

Part 2

The Framework

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This section tries to unfold some of the complexities associated with local knowledge by presenting a general framework on how to understand local knowledge on disaster preparedness. An assessment of the literature shows that there is no comprehensive framework through which to understand local knowledge on disaster management and especially disaster preparedness. Although there are exceptions (Kates 1971; Clarke-Guarnizo 1992; Hall and Davis 1999), these frameworks focus on coping strategies only.

The framework on the following page can be used to identify linkages between local knowledge and disaster management, and to determine what influences them. This framework is based on a literature review and highlights the over-riding processes surrounding local knowledge on disaster preparedness rather than listing good practices for data collection and storing. Knowledge is not static; it is being lost and gained all the time. Local knowledge is meaningful within its own spatial and temporal contexts. As such, understanding the causation and process of knowledge creation and transformation is more important than focusing on the knowledge outcomes. This section describes each step of the framework: the need to understand the nature of local knowledge, the transformation processes influencing local knowledge, the key dimensions of local knowledge on disaster preparedness, and the links between local knowledge, disaster preparedness, and poverty reduction.

Local knowledge system

A

Composed of

KNOWLEDGE TYPES

- Technical knowledge
- Ecological knowledge
- Historical knowledge
- Others

PRACTICES

- Individual, household, & community levels
- Technical & non-technical
- Short- & long-term
- Others

BELIEFS, VALUES WORLDVIEWS

- Sociocultural, religious belief systems
- Values based on respect, reciprocity, sharing, humility
- Others

B

Influenced by

TRANSFORMATION PROCESSES

- Power relations
- Cross-scale linkages

C

In the context of

NATURAL HAZARD RISKS

- Floods,
- Earthquakes
- Landslides
- Others

GLOBAL FACTORS AND TRENDS

- Development
- Wars, conflicts
- Climate change
- Technological change
- Institutional, economic & cultural globalisation
- Migration
- Population
- Others

D

Resulting in

DISASTER PREPAREDNESS AT THE LOCAL LEVEL

E

Based on

OBSERVATION

- Nature & history of natural hazards
- Evolution of people's social & physical vulnerabilities to natural hazards

ANTICIPATION

- Forecasting and warning systems
- Time thresholds
- Escape routes & safe places for humans & cattle
- Roles, skills & key actors

ADAPTATION

- Human assets
- Sociocultural assets
- Financial assets
- Natural assets
- Physical assets

COMMUNICATION

- Stories, songs, poems, proverbs
- Taboos, ceremonies
- Local art
- Local terminology
- Others

F

With effects on

LIVELIHOOD SECURITY/ SUSTAINABILITY

- Income level and stability
- Food security
- Environmental sustainability
- Others

COMMUNITY RESILIENCE- BUILDING

- Sharing
- Learning
- Networking
- Diversifying
- Re-organising
- Self-organising
- Others

