3 million deaths and US$2.3 trillion in damage (in 2008 US dollars). During the 21st century, a lack of planning in rapidly growing cities of the developing world will result in a major increase in disaster risks. The number of people exposed to storms and earthquakes in large cities could double to 1.5 billion by 2050. Furthermore, by the turn of the century losses resulting from weather-related hazards are expected to triple to US$185 billion annually. This is without taking account of possible changes in the climate and pattern of extreme weather events.

2. Climate change further complicates the picture. The 2010 World Bank / United Nations report Natural Hazards, UnNatural Disasters: The Economics of Effective Prevention estimates that annual losses from climate-change induced tropical cyclones will increase between US$28 billion and US$68 billion by 2100. New evidence shows that rare but powerful tropical cyclones will become more common. The main challenge lies in shifting focus from post-disaster response to pro-active risk management to increase resilience and reduce the vulnerability to natural hazards in the first place. Prevention needs to come hand in hand with preparation. Achieving this requires not only a shift in mindset, but a fundamental step change in how disaster risks are considered.

Member countries of the Organisation for Islamic Cooperation

3. Member countries of the Organisation of Islamic Cooperation make up almost a quarter of the world's population and land mass. Over 660 million people living in these countries are at high risk from multiple natural hazards. Reducing the impacts of natural disasters by reducing vulnerability and increasing resilience is essential to safeguard social and economic development gains. Member Countries such as Bangladesh, Côte d'Ivoire, Djibouti, Indonesia, Iran, Kazakhstan, Nigeria, Pakistan and Turkey are prone to disasters and have

(1) Source for all figures in this section: World Bank (2010) Natural Hazards, UnNatural Disasters: The Economics of Effective Prevention.

accumulated significant experiences in disaster response, recovery and preparedness. Many Islamic countries have also experienced large natural disasters in the past. For example the 2004 Indian Ocean Tsunami has caused over 160,000 casualties in Indonesia and the 1999 Izmit Earthquake in Turkey caused over 17,000 deaths as well as millions of dollars in damages[2]. Tragic events like these highlight the importance of proactive disaster risk management and helped catalyze national action on addressing exposure and vulnerability to natural hazards. This knowledge should be disseminated for the benefit of other member states.

4. The 4th Islamic Conference of Environment Ministers (Hammamet, Tunisia on 5-6 October 2010/ 26-27 Shawal 1431H), adopted the Islamic Strategy for Disaster Risk Reduction and Management (from here on "The Strategy"). Furthermore, it entrusted the Global Facility for Disaster Reduction and Recovery (GFDRR) with promoting Disaster Risk Reduction (DRR) and recovery amongst member-states and supporting the development of the executive work plan to implement the Strategy, under the guidance of the Kingdom of Saudi Arabia, as Chair of the Executive Bureau of Islamic Conference of Environment Ministers and in partnership with ISESCO. The 4th Islamic Conference of Environment Ministers invited the Islamic Development Bank as well as other financial institutions to contribute by implementing projects to put the strategy into action.

5. Adopted in 2005, the Hyogo Framework for Action (HFA) is a global blueprint for action to reduce disaster risks. A compact of 168 governments and international organizations, including the World Bank and the UN, it is focused on building resilience to disasters in all nations. The HFA is guiding political action to strengthen disaster risk reduction efforts at the national, regional and global level.

6. Drawing on the priority areas for action of the HFA, the Islamic Strategy for Disaster Risk Reduction and Management, as adopted by the 4th Conference of Islamic Environment Ministers, centers on regional cooperation, and information and experience sharing. The strategy's action areas focus on strengthened governance capacity, reinforcing risk assessments and early warning systems, education and training, promoting a culture of prevention and reinforcing preparedness to disasters, as well as post-disaster response and recovery.

7. Building on the Strategy, this executive plan aims to help advance the dialogue on DRR across the Islamic World, to mitigate the impacts of disasters through supporting governments and non-governmental actors in preparing for natural hazards.

8. Keeping in mind the immense reach of the Islamic countries across the whole globe, the key goal of this action plan is to draw on the comparative advantage the OIC and ISESCO has versus other regional or international organizations.

(2) All figures from EM-DAT http://www.emdat.be

9. Government ownership is the most important element of sustainable risk reduction. Thus the guiding principle of this work plan is a country led process, driven by the governments of Islamic countries with technical guidance and support by international partners. Support will build on existing programs of these partners.

10. By considering the key natural hazards in the region (droughts, floods, cyclones, tsunamis and earthquakes), we can gain a good understanding of the main disasters to which Islamic countries are vulnerable.

11. Coordination between international partners in support of government driven DRR programs will be a key feature of this Work Plan. Significant work in disaster risk reduction is already taking place across the Islamic World, driven by local governments and supported by international organizations such as the World Bank and the Global Facility for Disaster Reduction and Recovery. All work proposed by this work plan, undertaken in support of the Strategy, has to be closely coordinated with ongoing activities to complement and strengthen prior and current investments in building resilience to natural hazards.

12. For example the World Bank's GFDRR is focusing the broader part of its work on 31 focus countries, of which 11 are Islamic Countries[3]. A considerable amount of work has already been initiated in these countries with almost USD 90 million programmed in comprehensive DRR programs for these countries. To date GFDRR has already approved projects worth more than 30million dollars throughout the OIC member countries.

(3) Bangladesh, Burkina Faso, Djibouti, Indonesia, Kyrgyzstan, Mali, Mozambique, Pakistan, Senegal, Togo, Yemen

III. Implementation

Ownership by the governments of Islamic countries, fully taking into account and building on ongoing work, is one of the guiding principles of the present document. Given the large number of countries represented in the OIC, the broad variety in their vulnerability profiles as well as the different stages of implementing comprehensive risk mitigation strategies, a phased approach is recommended.

The first phase of the work plan will strengthen DRR capacity in Islamic countries, advance regional initiatives for disaster risk reduction, promote disaster risk financing and insurance strategies, and lay the groundwork for the second phase implementing comprehensive disaster risk management programs at the national level. This phase will include a pillar that aims at helping countries prepare for disasters and strengthen post-disaster response and reconstruction capacity.

A 3 year implementation period is foreseen for phase 1 (2013-2015). The second phase, the actual implementation of the country programs, is initially planned to take place over a 5 year period (2016-2020). However these are approximate figures, as overall implementation time will vary from one country to the next depending on the extend of the work required, the capacity and the individual advancement of each country's DRR agenda.

IV. Outline of Phase I: Promoting Comprehensive Risk Management Strategies

OIC and ISESCO, being the regional Islamic mechanisms for cooperation between Islamic countries, are both in a unique position to bring countries together in cooperation to strengthen disaster risk reduction efforts, by maximizing the unique comparative advantage both the OIC and ISESCO enjoys as an organization cutting across geographic regions but united by the cultural and traditional heritage of Islam.

The first phase of the work plan is divided into six pillars:

Phase I: Tentative Budget		**USD 146.25 million**
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Pillar I: Capacity Building and Knowledge Exchange — USD 38.5 million

Most OIC countries have many years of experience in preparing for and responding to natural disasters. The foundation of this work plan is supporting the continued strengthening of capacity within Islamic countries, and facilitate the exchange of knowledge between those countries.

Activity a: Capacity Building — USD 33.25 million

Fostering the necessary human capital and skill sets required to undertake cross-sectoral and multi-disciplinary work, is one of the most critical elements to successfully implement risk management strategies and is a crucial starting point for this work plan. For long term sustainable risk reduction, knowledge and capacity has to be strengthened at the regional, country and local level. The capacity building component offers options to raise the decision makers' and the public's awareness of the benefits of risk mitigation, to advance the analytical skills and professional knowledge of the DRM practitioners and, to promote proactive risk reduction strategies.

The following activities should be considered:

- Mapping of regional institutions with DRM capacity to identify where additional capacity support is needed and encourage networks amongst regional organizations and research facilities to support knowledge exchange.
- Capacity building, training and technical assistance for various sectors in disaster risk management measures. Training programs maybe designed to be implemented at national or at regional level.
- Development of a disaster risk management core curriculum for professionals from Islamic countries, drawing on cutting edge knowledge offered by development partners and leading academic institutions, for example incorporating GFDRR knowledge products. (A thorough peer review process will ensure high quality and pedagogically sound learning courses).
- Development of Partnership Learning Series (PLS) to establish basic competencies in DRM and set a baseline for continuous education of disaster practitioners. (This program could also lead to a predictable carrier development path for professionals engaged in different aspects of risk reduction). The Partnership Learning Series will be offered by regional organizations and entities mandated to improve the capacity of national DRM institutions.
- Develop e-learning courses in Arabic and French (and potentially additional languages) capturing the theoretical and empirical aspects of disaster risk management offered by national and regional entities, with topics ranging from risk analysis, risk sensitive land use planning, improved urban planning, to damage and reconstruction needs assessments.

Activity b: Knowledge Exchange **USD 5 million**

Drawing on the experience of OIC countries in preparing for natural hazards and responding to natural disasters, knowledge exchange and South-South experience sharing are a crucial part of implementing the Strategy. Classroom style education can provide a certain degree of knowledge about risk management, however experience has shown that sharing experiences, as well as the opportunity to meet experts and practitioners provides for a more direct, and deeper understanding of good practices. Knowledge sharing can take the form of workshops, hands on exercises, simulations and study tours through which practitioners will gain a better understanding of good practices from countries which have successfully implemented risk mitigation strategies to scale up across Islamic countries.

To help disseminate good practices and lessons learned the following activities are anticipated:

- Workshops for practitioners in Islamic countries at the national, sub-national and local level to exchange experiences and lessons learned.
- Dedicated study tours for officials and DRM practitioners from Islamic countries. These tours will provide them with the opportunity to benefit from the experience and knowledge from other countries as well as to see first-hand how other countries tackle Disaster Management
- Simulations of different catastrophic scenarios and hands on exercises at all levels (from the Governments to the grass root communities) bringing together practitioners from multiple countries.
- Creating forums for exchange of knowledge among OIC countries in various DRM topics on the technical and policy aspects, also bringing in experiences from outside the OIC countries. For example sectoral or multisectoral conferences on DRM for OIC countries (annually or bi-annually).
- Matching countries based on the common hazards/challenges to partner in sharing experiences and building capacity tackling the challenges.

Pillar II: Understanding Risk and Information Sharing — USD 30 million

Without a solid understanding of our risk we will never effectively increase our resilience. Understanding risk is one important step in supporting a solid decision making process. There are two cornerstones to the effective utilization of Understanding Risk, i) the first is how the risk assessment (or other analytical product) will support the decision that is to be made, and ii) the second is the availability of the data to inform that decision and future decisions.

In order to build resilient societies, policy-makers and the public must have access to the right data and information to inform good decisions; decisions such as where and how to build safer schools, how to insure farmers against drought, and how to protect coastal cities against future climate impacts. The following steps are foreseen:

- Develop the risk information at the regional level needed to guide these critical investments
- Apply that information to critical decision making ensuring that it is a central part of government planning i.e. how to retrofit the water supply system to make it earthquake resilient, or how to regulate new development in high risk flood plains.
- Develop the local technical capacity so they can produce the information and update the assessments moving forward

Activity a: Data Collection — USD 10 million

Natural disasters are very complex phenomena and understanding their characteristics and assessing the potential impacts require extensive amount of the scientific, engineering, and asset exposure data. Investing in the collection of appropriate data is therefore a required step for reliable risk assessments in the future.

Also the damage and loss data from disasters provide invaluable insight to understanding the nature of natural hazards and their socio-economic impacts at national and sub-national level. In most regions there is limited information available from historical disasters and moving forward it is critical to improve the mechanisms to collect data from natural events.

The following steps are foreseen:

- Design or modify and promote existing systems for collection of damage, loss and socio economic impact data after every disaster
- Installation and maintenance of appropriate instrumentation which would vary depending on the hazard type (i.e. Ground motion instruments for earthquakes, rainfall data instruments for flood and drought)
- Collection of baseline data of public assets and critical infrastructure
- Based on use for risk assessments (Activity b), collect required data such as topography, land cover, bathymetry, soil type, soil moisture, etc.

Activity b: Understanding Risk to Support Decision Making USD 10 million

A comprehensive disaster risk management strategy has to begin with establishing the risks faced by a region and assessing the vulnerability of its people and assets.

Three regional risk assessments are suggested as pilots in highly vulnerable and disaster prone regions spanning multiple Islamic countries that are exposed to the same hazards or share a similar vulnerability profile. For example this could be Central Asia, the countries bordering the Persian Gulf, and the West African Sahel. The geographical coverage and the type of hazards for the three proposed assessments should be defined based on vulnerability and government demand.

Population growth and increased concentration of physical assets in highly exposed areas is resulting in increased vulnerability. Unplanned and unregulated land use, lack of environmental controls, and the poor application of building standards all contribute significantly to potential asset losses. Considering increasing climatic variability and global climate change, this trend is likely to continue.

In most countries exposed to natural hazards, data relating to asset vulnerability is scarce. Often few attempts have been made to systematically assess risk in probabilistic and financial terms. There are therefore very few true assessments of risk at appropriate resolution and scale; little attention is paid to vulnerability of assets exposed and risk maps are essentially descriptive.

Risk assessments should be done with close involvement of the national governments and the efforts should include training and education on understanding the results of the assessments and the application of the results in decision making for various sectors of national governments. The global experience has proved, that risk assessments are more effective if they are defined to address the needs of a sector.

Regional risk assessments provide an adequate frame of reference from which countries can inform decisions and develop suitable risk evaluations for planning.

- Three hazard and risk assessments in three highly vulnerable regions and hazard prone regions spanning multiple Islamic countries
- Develop disaster and climate national risk profiles and identification of hot spots
- Training of relevant national sectors on the results of the risk assessments and identification of applications, and need for further detailed assessments as needed.

Activity c: Data and Information Sharing and Enhanced Accessibility
USD 10 million

Sharing data and creating open systems promotes transparency, accountability, and ensures a wide range of actors are able to participate in the challenge of building resilience. This information enables cheaper insurance, better informed citizens, and allows local governments to develop informed contingency planning. Building upon the World Bank's Open Data Initiative, the GFDRR has formed the Open Data for Resilience Initiative (OpenDRI) to support the client countries tackle the challenges in availability of the data required for risk assessments and access of the users to the results of such assessments. OpenDRI aims to reduce the impact of disasters by empowering decision-makers with better information and the tools to support their decisions. Throughout this activity the plan will be to expand the activities of OpenDRI or comparable products to the Islamic world, specifically to:

- Enable the sharing of risk information between ministries, and the public where appropriate.
- Promote the practice of sharing and effective data management including guidelines and policies to regulate and standardize the process at the appropriate level
- Develop tools to enable decision makers to utilize the risk information to support investment decisions.
- Workshops, seminars and training activities to promote the use of data and applications for development and disaster risk mitigation.

Pillar III: Regional Risk Reduction Activities — USD 22 million

Disasters are by their very nature cross-border phenomena and often their consequences affect multiple countries (e.g. river basins, coastal areas, etc.). In this context, the potential for countries to work together to address trans-boundary risk and common areas of vulnerability is significant. In addition to areas that are exposed to risk from the same event, there are also groups of countries that are exposed to a similar level of risk from the same type of event, or have the similar 'vulnerability profile'. For example, this can include countries that are spread along the same tectonic fault line.

Undertaking disaster risk reduction measures at a regional level, in partnership with regional inter-governmental bodies and organizations, offers advantages through cooperation and coordination such as:

- Sharing data and tools (e.g. risk models), best practices, and promoting exchange of expertise among neighboring countries;
- Avoiding unintended negative externalities of disaster prevention investments in one country on disaster vulnerability in another;
- Harmonization of disaster prevention related policies and regulations;
- Benefitting from economies of scale when developing mechanisms such as early warning systems;
- Lowering entrance barriers to risk insurance markets for developing country governments and offering new business opportunities to private insurers willing to invest in small states;
- Joining forces when conducting risk assessments related to hydro-geological, meteorological, and climatological hazards threatening the same area.

Regional cooperation is also a good level to strengthen synergies between disaster prevention and climate change adaptation initiatives. There is a need to scale-up and harmonize activities in climate risk management, for example by exploring synergies at regional scale in areas such as hydromet systems, knowledge portals, weather forecasts (using modern real-time hydromet and satellite systems), communication systems, and strengthening regional forecasting centers. This was also reinforced through the Cancun Agreements at the UNFCCC Cop-16 meetings in 2010, which called for stronger regional engagement to enhance the implementation of adaptation actions.

Activity a: Meteorological Forecasting and Early Warning Systems — USD 7.85 million

Building on the hazard and vulnerability profiles as established under Pillar II, this activity will assess and where needed improve meteorological forecasting. Utilizing regional risk profiles, weather and climate information systems help decision makers prepare for natural hazards through the development of early warning systems.

First, regional weather and meteorological systems to support decision making will be analyzed and strengthened where required. These systems should serve as triggers or entry points in end-to-end early-warning systems (EWSs) that deliver outlooks, forecasts and warnings for weather hazards and their impacts. Major advances in observation, analysis and prediction of high-impact weather and climate events have been achieved by some countries and are available to all. Meteorological forecasting systems are usually managed by public entities: National Meteorological Services or National Hydrometeorological Services (NMSs).

However the gap between the most-capable and the least-capable NMSs continues to widen. In contrast to agencies in developed countries, NMSs in many developing and least-developed countries lack the capacity and the capability to access recent scientific and technical advances.

Assessing and where required, strengthening meteorological forecasting systems is important for climate adaptation and sustainable development. They provide a basis for climate change assessments and help develop cost-effective adaptation to weather and climate extremes. Moreover these systems help identify risk-aversion solutions by providing weather and climate forecasts and other information products. These are broadly used for decision-making in agriculture, water resources management and irrigation, transport, public health, and environmental management, among other sectors.

Effective early warning systems rely on reliable weather forecasting. The poor weather information services provided in developing countries often make early warnings impossible, and lack of warning in turn leads to economic damage and loss of life that could have been avoided. Often, remote communities in which weather-, water- and climate-related vulnerabilities are largest lack even a minimal level of meteorological or hydrometeorological service, having no access to competent warnings enabling informed decision-making.

Hand in hand with the strengthening of meteorological forecasting systems, feasibility studies will be undertaken for early warning systems against hazards affecting the whole region. This will build on and fully integrate ongoing activities in these regions. For example, GFDRR has designed and leveraged the Central Asia Hydromet Modernization Project whose main beneficiary countries are Kyrgyzstan and Tajikistan. The project also aims at integrating NMHSs modernization into broader development frameworks, including for disaster risk management.

The following activities are foreseen:

- Assess existing weather and meteorological forecasting systems to identify requirements and strengthen where necessary
- Building on the risk assessments and weather and climate information systems, conduct feasibility studies to put in place comprehensive early warning systems.

Activity b: Safer Schools **USD 9.15 million**

A great number of school-age children are studying in hazard prone areas of the world, exposed to the dangers of disasters like earthquakes, fires, floods, landslides, volcanic activity and manmade disasters. The China earthquake of 2008 killed over 7,000 children in their schools. In Pakistan 17,000 students died at school and 50,000 were seriously injured during the 2005 earthquake in Kashmir. It is estimated that 40 million schoolchildren in the ECO (Economic Cooperation Organization) countries are exposed to an equal or greater level of seismic hazard than the children in Muzzafferabad, Pakistan were exposed to prior to 2005. The analysis of 15 PDNAs supported by GFDRR in priority and ear-marked countries between 2007 and 2010 showed that natural disasters directly affected more than 8 million children, destroyed (fully or partially) almost 40,000 schools and caused damages and losses bigger than US$1.2 billion for the education sector in those countries.

A number of Islamic countries have made strong progress in addressing resilient and safer Schools. For example Turkey and Indonesia have prioritized both the protection of the education development investment as well as meeting the state obligation of ensuring that children and education staff are safe in public run institutions. In particular within Indonesia after lessons learnt from the Tsunami a broader safety program has been implemented where schools are constructed in a safer way or retro-fitted to ensure safety. Moreover schools are required to have operational plans that include evacuations, document security, non-structural mitigation as well as adopting a national education program that encourages children's resilience through knowledge, awareness and practical application.

To assist Countries to make better decisions and prioritize resources in order to ensure physical safety of children and education staff, as well as to protect their development investment a phased approach has been developed through technical assistance encompassing the following steps:

- Risk Analysis of schools and Resource Mapping (including geo-spatial database)
- The formulation of a National Strategy for Resilient and Safer Schools
- The identification of key implementation agencies
- Financial resource identification
- Implementation

This activity will initiate demonstration programs in Islamic countries most at risk of seismic and other natural relevant hazards. Moreover it is proposed to organize an international conference on Safer Schools to facilitate knowledge exchange between Islamic countries.

Activity c: Cultural Heritage Protection **USD 5 million**

As seen in many countries where cultural assets are irreplaceably lost or severely damaged, such as the 2000 year old citadel of Bam in Iran which was reduced to mostly rubble by an earthquake in late 2003, practical precautionary measures can safeguard important cultural resources.

A comprehensive guide on risk preparedness for cultural heritage should provide guidelines for local and national authorities in countries and regions at risk. The basic principles of risk preparedness for cultural heritage can be summarized as:

- The integration of cultural heritage assets into existing disaster management plans and;
- The use of preventive approaches that improve or maintain the condition of heritage assets to ensure survival of the heritage and its significant messages during and after natural disasters.

For preventive conservation, risk management can provide a framework for decision making. There are four recognized steps to using a risk management approach to preservation issues.

- Identifying all risks to heritage
- Assessing the magnitude of each risk
- Identifying possible mitigation strategies, and
- Evaluating the costs and benefits associated with each strategy

Internationally accepted frameworks and procedures for Environmental Assessment can be applied to the protection of Cultural Heritage. In planning for reconstruction this method can be used.[4]

(4) For further information see World Bank Good Practice Notes, July 2008 **Risk Preparedness for Cultural Heritage**
http://siteresources.worldbank.org/CHINAEXTN/Resources/318949-1217387111415/Cultural_Heritage_en.pdf

Pillar IV: Disaster Risk Financing & Insurance Strategies in Islamic Countries
USD 12 million

Despite prevention and mitigation efforts, no country can fully insulate itself against losses from major natural disasters. Disaster risk financing and insurance (DRFI) solutions provide efficient means for countries to financially protect themselves from natural disasters as well as foster disaster risk management and climate change adaptation efforts. Integrated DRFI strategies allow countries to increase their financial response capacity in the aftermath of disasters and to reduce the economic and fiscal burden of natural disasters.

As part of a comprehensive risk management strategy, financial protection will help governments mobilize resources in the immediate aftermath of a disaster while buffering the long-term fiscal impact of disasters.

Well designed disaster risk financing and insurance strategies can also create financial incentives for governments and/or households to further mitigate their risks. For example, access to DRFI instruments can be made contingent upon implementation of a national disaster risk management plan or compliance with earthquake-resistance building codes. The simple fact that a Ministry of Finance is sensitized to a country's exposure can help mobilize resources beyond disaster response in support of risk mitigation. Insurance programs can also be designed to discourage risky behaviors.

Activity a: Disaster Risk Financing & Insurance — USD 12 million

A dedicated funding window will support the development and deployment of disaster risk financing and insurance strategies in selected countries across the Islamic world to increase Islamic countries' financial response capacity post-disaster and to reduce the economic and fiscal burden of natural disasters by developing integrated disaster risk financing and insurance strategies within the broader disaster risk management and climate change adaptation agenda. The disaster risk financing and insurance activity will initially work with up to ten demonstration countries already advanced on their DRM agendas to develop risk financing strategies. This will be closely linked to and complementing ongoing work in these countries.

The first component of each country's risk financing strategy will be sovereign-level financial strategies to increase the financial response capacity of the governments in the aftermath of natural disasters while protecting their long-term fiscal balances. These sovereign risk financing strategies will be based on financial and fiscal catastrophe risk assessments that bring to light appropriate options for disaster risk financing in a country. Such options could include innovative financial mechanisms such as contingent credit, parametric (re)insurance and catastrophe bonds, and catastrophe risk pooling.

The second component of each country's risk financing strategy will be catastrophe risk market development strategies, which could promote the deepening of property catastrophe risk insurance, agricultural insurance, and/or disaster micro-insurance markets, depending on the country context. The development of

competitive catastrophe risk insurance markets increases the overall financial resilience of a country to natural disasters and reduces economic disruption from natural disasters. Public-private partnerships could be established to increase populations' access to catastrophe risk insurance and to foster sustainable catastrophe risk insurance market growth.

In addition, US$2 million will be used to finance regional approaches to disaster risk financing and insurance enabling experience-sharing across the OIC. As part of this component, research on the development of Shari'ah-compliant disaster risk financing and insurance tools adapted to the circumstances and requirements of Islamic countries (e.g., the potential for takaful for catastrophe risk and/or sukuk for catastrophe risk), could be considered.

Pillar V: Post-Disaster Response and Emergency Intervention — USD 36 million

This pillar will help strengthen capacity for sustainable recovery involving post-disaster recovery and reconstruction planning which supports incorporating disaster risk reduction measures.

Furthermore strengthening preparedness to increase resilience and minimize the impacts of a hazard that cannot be prevented is an essential part of any disaster risk management program. Early planning and capacity building can support sustainable recovery and reconstruction in post-disaster situations.

The Post Disaster Needs Assessment (PDNA) is increasingly being recognized as the internationally accepted standard post-disaster assessment methodology for determining disaster impact and needs and as planning and financing platforms for multi-sector accelerated recovery. This has in turn improved country ownership and strengthened country systems. PDNAs foster an inclusive partnership to bring together country governments and all major stakeholders - UN, EU, bilateral partners, INGOs, IFIs, civil society, private sector etc. This facilitates aid harmonization and alignment, donor coordination and mutual accountability of governments to their peoples and partners in the recovery processes, resulting in better development effectiveness of recovery processes and longer-term risk reduction initiatives.

The PDNA is undertaken by country governments and their international development partners as a government-led process that assesses the damages and losses, and synthesizes the needs for recovery, reconstruction, and risk management after a natural disaster. A PDNA aggregates damage and loss estimates and crystallizes them into prioritized post-disaster short- and medium term recovery and reconstruction needs through a policy dialogue between a government and its development partners and captured in the Recovery Framework, the final part of the PDNA.

Activity a: Technical Assitance — USD 5 million

A dedicated capacity building and technical assistance program will strengthen capacities of disaster prone Islamic countries to plan, manage and implement long-term recovery programs and help sub national authorities implement these programs after a disaster. In-country capacity in recovery preparedness and response will be enhanced through training of practitioners from the government as well as civil society in high risk countries to conduct post disaster damage, loss and needs assessments. Additionally stronger integration of risk reduction aspects in disaster recovery strategies will be promoted through collecting and documenting experiences in disaster response and reconstruction to ensure knowledge transfer between Islamic countries and knowledge capture of successful approaches and interventions.

The Technical Assistance fund will build on ongoing work by the international community to strengthen the partnership and coordination among the World Bank, United Nations, European Commission, the larger donor community, governments and other stakeholders in assisting post-disaster recovery planning in affected countries.

The technical assistance component foresees four activities:

- Teams to build capacity for preparedness and response and to strengthen global post-disaster recovery assistance coordination among the World Bank, the UN, European Commission and other relevant stakeholders
- Tools to create global and regional knowledge networks on disaster recovery approaches and practices particularly in Islamic countries
- Training to build capacity for post-disaster recovery assessments and planning including pre-disaster baseline data preparation at the global, regional, country and provincial/local levels;
- Tasks to provide country-level support for post-disaster damage, loss and needs assessments to inform recovery and reconstruction planning

Activity b: Contingency Funding / Callable Fund Contingency: USD 30 million

Contingency funding will be set up to finance post disaster needs assessments and rapid interventions during slow onset disasters with the following attributes:

- Callable fund for rapid response in a post-disaster scenarios;
- Prior agreements with both donor and beneficiary governments;
- Financing/co-financing of post-disaster recovery;
- Joint needs assessments and implementation of recommendations under the leadership of country government's designated authority.

Activity c: Feasibility Study for Reconstruction and Recovery Fund USD 1 million

Finally, a feasibility study will be carried out to develop a significant permanent financing mechanism for emergency reconstruction and recovery funding. The objective of a permanent reconstruction and recovery fund would be to support the mobilization, coordination and allocation of financial resources to provide immediate liquidity to disaster-affected countries, provide funding for critical recovery interventions, and assist in building the capacity of the affected government over the long-term.

Unlike risk insurance or other risk financing options which have a limited set of activities eligible for funding, a permanent reconstruction and recovery fund would allow for greater flexibility, with activities including: (a) technical assistance and capacity building; (b) infrastructure investments; (c) delivery of basic services; (d) community development; (e) environmental protection and clean-up; (f) income generation activities; and (g) budget support.

The permanent reconstruction and recovery fund will be envisioned with the following principles in mind:

- **Government leadership**- the governance structure and the process for approving grants will be led by the governments of participating countries.

- **Strategic finance**- the fund's resources can increase flexibility by providing reconstruction finance that is not being furnished through earmarked funding from other sources;
- **Standards**- the fund and its financed activities will adhere to international standards and good practice in key areas such as financial management, procurement, poverty alleviation, good governance, environmental sustainability, and gender equity;
- **Build on existing capacity**- the fund will work with and finance existing successful programs.
- **Good governance**- the fund and its financed activities will facilitate the participation of different levels of government, civil society, the private sector, the donor community, and its international development partners, and will promote a transparent and accountable reconstruction process;
- **Speed and risk management**- the fund will ensure the speedy and efficient delivery of its activities while managing risks, producing high-quality results.

Pillar VI: Groundwork for Phase II - Development of Country Programs
USD 8 million

Preparing the ground for the second phase of implementing the strategy is a key pillar of this work plan. The guiding principle of these country programs is that they are led and driven by the country government and build on and complement all disaster risk management work already taking place. The activities of Phase I will be tailored towards supporting countries to build the capacity and gain the expertise for the development and implementation of comprehensive national DRM strategies.

Building on the first three pillars of this work plan, comprehensive disaster risk management plans to underpin risk mitigation plans and reduction strategies in Islamic countries have to be developed as the second phase of implementing the Islamic Strategy. This could be prioritized to target the highest risk countries first, based on exposure and vulnerability studies such as the World Bank's 2005 Hotspots study or an updated version thereof.

Every action at the global and at the regional level ultimately aims at strengthening implementation of risk reduction activities at the national and local level in disaster hotspots. Special emphasis must therefore be given to strengthening national legal and institutional arrangements enabling preparedness for disaster risk reduction.

Activity a: Develop National Programs **USD 8 million**

This step involves the preparatory work to develop these national programs, the focus of which will follow the priorities of the Hyogo Framework for Action to:

- Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
- Identify, assess and monitor disaster risks and enhance early warning
- Use knowledge, innovation and education to build a culture of safety and resilience at all levels
- Reduce the underlying risk factors
- Strengthen disaster preparedness for effective response at all levels

The following steps are foreseen to develop a country tailored risk reduction, capacity building and technical assistance program, taking into account ongoing activities, to create the basis for long term sustainable risk reduction:

- Developing country risk profile
- Assessing and reviewing the legislative and institutional environment
- Mapping of institutional landscape and ongoing activities
- Identifying national government priorities
- Ensuring effective coordination mechanism between development partners

Outline of Phase II: Implementation of National Disaster Risk Management Programs

As the second phase of this work plan, disaster risk mitigation program will be implemented in all Islamic countries, tailored to the specific context of each country. Based on the analytical work of phase I, a dialogue will be held to identify risks, prioritize actions, agree on a strategy and coordinate with all stakeholders. National and regional dialogues should take place in parallel with the implementation of Phase I. It is important to remain flexible with the regards to the implementation timeline. Countries that already have established DRR programs, which meet the necessary preconditions of a comprehensive, country driven risk mitigation strategy, are encouraged to strengthen their ongoing work closely integrated with additional activities as recommended by this work plan.

Based on the experience of GFDRR, these programs usually focus particularly on assisting countries in formulating appropriate policy, providing technical assistance, and preparing the ground for investments either directly focused on disaster risk reduction or integrating a risk reduction component in other development projects.

Programs are estimated to be in the order of USD 5-10million per country. These are, however, very tentative numbers to be established in phase I.

Tentative Budget Phase II	
57 OIC Member States	USD 5 - 10 million per state
Preliminary Total	**USD 285 to USD 570 million**

These are preliminary estimates based on experience;
The final figures for each country will be established as part of the analytical work undertaken in Pillar IV of the first phase.

Indicative Budget

Phase I		Cost in $
Pillar I	**Capacity Building and Knowledge Exchange**	**38.25M**
Activity a	Mapping of Regional Institutions & Identification of Knowledge gaps	0.25 M
	Capacity building and technical assistance in DRR and Post Disaster response	28.5 M
	Development of DRR Core curriculum for professionals	2 M
	Development of Partnership Learning Series for disaster practitioners	1.25 M
	Development of DRR e-lerning courses in Arabic and other languages as required	1.25 M
Activity b	Workshops for practitioners at national, sub-national and local level	1.2 M
	Dedicated Study tours for officials and DRM practitioners of Islamic countries	1.2 M
	Simulations of different catastrophic senarios and how to respond	1.5 M
	Hands on exercises at all levels (from the government to the grassroot communities)	1.1 M
Pillar II	**Understanding Risk and Information Sharing**	**30 M**
Activity a	Data Collection	10 M
Activity b	Risk assessments in three highly vulnerable regions spanning more than 1 OIC country (500K per region)	1.5 M
	Development of Disaster and Climate Risk Profiles (150K per country)	8.5 M
Activity c	Develop data sharing between Ministries and between Government and Public where appropriate	5 M
	Workshops, Seminars and training activities to promote the use of data and applications for development of disaster risk mitigation	5 M
Pillar III	**Regional Risk Reduction Activities**	**22 M**
Activity a	Assess existing Weather and Climate Information Decision Systems and strengthen where necessary	5 M
	Conduct feasibility studies for Early Warning Systems (50K per country)	2.85 M
Activity b	Risk Analysis of school and Resource Mapping (100K per country)	5.8 M
	Formulation of National Strategy for Resilient and Safer Schools (250K per country)	2.85 M
	Identification of Key implementation agencies + additional training where required	0.5 M
Activity c	Identification and Assessment of risks to Heritage Assets	2.5 M
	Identification and evaluation of possible mitigation strategies	2.5 M
Pillar IV	**Promoting Disaster Risk Financing and Insurance Strategies in OIC Countries**	**12 M**
Activity a	Development of a Disaster Risk Financing and Insurance Strategy in selected countries	10 M
	Financing of Regional approaches to DRFI to enable experience sharing across the OIC	2 M
Pillar V	**Post-Disaster Response and Emergency Interventions**	**36 M**
Activity a	Development of capacity for preparedness and response and to strengthen global post disaster recovery assistance coordination	5 M
Activity b	Contigency Funding/Callable Fund	30 M
Activity c	Feasibility Study for Reconstruction and Recovery	1 M
Pillar VI	**Development of country programmes**	**8 M**
Activity a	Development of Country risk profiles	2 M
	Mapping of the Institutional landscape and ongoing activities	2 M
	Identifying national government priorities	2 M
	Ensuring effective coordination mechanism between development partners	2 M
Phase II		
	Implementation of Country Programs ($5-10 million per country)	285 M to 570 M
Total	**Phase I + Phase II indicative budget***	**431.25 M to 716.25 M**

* These amounts are calculated based on the assumption that the initiatives would be implemented in each of the Countries, these numbers will be revised according to the needs and advancement of each of the countries.

ANNEX I

SAMPLE DISASTER RISK PROGRAM

Historical Profile of Natural Disasters in Country X

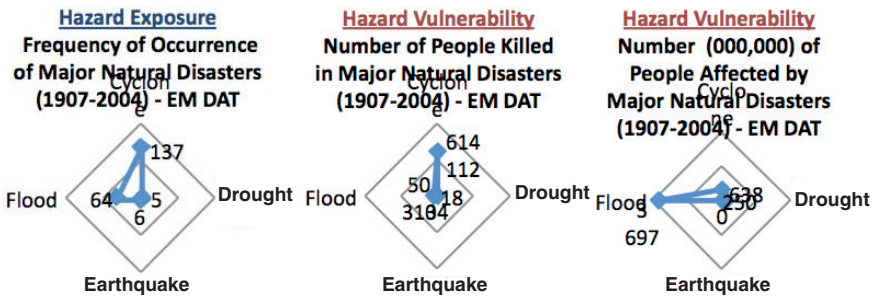
1. Country X's geographical location and land characteristics make it one of most hazard-prone countries in the world. The country has been frequented by a range of natural hazards throughout its history, including cyclones, floods, droughts, tornadoes and river bank erosion. Other major hazard risks to the country include earthquake, Tsunami, high arsenic contents in ground water, water logging and salinity, etc. Wide-scale flooding has been the most recurring type of disaster striking Country X, and the country remains one of the worst sufferers of cyclonic casualties in the world. The transitional pre- and post-monsoon periods are also frequented by severe local storms and tornadoes. In addition, riverbank erosion affects many people and hectares of land annually. Droughts have also been a common occurrence over the years.

2. Country X has experienced a number of earthquakes over the past 200 years - between 1869 and 1950, 7 earthquakes ranging between 7.0 to 8.7 on the Richter scale have been recorded in the Country X region. Even though Country X is located in a seismically active and high-risk region, seismic risk awareness, mitigation and reduction has not been mainstreamed into the country's core disaster management agenda and strategy. Not only is there great need for such mainstreaming of seismic risk reduction and mitigation, but for the country to urgently start devising and implementing major preparedness interventions and capacity building efforts.

3. Country X is currently ranked as the most climate vulnerable country in the world (World Bank 2005). Climate change in particular, is likely to considerably exacerbate' Country X's disaster vulnerability Projections of the Intergovernmental Panel on Climate Change (IPCC) suggest that warmer temperatures will increase both the frequency and intensity of cyclones in the Bay of XXX. In addition, rapid snow melt in the upper Himalayas coupled with increased peak discharges, would likely increase the depth and spatial extent of flooding in the XXXXX. Added to these risks are the likely consequences of sea level rise, which can cause economic losses of an unprecedented magnitude in Country X's case.

Country X's Exposure and Vulnerability to Hazard Risks

4. Historically, cyclones and floods have posed the greatest risk to Country X on a country level. The charts below indicate that cyclones have by far been the most recurring and devastating natural hazard in terms of the frequency of their occurrence and their human toll., floods in Country X affect a greater population base than any other natural hazard. The country remains one of the worst sufferers of cyclonic casualties in the world. There have been at least 8 major cyclones since 1965, wreaking huge damages and loss of life - the 1970 and 1991 cyclones caused 300,000 and 140,000 human casualties respectively. The November 2007 cyclone, although of no less magnitude than some of the earlier cyclones, led to lesser (3,363) casualties, due to among other factors, the much improved state of disaster management in the country.



Moreover, in most years, between 30-50% of the country has been affected by floods. As illustrated by the Hotspots Study by the University of Columbia's Earth Institute, sub nationally, the northern and eastern regions of the country are susceptible to earthquakes while the southeast is particularly vulnerable to all five hazards. The combined multi-hazard maps for mortality and GDP show that Country X ranks in the top 3 deciles of risk when compared to the rest of the world.

The Key Underlying Risk Factors

5. **Deficiencies and Gaps in Implementation of Disaster Preparedness and Risk Reduction Plans (A Case Study of the 2007 Cyclone)** - The country's geographical location and land characteristics overwhelmingly and unmistakably remain the biggest underlying risk factors for Country X. Over time, the country's ability to manage disaster risks, in particular floods and cyclones, has evolved and improved, as a result of a gradual shift from a response-based approach to a strategy that incorporates elements of greater emergency preparedness and risk mitigation. However key deficiencies and gaps remain in the actual implementation of national DRM policies and local risk reduction action plans, as was evidenced in the 2007 cyclone event. The event highlighted the following unmet needs that continue to remain the key underpinning risk factors for Country X: (a) further strengthening and institutionalizing disaster preparedness, especially among the various sub-national disaster management committees; (b) mobilizing adequate resources for improved local disaster preparedness and response management resources; (c) mainstreaming disaster risk reduction and mitigation across sectors and down to the lower levels of governance, and; (d) taking stock of deficiencies in key risk mitigation infrastructure such as shelters and coastal and river embankments.

6. **Inadequate Attention to Seismic Risks** - Even though Country X is located in a seismically active and high-risk region, seismic risk awareness, mitigation and reduction has not been mainstreamed into the country's core disaster management agenda and strategy. This is probably because of the long period of time that has elapsed since the last major earthquake in 1950, but predictions now suggest that a major earthquake might be just around the corner. Hence, there is a need for mainstreaming seismic risk reduction and mitigation in Country X's disaster management strategy and plans, and to start devising and implementing major preparedness interventions and capacity building at various levels.

7. Lack of Technical and Financial Capacities for Climate Change Adaptation - With the added climate change factor, which is likely to exacerbate the intensity and impacts of floods, cyclones and droughts in particular, there is a need for greater urgency for further improving disaster management and preparedness in the country, including quickly mobilizing substantial additional financial and technical support from the international community and development partners. The up-gradation and modernization of Country X's hazard risk management regime is vital for the country to continue the economic growth it has achieved over the last decades. The Government's PRSP must place even greater emphasis on Disaster Risk Reduction (DRR), along with the cross-sectoral mainstreaming of DRR, in order to be able to achieve the millennium development goals.

COUNTRY X'S DISASTER RISK MANAGEMENT FRAMEWORK

Country X's Disaster Management Strategy

8. The present national strategy for disaster management, although in an early phase of implementation, is based on 3 key elements including:

- Defining and redefining the risk environment, entailing systematic and improved hazard analysis and vulnerability/community risk assessments; and risk treatment and ranking, including incorporation of climate change impacts;
- Managing the risk environment, including achieving a good balance of risk reduction options; moving from generic hazard to risk specific programs, and; mainstreaming risk reduction across sectors through advocacy, policy and planning reform, and capacity building;
- Responding to the threat environment, including activating systems and mobilizing resources; utilizing vulnerability and risk databases for emergency response planning; and maintaining effective communications and early warning systems.

Institutional Structure for Disaster Management

9. This section will describe individual country's institutional DRM structure.

Presently Articulated National Priorities for Disaster Management

10. TBC

11. The DRM authority is centered around the following strategic priorities and goals: (i) professionalizing the present disaster management system; (ii) mainstreaming disaster risk reduction; (iii) strengthening institutional mechanisms for disaster management; (iv) empowering at-risk communities; (v) expanding risk reduction programming across all sectors and all hazards; (vi) strengthening emergency response systems, and; (vii) developing and strengthening networks for disaster management.

12. Further, the DRM authority calls for the development and implementation of district, and also lays out specific requirements to be addressed by these multi-tier plans. It also mandates the development of sectoral development plans incorporating disaster risk reduction, and hazard-specific multi-sectoral disaster management plans.

Priorities for Climate Change Research, Capacity Building and Adaptation

13. Under its strategic goal for expanding risk reduction programming, the DRM authority provides an elaborate framework for 'establishing an integrated approach to disaster management, including climate change and climate variability impacts'. Key priorities identified vis-à-vis climate change include: (a) establishing and capacitating the Climate Change Cell (CCC) within DOE; (b) developing scenario and prediction models; (c) conducting research and strengthening knowledge on climate change and climate variability impacts; (d) identifying climate change adaptation options through action research; (e) incorporating climate change and climate variability impact information in DRR programs and strategies, and ; (f) designing and implementing capacity building programs to improve and enhance multi-stakeholder understanding of climate change impacts.

INTEGRATION OF DRM IN DEVELOPMENT STRATEGIES

Integration of DRM in National Policies and Linkages with International Conventions

14. Country X's Poverty Reduction Strategy Paper (PRSP) provides for strengthening disaster management and risk reduction, mainstreaming DRR into national policies and developmental processes, and enhancing community capacity for disaster preparedness and risk reduction. Further, the Draft National Plan for Disaster Management, is aligned with the objectives and priorities for action identified under various international conventions, such as the Hyogo Framework for Action (HFA, 2005-15), the United Nations Framework Convention on Climate Change (UNFCCC) and particularly, the SAARC Framework for Action (SFA, 2006-15). The NPDM has already been approved by, and incorporates the feedback of: (a) a dedicated MoFDM committee; (b) a wider stakeholder group comprising of government and non-governmental organizations and academic institutions; (c) relevant government ministries and departments; and lastly; (d) the IMDMCC. In the light of IMDMCC comments and decisions, the draft was further revised and prepared for Cabinet consideration and approval.

The Bank's Shifting Focus from Disaster Response to DRM Financing

15. Where appropriate, this section will detail the work done by the WB in support of DRM in the country

KEY DONOR AND INTERNATIONAL FINANCIAL INSTITUTION ENGAGEMENTS IN DISASTER RISK MANAGEMENT

19. The national disaster management institutional apparatus above has collaborative linkages with a host of technical and scientific organizations, such as the Flood Forecasting and Warning Centers (FFWCs), Country X Meteorological Department (BMD), Center for Environmental and Geographical Information Services (CEGIS), Institute for Water Modeling (IWM), and the Space Research and Remote Sensing Organization (SPARRSO).

20. A number of International Financing Institutions, multilateral and bilateral donor agencies are supporting disaster management and risk mitigation interventions in the country. The Disaster Emergency Response Group (DER) is a forum for information sharing, composed of government representatives, donor agencies and the NGO community.

21. The Comprehensive Disaster Management Programme (CDMP), under the auspices of the DMB, is undertaking a number of interventions aimed at strengthening and improving disaster management and risk mitigation capacities at various levels, and in promoting and implementing the national strategic priorities and plans set out by the Government. It is funded by DFID, UNDP and the EC. The CDMP Phase I has effectively been under implementation since late 2005 and is scheduled to be completed by December 2009. The program has started to make significant contributions in the areas of:

- capacity building and professionalizing disaster management;
- partnership development including advocacy for mainstreaming disaster risk reduction and for expanding risk reduction across a broader range of hazards;
- community empowerment, community risk assessments (CRA) and community risk reduction programs funded through the Local Disaster Risk Reduction Fund (LDRRF);
- research and information management on earthquake and Tsunami preparedness and capacity building on climate change risk management;
- strengthening response management through the establishment and strengthening of Disaster Management Information Centers and a Disaster Management Information Network;

22. The CDMP has met with particular success in implementing CRAs, community-level Risk Reduction Action Plans and small scale risk mitigation interventions funded through the LDRRF in seven pilot districts. Phase II of the CDMP shall be able to scale-up these activities in additional program districts. In other areas, the CDMP has yet met with partial success, but is steadily moving towards achieving its strategic objectives, as per the program's mid-term evaluation report.

DRM Action Plan Development Process

23. The preparation of the integrated, multi-stakeholder proposal or DRM Action Plan for possible GFDRR funding (Refer Table 1), was carried out over a nearly 3-month period between March-May 2009. The first round entailed soliciting proposals from different government and non-government entities and concerned donor agencies. In the second stage, these proposals were analyzed by a 3-member team comprising of the Bank's Regional and Country DRM Coordinators and other staff. This required an assessment of these proposals in respect of: (a) their relevance to the national and local contexts and DRM capacities, including their potential for addressing and mitigating the underlying risk factors for the country (refer sub-sections 5,6,& 7); (b) their relationship with, and leveraging potential for furthering the objectives of, the various existing national strategies, priorities and action plans in respect of improved DRM and strengthened disaster preparedness; (d) addressing present gaps in DRM interventions and avoiding duplications (although some overlaps are unavoidable in the country environment), and; (e) their responsiveness to the lessons learnt and gaps and weaknesses identified in recent disaster responses (refer sub-section 5).

24. The third stage included a consultative process involving a range of stakeholders including the Economic Affairs Department, the Ministry of Food and Disaster Management including its various directorates, the Bank's ECRRP Team, and the Comprehensive Disaster Management Program (CDMP) and its present financers including the UNDP, DFID and EC. However the present proposal is still in draft form and shall be further deliberated upon with the concerned stakeholders in a final consultative round, subsequent to receiving preliminary GFDRR feedback.

Rationale for Selection of Proposed Activities

25. Selection Criteria and Expected Results - Following from above, the criteria used for selection of proposals towards the development of the proposed action plan, include: (a) relevance in addressing and mitigating underlying risk factors for the country; (b) leveraging potential for future DRM interventions; (c) potential for furthering national DRM priorities developed in harmonization with the agreed priorities for actions under the Hyogo Framework for Action (HFA 2005-15); (d) meeting the challenge of increased DRM activity synchronization and synergy-building across various donor/IFIs, thereby improving the quality and effectiveness of donor aid in the DRM arena; (e) deepening and widening the association of the Bank with other players (particularly the UN) and among other players in the DRM area ; (f) fostering, deepening and widening DRM partnerships between the Bank, government and other donors, and; (g) ease and pace of activity implementation.

26. Reasons for Non-Selection of Some Proposals -The non-selection of some proposals was based on grounds of: (a) lack of clear objectives or potential

for strategic impact; (b) duplications with existing or already funded planned activities, and; (c) availability of other more readily accessible funding mechanisms, such as climate change adaptation related proposals which can be funded through Country X's Multi-Donor Trust Fund of Climate Change, the Government's own fund on climate change and various other funding windows.

27. GFDRR Guidance Request - As per earlier GFDRR guidance, some of the proposed activities are likely to be executed by the government or other players such as the UNDP. One proposal for contributing to the donor resource pool of the CDMP requires more clarity from the GFDRR over the various implementation modalities, particularly the issue of procurement methods and guidelines to the followed in such scenarios. For the time being, the proposed activity has been kept flexible with possibilities for both pool-funding or funding of a discrete set of Phase-II activities under the CDMP.

***Table-1*: Draft 3-Year DRM Action Plan for Prioritized Multi-Stakeholder Interventions**
Based on Initial Review of Proposals Received for Possible GFDRR Funding

Indicative new program areas and projects for GFDRR funding	Partnerships	Indicative Budget & Duration	HFA activity area(s)
1. Policy Advice, Technical Assistance and International/ Regional Experience Sharing for: (A) the Conceptualization of a National Disaster Management Authority; (B) Enhancing the Institutional Coordination, Monitoring and Oversight Capacities of the Ministry of Food and Disaster Management in respect of the multitude of DRM related activities and interventions (ongoing and planned) by various partners and stakeholders, and; (C) Conducting a Feasibility Study for the Establishment of a National Emergency Operations Centre	Ministry of Food and Disaster Management	$1,500,000 3 years	**Priority Area 1**: Ensuring that DRR is a national priority with a strong institutional basis for implementation. *Sub-Priority (i):* National Institutional and Legislative Frameworks
2. Training and Capacity Building of a National Volunteers Force for supporting Multi-Hazard Emergency Response Management. This program will broadly following the operating model of existing and very successful Cyclone Preparedness Program which is co-financed and co-managed by the Government and the Red Crescent Society. The proposed intervention shall scale-up this model to include training and building of a volunteers force for multi-hazard response management in other hazard-prone districts in the areas of: (A) Search and Rescue; (B) Evacuation; (C) First Aid Provision, and; (D) Emergency Communications and Community Early Warning Systems	DMB, Directorate of Relief and Rehabilitation (DRR), Red Crescent Society, and Local Governments including District, and Union Governments	$ 2,900,000 3 years	**Priority Area 1:** *Sub-Priority (iii):* Community Participation; Strategic Management of Volunteer Resources **Priority Area 3:** Use knowledge, information and education to build a culture of safety and resilience at all levels *Sub-Priority (ii)-I:* Promote community based training initiatives, considering the role of volunteers.
3. Vulnerability Reduction of Health Facilities in Disaster Prone Districts. This shall involve scaling up of the Ministry of Health's (with USAID and ADPC)	Ministry of Health, APDC	$ 2,400,000 3 years	**Priority Area 2:** Sub-Priority (i): National and Local Risk Assessments

Indicative new program areas and projects for GFDRR funding	Partnerships	Indicative Budget & Duration	HFA activity area(s)
existing structural vulnerability program to focus on: (A) Detailed Structural Vulnerability Assessments of Health Facilities in Prioritized Multi-Hazard Prone Districts and Development of Retrofitting Techniques for Enhancing Building Safety; (B) Incorporation of DRM Considerations in the Design and Planning of Future Health Facilities, including development of district and local capacities in this respect, and; (C) Capacity Building of Key Health Staff in Disaster Prone Districts in Health Emergency Response Management, Provision of Life-Saving Equipment, and Training/Skill Development in life-saving operations/techniques including the use of such equipment in disaster events			**Priority Area 4:** Reduce the underlying risk factors *Sub-Priority (ii)-E:* Integrate disaster risk reduction into the health sector, promoting the goal of "hospitals safe from disaster", by increasing their level of resilience, and implementing mitigation measures to reinforce and strengthen their capacity to remain functional in disaster situations.
4. Urban Vulnerability Reduction - Knowledge Sharing, and Development of Investment and Implementation Options. This shall be implemented in three 3 Major Urban Center, building upon the Risk Exposure and Structural Vulnerability Assessments carried out by CDMP under Phase-I. This activity will support: (A) Visits by International DRM Practitioners to Major Cities for development of Risk Mitigation Investment Options, and Exposure Visits for Local City Management Officers to Mega Cities where such mitigation options have been implemented; (B) Mainstreaming of DRM Considerations and Interventions in the City Investment Planning Processes; (C) Carrying out an assessment of strengths, gaps and weaknesses in the city/ urban search and rescue capacities in respect of both natural and man-made hazards - also based on a comparison bet-	CDMP, DMB City Corporations	$ 1,500,000 1 year	**Priority Area 4:** Reduce the underlying risk factors *Sub-Priority (iii)-N:* Incorporate disaster risk assessments into urban planning and management of disaster prone human settlements, in particular highly populated areas. *Sub-Priority (iii)-O:* Mainstream disaster risk considerations into planning procedures for major urban infrastructure projects. *Sub-Priority (iii)-R:* Encourage the revision of existing or the development of new building codes, standards, and rehabilitation and reconstruction practices.

Indicative new program areas and projects for GFDRR funding	Partnerships	Indicative Budget & Duration	HFA activity area(s)
ween present municipal and urban risk management action plans and the implementation capacities and systems of the respective cities.			
5. Support to the Comprehensive Disaster Management Program (a program under the auspices of the MoFDM and Disaster Management Bureau, and currently financed by UNDP, DFID and EC). This program supports: (a) capacity building and professionalizing disaster management at various levels; (b) partnership development including advocacy for mainstreaming disaster risk reduction; (c) community empowerment, community risk assessments (CRA) and community risk reduction programs; (d) research and information management on earthquake and Tsunami preparedness and capacity building on climate change risk management, and; (e) strengthening response management through the establishment and strengthening of a Disaster Manage-ment Information Network.	MoFDM, DMB, CDMP, UNDP, EC, DFID	$ 6,000,000 3 years	**Priority Area 1:** *Sub-Priority (i):* National Institutional and Legislative Frameworks *Sub-Priority (iii):* Community Participation **Priority Area 2:** *Sub-Priority (i):* National and Local Risk Assessments **Priority Area 3:** *Sub-Priority (i):* Information Management and Exchange *Sub-Priority (ii):* Education and Training **Priority Area 5:** *Sub-Priority (a):* Strengthen policy, institutional and technical capacities for disaster management *Sub-Priority (b):* Support exchange of information across risk reduction and development agencies
Total Indicative Budget - GFDRR Funding Request	**US $ 14.3 Million**		

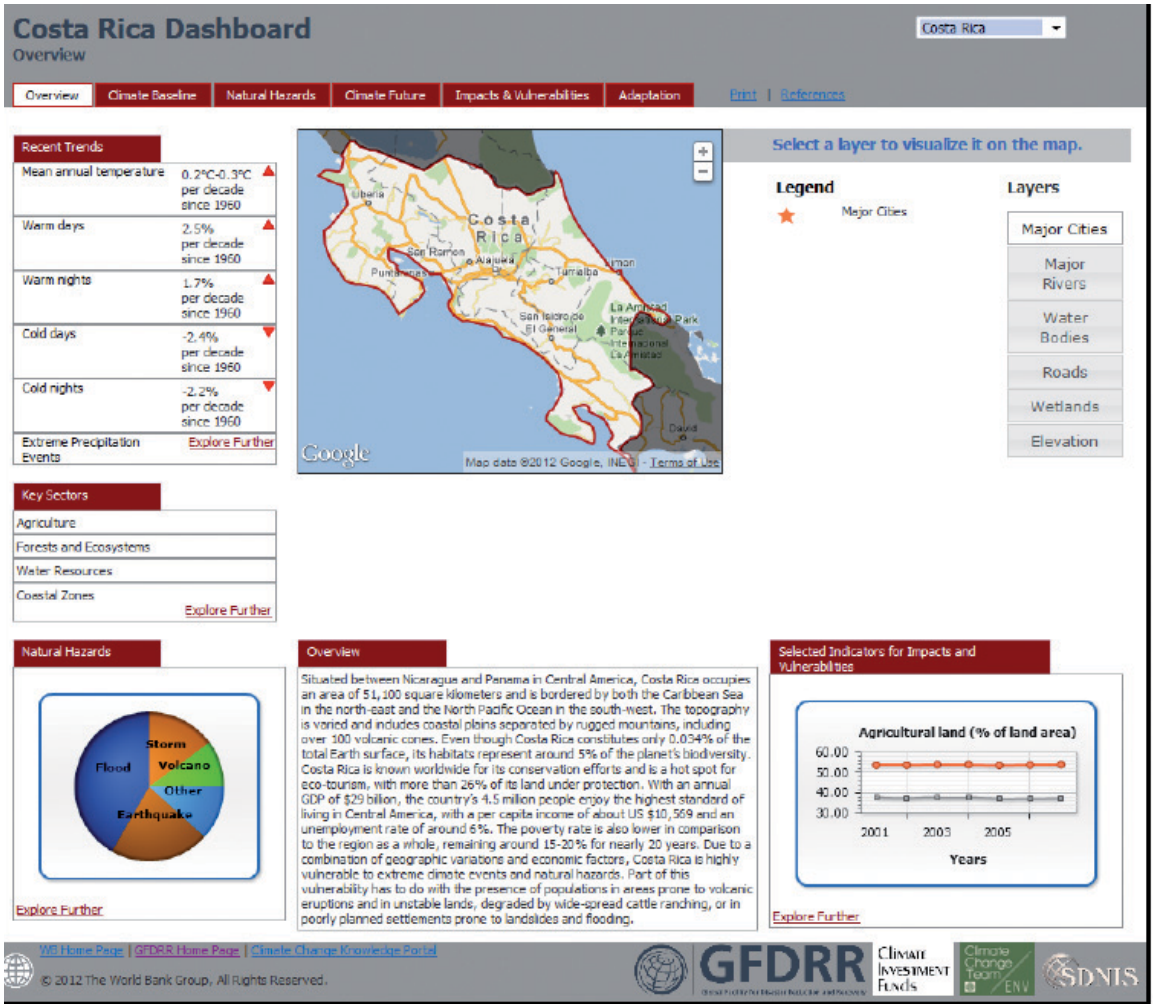
Table 2: Donor Engagements and Plans for Medium to Long-term Disaster Risk Mitigation in Country X

Strategy Pillar:	Planned Activities	Existing and Probable Development Partners	Indicative Timeframe		
			2008 - 2012	2013 - 2017	2018 - 2022
I. Risk Identification and Assessment	(i) Detailed, National Level Multi- Hazard Risk and Vulnerability Assessment & Modeling (ii) Supporting Community Risk Assessments at the District, Upazila and Union Levels	WB/GFDRR, UNDP, Others UNDP, DFID, CDMP			
II. Strengthening and Enhancing Emergency Preparedness	(i) Disaster Forecasting and Warning (ii) Construction of New, and Rehabilitation of Existing, Disaster Shelters (iii) Strengthening and institutionalizing disaster preparedness (iv) Strengthening Local Communication Systems and Sustained Public Awareness and Sensitization Campaigns	JICA, EC, CDMP WB, ADB, JICA/JBIC, IDB, Kuwait, Saudi, and OPEC Funds UNDP, DFID, CDMP WB, CDMP, IFRC			
III. Institutional Capacity Building	(i) Establishing a Country X Institute for Disaster Management Training (ii) Professionalizing the Present Disaster Management Institutions (iii) Building DMB Capacity for Damage, Loss and Needs Assessments (iv) Mainstreaming disaster risk reduction and mitigation across sectors (v) Fostering National-level Public-Private Partnership Forums	UNDP, DFID,CDMP UNDP, CDMP WB, ADB,UNDP, CDMP UNDP, CDMP WB, ADB,UNDP, CDMP			
IV (a). Risk Mitigation Investments	(i) River Bank Protection Improvement Program (ii) Coastal Embankment Improvement Program (iii) Program for upgrading the Standards of Construction for Roads (iv) Forestation of Coastal Belt (v) Restoration and improvement (vi) Restoration Program	WB, ADB, Dutch Govt. WB, ADB, Dutch Govt. WB, ADB, JICA/JBIC, Others WB, ADB, Others WB, ADB, Dutch Govt., Others WB, ADB, Dutch Govt., Others			
IV (b). Climate Change Risk Mitigation and Adaptation	(i) Capacitating and Strengthening the Climate Change Cell (CCC) within DOE (ii) Developing climate change and climate variability scenario and prediction models (iii) Conducting research and strengthening knowledge on climate change and climate variability impacts (iv) Identifying climate change adaptation options through action research (v) Incorporating climate change and climate variability impact information in DRR programs and strategies	DFID, UNDP, CDMP DFID, UNDP, CDMP DFID, UNDP, CDMP, Others DFID, UNDP, CDMP DFID, UNDP, CDMP, WB, ADB, JBIC/JICA, Others			

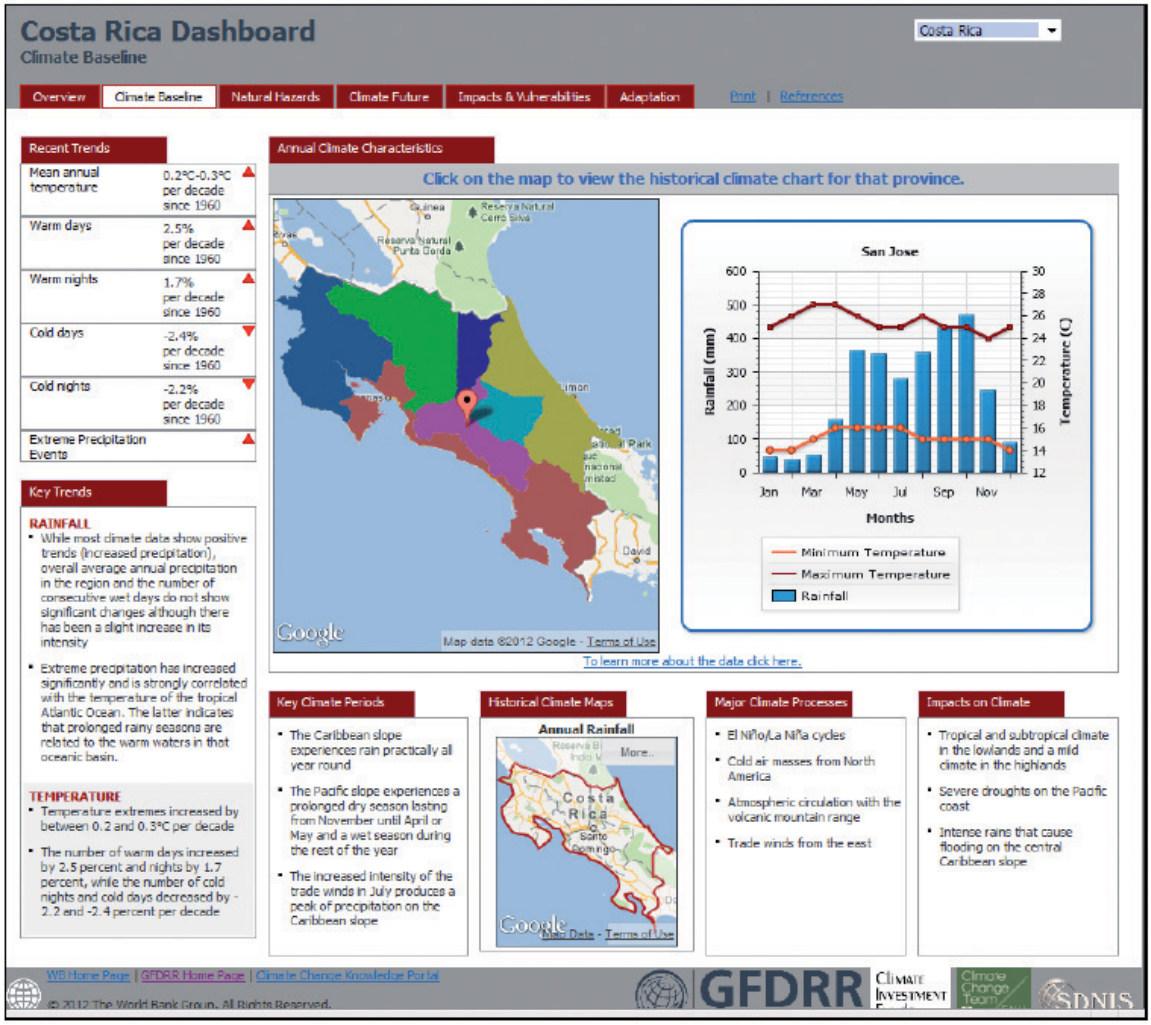
Strategy Pillar:	Planned Activities	Existing and Probable Development Partners	Indicative Timeframe		
			2008 - 2012	2012-2017	2022
	(vi) Designing and Implementing capacity building programs to improve multi-stakeholder understanding of climate change impacts.	DFID, UNDP, CDMP, Others			
V. Introducing Catastrophe Risk Financing	(i) Establishment of Disaster Response Fund (ii) Catastrophe Risk Financing of Rare Events	GOB, IFIs, UN, Bilateral Donors GOB, WB, GFDRR, ADB			

ANNEX II

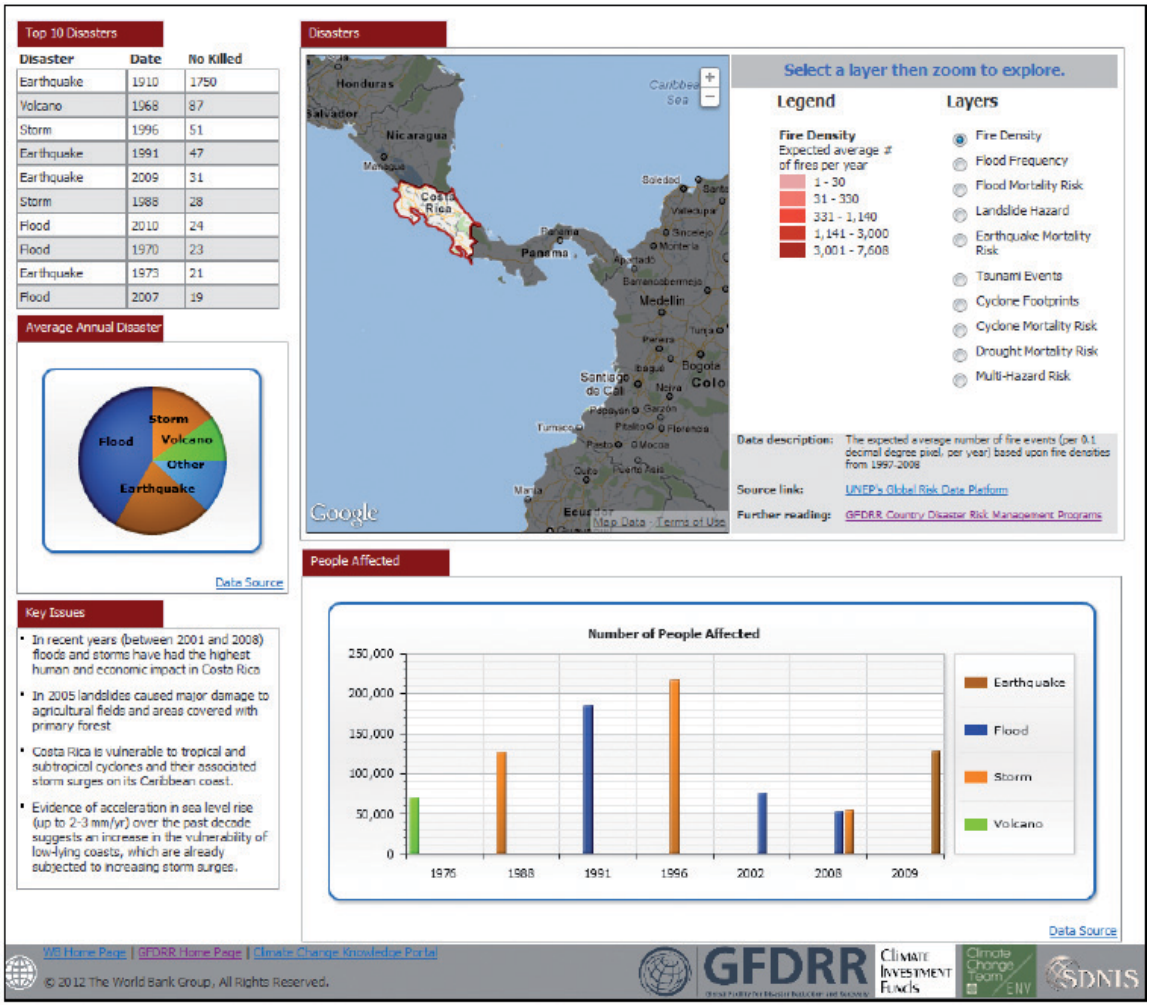
Sample Country Adaptation Profile



Sample Country Adaptation Profile (Cont'd)



Sample Country Adaptation Profile (Cont'd)



Sample Country Adaptation Profile (Cont'd)