

Disaster Risk Reduction – Policy to Action

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Gratitude



Oxfam, Sawtee & all others involved in organizing this great event



"Disaster risk is increasing with every passing day. Poverty, rapid urbanisation, climate change – these and other factors are leaving people and communities ever more exposed."

Remarks by UN Secretary General Ban Ki-moon at launch of Global Assessment Report on Disaster Risk Reduction (GAR), 15 May 2013

"One trillion dollars have been lost in the last decade due to disasters and one million people killed".! Such statements are familiar to investors and business developers. But they only partially reflect total disaster losses.

Global Assessment Report on Disaster Risk Reduction 2013



Major Disasters in 2013/2014

2013

- Deadliest Typhoon Haiyan in the Philippines
- Typhoon Phailin India, Hurricanes Manuel and Ingrid Mexico
- Floods and Landslides in Uttarakhanda, India
- Tornadoes United States
- Earthquake Central Visayas, Philippines
- Floods, Landslides, Lightning and Fires in Nepal

2014

- Floods, Landslides, Lightning and Fires in Nepal particularly the Floods & Landslides in Sindhupalchowk, Surkhet, Banke and Kanchanpur
- Typhoon HudHud in Urissa, India





Major Causes of Disasters

- 1. Geo-physical structure of a country
- 2. Climate
- 3. Environmental degradation
- 4. Mismanagement of natural resources
- 5. Widespread urban and rural poverty
- 6. Unplanned and haphazard settlement
- 7. Rapid urbanization
- 8. Human greed/selfish nature
- 9. Inefficient public policies





Major Causes of Disasters contd...

- 10. Limited resources
- 11. Large (Atmosphere, Oceans, Arctic Ice)
- 12. Small (Production system, Land, Crops, Water bodies)
- 13. Reactive approach
- 14. Leaving a serious underinvestment in hazard prevention and mitigation; and
 - 15. Lagging and misguided investments in infrastructures e.g. poor implementation of building codes.





Consequences

- Serious effects on:
- Water Security
- Food Security
- Livelihood Security
- Health Security
- Energy Security
 - Resulting into the economic, social, political and survival issues strongly correlated with

"POVERTY."





Mostly Disaster Affect the Poor



Source: ADRC, EM-DAT, CRED, University of Louvain, Belgium



Number of Disasters 1900-2010



Source: EMDAT



Why are disasters increasing?

Better media reporting

CNN as first responder

Increased population and density

Population growth particularly in developing countries

Cities in high risk areas

64 of the largest cities in the world are in seismic zones

Rapid & unplanned urbanization

People abandon rural areas and tend to live in the cities.

Global warming

Increased storm activity

Increased technologies

Mass transport
Chemical industrialisation
Transport of dangerous
goods

Economic stress

Urban slums in dangerous environments

Armed conflict

- Terrorism
- **Reactive Approach**





Cost of Disasters

Human Costs

- Deaths
- Injuries and illness
- Loss and grief
- Economic Costs
 - Tangible/Actual Costs
 - Intangible Costs









Misunderstanding Disasters

- Disasters will occur
- Disaster may occur
- If they occur, will not affect
- If they affect, will not affect me
- If they affect me, will have less effect
- If they will have effects on me that will be bad luck!





The Myth & The Reality

Donors, governments and aid agencies prefer to invest in response rather than cost-effective disaster prevention and preparedness !

why ???





Disaster Risks in Nepal



Types of Disaster

l Natural

- Earthquake
- Floods and landslides
- Windstorms,
 Hailstorms,
 thunderbolts
- Drought
- Epidemics
- GLOFs
- Avalanches
- Fire
- Hot Wave/Cold Wave

□ Human-induced

- Fire
- Landslides
- Industrial accidents
- Weak infrastructures
- Environmental degradation e.g. rural roads
- Road/Air/Sea accidents
- Terrorism



Major Hazards in Nepal

- Flood
- Landslide
- Fire
- Earthquake
- Windstorm
- Hailstorm
- Lightning
- Glacier lake outburst flood
- Drought
- Epidemic
- Avalanche
- Hot wave, Cold wave etc.





Nepal's Disaster Risks

- Floods and Landslides 31st
- Earthquake 11th(Kathmandu No. 1)
- Climate Change 4th
- Kathmandu is the most vulnerable city in the world in terms of earthquake vulnerability
- Hence, Nepal can be considered as a hot spot of disasters.



आइतबार पानी नपरेको समयमा पनि भालुबाड-प्यूठान सडकको चेरनेटा नजिक गएको पहिरो पन्छाउँदै यात्रु । ब्लाब्रियुर् । कंजलबार, २० साउल, २०७० (Tuesday, August 13, 2013) तस्विर : गिरुप्रसाद/कान्तिपुर



Nepal's Disaster Vulnerability

- Nepal is one of the most disaster prone countries in the world
- Natural and human induced factors contribute to the high incidence of disasters in Nepal.
- Poor, women, children, elderly, disable and rural people suffer more from disasters
- Losses from disasters are in increasing trend
- The govt. is still taking reactive approach

Seismicity in Nepal





Causes of Disasters in Nepal

- •Young & fragile geo-physical structure
- High hills and steep slopes
- Active tectonic process
- Rapid & unplanned urbanization
- Increasing population
- Absence of modern technology
- •Lack of well-trained human resources
- •Undeveloped early warning system
- •Low literacy rate
- Lack of disaster awareness
- Lack of coordination, and;
- Lack of resources

Crossing the Flood





Losses from Disasters (1971 and to 2012) in Nepal

No of events:	23391
No. of people killed:	31,908
No. of Injuries:	58,210
No. of affected families:	6,936,170
Houses destroyed:	229, 167
Economic Damage (US\$):	13,512.29 million
Economic Damage per year (US\$):	4.35 million

Source : DiesInventar & MoHA

Earthquake Vulnerability of Kathmandu City



Cross Cutting Issues

- Weak policies, legislation and law enforcement
- Weak database & technology
- Weak Institutional and human resource capacity
- Weak horizontal and vertical coordination mechanisms for DP/DRR
- Absence of DM policy, revised Act, codes, conducts, guidelines, manuals etc.
- Lack of specialization
- Undermining disaster and development

Cross Cutting Issues

- Weak community preparedness capacities for effective response
- Undeveloped early warning system and low level of public awareness
- Weak local government and decentralization process
- Shifting responsibilities
- Wrong approach to formulate the legislations
- Resource constraints



Way Forward

- Single agency can't prepare for and deal with the disasters
- Therefore, it is necessary to involve coordinated activities of a range of organisations that contribute to PPRR within and across all levels of government
- Command, control and coordination mechanism should followed
- Application of space technology is required
- The DM cycle should be taken into account by adopting all hazard approach
- DM Policy & Act is highly necessary for the establishment of a separate powerful/resourceful body in Nepal.

Necessity of Regional Cooperation

- All countries of this region are affected by natural disasters
- Disasters have transboundary effects & they have common problems
- Hence, establishment of a Regional Information Center is imperative
- The must have mutual trust to solve the problems

Nepal and her neighbors



Necessity of Regional Cooperation

- Disaster Management is a multi-sectoral activity. It needs wide range of contacts. Working in isolation may result into poor productivity. Therefore, coordination is inevitable for disaster management.
- Establishment of a SAARC Regional Info. Center consisting of civil society, academia, media, corporates, community members is highly desirable in order to build up a network of partnerships through the region.

The Center will be highly instrumental to reduce socioeconomic impacts of disasters and adopt good practices in the region with coordinated and cooperative efforts.



Recommendations

- DM policies should be redirected towards poverty and vulnerability reduction instead of mere compensation and immediate relief
- DRR should encompass prevention, preparedness and mitigation within a broad context of development.
- Empower the local govt. & community
- Collaboration & Networking within the government and Civil Society Organizations
- Co-operation and coordination at the national, regional and global level is needed.
- The above initiatives can be taken as a strategic reference point to the HFA.
- Public & private partnership needs to be enhanced



