JENNI KOIVISTO DEVELOPMENT DISSERTATION BRIEF

2020:09

NAVIGATING IN THE MIDST OF UNCERTAINTIES: Challenges in disaster risk governance in mozambique



Navigating in the Midst of Uncertainties: Challenges in disaster risk governance in Mozambique

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Development Dissertation Brief 2020:09

till

Expertgruppen för Biståndsanalys (EBA)

Jenni Koivisto disputerade i oktober 2018 med avhandlingen "Navigating in the Midst of Uncertainties – Challenges in Disaster Risk Governance in Mozambique" vid Institutionen för miljö- och livsvetenskaper på Karlstads universitet. Jenni arbetar vid Institutionen för samhälls- och kulturvetenskap samt Centrum för forskning om samhällsrisker på Karlstads universitet. Hennes forskningsintressen kretsar kring frågor om riskperception.

Avhandlingen finns här:

http://kau.diva-portal.org/smash/get/diva2:1246683/FULLTEXT02.pdf och Jenni kan nås på jenni.koivisto@kau.se

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Please refer to the present paper as:

Jenni Koivisto (2020), Navigating in the Midst of Uncertainties: Challenges in disaster risk governance in Mozambique, EBA Dissertation Brief 2020:09, November 2020, Expertgruppen för biståndsanalys, Sverige.

Printed by Elanders Sverige AB Stockolm 2020

Cover design by Emma Andersson

Abstract

Disasters cause heavy losses for societies and may quickly erode development efforts. Consequently, disaster risk reduction (DRR) is an integral part of development work that should be addressed at multiple levels. Global DRR frameworks, scholars and practitioners all advocate disaster risk governance (DRG) strategies that are multi-stakeholder, polycentric and multisectoral. While studies have addressed questions of risks and the crosscutting nature of DRR, uncertainties relating to multiple DRR actors operating and collaborating at different scales remain underexplored.

This thesis investigates the uncertainties in DRG in Mozambique, a lowincome country that regularly faces natural hazards that cause heavy loss of life and livelihoods. The thesis focuses on different sets of uncertainties and factors that have constrained or enabled Mozambique to progress in this policy area. By exploring uncertainties related to stakeholder involvement, coordination and policy disputes, this thesis highlights challenges and opportunities affecting DRR policymaking.

This thesis concludes that while Mozambique has managed to take important steps in DRR, the challenges make policymaking shortsighted and slow in progressing, increasing the disconnect between theory, policies and practice. This thesis thus argues that DRG research and practice need to consider power-relations; coordination and capacity issues; and responsibilities and transparency across scales.

1. Introduction and Aim of the Stydy

Disasters place heavy burdens on societies in terms of human and economic losses. For example, in 2017 there were 318 "*natural disasters*"¹ around the globe affecting the lives of 96 million people, causing over 9,500 deaths and economic damage of US\$314 billion (CRED, 2018). The way we understand disaster events, including their prevention, management and recovery, has varied considerably over time and across cultural and political settings. While the understanding of disaster risk reduction (DRR) has expanded, DRR as a policy issue is still relatively new and unorganised (Raju & da Costa, 2018).

How much emphasis is put on DRR and what measures are taken depend on context-specific factors, including the hazard types, the frequency and intensity of hazardous events, as well as economic, political and social realities and institutional settings for decision-making. Low income countries are generally more affected by hazards than high income countries. Some of these countries are repeatedly hit by extreme weather and have no time to fully recover before they face the next hazardous event (Eckstein, 2018). This can lead to a vicious circle of increasing vulnerability and reduced capacity to manage and recover from disasters. DRR is therefore of extreme importance for many poorer countries. Disasters not only cause major setbacks in pursuing development goals but also poor socio-economic structures leave people vulnerable in the face of natural hazards (Holloway, 2003). While poverty does not automatically equal vulnerability, studies reveal that poor are much more exposed to natural disasters than the non-poor (Kim, 2012). Climate change, which is predicted to change weather patterns and increase the frequency and intensity of climate

¹ There is a strong agreement among scholars that there is no such thing as "natural disaster", as the natural hazards, such as earthquakes, droughts, heavy precipitation etc. cause only disasters when met by societal vulnerabilities. Yet in the EM-DAT database the term is used to separate those disaster events from "man-made disasters", such as riots, armed conflicts or technical disasters. However, it should be noted that it is not always possible to tell "natural" and "man-made" disas-ters apart as they can be heavily intertwined.

related natural hazards, makes DRR a topical development issue (Lavell & Maskrey, 2014). Effective and well-functioning disaster risk governance (DRG) can help tackle issues constraining sustainable development (Hoffman, 1999; UNISDR, 2015b).

The African continent is exposed to various natural hazards. With multiple vulnerabilities, even smaller hazards can have catastrophic consequences (UNISDR, 2014). One of the countries in Southern Africa most exposed to hydro-meteorological hazards, and one of the poorest, is Mozambique. Recurrent disaster events have taken a great toll on the country. But it has also been on the front line in dealing with the challenges that hazards pose (Scott & Tarazona, 2011).

DRR as a public policy issue is tricky: it entails dealing with complex and intractable societal and environmental questions and problems that span governmental silos, institutional boundaries, mandates and disciplinary perspectives (Benouar et al., 2009). It is also overlapping and intertwined with issues such as development, climate change adaptation, and disaster response and recovery. These various obscurities characterise the DRR policy process and, consequently, DRR has proven difficult to conceptualise and organise in practice. The uncertainties are in part linked to the substantive knowledge gaps stemming from the fact that disasters occur at the nexus of nature and society. Therefore, disaster management and risk reduction require knowledge and a holistic understanding of both natural phenomena and the factors that make societies vulnerable to such hazards (Head & Alford 2008). Such knowledge gaps can partially explain why policy-makers have allowed unsafe conditions to arise and why the social causes of vulnerability have not been addressed in DRR (Wisner et al., 2004).

To overcome these uncertainties, a multi-stakeholder approach to DRR has been widely advocated. Similarly, the importance of good governance of disaster risks has been emphasised (Tierney, 2012). Disaster risk governance (DRG) refers to institutions, policies and frameworks that guide and coordinate DRR (UNISDR, 2017). Global DRR frameworks heavily and increasingly focus on DRG, calling for the broad participation of stakeholders (Jones et al., 2014). As such, DRR systems are typically based on polycentric, multi-level, multisectoral and multi-stakeholder strategies. While this approach ensures that the requisite institutional diversity is embodied in the governance system, engaging many stakeholders in policy-making brings other uncertainties (Verwwij & Thompson).

When multiple actors – all with different strategies, perceptions and preferences regarding the process – take part in the decision-making, the effects of interactions between the actors are unpredictable (Head & Alford 2008). These *strategic uncertainties* are coupled with *institutional uncertainties*: complex effects of multiple policy arenas, networks and regimes and the different, and often simultaneous, processes of reaching decisions. (Koppenjan & Klijn, 2004). These uncertainties are directly related to the known problems of DRG, such as coordination and ownership (see UNISDR, 2011, 2015a, 2015b)

The importance of well-functioning DRG is often highlighted as key to successful DRR, but the institutional and strategic uncertainties created by a multi-stakeholder approach to DRG have not been adequately explored in previous studies. The aim of the thesis is to investigate the uncertainties as perceived by actors involved in DRG. It does so by combining empirical material from the Mozambican DRR policy sub-system with insights derived from different bodies of literature. The overarching research puzzle that this thesis revolves around is: how does the multi-stakeholder DRG and the various uncertainties therein affect DRR policymaking in Mozambique?

2. The Case of Mozambique

Mozambique won independence from Portugal in 1975. Over 90 per cent of the Portuguese living in Mozambique fled, often destroying factories, machinery, cattle and other non-portable assets as they went (Coelho, 2013). They left behind a bankrupt country with a crippled economy, poor health services and a poorly educated population with a literacy rate well under 15 per cent (Hanlon, 1991).

Figure 1. Mozambique. Source: United Nations. Map No. 3706 Rev 6, May 2016. (http://www.un.org/Depts/Cartographic/map/profile/mozambiq.pdf)



The new government had the difficult task of transforming the country. Ambitious programmes were launched to educate the people, improve health care and lift the country out of poverty (Coelho, 2013). But just a year later, the country itself embroiled in a civil war (or a war of destabilisation as it is also known, given the notable role that other countries played in it). The civil war finally ended in 1992. The struggle for independence and the war that followed severely damaged infrastructure, the economy, the people and trust among different political groups. Almost 20 years later, Mozambique remains one of the poorest countries in the world (Cunguara, 2012).

The dire economic situation makes Mozambique heavily dependent on external assistance and slows capacity-building in all policy domains, including DRR, leaving gaps in knowledge and expertise (Hanlon & Smart, 2008). The strong presence of and dependence on donors has complicated national policy-making throughout Mozambique's history (Manning & Malbrough, 2012). Mozambique, like many other low income countries, is struggling not only with inadequate resources but is also characterized by low levels of democracy and policy-making capacity (Newitt, 2017).

Mozambique faces recurrent natural hazards. Between 1975 and 2018 there were 34 floods, 23 storms, 13 droughts, two landslides and one earthquake and wildfire, respectively (EM-DAT, 2018). Mozambique's exposure to such hazards stems from its geographical location: seven major river systems that drain vast areas of south-eastern Africa cross Mozambique on their way to the Indian Ocean and the 2500 km long coastline makes the country prone to floods and tropical storms (Newitt, 2017). With most people and economic activities concentrated in the fertile coastal and low-lying areas, both lives and assets are exposed to hazards.

Mozambique's vulnerability in the face of such hazards is, in turn, connected to its social, economic and political conditions. Poverty, low levels of development and dependency on rain-fed subsistence agriculture cause vulnerability among the people in the face of climate-related hazards (Shankland & Chambote, 2011). Various disaster events have caused severe economic losses and changes to the lives of people living in the affected areas in Mozambique. The recurrent disaster events have also considerably slowed down the pace of development (Christie & Hanlon, 2001).

Disaster management in Mozambique has developed through the years. Disasters are recognised as a notable problem in fulfilling the country's development objectives and measures have been taken to improve the response to natural hazards and to reduce the number and consequences of future disasters (Hellmuth et al., 2007). Yet DRR as a public policy issue has previously gained limited attention.

A more proactive approach to disaster management started to appear slowly in the 1990s, marked by the creation of the National Disasters Management Institute (*O Instituto Nacional de Gestão de Calamidades*, INGC) and the adoption of the first disaster management bill in 1999 (Christie & Hanlon, 2001). The disastrous flooding in 2000 served as an important wake-up call, highlighting the scale of impacts that natural hazards can have and revealing gaps in the disaster management system (Christie & Hanlon, 2001). The paradigm shift towards more proactive policies became more obvious from 2005 onwards, marked by structural changes at the INGC and the creation of a National Master Plan for Disaster Risk Reduction.

Despite these efforts, DRR policies and interventions have not always been successful. While interventions such as relocations have led to increased safety from future floods, issues have emerged relating to droughts, differences in risk perceptions, impoverishment, increased vulnerability and inequalities (see e.g. Arnall, 2014). The DRR "success story" in Mozambique also elicit questions regarding what share of the progress within the DRR sector is real and how much of it is a delusion, a self-reinforcing *hyper-reality*? (UNISDR, 2015a). While success and progress may be reported, what does it mean in practice? Laws or

policies in place does not mean that they are implemented (Lavell & Maskrey, 2014). Similarly, including DRR or vulnerability reduction as objectives in development strategies does not mean that real efforts are made to pursue them (Newitt, 2017).

3. Governing and Framing DRR

While DRR is a relatively new concept and policy area, it has been studied from a wide range of perspectives (see e.g. Sarewitz et al., 2003; Wisner et al., 2004). Much of the previous research on DRR within social science is built on a perspective that emphasises the different drivers of vulnerability, including social, political, economic and environmental conditions, and highlights the need to look at hazards and vulnerabilities together (Wisner et al., 2004). The proponents of the perspective that views disasters as "the unfinished business of development" understand disaster risks and disasters essentially as products of unbalanced development rather than as "natural" phenomena - as something to be dealt with under social, development and planning frameworks (Lavell, 2012).

3.1 Disaster Risk Governance – Good, Adaptive, Collaborative?

Much of disaster research has focussed on specific legal arrangements or governments, while governance has been neglected. Governance can be understood to include three main components: authority; decision-making and accountability. By determining "who has power, who makes decisions, how other players make their voice heard and how account is rendered" (Raju & da Costa, 2018, p. 279) it creates "conditions for ordered rule and collective action" (Stoker, 1998, p. 17). This thesis adopts the DRG definition from the UNISDR (2017), which simplifies it as "the system of institutions, mechanisms, policy and legal frameworks and other arrangements to guide, coordinate and oversee disaster risk reduction and related areas of policy".

Concepts such as collaborative governance, adaptive governance and good governance are often connected to successful DRG. The normative notion of "good governance" adds standards and values to governance. Participation, inclusiveness, empowerment, transparency, incorruptibility, accountability and responsibility are often highlighted as features of good governance (Weiss & Thakur, 2010). UNISDR (2017) also emphasises that the DRG should be "collective and efficient to reduce existing disaster risks and avoid creating new ones".

The collaborative governance literature, also based on the idea of governance as a joint effort between government and other stakeholders, highlights trust among participants as an important feature in successful governance (Klijn et al., 2010). Given the emphasis on collaboration in DRG, collaborative governance approach has been applied in a number of studies on DRR and crisis management (see e.g. Bodin & Nohrstedt, 2016; Hutter, 2016)

Adaptive governance (AG), is yet another term that is frequently connected to successful DRR by scholars (Djalante et al., 2011). Like the DRG literature, the AG literature highlights polycentric and multi-layered institutions; participation and collaboration; and self-organisation and networks as being conducive to DRR. Generally, these factors offer prescriptions on institutional designs supporting effective DRR. The greatest emphasis is, however, put on learning and innovation that are identified as key aspects of successful DRR (Djalante et al., 2011).

3.2 The Subsystem Approach

To better understand "who has power, who makes decisions, how other players make their voice heard and how account is rendered" (Raju & da Costa, 2018, p. 279), this thesis draws on the public policy and policy process literature. This literature provides theoretical frameworks on stakeholder involvement and the policy process. Policymaking in modern societies is complex and occurs at different levels and arenas, which are often context- and issue-specific. DRR is no exception here. One way to simplify the complexity of public policymaking and actor involvement in DRG is through a *policy subsystem approach*.

According to Sabatier and Jenkins-Smith (1993) decision-making occurs in multi-level policy subsystems, such as a DRR policy subsystem. These policy subsystems are theoretical constructs with substantive (e.g. disaster management) and geographical boundaries (disaster management in Mozambique). Policy subsystems consist of a large number of actors who are concerned with certain policy issues and who regularly seek to influence governmental decisions and public policy within a specific issue area (Sabatier & Jenkins-Smith, 1993).

This thesis takes the Advocacy Coalition Framework (ACF) understanding of a DRR policy subsystem as its starting point when investigating the interplay between stakeholders involved in the DRG and policy process in Mozambique. The ACF postulates that actors, bound together by similar values, beliefs and policy goals, form *advocacy coalitions* (Sabatier & Weible, 2007). Policy process is then understood as competition between two or more coalitions over a long period of time (Weible et al., 2012).

Typically, there are two or more parallel competing coalitions in a policy subsystem. Each coalition attempts to reach its policy goals, and to do so, it needs to coordinate its activities and develop joint strategies (Meijerink, 2005). The coalitions have varying resources and power over the political processes within the subsystem and usually, one of the coalitions is more dominant than the others (Adam & Kriesi, 2007).

The "polycentricity", separate centres of decision-making that are formally independent of each other, adds to the complexity of DRG (Galaz et al., 2017). The global and regional institutions and structures, such as the UN and Bretton Wood institutions, as well as international agreements and conventions, such as the Sendai Framework for Disaster Risk Reduction or the UN Sustainable Development Goals, have a notable impact on governance at the national level (Ainuson, 2009).

3.3 Policy process and change

The role of actors involved in DRG is to design, agree upon, pursue and implement different policy tools for DRR. The ACF assumes that policies are translations of beliefs within coalitions and, thus, a change in policy is an outcome of a change in the policy core beliefs (Weible & Nohrstedt, 2013). Many approaches in the policy process literature entail an understanding that a shock, such as a disastrous event, can lead to or at least partly initiate policy change (see e.g. Birkland, 2006; Sabatier & Jenkins-Smith, 1993). This puts disasters at the centre when exploring policy changes in DRR policy subsystems. It highlights the dualistic nature of natural disasters: while causing loss of life and livelihood, they can also be constructive, creating opportunities to address different aspects of DRR. Although shocks are often understood as (partial) explanations for major policy changes in the policy process literature, the causal mechanisms linking disasters and any subsequent possible learning and policy change are not well known (Birkland, 2006).

The role of learning is often highlighted in conjunction with changes in DRR policies. Learning and policy change after a disastrous event are complicated, even more so when looked at in a low-income country context, given the constrains in resources and shortcomings in governance (Birkland & Wernement, 2014). Learning is often a desired (or even expected) outcome after a disaster event, but identifying and measuring such post-disaster learning is difficult. Birkland (2006, p. 22) defines learning as "a process in which individuals apply new information and ideas, or information and ideas elevated on the agenda by a recent event, to policy decisions". Following this, one can assume that policy change after a disaster event is evidence of learning.

4. Research design and Methods

A large share of research on disaster risk governance and policy process focuses on western countries, where most of the theories on governance and policy processes originate. In contrast, DRR policy processes and DRG are less studied in the African context. The challenges that African countries face in organising effective DRR policy and practice are sometimes dismissed as resulting from a lack of resources. While this is certainly true in many African countries, this notion overlooks other challenges as well as the opportunities that African countries have for the development of policy and practice (Holloway, 2003; UNISDR, 2014).

Mozambique is one of the most disaster-prone countries in the world and has carried out considerable work on enhancing DRR (Eckstein, 2018;). Based on the information collected from the HFA progress reports from 2007–2013 (INGC, 2009, 2011, 2013, 2014), Mozambique appears to be a high-performing country, which makes it a particularly interesting case. However, the need for empirical research on DRG is further justified by limitations associated with the HFA process where the national progress was based on self-evaluations, causing problems of validity (see e.g.Twigg, 2009).

To obtain detailed information and in-depth knowledge on how the uncertainties in DRG manifest themselves and how the stakeholders perceive these uncertainties in Mozambique, the research design was conceived as a case study with fieldwork (Yin, 2003). As DRR actors, and the way that they perceive and interpret situations, challenges and changes, were placed at the centre of the study, semi-structured interviews were used as the main datacollection technique. The semi-structured interviews were combined with participant observation, which enabled better interpretation of many of the points made by the respondents. It also allowed me to ask more direct questions about issues that I could observe, such as power-relations or collaboration between the different actors. I also went through various policy and programme documents with the aim to triangulate the interview and observation data and to obtain a richer account of the DRR policy process and governance in Mozambique (O'Reilly, 2012).

Most of the data for this study were collected during two fieldwork periods in Mozambique, in 2013 and 2015, respectively. On both occasions, I was based in Maputo, the capital city of Mozambique. The first fieldwork period took place in January–May 2013. During that time, I was affiliated with the UNDP country office in Mozambique, which allowed for participant observation, provided good access to documents, enabled daily chats with key informants and aided in getting in touch with other stakeholders. The second fieldwork period took place in April–May 2015.

Respondents for this study were selected through purposive sampling (O'Reilly, 2012): the first people and organisations were pointed out by the two key informants. Subsequently, respondents were selected mainly utilising snowballing technique, where the previous respondents provided new names of actors that they considered important or collaborated with (O'Reilly, 2012). The respondents were drawn from ministries and other governmental institutions, non-governmental organisations, UN and other intergovernmental agencies, bilateral donor organisations and academia. The total number of interviews was 44 - 31 in 2013 and 13 in 2015. Some of the interviews were conducted in small groups, depending upon the wishes of individuals in various organisations, which increased the total number of respondents to 52.

The data were coded in phases moving from fairly general codes to more detailed ones. Coding categories were generated abductively moving between the theoretical literature and the data itself. The coded data were then organised and categorised based on concepts and themes, which reduced the raw data and allowed for the development of new concepts, new questions and, in the end, theoretical generalisation (Rubin & Rubin, 2005).

5. Summary of the Papers

5.1 Paper I: A Policymaking Perspective on Disaster Risk Reduction in Mozambique

This study investigates the long-term development of DRR. It focuses on stakeholders' perceptions of what has influenced the DRR policy process in Mozambique, both positively and negatively.

Six enabling factors for policy development were identified, including: past disasters; international agreements; technical assistance; political support and participation of stakeholders from different sectors and governmental organisations; increased knowledge and awareness; and policy diffusion. Similarly, six important factors constraining DRR policy change in Mozambique were identified, including: lack of resources; lack of coordination and insufficient information-sharing between organisations; a hierarchical political system; unclear mandates; the ambiguity of the DRR concept; and priority given to disaster response over DRR.

The analysis highlights DRR policymaking as a process of public adaptation. Specifically, the findings demonstrate how DRR policymaking in Mozambique has been driven by a combination of proactive and reactive adaptation, including predictions of the nature and likelihood of future hazards as well as experiences from past disasters (see Grothmann & Patt, 2005). Several of the enabling or constraining factors identified in this study are not new to public policy research but corroborate with several well-established insights in the public policy literature (see e.g. Birkland, 2006; Dolowitz & Marsh, 2000) and findings elsewhere on the role of disasters in policy development (e.g. Scolobig et al., 2014). The study therefore suggests that further insights regarding the drivers of DRR and factors affecting DRR policy-making in different countries

and settings can be gained by promoting closer dialogue between DRR research and policy process research.

5.2 Paper II: A Stakeholder Analylsis of the Disaster Risk Reduction Policy Subsystem in Mozambique

The aim of this study was to explore the political context and prevailing policy disputes within the DRR policy subsystem in Mozambique by conducting a stakeholder analysis using the advocacy coalition framework (ACF) approach. The analysis was conducted through three main themes: (1) subsystem boundaries, (2) policy core beliefs and (3) advocacy coalitions.

The Mozambican DRR policy subsystem is nested under regional and international subsystems of DRR as well as the disaster management subsystem. As a subsystem, it also overlaps with those of development and climate change. Actors involved in the DRG in Mozambique could be divided into two coalitions formed around extant approaches to DRR: one that understands DRR as a disaster management issue (Disaster Management Coalition) and one that frames DRR as a participatory development issue (Development Coalition). Although two coalitions could be identified, there was some ambiguity and the membership did not appear to be permanent but gradually shifting. While the coalitions approached DRR slightly differently, the belief differences between the coalitions were fairly small, allowing cooperation across the coalitions.

Some of the challenges and ambiguity can be explained by the fact that DRR as a policy issue is overlapping with other policy issues, such as climate change, and some of the actors were simply treating DRR and climate change adaptation as one and the same, using concepts such as "resilience". Similarly, the DRR policy area is still new and the DRR subsystem is still nascent with the discourse of DRR constantly evolving. Uncertainties relating to DRR, beyond the lack of scientific knowledge, cause major problems and there is a persistent need to find ways to cope with the challenges of DRG.

The study concludes with reflections on the applicability of an ACF approach to stakeholder analysis and as a tool for understanding policy disputes and coordination challenges in complex settings. This type of research can help in answering some of the persistent challenges in DRGR highlighted globally, including coordination and collaboration (UNISDR, 2011). By describing actors, their beliefs and the coalitions they form, it was possible to reveal some underlying disagreements that hinder coordination and decision-making between organisations. The study thus provides a possible tool for understanding policy disputes and specific issues in the policy subsystem that cause stalemates and hinder decision-making processes.

5.3 Paper III: Round and Round We Go – The Impacts of Staff Turnover in Disaster Risk Governance

The effects of staff turnover on DRG are rarely discussed. Staff turnover is often connected to organisational performance and capacity development (Meier & Hicklin, 2008). Since capacity development and retention are often highlighted in DRR, studying the implications of staff turnover is crucial in order to find ways to meet internationally set DRR goals. This paper sheds light on the possible effects that staff turnover has on DRG and policy processes, and how actors involved in DRG perceive these effects. Studies on staff turnover at the institutional level are scarce and have often settled on naming turnover as a factor with simple positive or (more commonly) negative consequences.

Respondents were well aware of the myriad impacts a high staff turnover has on the performance of organisations and the DRR subsystem as a whole. A variety of negative impacts associated with staff turnover were mentioned, including the loss of knowledge or personal capacity; variability in cooperation between organisations; the loss of personal connections; the loss of institutional and organisational memory; poor capacity and skill retention; breaking continuity of different initiatives; loss of momentum and slowing down the work. Among the positive impacts mentioned were internal turnover (people move from one organisation to another but remain within the Mozambican DRR subsystem); temporary movement may strengthen the organisation in the long run; and the possibility of hiring of new, skilful people.

Negative impacts appeared to outnumber the positive ones. However, it was not staff turnover as such that was deemed negative, but the sheer number of people moving in and out of organisations and out of the DRR subsystem. External turnover erodes trust and information flows, as assumed in the collaborative governance literature (Klijn et al., 2010). However, staff turnover did not appear to negatively affect trust when staff turnover was internal.

The results of this study beg questions of how the negative implications of staff turnover could be mitigated in the future and how to retain organisational and institutional memories. One key challenge is the loss of institutional and contextual memory, which may severely harm future work and undermine any "lessons learned" – important in developing and improving DRR practice and policies. High staff turnover can severely undermine capacity development projects and their benefits, if trained staff are not retained in the organisation. It also raises questions on the usefulness of people-centred capacity development programmes.

5.4 Paper IV: Whose Voice Do We Hear? Obstacles to Multi-Stakeholder and Mulit-Level Disaster Risk Governance in Mozambique

The role of good disaster risk governance (DRG) in enhancing disaster risk reduction (DRR) entails certain normative prerequisites for successful DRR, such as democracy, transparency and citizens' ability and will to participate –

largely predicated on notions of pluralist democra-cy. As such, there has been less discussion about how good DRG is be-ing implemented in countries where democracy and policymaking ca-pacity are limited (Birkland & Warnement, 2014). This paper explores participation and "all-of-society engagement" in DRR in Mozambique by outlining three examples.

The first example in this paper focuses on the inclusion of different views in flood risk management in the Zambezi River Valley in Central Mozambique. Extensive relocation of people living on floodplains has been one of the main measures utilised by the Mozambican government to reduce the direct impacts of future floods. But there are divergent views on what constitute the main risks to people living in flood-afflicted areas as well as what approach should be used to tackle these risks. Three distinctive approaches have been outlined. The proponents of the *relocation* approach view this as necessary. Many of the local people would prefer to continue living by the river, living with floods. As a compromise, international organisations and NGOs advocate a *Living with floods – improved* approach.

Example 2 revolves around *local risk management committees*. These committees consist of community-level volunteers with the role to mobilise communities in an emergency. This approach has also been criticized for focusing on disaster response rather than DRR, and for excluding these committees from policymaking.

Capacity at provincial, district and municipal level is the third ex-ample in this article. Redistribution of power and resources to the province, district and municipal levels has not been prioritised and as such, there are notable challenges and gaps. The weaknesses of the sub-national levels are understood as both a consequence of inade-quate decentralisation and as a reason for not decentralising the DRR system.

The findings of this paper reveal that the DRR system in Mozambique is very hierarchical and centrally led. While at the national level there is wide stakeholder participation and parallel decision-making arenas, there has been little emphasis upon decentralisation of the DRR system across the various policy scales. Many of the outlined challenges relate to limited transparency and lack of trust. While participation is a central question in DRG studies, trust, transparency, accountability and collaboration across sectors and scales should be better addressed. Since many of the challenges are features of wider political, economic and cultural settings, DRG cannot be studied in isolation from political processes.

6. Discussion: Challenges and Opportunities

6.1 Focus on Individuals or Systems

The papers that this thesis is based upon highlight, on the one hand, the role of individuals and, on the other hand, the role of organisations. Individuals play an important role in DRG. The findings of this thesis have pointed to the importance of the active involvement of and commitment from political leaders, managers, and technical staff in DRG. This has helped maintain DRR's place on the policy agenda and has facilitated development of new policies in Mozambique. Over time, these actors have strengthened their capacity to acquire knowledge about DRR issues and to utilise that knowledge in the policy process. Through "skilful exploitation" of disaster events and opportunities, they have pushed DRR higher up on the national agenda and managed to develop important policy documents (Nohrstedt & Weible, 2010). Such individual skills are rarely discussed in the literature on DRR policymaking and thus deserve more attention in future research.

At the same time, it can be risky for the system to rely on capacity at individual level or to aim capacity-development programmes solely at individuals. High staff turnover can result in a rapid loss of capacity and prevent the accumulation of embodied context-specific knowledge. This embodied knowledge and capacity is needed to ensure a long-term perspective in DRG. This raises questions about the usefulness of people-centred capacity-development programmes. These questions underscore the need to develop strategies supporting inter-organisational collaboration and closer stakeholder dialogue regarding DRR policy priorities. The results also elicit the question of how the negative consequences of high external staff turnover can be mitigated in the future. The paper calls for improvements in practice, notably in daily operational practices as well as in specially designed capacity development programmes. It also highlights the importance of mainstreaming DRR across governmental silos and creating a collaborative system that is less dependent on individuals.

6.2 Recurrent Disasters

DRG in Mozambique still focusses much on disaster preparedness, response and recovery rather than risk reduction. The shift from disaster-centred thinking towards more risk- and vulnerability-centred thinking (and action) is still ongoing. While the vocabulary has changed to be more aligned with that of DRR, many of the structures and institutions in Mozambique still support the reactive disaster management way of organising the work (Scott & Tarazona, 2011). Legislation and other policy documents have been developed, but the implementation of these policies is very limited, mainly because of limited resources and capacities. In the worst case, the documents serve only as box-ticking exercises to demonstrate progress whilst providing few tangible changes on the ground.

Perhaps the most important factor explaining the slow progress is the presence of recurrent natural hazards. With disaster events occurring almost annually, the Mozambican DRR subsystem is "stuck" in the preparation-responserecovery cycle. This exhausts resources and the system. With most funds available for disaster response, it is difficult for poorer countries such as Mozambique to break free from disaster management thinking.

Disasters can also be positive in the sense that they create space for learning and changes to occur. The recurrent disasters may bring ample opportunities for learning. However, while recurrent disaster events offer many possibilities "to learn", it is less clear who is learning what; what conclusions are being drawn; and if it leads to any action. Also, disaster events alone are not enough to engender learning: skilful and resourceful actors are required that can exploit the situation and mobilise for action (Nohrstedt & Weible, 2010). Frequent disaster events may lose their "shock factor" and thus it may be that only major events provide "a window of opportunity" for change. In addition, given the limited democratic space and low policymaking capacity of Mozambique, the public has fewer opportunities to demand post-disaster changes compared to populations in pluralistic systems.

6.3 A Multi-Level and Mulit-Stakeholder Approach

While wide societal engagement in DRR and the expansion of DRG *downward*, *upward* and *outward* have been heavily advocated, there are still many challenges to be addressed (Jones et al., 2014). The DRR subsystem in Mozambique has been built following a multi-level approach to DRR consisting of global, regional, national, provincial, district and local levels. However, the sub-national level has little resources or power.

UNISDR and other international agencies have played a key role in bringing DRR into focus, providing different guidelines and frameworks to support work at the national level. But global DRG has also brought with it some further uncertainties for national agencies to deal with. These include issues such as fluctuating funding and changing priorities. Changes in the focus of themes that are highlighted and funded can make it difficult for the countries

to focus on issues that are important within their own specific contexts. Instead of focusing on issues of national (or local) importance, national agencies plan and implement programmes focusing on issues that will get funded. In essence, this means that a lot of the decision-making power has shifted, or remain, above the national level. When countries' performance is measured by globally agreed indicators on specific issues, activities that will show progress on these specific indicators are prioritised. The global community forms a public that the Mozambican government is eager to please and, to a certain extent, appear to be more accountable to than their domestic constituents.

Expanding DRG downwards, i.e. decentralising power and resources, is often understood as central to successful DRR. A better dialogue and inclusion of different voices in the process might help in achieving more sustainable policy decisions. Limited resources or capacity at lower levels can severely inhibit any decentralisation process, and trying to decentralise DRG to lower levels without a wider decentralisation of resources and political power is unlikely to succeed.

7. Conclusions

The actors involved in DRG in Mozambique face myriad challenges within the policy process. While uncertainty can be seen as an inherent characteristic of modern society, uncertainties in DRR are not simply about gaps in knowledge or information. Rather, they relate to strategic and institutional features of the DRG settings in which these problems are articulated and dealt with (cf. Koppenjan & Klijn, 2004).

The greatest challenges in Mozambican DRG revealed by this study all relate to strategic and institutional uncertainties. The strategic uncertainties in the DRR subsystem in Mozambique relate to coordination, collaboration, information-sharing and the inclusion of stakeholders in decision-making processes. Currently, the system is set to limit many voices from being heard. Examples from Mozambique and elsewhere show that people are more willing to collaborate when they are part of the decision-making process and that including plural perspectives in governance tends to lead to more sustainable solutions (see e.g. Verweij & Thompson, 2011).

Polycentricity in DRR and DRG increases institutional and strategic uncertainties. The more arenas for different stakeholders to meet and the more stakeholders are involved, the more opinions, perceptions and coordination work there is. However, the more arenas there are to collaborate at different scales, the more possibilities there are for an "all-of-society engagement". It also highlights the importance of trust between different stakeholders and transparency across scales. The success of DRR policy processes and implementation also depend on the Mozambican political landscape. DRR policy changes require political will and it is therefore central that DRR is kept high on national political and policymaking agendas – something that Mozambique has succeeded in doing well.

Making DRR a truly cross-cutting issue that penetrates governmental silos would enable more actors to participate. The involvement of actors beyond those engaged in reactive disaster management would allow continued work despite recurrent hazards, which absorb the capacity of those involved in preparedness, response and recovery. This also highlights the importance of integrating DRR and vulnerability reduction in development strategies: DRR does not belong to the disaster management sector alone.

This thesis concludes that low and fluctuating capacity in the DRR subsystem, limited resources and disagreements on what DRR is, i.e. what aspects should be included and highlighted and who should be included in decision-making, are all aspects that have affected the DRG and DRR policy process in Mozambique. There have been some very positive developments within Mozambican DRR, but long-term DRR interventions have been limited in scale and scope. Moreover, the existence of DRR policy documents does not necessarily lead to concrete actions – due to lack of resources or political will (Newitt, 2018). Consequently, the DRR policy process in Mozambique can be short-sighted and progress slowly. This, in turn, increases the disconnect between theory, policy and practice.

This thesis thus argues that DRG theory and practice should better take into account diverse issues such as power-relations, accountability and transparency across scales. In addition, there is a need to focus on the inclusion, coordination and capacities of different stakeholders, both in Mozambique and elsewhere.

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