

Drawing the case studies together: synthesis of case studies and group discussions¹

A paper based on the discussion of case studies at a workshop in Kathmandu, Nepal, 30 October– 1 November 2017.

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Disaster risk reduction, Qualitative methods, Community-based disaster risk reduction Paper type Research paper

Introduction

As part of the programme of work in which case study authors participated, all were able to meet in Kathmandu, Nepal, for a workshop to discuss findings from the papers. The method for this discussion and subsequent analysis is described in this paper, and findings from the analysis of individual case studies, comparisons between them and from the case studies taken as a whole are discussed.

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The research questions posed in this study

The challenge of addressing underlying risk drivers leads to the recognition of two possible modes of action, either working within existing structures of power and powerlessness or acting to disrupt them to achieve transformatory change.

The focus of this study is on local-level accounts concerned with social change, actions to achieve change and barriers to change. Examination of these examples enables reflection on the possible modes of action referred in the Box 1. Two questions are investigated through the discussion and synthesis of the case studies:

- What understanding of the nature of underlying risk drivers and the structures which frame them is brought through this experiential perspective?
- What proposals for influencing change to address underlying risk drivers emerge from this experiential investigation?

Co-creation of the case studies as a basis for discussion

The studies at the heart of this special issue focus on local action to address shocks and stresses resulting from everyday disasters, seeking in different ways to address both the immediate events and the “underlying risk drivers”. The participants collaborated in an iterative “loop learning” process (Argyris and Schon, 1974). The steps of this process are listed and annotated in Norton’s (2018) Diagram 2, in this issue and summarised below:

1. selection of case study contributors
2. preparation of an initial case study outline by the participant;
3. feedback and questions from the editors;
4. production of a further draft by the participant;
5. invitation to use a table format to “deconstruct” the case study and identify the subject, context, threats, consequences, barriers, key actors, actions, important themes and issues, future change and transformation;
6. revision of case study in a common format drawing on the analysis in (4);
7. peer review of each case study by other participants in preparation for the Kathmandu workshop, each case being reviewed by three or four colleagues who prepared questions based on the review;

Box 1. Structures of power and powerlessness

Local actors are affected by underlying risk drivers which are affected by decisions and action taken beyond local level, nationally, internationally and globally. This is particularly clear in the context of climate change, as can be seen in the case study from Kiribati, where many of the local challenges result from global climate effects. The scale of influence needed to achieve systems change or “transformation” for problems on such a scale is highlighted in the Intergovernmental Panel on Climate Change special report, requiring

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“The altering of fundamental attributes of a system (including value systems; regulatory, legislative, or bureaucratic regimes; financial institutions; and technological or biological systems)” (Field et al., 2012, p. 564).

Other risk drivers result from political, economic and environmental factors. Their characteristics are often determined by powerful actors. Political influence is closely guarded by institutions (Gaventa, 2005) and institutions tend to protect the status quo (Clemens and Cook, 1999). The very complexity of socio-political systems, forming a multi-dimensional

8. discussion of each case study paper between all participants at the Kathmandu workshop, initiated by the reviewers' questions;
9. recording of key points made by participants at the workshop;
10. further revision of the case study on the basis of the workshop feedback; and
11. discussion and amendment of this paper by all participants.

Investigation of the case studies

The eight case, along with other examples from papers 4–11 of this special issue. The opportunity for face-to-face discussion of them between the participants, at a workshop in Kathmandu, Nepal was a particularly valuable step in the co-creation method outlined above. These rich discussions were captured in peer review notes and audio recordings.

This information formed the basis of a simple qualitative analysis as outlined below:

- (1) During the discussions, key points were recorded on flipchart sheets visible to the group. A total of 230 points were recorded in free text form (see example in Plate 1).
- (2) The flipcharts were transcribed at the close of the workshop.
- (3) The transcribed points were imported into a spreadsheet, and coded by developing short (normally one word) codes intended to reflect the theme of each point. For example, "Government responsive on disaster risk reduction" was coded as "loggov" (local government).
- (4) Codes were accumulated in a code list. An iterative process was employed. If it became clear that codes were a poor fit, or were redundant, they were modified or deleted.
- (5) The process resulted in the 230 points being categorised under 30 codes. Each point was also flagged according to the source case study.
- (6) Charts were generated showing the frequency of coded points for each case study discussion.
- (7) A chart was also generated showing the frequency of coded points for all case study discussions.

It is important to consider the significance and the limitations of this analysis, which is qualitative in nature and, therefore, the final output charts must be regarded as such. The frequencies which emerge are helpful in understanding the flow of discussions, rather like a poll, and are clearly influenced by the interpretation of the researcher (e.g. in coding), as is the case in any research, whether qualitative or quantitative. The researcher asserts that the exercise was conducted with an open and enquiring mind rather than with a pre-existing conclusion driving investigation. Flyvbjerg (2006), in discussing the value of a case study driven approach, notes:

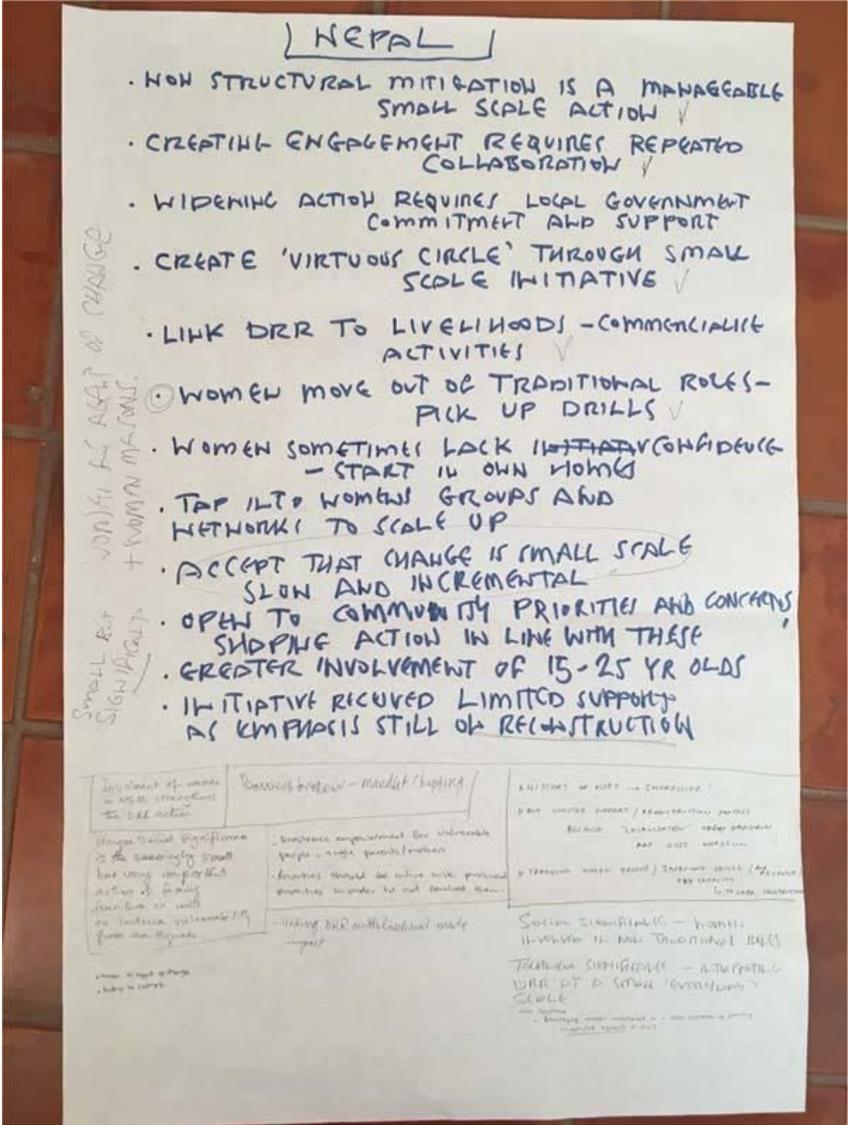
Researchers who have conducted intensive, in-depth case studies typically report that their preconceived views, assumptions, concepts, and hypotheses were wrong and that the case material has compelled them to revise their hypotheses on essential points (p. 235).

Plate 1. Example of original flipchart sheet, recording key points in discussion of Nepal case study

For example, the resource constraints of local NGOs are widely recognised as a limiting factor, for example, driving the “localisation debate” as discussed above, but resources do not appear as a strong theme in the discussions.

The findings from the qualitative analysis are grouped into several pairs, as both the original case studies and the qualitative analysis of the group discussion of them showed strong commonalities between experience in Kiribati and in Gigantes Island, Philippines, resulting from the small geographical scale of both contexts. They also showed themes in common between the cases in Vietnam and Pakistan, both concerned with gulfs between local action and the exercise of politics and power. In East Delhi, India and in rural Indonesia the action of the local NGO and the application of innovations were common themes. In the remaining two cases, the stories were very particular; that in Cameroon being concerned strongly with the lack of governance and local capacities, and the case study from Kathmandu, Nepal focussing strongly on transformatory approaches to gender-related participation.

The discussion, therefore, groups the cases as outlined above, and concludes by considering the aggregation of significant themes across all case studies.



Discussion of the analysis

Kiribati Islands; and Gigantes Islands, Philippines

Two separate island groups are considered here. Kiribati is composed of 33 Pacific islands, 21 of them inhabited, with a total population of approximately 110,000 people. The Gigantes group of islands in the municipality of Carles in the Philippines are 26 km away from mainland Iloilo and consist of four villages with a population of approximately 13,000.

The challenges faced in the two localities are quite different. An overarching concern for the Kiribati Islanders is the direct and indirect effects of climate change. Rising sea levels and temperatures are affecting both fishing and agriculture negatively. This in turn affects both livelihoods and health. Inward migration to the main island of South Tarawa as life on the outlying islands becomes unsustainable increases social pressures, and activities such as sand and gravel digging to earn money damage the environment further.

Though less isolated than Kiribati, Gigantes Islands face the effects of isolation in a lack of services compared with mainland communities. Poverty levels are high and this leads to activities such as illegal fishing. Alongside social and economic pressures are the major impacts of typhoons sweeping across the region.

Discussion recognised striking similarities between the responses to the challenges faced in the two localities. Figures 1 and 2 show the most significant themes arising in discussion.

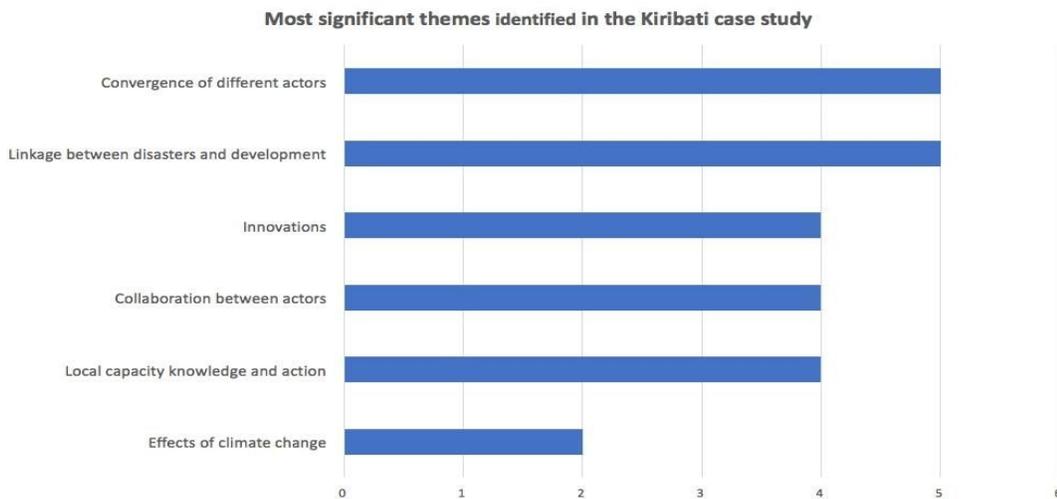


Figure 1: Kiribati

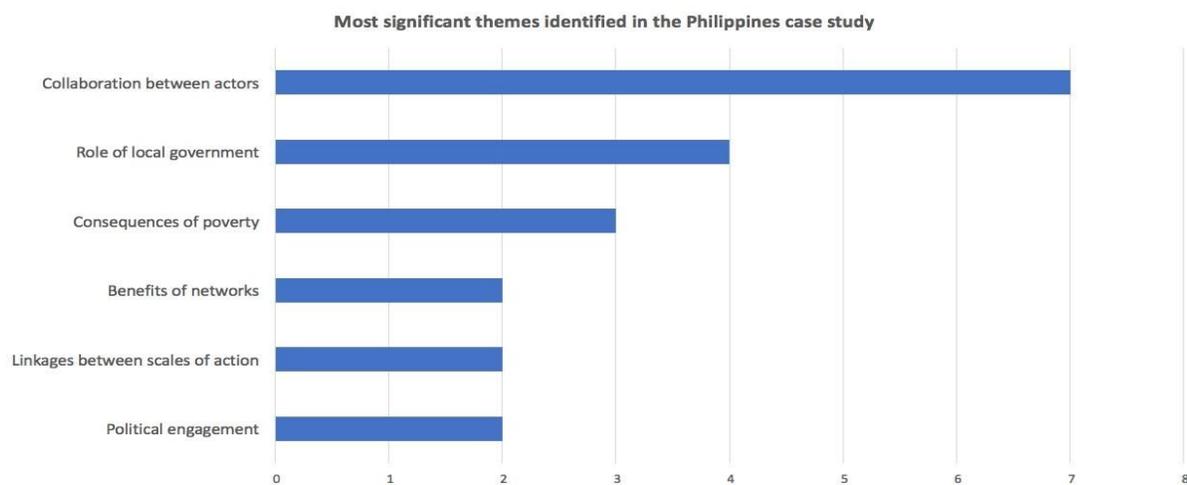


Figure 2: Philippines

The figures show some similarities and some differences. In both cases, collaboration and convergence were identified as significant themes. In the Kiribati case linking disasters and development, innovations and local capacities were also major topics. In the Gigantes Islands, the focus was rather on local government role, the pressures of poverty, political and cross-scale action through networks and linkages between scales.

The levels of collaboration described in both cases were found remarkable by participants, as this contrasted with experience in other localities. In both cases, there were strong and positive connections between the local people, civil society organisations, local government and technical experts. The emphasis on the political dimension in the Gigantes islands may reflect the fact that such collaboration is a fairly recent phenomenon, driven partly by the formation of the ISDA umbrella group and the initiation of the RISE project.

There is a sense in Kiribati that collaboration is driven by the fact that all actors face the same challenges. Government, for example, is not remote as it is in some cases. The emphasis on understanding linkages between disasters and development, on innovations and on engaging local capacities suggest recognition that new approaches are needed to face changing economic and social conditions resulting from climate change. Finally, it is noted that both localities are small in physical scale and bounded by sea, compared with the other cases considered. We will return to this point.

Basti Rindan, Pakistan; and Central Vietnam

In Pakistan, the case study focusses on the impact of both floods and the politics and power lying behind their management in the village of Basti Rindan on the Indus river in South Punjab. The Vietnamese study concentrates on the specific issue of safe housing in Central Vietnam, and the broader issues of disasters and development as local and national policy bears on these issues. In both cases, the studies highlight a lack of connection between local needs and priorities and the policy and action of decision-makers remote from the local scenes. In both cases, disaster risk reduction tends to be interpreted at government level as a response to crisis rather than as a developmental approach. Figures 3 and 4 showing the focus of discussion on these cases show some common themes in both cases.

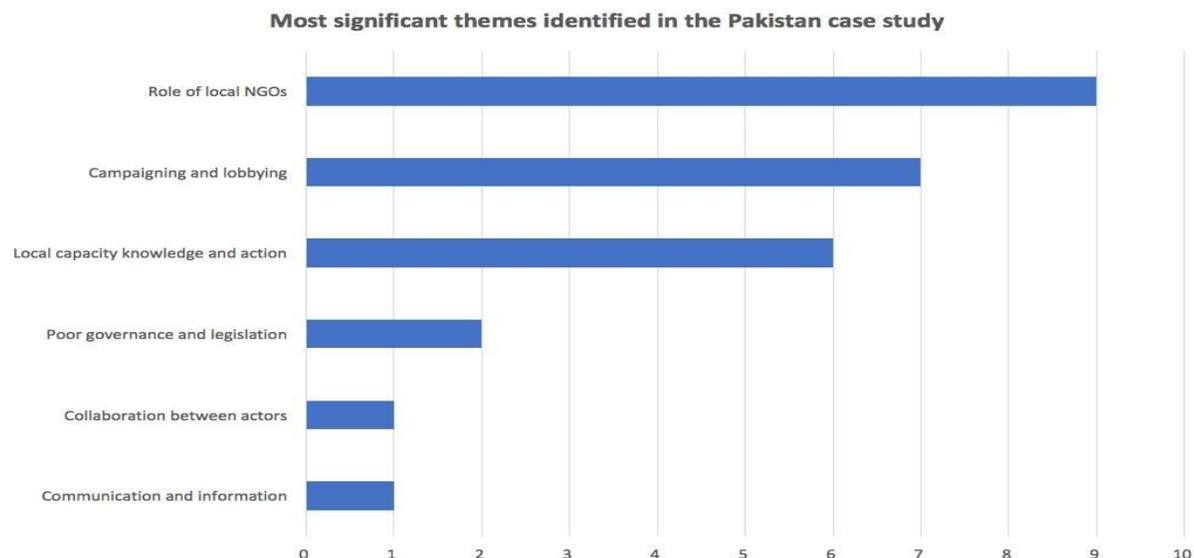


Figure 3: Pakistan

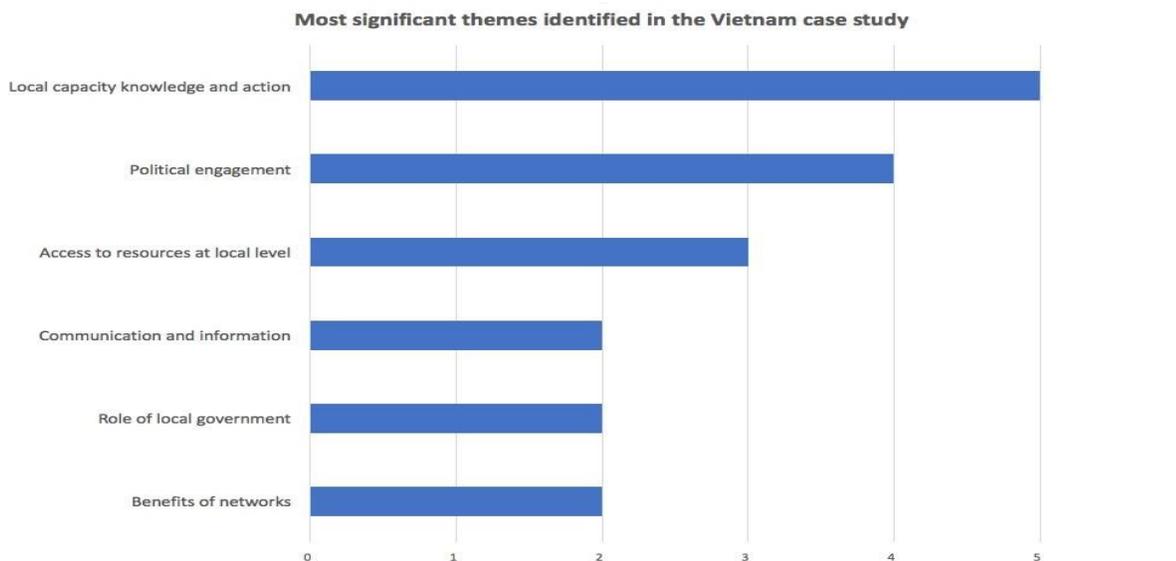


Figure 4: Vietnam

In the discussion of both cases, the significance of local capacity, knowledge and action was highlighted, along with campaigning and lobbying, and the role of NGOs in Pakistan, contrasting with poor governance and legislation in this case. Similarly in Vietnam, political engagement, communication and information and the role of networks reflected the concern to influence for change. Resources were a topic of discussion, possibly reflecting the concern that disaster risk reduction funding does not reach local areas except in times of crisis. Local government was also highlighted. The Vietnamese case study indicates cohesion at a local level between communities and government, whereas even this is absent in the Pakistani case study.

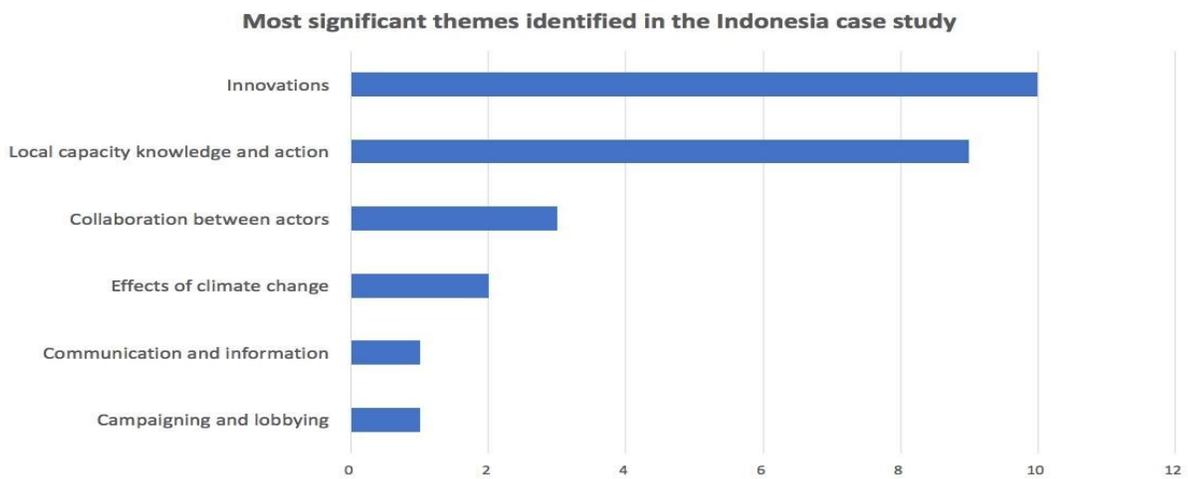
Faced with a lack of constructive collaboration between local communities on the one hand and government (and landlords in the Pakistani case study) on the other, discussion showed a strong focus on the means of influencing for change through political engagement, campaigning, lobbying, communication and information and networking. Though the Pakistani case study acknowledges that the NGO had a small part to play and that the trigger for public unrest and lobbying was a major catastrophe, nevertheless the bridging role of NGOs seems significant in both cases. As in the discussion of the Kiribati case it seems the challenge is engaging decision-makers with disasters as a development issue. The Vietnamese case study concludes by quoting Jason von Meding (2017): In Vietnam poverty and poor development, not just floods, kill the most marginalised.

Gunungkidul District, Indonesia; and East Delhi, India

These cases present contrasting locations in geography and demographics. East Delhi district has mushroomed on the lowlands surrounding the river Yamuna, with many informal squatter settlements expanding through the inward migration to the city. Apart from the regular hazard of flooding, the standard of buildings and infrastructure is poor and ill-managed, and waste and poor sanitation affect health and cause disease to spread.

Gunungkidul district in Yogyakarta, Indonesia, is rural and has agrarian economy. It is a karst limestone landscape with poor fertility, long dry periods and changing patterns of rain and drought resulting from global climate change, leading to increasingly extreme conditions with ponds and artificial lakes drying up and regular crop failures.

In both cases, the NGO work described in the case study focusses on innovation to provoke changes in behaviour and improve lives and livelihoods. Both have had to tackle limited government engagement; in the Delhi case study because of the local government resistance to serving the informal sector, and in the Gunungkidul case because of the government interventions, remote from the local scene, are limited and not closely tuned to local needs. In both cases, themes of local capacity, collaboration and innovations emerge (Figures 5 and 6).



Figure

5: Indonesia

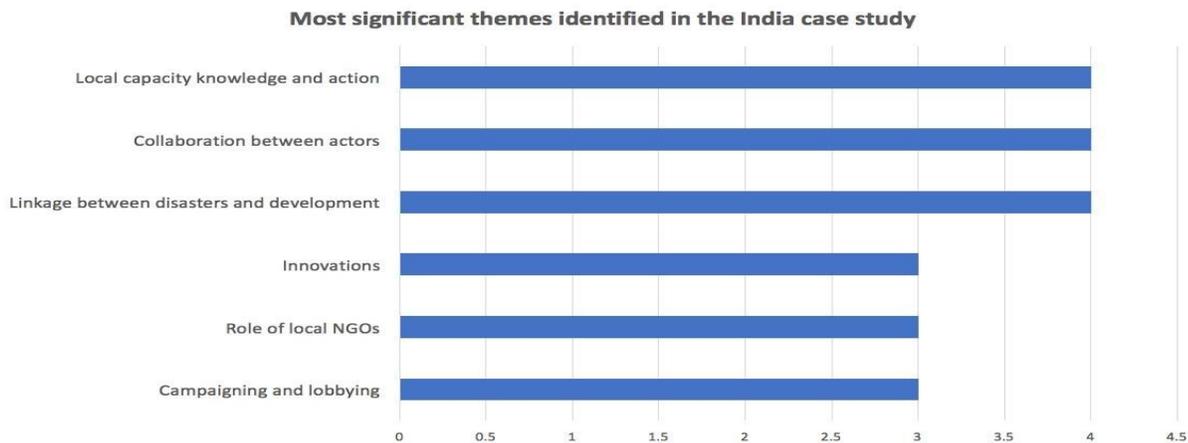


Figure 6: India

Discussion of the Gunungkidul case focussed strongly on innovation and on local capacities, and also highlighted collaboration, with the backdrop of the effects of climate change. In the East Delhi district, local capacities, collaboration and innovations were similarly highlighted, and the necessity to link disasters and development was also highlighted – a theme was discussed in several other cases. Additionally, in discussion of the East Delhi case study, the role of the NGO, campaigning and lobbying, and communication and information were highlighted. Further themes were significant of everyday risk, the role of youth and pressures of urban informality. The East Delhi case study is the only one reflecting life in a mega city, but its lessons are important to a wider discourse as over 50 per cent of the global population now live in cities, and over 40 per cent of the population live in the informal sector.

Though this experience contrasts strongly with life in the Gunungkidul district the response to the challenges faced – in both cases predominantly those of small-scale everyday disasters – are similar. In both cases, attempts to drive change are based on local mobilisation and on innovative approaches and both depend on increasing local cohesion to do so. In East Delhi, the growing and fragmented population have been mobilised with a local forum for action “Purvi Dilli Apada Prehari” (East Delhi Disaster-Watch Forum), by mobilising youth, by use of an innovative smartphone app to report local problems, and by using these approaches in combination to put pressure on local government for action. In Gunungkidul district, local seed banks, development of organic agriculture and strengthening of learning based on advance farmers have created shifts in social behaviour based on strengthening cohesion and through introducing innovations. It could be argued that both approaches depend, as in Kiribati and Gigantes Islands, on creating cohesive local groupings to exercise influence for change.

Limbe, Cameroon; and Kathmandu, Nepal

Unlike the cases discussed so far, there are distinct contrasts between the cases in the coastal city of Limbe, Cameroon and Kathmandu in Nepal. Both face a backdrop of occasional major geophysical disasters, in the case of Limbe as it lies close to the slopes of Mount Cameroon, an active volcano. Kathmandu lies in a highly seismically active area, resulting most recently in the 2015 Gorkha earthquake. Neither major events, however, are features of the cases, which concentrate on addressing everyday disasters. The social and political contexts are quite different. The participant presenting the Cameroon study said in discussion “Compared with Nepal, the situation in Cameroon is similar to that in Nepal ten years ago”. In Cameroon, the capacity of both the government and local people to engage with disaster risk reduction action is very limited. The study shows that people are often passive and fatalistic, and sometimes contribute to risk creation, for example, through blocking waterways with waste, and by building (of necessity) on unstable land. Kathmandu is clearly a more highly developed city than Limbe, though creaking under the strain of overdevelopment and the rapidly growing population through inward migration. Faced with these developmental pressures the capacity of the government to address disaster risk reduction issues is limited. Infrastructure and planning management is limited and laws are often overridden by developers. The NGO sharing the case study here, though technical in origin, has increasingly engaged at community level, recognising the need for mobilisation at this level. Contrasting themes emerged in terms of NGO-facilitated action (Figures 7 and 8).

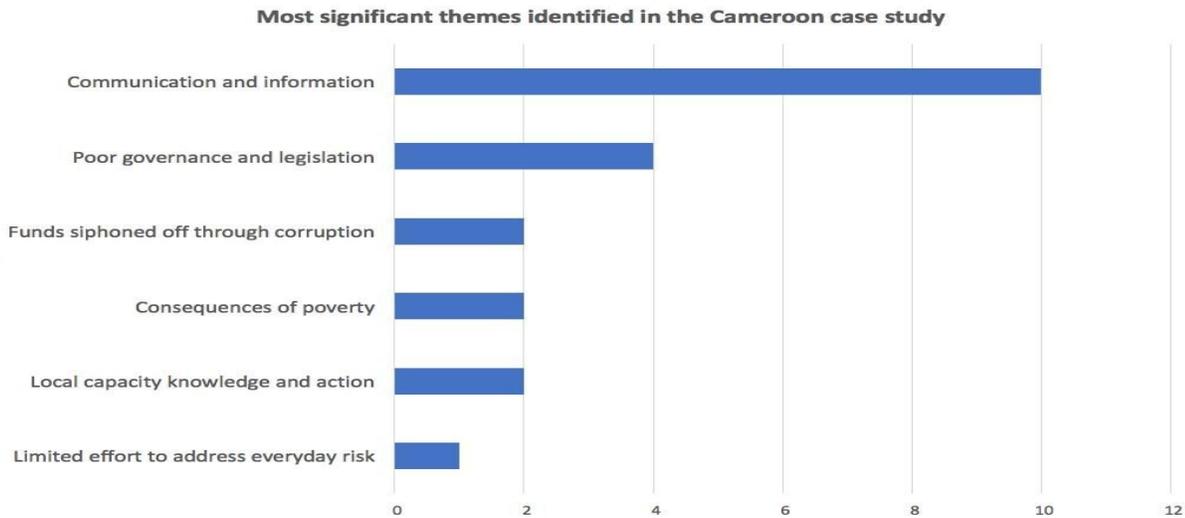


Figure 7: Cameroon

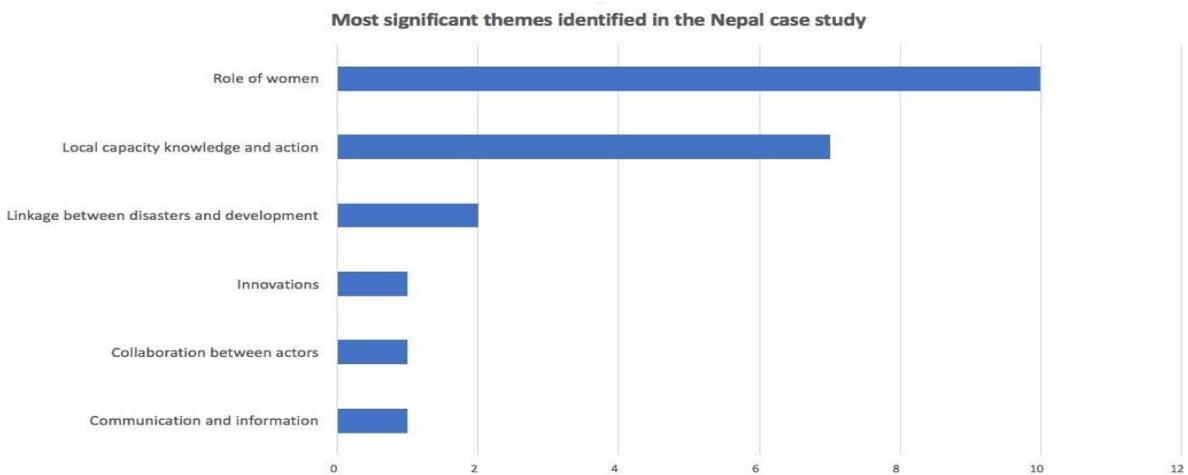


Figure 8: Nepal

Strikingly in discussion of the case study from Limbe, a major emerging theme is communication and information. This could be seen as “first base” in promoting changes in behaviour at local level and in decision-making at government level, perhaps addressing other themes discussed including poor governance and legislation, funds siphoned off through corruption, and the consequences of poverty. A specific result of communications through mapping and community mobilisation has been a local action to improve drainage in lower Motowoh district of the city. The specific action has had valuable results in improving housing and livelihoods, and it also speaks of a broader first step in creating local cohesion and understanding.

Mobilisation in the case discussed in Kathmandu, Nepal, has a specific gender focus. Through the work of the NGO women have picked up hammers and drills and developed a business based on providing “non-structural mitigation” measures. The participants witnessed this in action on a field visit during their workshop, and saw

how the role and agency of women had been transformed in this project. Set alongside other activities already in progress such as retrofitting of structural measures in schools and promotion of earthquake resistant housing, this case shows a specific facilitating role in changing social behaviour in a traditionally male-dominated context.

Both cases are at one level about specific disaster risk reduction interventions, but at a deeper level are about changing social attitudes and behaviour, towards a safer society.

Broader perspectives: learning from comparison and contrasts in the case studies

As a further means of understanding the workshop discussions the data used in the above analysis were aggregated to present a picture, or at least a “straw poll” of the most dominant themes discussed over all the case studies during the workshop. Discussion of the cases shows particular themes emerging, summed up as follows in Figure 9.

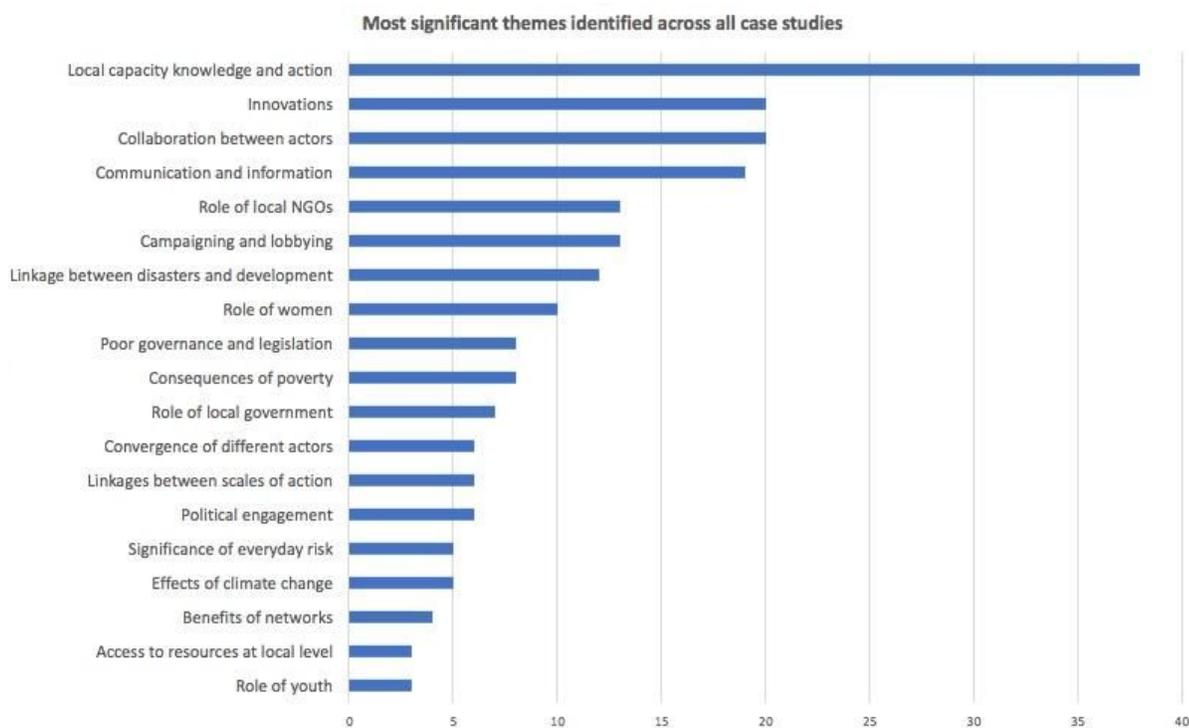


Figure 9: Most significant themes across all case studies

It is important to emphasise, as noted earlier, that this analysis is simply a means of depicting major themes discussed. It offers a “straw poll” of the flow of discussions. It is notable in this figure that “local capacity, action and knowledge” is a widely discussed theme, and others include “innovations”, “collaboration”, “communications and information”, “role of local NGOs”, “Campaigning and development” and “Role of Women”. Making an arbitrary cut-off at this point on the figure, these themes are all concerned with aspects of social influence and change.

Summary of themes emerging from case studies:

- collaboration and cohesion in small island contexts to address both disaster reduction and development (Kiribati and Philippines);
- campaigning, lobbying, communications and social mobilisation in an attempt to bridge the gap between local concerns and the decision-making of government and other powerful actors (Pakistan and Vietnam);
- innovation and local mobilisation to address shortcomings in government support for disaster reduction and development (Indonesia and India);
- communications as a first base to influence behaviour of both communities and government (Cameroon); and
- social change through empowerment of women to act in disaster reduction and development (Nepal).

Similarly, the themes emerging from the individual cases, summarised above in the list “Summary of themes emerging from case studies”, are concerned with cohesiveness and collaboration, local capacity action and knowledge, allied with communications, campaigning and innovations, intending to achieve change not only locally but by influencing government and other powerful actors at local, district and national levels. The cases are diverse in their contexts and the discussion of the Kiribati and Philippines cases suggested we would return to the point about the small geographical scale of both localities, which contrasted with the remote, disconnected nature of the government in other contexts such as Indonesia, India, Pakistan and Cameroon. This leads to the suggestion that where a context is not by nature and by its boundedness small in scale, one course of action is to create cohesive small-scale contexts for action and influence. The work in the Gunungkidul district of Indonesia, in East Delhi, in Pakistan and in Cameroon could be described in this light. In Indonesia, strengthening local collaboration around innovations such as seed banks and organic farming is a counter to limited and inappropriate government action. In East Delhi, a community in a state of change and growth has been drawn together by the citizens’ forum and the mobilisation of youth. In Pakistan, a combination of facilitation and the impact of a major disaster have led the local community to cohere for campaigning and lobbying. In Cameroon, the challenge has been to move the community from passivity and risk creation to concerted local action, a “first base” in a story it is suggested is a decade behind that in Nepal, where social norms are being challenging in strengthening disaster reduction and development.

The lead author, having worked for a number of years with hundreds of mostly small NGOs at GNDR, finds it equally notable what is not emphasised. The lifeblood of many NGOs is project funding to finance their operations, which in turn focusses them typically on service delivery activities, often as “sub-contractors” of INGOs and other large agencies. Project cycles, funding bids, service delivery and accountability are often “front of mind” for small NGOs. Nevertheless, these themes appear infrequently or not at all in the discussions, where the overarching concerns appear to be both local-level social change and influence of other scales of governance and power, aimed at addressing disaster reduction as an activity integrated with development.

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