Community Coping Strategies

*Integrating all of the factors of disaster risk*

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**Evolution of disaster risk management**

- **1970-1980 Disaster Management**
  - 1980’s - early 1990’s Shift to longer term disaster prevention, linked to development
  - 1990’s Emergence of strong CBDM (Peri-Peri, La Red, IFRC, Duryog Nivaran)
  - Integrated risk reduction, linked to sustainable development

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World Conference on Natural Disaster Reduction
Yokohama, Japan, 23-27 May 1994 (1):

• Community involvement and their active participation should be encouraged in order to gain greater insight into the individual and collective perception of development and risk, and to have a clear understanding of the cultural and organizational characteristics of each society as well as of its behaviour and interactions with the physical and natural environment.

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World Conference on Natural Disaster Reduction
Yokohama, Japan, 23-27 May 1994 (2):

• Vulnerable developing countries should be enabled to revive, apply and share traditional methods to reduce the impact of natural disasters, supplemented and reinforced by access to modern scientific and technical knowledge. The existing knowledge and know-how should be studied and efforts should be made to ameliorate, develop and better apply them today.

• There is a strong need to strengthen the resilience and self-confidence of local communities to cope with natural disasters through recognition and propagation of their traditional knowledge, practices and values as part of development activities

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Learning risk reduction from practices in the past – some examples (1)

- Terraces built 500 years ago by the Incas, on steep slopes to conserve the scarce soil and water. Similar millenarian constructions in the mountain provinces of Indonesia and the Philippines
- Protection from floods, like the embankments in Shanghai and Singapore, and sea dykes in the Netherlands

Learning risk reduction from practices in the past – some examples (2)

- In Viet Nam, strengthen irrigation channels and sea dykes prior to the start of every annual cyclone season
- Traditional housing building techniques to withstand floods in coastal areas, in the Pacific and elsewhere

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Various coping strategies

- Observing natural features for prediction of drought or high rainfall
- Traditional early warning methods
- Traditional building techniques
- Diversified livelihoods
- Social networks, reliance on community for support

Risk as the focus

- Risk = the negative outcomes faced by people, enterprises, governments
- All time scales – rapid events, seasonal changes, and long term trends
- All sources of risk – social, economic, ecological, not just the hazard
Multiple factors compound the risk

*Why have climate-related disasters increased?*

- Climatic hazards
- Population exposed
- Poverty
- Development pressure
- Environmental degradation
- Lack of knowledge
- Inadequate leadership
- Minimal public services
- Ineffective early warning

**Framework for Disaster Risk Reduction**

- **CONTEXT**
  - Sustainable development
    - Social-cultural
    - Political
    - Economic
    - Ecosystems

- **RISK FACTORS**
  - Vulnerability
    - Social
    - Economic
    - Physical
    - Environmental
  - Hazards
    - Geological
    - Hydrometeorological
    - Biological
    - Environmental
    - Technological

- **DISASTER IMPACTS**

- **AWARENESS**
  - Vulnerability/capabilities analysis
  - Hazard analysis

- **KNOWLEDGE DEVELOPMENT**
  - Education, training
  - Research
  - Information
  - Networking

- **RISK ASSESSMENT**

- **APPLICATION OF RISK REDUCTION MEASURES**
  - Environmental management
  - Land use planning
  - Protection of critical facilities
  - Structural measures
  - Application science & technology
  - Financial and economic tools

- **PUBLIC COMMITMENT**
  - Global, regional, national, local
    - Institutional framework
    - Policy development
    - Legislation and codes
    - Community actions

- **RESPONSE**
- **RECOVERY**
- **PREPAREDNESS**
- **EARLY WARNING**

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Integrating approach to disaster risk reduction

- Local communities are most aware of the historical risk scenarios.
- It is not only a question of local knowledge, but community groups influencing decisions and managing resources.
- The advantages provided by GIS or access to satellite weather forecast need not diminish the values of traditional wisdom.

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Integrated approach to disaster risk reduction

- Community processes and action to achieve disaster reduction are much talked about in theory, but results are much more difficult to realise
- The extent of commitment by local government depend upon citizen involvement in planning risk reduction processes

Conclusion

Coping strategies for climate change adaptation requires ....

- Enhanced capacities to identify and engage example of traditional practices, rather than imposing top down new techniques
- Giving relevance to the validity of such traditional techniques, and ensuring they are still effective today (and tomorrow)
- For similar types of habitat (mountainous regions, low lying coastal areas), facilitate the exchange of traditional practices