Draft Generic Guidelines for DRR Mainstreaming in ER Projects

1. Implementation of DRR measures needs to be based on an assessment and prioritization of the hazards and risks that people face, as well as their ability to cope and withstand the effects of those hazards. This assessment should in an integrated way: a) identify the typology, frequency and potential severity of a hazard (hazard assessment); b) identify geographical areas and communities that are most vulnerable to those hazards (hazard mapping); c) identify the key factors of vulnerability and local coping and adaptive strategies and capacities; and d) assess gaps in national policies, legislation and institutional capacity for DRM.

2. For the purpose of establishing uniformity across reports of SWGs, the following terminology will be used;

   a. **Natural hazard**: A geophysical, atmospheric or hydrological event (e.g., earthquake, landslide, flood or drought) that has the potential to cause harm or loss;

   b. **Vulnerability**: The potential to suffer harm or loss, related to the capacity to anticipate a hazard, cope with it, resist it and recover from its impact. Both vulnerability and its antithesis, resilience, are determined by physical, environmental, social, economic, political, cultural and institutional factors;

   c. **Disaster**: The occurrence of an extreme hazard event that impacts on vulnerable communities causing substantial damage, disruption and possible casualties, and leaving the affected communities unable to function normally without outside assistance;

   d. **Disaster risk**: A function of the characteristics and frequency of hazards experienced in a specified location, the nature of the elements at risk and their inherent degree of vulnerability or resilience;

   e. **Mitigation**: Any structural (physical) or non-structural (e.g., land use planning, public education) measure undertaken to minimize the adverse impact of potential natural hazard events;

   f. **Preparedness**: Activities and measures taken before hazard events occur to forecast and warn against them, evacuate people and property when they threaten and ensure effective response (e.g., stockpiling food supplies);

   g. **Relief, rehabilitation and reconstruction**: Any measures undertaken in the aftermath of a disaster to, respectively, save lives and address immediate
humanitarian needs, restore normal activities and restore physical infrastructure and services.

3. These generic guidelines are for the Early Recovery Sectoral Working Groups and are meant to provide a basic level shared understanding of the concept of Disaster Risk Reduction (DRR) for the purpose of ERWG, the importance of its mainstreaming into sectoral plans and to consider the tools, processes and products of DRR while designing interventions. Sector specific DRR guidelines are provided separately.

4. For the purpose of the ERWG, DRR means “Considering and addressing the risk from natural hazards in medium term sectoral frameworks which may affect institutional structures and/or individual projects”. The goal of mainstreaming DRR for ERWG requires an analysis of;
   a. How policies, programmes and projects will be affected by potential future disasters, thereby protecting the development investments and;
   b. The impact of the policies, programmes and projects on vulnerability to potential future disasters, thereby increasing the resilience of communities to disasters.
   c. DRR primarily consists of structural and nonstructural measures. Safer building codes, land use, and quality control through regular monitoring and inspection regimes are important amongst structural measures while creating DRR awareness, planning, training and capacity building of all stakeholders, specially the community and the government departments are important nonstructural measures.

5. DRR must be an integral part of project selection and implementation. In order to set the design criteria for a risk reduction project, the hazards, the current risk and level of risk that is socially acceptable must be identified. A multi-hazard appraisal should be carried out at an early stage to identify the types of hazards, their likely severity and recurrence.

6. An evaluation of the current risk includes identifying locations most likely to become unsafe in the event of a natural hazard (e.g., areas prone to flooding, landslides or earthquake-induced liquefaction) and assessing their land use, as well as assessing the ability of local construction to resist the identified hazards.

7. If, for the identified hazards, the level of current risk is greater than that which is socially acceptable, then the need for hazard-proofing (and/or re-siting) is established, and the socially acceptable risk and identified hazards become the design criteria for the new construction or strengthening works.

8. Determine whether additional works are required to render the site viable for development or whether land use should be restricted to reduce vulnerability to natural
hazards. Also consider whether re-siting to a location of reduced risk is an option. Topographical features and landscape can be used to reduce the impact of potential natural hazards (e.g., to minimize flood risk or modify wind-speed and wind direction).

9. A technique to strengthen constructions or make them hazard-safe should consider all potential hazards, not just the recent floods. In many cases, design features intended to enhance resilience to one type of natural hazard will augment resilience to others, for example, the provision of good connections between foundations, frames, walls and roofs of buildings. However, in certain cases, design features that help resist one type of hazard may be detrimental to the resistance of another. For example, heavy roofs help withstand strong winds due to cyclones, storms or typhoons, but will increase the forces on buildings subjected to earthquakes.

10. The siting and design of critical facilities (e.g. bridges) and infrastructure that are essential for relief and recovery purposes in the event of a disaster should be given special consideration.

11. The site for development will typically be defined by local government based on availability and economic criteria. The suitability of these sites needs to be assessed. This can be done by following. Any hazard assessments carried out in previous stages should also be considered.

12. Develop building codes and guidelines, accounting for local hazard conditions, building material characteristics, construction skills and quality. The aids and guidelines prepared by UNHABITAT Pakistan should be used wherever applicable.

**Common Steps in Mainstreaming DRR in the Work of SWGs**

13. Collection of information on hazards. These may include hydro-meteorological (e.g. floods, snow, drought etc), geological (e.g. earthquake and landslides) and biological. The information should include

   a. Location and extent

   b. Frequency and probability of occurrence

   c. Intensity/ severity of the event that is likely to occur in short and long terms

   d. Duration

   e. Predictability

14. Identification of risks to the sectoral plans from these hazards by determining the expected damage to people, property/facilities, economic activities and disruption to implementation plans;
15. Making decisions about how to deal with those risks by:

   a. Selection of best strategy options;

   b. Development of mitigation strategies;

   c. Enhancement of institutional capacity and;

   d. Vulnerability reduction measures;

16. Review of relevant initiatives (completed, ongoing and planned) and their linkages to the proposed initiatives;

17. While framing minimum sector specific standards, guiding principles, technical specifications and monitoring mechanisms, include relevant targets and indicators for DRR in the results or indicators framework thereby helping implementation and assessing the impact.

18. Consider the financial capacity to meet recovery and reconstruction costs and the use of risk sharing mechanism such as insurance;

19. Civil society disaster related concerns and activities should be incorporated, both at the sectoral level work and in the resulting guidelines, by consulting with relevant stakeholders. Known highly vulnerable groups should be represented. The consultations should be about;

   a. Concerns and needs relating to DRR;

   b. Measures required to address particular aspects of risk and vulnerability;

   c. Inadequacies in existing disaster response systems and mechanisms;

   d. How hazard events could potentially hinder the achievement of long term goals and objectives.

20. Stand alone projects on DRR should be recommended in each sector;