

Helpdesk Research Report

Community-based disaster risk management in Pakistan

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Question

Please provide an overview of the literature on Community-Based Disaster Risk Management in Pakistan, with a focus on impact. Identify successes and failures (including with regard to social inclusion), and key factors of success and failure. Where possible, consider variation among provinces, engagement with local and district government, and the types and methodologies of interventions supported, including links with environmental management.

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1. Overview

Disaster risk management (DRM), including disaster risk reduction (DRR), has received increased attention in Pakistan since the 2005 earthquake and the 2010 floods. In particular, development actors have shown growing interest in community-based disaster risk management (CBDRM). However, little seems to be known about the impact of CBDRM, due to limited implementation and a very limited evidence base. This report offers an overview of what has failed and what has worked, why and how.

- **Factors of success** have included:
 - Work that is multi-sectoral, integrated and multi-hazard.

- Good programming practices, with high-quality analysis, implementation and knowledge management.
- Meaningful engagement with communities, over longer times and culturally attuned.
- Ownership and leadership on part of communities and key involved actors.
- Cooperation and trust among institutions tasked with DRM.
- Strong DRM capacities and effective capacity-building.
- Achieving social inclusion and creating space for equality within local social settings, especially with regard to gender.
- Some context-specific factors, depending on locations and past experiences with disasters.
- **Factors of failure** have included:
 - Little room for DRR in development, and the lack of sustained, integrated and systematic approaches to CBDRM.
 - Top-down, technocratic, reactive practices, as well as a focus on short-term actions and immediate issues.
 - A lack of capacities, resources or will among DRM actors.
 - Political economy dynamics (including in relation to local government), along with institutional confusion and rivalries.
 - A lack of community ownership and the failure to truly engage with communities.
 - Inequalities and exclusions adversely affect groups such as women and girls or minorities.
 - Poor quality in some programmes (analysis, design, implementation, knowledge management).
 - The hurdles of urban settings, such as lack of space and complex multi-sector endeavours.
- **Learning from and enabling communities' informal DRM and broader changes:**
 - There is untapped potential for CBDRM with regard to learning from and enabling communities' informal DRM, in working with communities' local knowledge and local practices related to hazards, risks, vulnerabilities and risk management.
 - Broad social changes in communities, such as improved telecommunications and roads, have had positive effects on communities' capacities in DRM.

2. State of CBDRM in Pakistan and evidence base

There have been a number of CBDRM initiatives in Pakistan since 2005 (expert comment), with DRR and CBDRM becoming 'buzzwords' (Khan & Mustafa, in Moench & Dixit 2007: 230). Different organisations have adopted **different approaches** and tools, and applied them in isolation without standardisation (expert comment). Since 2006, CBDRM has had a strong component in community and technical mapping (expert comment). Many NGOs have emphasised 'soft' activities, especially community training and mobilisation (Khan & Mustafa, in Moench & Dixit 2007: 231). **Many differences exist between regions and projects**, in relation to the nature of the hazards, the administrative set-up, the level of government support, political conditions, social and cultural characteristics (e.g. literacy rate, rights awareness), gender, and the structure of community organisations, among others (expert comment).

There are **very few rigorous assessments** of CBDRM activities in Pakistan (comments by three experts). The lack of documentation, the recent character of CBDRM in the country, and limited evaluations all make it difficult to identify good practices (Murtaza et al. 2012: 29). The evidence base mostly consists of qualitative and mixed-method case studies, with a majority of practitioner references. While gender issues are present in discussions of impact, other **disadvantaged groups are understudied**, such as religious and ethnic minorities, youth, the elderly and persons with disabilities. The geographic coverage of Pakistan is broad, but mountain regions are much more discussed than urban settings, which may reflect a 'rural bias' among some agencies (Qazi 2010: 312). No systematic comparison was found on the implications of regional variations. Findings are largely consistent, although specific points are either contested or, frequently, mentioned only by one source.

3. What has worked in formal CBDRM

Multi-sectoral, integrated, multi-hazard work

A comprehensive approach in implementation, involving multiple stakeholders at multiple levels, is a key factor for success (expert comment). Multi-sectoral, integrated DRR increases resilience the most at community level, but requires greater funding and coordination (Murtaza et al. 2012: 3, 38). **Multi-input responses** should address 'the multiple dimensions of life and livelihoods' affected by disasters, such as 'housing reconstruction, social and economic infrastructure recovery, and livelihood re-creation' (Zimmermann & Issa 2009: 209). For example, in a large number of villages in Sindh, work by British NGOs from the Disasters Emergency Committee (DEC) provided stronger shelter, water and sanitation structures and increased people's assets and knowledge (Murtaza et al. 2012: 2, 30). Communities now have a higher capacity to deal with minor and medium disasters systematically and collectively (*idem*: 30, 34). Similarly, in Oxfam's multi-pronged programme in Punjab, supported households reached better disaster preparedness, scored more positively on most resilience characteristics, did better during the 2010 floods and became better off (*idem*: 1, 33).

Supporting communities' economic recovery is also important. After a disaster, rural and/or remote communities can face transportation costs and shortages for building materials as well as an increase in prices (Arshad & Athar 2013: xii). All this will erode the purchasing power of affected households, and Arshad and Athar (*ibid.*) recommend combining market and state mechanisms in response.

A **multi-hazard approach** is a prerequisite to understanding risk and achieving DRR (Zimmermann & Issa 2009: 208). In Chakhama (Kashmir), the threatening probability of secondary hazards such as landslides was of greater daily concern to communities than seismic risk (*ibidem*). In response, the Aga Khan Development Network coupled seismic micro-zonation studies with 'site-specific geotechnical studies and localized hazard assessments of settled areas' (*ibid.*).

Quality of programming

Programmes have succeeded when they designed sustainable and simple projects, made optimum use of local resources, included contributions from the community, upheld **transparency, accountability and respect for basic rights**, and conducted continuous knowledge management (expert comment; see also: Shah 2013: 52, 58; Zimmermann & Issa 2009: 208). Much boils down to field staff's implementation and engagement with communities (Hughes 2012: 34). Common themes in six DEC NGOs' promising practices are: i) a focus on enhancing people's self-reliance, ii) in-depth, multi-level analysis of problems, iii) 'linking

people with a broad range of external stakeholders', and, iv) cultural and political sensitivity (Murtaza et al. 2012: 29). Across contexts and organisations, CBDRM activities are very **low-cost activities** with high benefits (*idem*: 33).

In the Mansehra district, the implementers' professional competency was an important factor (Shah 2013: 52). In addition, **identifying spoilers and drivers** was essential. Stakeholders' conflicting expectations and fears were tackled in early consultations (*ibidem*). Implementation and monitoring 'were practical, understandable, localised and acceptable' to all stakeholders (*idem*: 58). **Monitoring and evaluation** were positioned as facilitating, learning and mutual support (*idem*: 59). In post-2005 governmental reconstruction, the low-cost grievance redress mechanism meant to ensure equity also served as quality control and 'a built-in monitoring and evaluation function' (Arshad & Athar 2013: xiii).

Meaningful engagement with communities

Successful programmes have taken all stakeholders on board, understood local people's needs and requirements, and had **strong consultation and social mobilisation** (expert comment; Qazi 2010: 132). In Mansehra, **community trust** in the programme was a top driver of success (Shah 2013: 52). Further positive drivers included an approach that was 'supportive, cooperative and adaptive to the culture and system' and 'no hidden agenda' (*ibidem*).

Shared Learning Dialogue (SLDs)¹ have had major benefits, including: a two-way dialogue between the research team and the respondents, opportunities to share viewpoints across a range of actors, getting a wider perspective on hazards and disseminating technical knowledge (Ahmed et al., in Moench & Dixit 2007: 110-111). **SLDs 'need to involve a diverse array of social groups'** (*idem*: 105). More meetings are often required at local levels, 'but discussions at all levels are central to shared learning' (*ibidem*). The field team must have a non-hierarchical structure and open channels for dissent and information exchange (*idem*: 109). Local and expert knowledge should enrich each other in SLDs (*idem*: 109-110).

Communities in Sindh, Kashmir and Rawalpindi were found to be keen to enhance their resilience 'both through software and hardware programs' (Khan & Mustafa, in Moench & Dixit 2007: 230-231; Murtaza et al. 2012: 20). Khan and Mustafa found that affected communities, when presented with options, were **open to a very wide range of measures**, whereas powerful organisations have a strong interest in physical solutions (in Moench & Dixit 2007: 230-231). In Sindh, women were particularly interested in support in health, hygiene promotion, nutrition and livelihoods (Murtaza et al. 2012: 21).

Stakeholders' **willingness to make informed but somewhat delayed decisions is often limited**, particularly in post-disaster contexts with the pressure to reconstruct quickly (Zimmermann & Issa 2009: 208). As systematic risk assessments can delay construction, the community's active involvement 'can relieve some of the pressure to rebuild quickly' (*ibidem*). Close collaboration between scientists and the community is essential in this respect (*ibid*).

Ownership and leadership

Government leadership and ownership is essential (Khan & Mustafa, in Moench & Dixit 2007: 232). There is also consensus in the literature that, due to the limitations of what even successful CBDRM can

¹ SLD is an iterative exchange between communities and sets of other actors, meant 'for building common understanding and encouraging reflexive learning across scales, groups and styles of organisation' (Ahmed et al., in Moench & Dixit 2007: 101). See Khan & Mustafa, in Moench & Dixit 2007: 202-204.

achieve on its own, **linkages** between levels of governance are crucial too. The Mansehra model demonstrated that any district could use its resources effectively and efficiently where there was genuine will (Shah 2013: 52). Supportive factors included the **leadership of key organisations and persons**, a clear understanding of mandate and vision, honesty, commitment and dedication, and an action-oriented approach (*ibidem*). ‘Continuous motivation, training and skills transfer to the concerned agencies, organisations and communities’, as well as the building up of stakeholders’ trust and confidence, served to overcome obstacles (*idem*: 53). In rural areas after 2005, early **community mobilisation** led to success in the owner-driven approach to housing (Qazi 2010: 131-132). In a large number of villages in Sindh DEC NGOs worked, **communities ownership** of the process was visible (Murtaza et al. 2012: 27).

Institutional cooperation for DRM

In response to the 2005 earthquake, the government of Khyber Pakhtunkhwa and German aid developed **district-level disaster preparedness and management in Mansehra** in 2008-2010 (Shah 2013). The programme, which included community-based activities and a wide range of stakeholders, ‘was a successful model of learning and practice’ despite limited resources (*idem*: 36, 44-50, 52, 60). In Mansehra, the **allocation of tasks** to respective institutions and their implementation was vital in operationalising DRM and in ‘mediating the link between sustainable development, disaster management and humanitarian actions’ (*idem*: 53). This implies a ‘sound analysis’ of the roles and responsibilities of formal and informal organisations in DRM, and their institutional and technical capacities (*ibidem*). The DRM model in Mansehra was designed to be **aligned with provincial, national and international norms**, while providing the district authorities with some independence and flexibility (*idem*: 56-57). Constant **communication** throughout the programme led to trust and cooperation (*idem*: 54-59).

Capacities and capacity-building

The **professional and technical competencies** of the implementers make a big difference (expert comment). After the 2005 earthquake, the Earthquake Reconstruction and Rehabilitation Authority (ERRA) partnered mainly with local NGOs that often had prior experience with reconstruction and provided valuable expertise in community mobilisation (Arshad & Athar 2013: xii). ‘**Cascaded training**’ was effective and efficient in training a critical mass of craftsmen (e.g. masons) in seismic-resistant construction (*idem*: xi). In addition, an **independent regime of assistance, inspection and certification** was set up to ensure compliance with seismic-resistant construction but also to advise beneficiaries on necessary improvements and, where needed, to arrange for technical assistance (*ibidem*). In Mansehra, **knowledge- and experience-sharing** enhanced district stakeholders’ capacities and the sustainability of the programme (Shah 2013: 56).

Social inclusion and equality

An inclusive approach in CBDRM is possible through ‘successful **advocacy and proper community social mobilization**’ and awareness-raising, but this requires committing to a long enough time span and being consistent (expert comment). Based on lessons from post-2005 reconstruction, Arshad and Athar (2013: xiii) stress that accounting for post-disaster social dynamics is critical to ensuring that reconstruction does **not exacerbate existing inequities**.

One expert states that the **inclusion of women** has been rather easy in Ismaili areas, but rather difficult in conservative Sunni areas (expert comment). Sustainability is a greater challenge in these areas, as hardly any on-the-job activities are possible (*ibid.*). When holding SLDs in Kashmir and Rawalpindi, dialogue was

conducted in gender-segregated groups (Ahmed et al., in Moench & Dixit 2007: 110). Experience shows that women do not speak up in large gatherings, especially in the presence of male participants, while their discussions in same-sex groups are much richer and unrestricted (*ibidem*).

UNISDR note the **effectiveness of integrating gender analysis into all post-disaster response from the beginning** (mentioned by Murtaza et al., 2012: 46-47). This is based on a successful experience in the districts of Bagh and Chakwal shortly after the 2005 earthquake (*ibidem*). There, the Potohar Organization for Development Advocacy educated communities on their legal rights, with a focus on women's and girls' rights in disasters (*idem*: 47). It identified key influential partners in the community supportive of women's and girls' post-disaster needs in community plans and priorities, while ensuring women and girls exerted direct control over the project (*ibidem*).

Following severe floods in 1992, an NGO, Pattan, successfully developed **new institutional structures** to facilitate a reduction in community vulnerability to floods, with an emphasis on women's capacities (Mehta 2007: 23). Pattan used actions such as involving women in designing and constructing houses and joint house ownership for husband and wife, which slowly gave women greater self-confidence to participate in further projects (*ibidem*).

Context-specific factors

Successful interventions are **in tune with the local culture and environment**, working with the local values and traditions (expert comment). In-depth comprehension of how communities understand and assess risk, before making investments, requires substantial work and experience (Zimmermann & Issa 2009: 208). One expert argues that it is 'definitely' easier to succeed at CBDRM in Ismaili areas (Gilgit Baltistan), while provincial governments in Khyber Pakhtunkhwa and Kashmir have provided 'good support' (expert comment).

Owner-driven reconstruction after the 2005 earthquake was **very successful in rural areas**, with high levels of reconstruction, good occupancy and satisfaction, adaptation of indigenous housing technology, and 'widespread and sustainable vulnerability reduction' (Qazi 2010: 113). One expert also states that CBDRM has been **more successful in mountain regions** (expert comment). In the northern parts of Pakistan (Gilgit-Baltistan and Chitral), FOCUS' technical mapping and community preparedness seem 'rather successful' (expert comment).

A **recent experience of extreme disasters can be a catalyst** for change (Moench & Dixit, in Moench & Dixit 2007: 9). One expert argues that success in CBDRM was higher in areas of recent disasters, e.g. following the Kashmir earthquake (expert comment).

4. What has not worked in formal CBDRM

The diversity of challenges and context means there are few standardised practices. An expert noted that there seem to be **no 'wonderful' practices with a substantial impact** (expert comment). Sustainability is always difficult (expert comment). There are also general **questions about priorities and problem identification**. For example, in the absence of district hazard maps in Sindh, it is difficult to 'figure out whether the most vulnerable villages have been targeted' (Murtaza et al. 2012: 30). In one evaluation, communities, especially women, identified clean drinking water, sanitation and access to health and transport as some of their most important problems, ranking them above floods (Khan & Mustafa, in Moench & Dixit 2007: 197).

Little room for DRR in development

Very few national and international development actors are willing to seriously invest in and mainstream DRR at the planning and design stages of development projects, so DRR is marginalised (Khan & Mustafa, in Moench & Dixit 2007: 231). Communities, policy-makers and others ‘tend to focus on problems or opportunities present in their immediate context’ (Moench, in Moench & Dixit 2007: 38). Approaches are unlikely to make fundamental changes to basic systems ‘in response to risks or needs that are not immediate or have not been previously experienced’ (*idem*: 38-39). DEC NGOs’ DRR work is mainly a part of emergency response without full incorporation into development work (Murtaza et al. 2012: 34). This means DRR ‘will reduce significantly’ once emergency work is over, and **linkages with ecological change, conflict and other long-term programming are weak** (*idem*: 34-35).

Lack of sustained, integrated and systematic approaches to DRM

‘Much of CBDRM work is **patchy, scattered, and one-off**’ (expert comment). Pakistani DRR governance suffers from fragmentation (Murtaza et al. 2012: 2). Government authorities ‘look at disaster from event to event, and sector to sector’, without systematic planning (Khan & Mustafa, in Moench & Dixit 2007: 231). Given the large number of highly vulnerable villages in Pakistan, the number of villages covered by CBDRM in a given district is small (Murtaza et al. 2012: 3).

One expert also notes that **CBDRM ‘has limitations especially for climatic hazards** where, for instance, carrying out localised CBDRM in one location along a river or a beach is useless unless all (or at least most) of the communities are targeted in an integrated fashion’ (expert comment). The expert explains that this ‘involves a strong external interlocuter (e.g., the state) to promote inter-community dialogue’, but no national or provincial stakeholder seems to make such an investment.

The widespread **lack of coordination** in CBDRM is mentioned throughout the literature as a source of failure (e.g. Murtaza et al. 2012: 31). For example in Sindh, DEC NGOs have engaged in little exchange of information and resources and ‘very limited attempts to develop broader and common perspectives’ on communities’ vulnerability at district level (*idem*: 2).

Top-down, technocratic, reactive practices

Many interventions ignore local knowledge and lack a holistic, deeper analysis of context, thereby creating new vulnerabilities (Dekens, in UNISDR 2008: 39). The **dominance of a military mindset** is a major challenge, with a reactive, technologically-driven, command-and-control approach (Khan and Mustafa, in Moench & Dixit 2007, 196, 222). In Kashmir, the authorities rely on ‘centralised decision making and standardised reconstruction protocols, which are often economically, culturally and socially inappropriate’ (*idem*: 196). Top-down or reactive approaches also existed in Mansehra (Shah 2013: 52) and Balochistan (Ainuddin & Routray 2012: 22).

Reactive thinking focused on response equipment is also found ‘across all sectors and communities’ (Khan & Mustafa, in Moench & Dixit 2007: 231). Both national DRR and the DEC NGOs focus CBDRM mainly on response and emergency (Murtaza et al. 2012: 2-3). This **ignores prevention and mitigation**, which could address the root causes of risk and larger hazards (*idem*: 2-3, 29-30, 35). This is due to a lack of funds and a ‘community-focused outlook’ (*idem*: 29).

Local authorities and, to some extent, communities (mostly men and some women), tend to put an **emphasis on engineering and technical solutions** (Khan & Mustafa, in Moench & Dixit 2007: 225, 230).

This manifests in their interest in building expensive infrastructure rather than funding less expensive but effective measures (e.g. purchasing adequate ladders for fire services) (*idem*: 225). As a result, government programmes often end up increasing people's exposure to hazards (Murtaza et al. 2012: 2).

Short-term practices and focus on immediate issues

Many practices are short-term and thus not sustainable (Murtaza et al. 2012: 3; expert comment). Even the 'Mansehra model' does not seem to be sustainable after donor exit (Shah 2013: 59-60). The interventions of ERRA in Kashmir were 'rather fast and top-down' (expert comment). In Muzaffarabad, the **focus on immediate risks generated limited effects** for DRR and adaptation (Khan & Mustafa, in Moench & Dixit 2007: 197, 230). DRR interventions by DEC NGOs are not likely to have increased communities' resilience to floods of greater size, intensity and impact, which would overwhelm the current DRR structures (Murtaza et al. 2012: 34).

Lack of capacity, resources or will in DRM

By and large, communities as well as national and international actors still **do not understand well what constitutes hazards and vulnerability** (Khan & Mustafa, in Moench & Dixit 2007: 231). For example, in Muzaffarabad, communities and institutions (foreign and Pakistani) had **low awareness** of the underlying social and political factors that contribute to risk reduction and adaptive capacity in relation to hazards and climate change (*idem*: 213, 230). Interventions are not perceived to relate to DRR 'unless they are explicitly and exclusively intended for that purpose' (*idem*: 230).

DRR governance 'suffers from **a lack of political commitment, funding, skilled human resources, and coordination**', all needed to implement mitigation and preparedness in the most vulnerable regions (Murtaza et al. 2012: 2, 31). **National and provincial DRM agencies** are under-resourced and donors 'have not made any effective investments to bolster their technical and management capacity' (expert comment). The system is weak at the local level (expert comment), particularly at district level 'where the bulk of implementation occurs' (Murtaza et al. 2012: 2). For example, government early warning is often late and couched in obscure technical language, and district authorities often lack the resources to transmit it to communities (*idem*: 13, 18). In Mansehra, actors had 'insufficient technical capacity' on DRM (Shah 2013: 52).

After 2005, many organisations with **no previous experience in disaster programming** entered the field, leading to a haphazard response (Khan & Mustafa, in Moench & Dixit 2007: 227). For example, DEC NGOs initially lacked skills in DRR (Murtaza et al. 2012: 31). The NGO sector also **lacks 'multisectoral technical knowledge'** on the full scope of DRM (Khan & Mustafa, in Moench & Dixit 2007: 232).

Political economy

Political incentives in municipal government and in the development field make risk reduction a low priority (Khan & Mustafa, in Moench & Dixit 2007: 197, 225). Political interference in professional decision-making has hampered effectiveness (Shah 2013: 52; see also Murtaza et al. 2012: 2). Responsibilities often remain unclear due to both complicated lines of authority and the political economy of local power, such as where vote banks lie for the district leadership (Khan & Mustafa, in Moench & Dixit 2007: 225-226). The political economy of inter-state water sharing and land tenure issues also make DRR complex (expert comment).

Competition and power differential among institutions also cause problems. Departments have a vested interest 'in giving a solution that suits their mandate' (Khan & Mustafa, in Moench & Dixit 2007: 230). Due to competing organisational mandates, a lesser emphasis is put on the cost-effectiveness of DRR, and project designs are not based on an evaluation of various structural and non-structural measures (*idem*: 197). Work on root causes across sectors is difficult (*idem*: 232).

Institutional problems

Responsibility for CBDRM is unclear 'between national, provincial, local governments and the implementing partners' (expert comment). DRR governance suffers from 'overlapping and unclear mandates' horizontally and vertically (Murtaza et al. 2012: 2). Problems range from 'bureaucratic red-tapism' (Shah 2013: 52) to Balochistan lacking a disaster management authority at district or community levels (Ainuddin and Routray 2012: 33). **Local governmental bodies do not necessarily have the authority or budget** to carry out DRR effectively (Khan & Mustafa, in Moench & Dixit 2007: 225-226). Yet no serious thought has been given to the institutional side of DRR, hampering effectiveness and sustainability (*idem*: 226, 231).

Lack of ownership and failed engagement with communities

Communities do not always have ownership or good participation in CBDRM (Shah 2013: 52; expert comment). Communities need to see a benefit to projects beyond increased security (expert comment). Yet, in reconstruction after the 2005 earthquake, master planning in urban areas 'remained a rather exclusive and somewhat secretive exercise with no provision for involving the citizens or civil society' (Qazi 2010: 132). Divisions in communities and communities' negative perceptions of institutions can also pose challenges (Shah 2013: 52).

SLDs with communities can be challenging (Ahmed et al., in Moench & Dixit 2007: 109). In one evaluation, the field teams, despite receiving training, found it **difficult to move out of top-down interactions** (*idem*: 109-110). The field team often used an extractive rather than information-sharing mode. Their field reports also lacked the richness and nuance expected from SLDs (*idem*: 109).

Inequalities and exclusion

Poverty, cultural barriers and a lack of rights awareness hinder inclusion in CBDRM (expert comment). Community mobilisation 'is difficult in rather conservative areas', such as some areas in Kashmir (expert comment). The '**absence of gender- and culturally-appropriate facilities**, coupled with restrictive cultural mores and women's low social status', can create difficult situations for women (Mehta 2007: 12, see also 13-14). In Sindh, women were less familiar with NGOs programmes and DRR, and were less involved than men in CBDRM and preparedness activities, even where community-based organisations of women had been set up (Murtaza et al. 2012: 3, 21, 27, 35). Rural religious minorities have faced discrimination, including in exclusion from assets, livelihoods and government emergency and regular services (*idem*: 22).

Poor quality in programmes

Some failures relate to a **lack of quality in programmes**, such as a 'lack of professional and technical competency of the implementing agencies and their staff'; a 'lack of commitment, dedication and poor understanding of culture/area specificities'; isolated or project-based approaches; and a lack of

transparency, accountability and simplicity in interventions (expert comment). DEC NGOs had very often not conducted detailed analysis of the socio-economic contexts of the villages and in-depth community vulnerability analyses which could provide useful information, e.g. for identifying excluded groups and strategies for enhancing their resilience (Murtaza et al. 2012: 27, 31). In Muzaffarabad, the poor design of maintenance mechanisms for DRR outputs limited sustainability (Khan & Mustafa, in Moench & Dixit 2007: 197).

The literature frequently mentions that **knowledge management on CBDRM is weak** (e.g. Shah 2013: 52). The evaluation of Oxfam UK's CBDRM notes that insufficient documentation made it difficult to look into some failures, which included a lack of livelihood diversification and poorer attitudes towards climate change after the programme among some of the targeted population (Hughes 2012: 33-34).

Specific challenges of urban settings

The government's owner-driven reconstruction after the 2005 earthquake was not very successful in urban areas, where the planned strategy could not 'overcome the complexities of coordinating housing construction with services and infrastructure and, in some cases, resettlement' (Qazi 2010: 113). Urban areas have presented specific barriers to a decentralized, people-centred reconstruction (*idem*). **Limited space and the multi-sectoral nature of town construction** (e.g. zoning, infrastructure, contractor work) hampered transitional shelter (*idem*: 132). Obstacles have included land scarcity, tenure issues and costs. In addition, municipal authorities tasked with training, inspection and regulation of housing reconstruction in urban areas were weak, unlike in rural areas (*ibidem*). Because of the 'interconnectedness of a multitude of recovery challenges', the duration and financial cost of reconstruction is higher in urban areas (*idem*: 133).

5. Learning from and enabling informal DRM and broader changes

Working with communities' informal DRM

A number of references point out **communities' autonomous capacities to manage disaster risk**, while acknowledging their major limitations (e.g. Murtaza et al. 2012; UNISDR 2008: 35, 39, 45). Communities have their own knowledge about hazards, risks and DRR, including on differential vulnerabilities such as gender-based ones (Murtaza et al. 2012: 19-21; UNISDR 2008: 35-45). There are several examples of **successful collaborations** with local knowledge. The post-2005 rural housing strategy 'was adjusted midway to allow for indigenous construction materials' (Qazi 2010: 133). In Chakhama Valley, the Aga Khan Development Network's project included regular cooperation between geologists and community representatives on local risk maps (Zimmermann & Issa 2009: 205). The incorporation of local knowledge was critical to analysis and contributed to local ownership and acceptance (*idem*: 205).

Among the challenges for interventions, a key one is that development actors often overlook communities' informal DRM and focus on external, scientific knowledge (Dekens, in UNISDR 2008: 35). At the same time, Dekens argues care is needed as outsiders can use local knowledge for control over communities and their resources (*idem*: 39). In addition, **some local practices are not sustainable or equitable** (*idem*: 35, 39). Local knowledge is often monopolised by dominant groups, is shaped by some unequal social relationships, especially caste, and lacks accountability especially towards youth (*idem*: 39). Lastly, local knowledge **can be perceived as a threat** to national and political interests, especially in authoritarian regimes (*ibidem*).

Working with broader changes in communities

In Muzaffarabad, compared to formal DRR, **systemic changes** have had a much more profound effect on communities' resilience (Khan & Mustafa, in Moench & Dixit 2007: 194). **Mobile phone communication, the expansion of financial services, road networks and aid fro; civil society** are 'likely to diversify livelihoods, build social capital and expand opportunities for basic services like health and education' (*ibidem*). This may lead to sustained DRR and resilience, because policy changes and local demand more than public investment have catalysed many of these systems, making them **self-sustaining** (*idem*: 194, 197, 214). The benefits 'are almost certain to far outweigh the costs' (*idem*: 214). The private sector has a central role in creating and maintaining such social, political and economic systems that can be used for flexible strategies (Moench, in Moench & Dixit 2007: 46). Moench argues that this private role must be balanced by regulatory government and civil society, to ensure access for all vulnerable groups (*ibidem*).

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Key websites

- International Centre for Integrated Mountain Development (ICIMOD) – Information Resources:
<http://lib.icimod.org/?page=info>
- PreventionWeb – Documents & Publications – Pakistan – Community-based DRR:
http://www.preventionweb.net/english/professional/publications/index.php?o=ent_datepublished&o2=DESC&ps=50&hid=0&tid=34&cid=129&oid=0&x=10&y=4
- ReliefWeb – Pakistan – Disaster Management – Evaluations and Lessons Learned:
[http://reliefweb.int/country/pak?f\[0\]=field_language%3A267&f\[1\]=field_content_format%3A6&f\[2\]=field_country%3A182&f\[3\]=field_theme%3A4591](http://reliefweb.int/country/pak?f[0]=field_language%3A267&f[1]=field_content_format%3A6&f[2]=field_country%3A182&f[3]=field_theme%3A4591)
- UNISDR (UN Office for Disaster Risk Reduction) – Publications – Asia-Pacific:
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