

More data and new technology
alone are not going to improve
disaster risk reduction.

We need to better understand
local contexts and needs.

How can you improve ways of capitalizing upon the communities' own resources?



Local Knowledge on Disaster Preparedness

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Accounting for local knowledge
can help you to better
formulate and implement
disaster management activities.

EXAMPLE 2

**LOCAL KNOWLEDGE ON FLOOD
PREPAREDNESS IN EASTERN TERAI OF
NEPAL**



Example 1

**LOCAL KNOWLEDGE ON DISASTER
PREPAREDNESS IN CHITRAL DISTRICT,
PAKISTAN**



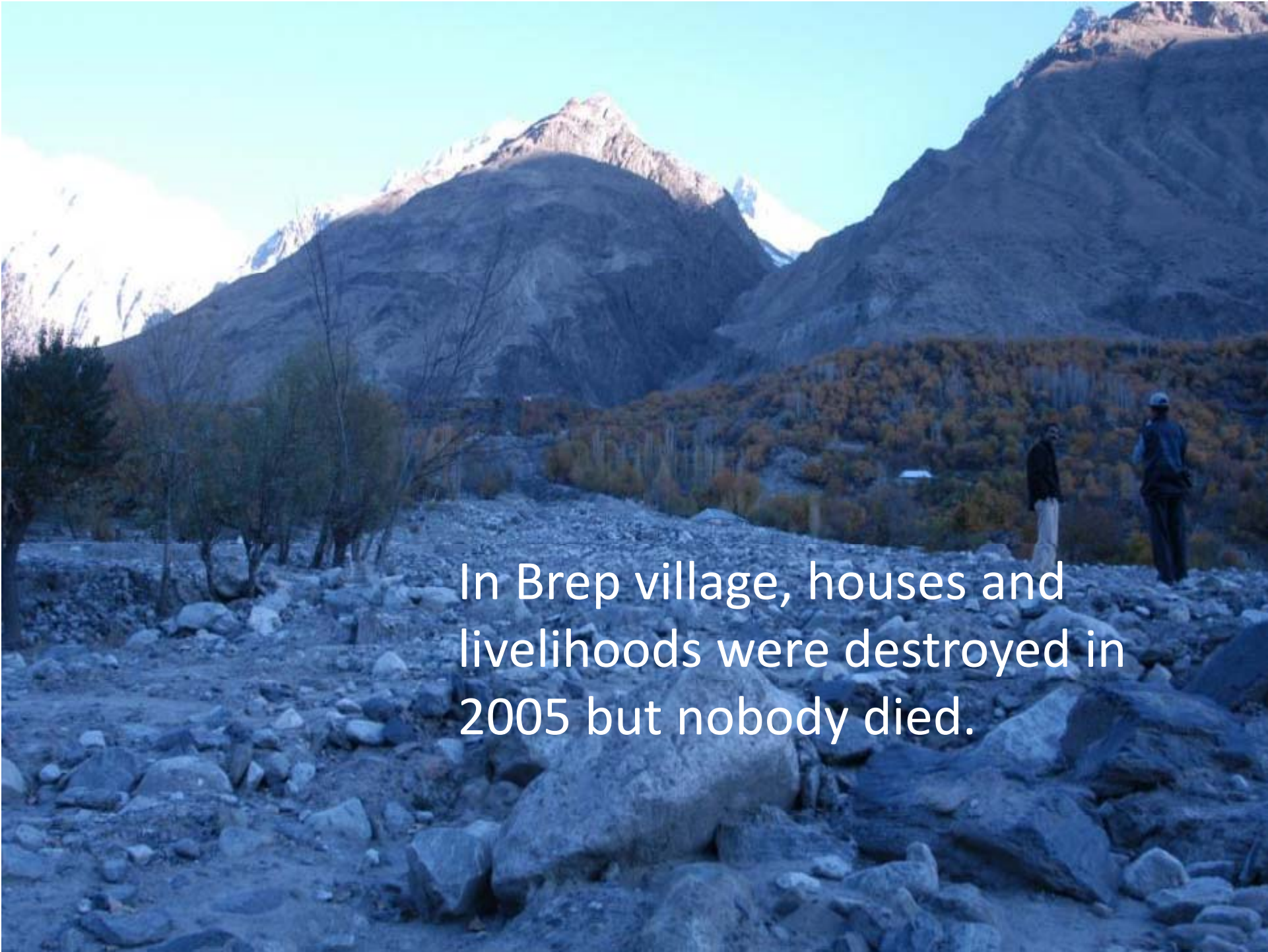
Knowledge on disasters & development projects

“Government officials and technical people never listen to local advice!”



Ignoring Local Knowledge



A photograph of a mountainous landscape. In the foreground, a large, dark, rocky area is covered with numerous large, grey boulders, suggesting a recent rockfall. The middle ground shows a valley with sparse, dry vegetation and a few small, white structures. Two people are standing on the right side of the rocky area, looking towards the mountains. The background features steep, rocky mountains with patches of snow or light-colored rock near the peaks. The sky is a clear, pale blue.

In Brep village, houses and livelihoods were destroyed in 2005 but nobody died.

Landscape interpretation

“A river
always
remembers
its path.”
(Local proverb)



Safe places for building houses



Traditional house construction

“Whenever there is an earthquake, we are running into our houses!”
(Kalash valley)



Food security



Community regulations for NRM



Early warning systems

“The old system is gone and the new system is not working!”





LESSONS

The Four Pillars of Local Knowledge on Disaster Preparedness

Local knowledge on disaster preparedness is based on the following abilities:-

(1) Observation



People's experience of the local surroundings

History of natural hazards

Examples: knowledge on the location, time, duration, frequency, intensity, predictability of previous hazards

Nature of natural hazards

Examples: knowledge on the onset, origin, velocity of water flow; knowledge of different types of rain

Evolution of social and physical vulnerabilities to natural hazards

Example: life stories explaining the impoverishment processes of households following recurrent natural hazards and other stresses

(2) Anticipation



People's identification and monitoring of environmental indicators

Early warning signals

Examples: interpretational knowledge of changes in animal behaviours, vegetation patterns; knowledge of local weather forecast

Time thresholds

Examples: knowledge of when it is time to buy and store food in advance, leave the house, move the cattle, and remove important belongings

Escape route and safe places for humans and cattle

Examples: knowledge of the safest and fastest routes

Key actors and skills

Examples: knowledge of who knows what, who does what and when, who stays behind, who goes first

(3) Adaptation



People's access to assets and their ability to learn, self-organize, re-organize, innovate etc.

Human assets

Examples: specific skills such as traditional carpenters and masons

Sociocultural assets

Examples: knowledge of different social groups depending on occupational, physical ability, ethnicity, gender, caste, class, & age characteristics

Institutional assets

Examples: knowledge generated by local institutions and cross-scale linkages

Financial assets

Examples: micro-finance arrangements such as credits and savings

Natural assets

Examples: natural resource management strategies such as intercropping and agroforestry that conserve biodiversity and protect soil erosion and can contribute to reducing the impacts of natural hazards

Physical assets

Examples: infrastructural safety arrangements such as boats, housing, embankments

(4) Communication



People's ability to transfer knowledge among themselves and between generations

Oral & written communication

Examples: local songs, poems, proverbs which help the younger generation and outsiders to learn about previous hazards; stories of previous hazards encoded in the name of specific places

Early warning systems

Examples: use of visual signals such as mirrors, fire or audio signals such as drums; having dreams of natural hazards in advance

Other practices

Examples: taboos which prevent people from going to certain hazard-prone areas; ceremonies, local art which helps the community to understand, remember past natural hazards, and relieve the anxiety related to the threat of future hazards

Why is it important to know this?

- Recognizing the diversity and complexity of local knowledge and practices
 - Different actors/caste/social groups have different knowledge on disaster preparedness
- Understanding local contexts and needs
 - Local environmental variability/specificities
 - Local perceptions of natural hazards
 - Risk-trade offs in the context of multiple stresses
 - Vulnerable groups and individuals, local elites and power relations
 - Change in people's vulnerability to natural hazards over time
- Combining local knowledge with scientific knowledge

Examples of potential applications

- Accounting for local advices regarding safe locations, construction sites (buildings, roads etc.)
- Combining local knowledge with conventional knowledge for hazard mapping, survey and other inventories, and for early warning systems
- Adapting communication strategies to local understandings and perceptions

Challenges

- Rapid change and multiple stresses (policies, development projects etc.)
- Not all local knowledge and practices are relevant BUT all local knowledge and practices needs to be understood and accounted for

KNOWLEDGE IS POWER

