

# POLICY BRIEF

Traditional and local knowledge to disaster risk reduction

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## Disaster-proofing our communities: The urgent need for local governments to prioritize development based on risk assessment

### SUMMARY

Designing local development plans that consider site specific hazard risks is crucial. However, this consideration is often overlooked, even in areas with high hazard risks, resulting in significant damage to public resources. This policy brief examines the challenges that arise from ignoring local conditions by using Gobargada, a flood-prone village in Eastern Nepal, as a case study. In this village, local people construct houses using easily disassembled, cost-effective, and easily repairable local resources, whereas the government school consists of permanent concrete buildings that were destroyed due to the shift of the river channel, a regular occurrence in the region. Such inconsistencies in the government's programs reflect a complete disregard for local circumstances. In conclusion, local governments must prioritize local knowledge in disaster risk reduction to create more sustainable and resilient communities.

### Background

Local governments play a crucial role in creating development priorities that reflect the unique characteristics of their regions, including the risks posed by natural hazards. This policy brief highlights the importance of disaster risk-informed development planning, using the village of Gobargada as a case study, and provides recommendations for local governments to prioritize development interventions in disaster-prone areas.

Gobargada is a unique village, located between river tributaries, which gives it an island-like characteristic (Fig. 1). Due to the absence of proper road infrastructure, the village is accessible only by boats throughout the year. Agriculture and animal husbandry are the primary sources of livelihood for the local population. However, the area is prone to floods, especially during the monsoon season, which brings heavy rainfall, causing inundation of villages at least a few times every year. The recurrent flooding and river channel changes pose significant challenges to the safety and agricultural productivity of the region, leading to damage to crops and properties.

### The challenge

The recent flood in Gobargada resulted in the destruction of a newly built school, consisting of a six-room brick building and a concrete wall. The shifting pattern of the river, a common occurrence, indicates that the local designs were not suitable for the area. While the houses of the local residents are temporary and made from local materials to reduce both costs and losses, the construction of permanent structures, such as the school, within the floodplain demonstrates a lack of consideration for local circumstances in development plans by the local government. These challenges faced by disaster-prone rural communities emphasize the importance of integrating disaster risk reduction (DRR) into development planning. The main challenge, in this case, is to incorporate local adaptation into government practices to address the unique characteristics of the region and mitigate risks from natural hazards.

### Importance of integrating local knowledge into development plans

Incorporating local knowledge into development plans

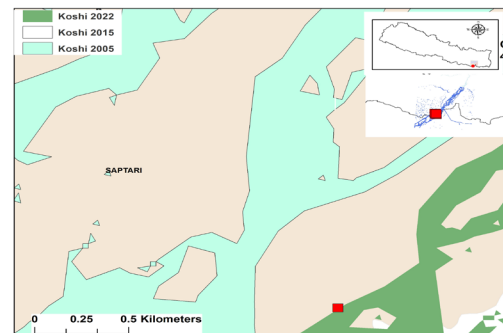


Figure 1. Gobargada village marked in red color. River shift is shown for 2005, 2015 and 2022. (Inset: Location of village in Nepal).



Figure 2. A primary school in Gobargada village adjacent to Koshi River

is crucial for effective disaster risk reduction (Hadlos et al. 2022). Local governments must prioritize disaster preparedness objectives in their plans and policies, incorporating local knowledge to ensure that development interventions are contextually relevant and appropriate (Tuladhar et al. 2015). This requires the active participation of local communities in the planning process to ensure that their needs and concerns are addressed. Furthermore,

local governments must institutionalize mechanisms for integrating local knowledge into development plans and policies, including training and capacity building for local officials (Vasileiou et al. 2022). In addition, the DRR authority in Nepal may need to develop guidelines to assist local governments in this process.

### Recommendation

1. **Conduct comprehensive risk assessments:** Local governments must conduct comprehensive risk assessments for every development project. This will be critical in identifying potential hazards, vulnerabilities, and risks associated with the project, and developing a site-specific DRR plan (UNDRR 2015).
2. **Incorporate local knowledge into development programs:** Local governments should ensure that the findings from the risk assessments are used to inform development planning (ADB 2020), and prioritize the integration of local knowledge into the decision-making process. This may require the development of a guideline and a planning protocol that outline how to incorporate local knowledge effectively.
3. **Ensure meaningful community participation:** Community participation is essential in the planning and implementation of development programs to ensure that interventions are contextually relevant, appropriate, and effective. Local governments should involve the local communities in the planning process from the beginning, provide them with relevant information, and ensure that their feedback and concerns are considered.
4. **Build institutional capacity:** Local governments should invest in building institutional capacity for disaster risk management. This includes providing training and capacity building for local officials and stakeholders involved in development planning and DRR. Improved coordination among different government agencies and stakeholders is also critical for effective disaster risk management.

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### About Us

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