

A Critical Approach to Climate Change Adaptation

Discourses, Policies, and Practices

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First published 2018

ISBN: 978-1-138-05629-9 (hbk)

ISBN: 978-1-315-16544-8 (ebk)

3 Rethinking the framing of climate change adaptation

Knowledge, power, and politics

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 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK



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Introduction

Adaptation to climate change has always been part of life on earth. Yet, according to the scientific literature – such as the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) – the increased magnitude of global warming the planet is currently experiencing further exacerbates the negative impacts of climate change on people – increasing risk and reducing their capacity to adapt. This is particularly the case for marginalised people in the Global South living in poverty (IPCC 2014). Wide recognition that industrialised countries are overwhelmingly responsible for these changes has, albeit slowly, led to governments of industrialised countries increasingly financing climate change adaptation initiatives in the Global South.

Linking the vulnerability of people and systems to climate change impacts as a basis for designing measures to reduce such impacts is a complex and highly contested socio-political process that creates both winners and losers. Therefore, who participates in adaptation decision-making, how the process is framed, justified, and operationalised has considerable implications for development outcomes. This is never a fortuitous process, but rather one loaded with political agendas. In this chapter, I pay particular attention to which, and the processes by which, knowledge is included or left out of the climate change adaptation debate, because this has implications for the equity and potential for social change that adaptation and development efforts will either promote or hinder.

Against this backdrop, different scholarly and political voices have emerged over the years that foreground the importance of fair, equitable, and ethical adaptation policies (e.g. Paavola and Adger 2006; Shackleton *et al.* 2015) as well as the need to introduce radical changes to adaptation in order to foster social justice (e.g. Eriksen *et al.* 2011; Manuel-Navarrete and Pelling 2015; Pelling *et al.* 2015). Failure to do so risks promoting a paradigm whereby groups with little power in the Global South are constrained to play the role of helpless, while the Global North and Southern enclaves of powerful elites and unrepresentative governments recognise themselves as

rightful providers of adaptation solutions. I explore the considerable disconnect between adaptation needs and adaptation focus at different levels of governance, and the significant influence that donors, on the one hand, and climate science and academia, on the other, exert in shaping adaptation agendas. I will claim that this framing of adaptation and development often undermines situated, locally embedded, and practitioner knowledge.

There is also a push in the climate and development communities to gain traction for implementation by promoting climate action as a moral imperative. At the ‘Our Common Future under Climate Change’ conference in Paris in 2015, Laurence Tubiana, founder of the Institute for Sustainable Development and International Relations (IDDRI), said that global climate talks need to be framed from an ethical perspective, while John Schellnhuber, director of the Potsdam Institute for Climate Impact Research (PIK), believed that decency needs to be the most compelling force in adaptation discussions (Morchain 2015). Adger *et al.* (2017) found evidence that action on climate change is, indeed, most effective when framed it as a moral issue. But this realisation has not, however, managed – or perhaps even intended – to transform the climate action ideology from a natural science framing to a social framing. Furthermore, the idea of framing the adaptation and development discourse around morality begs the question, ‘whose morals and whose values?’, and demands an examination of how, or indeed whether, indigeneity, power dynamics, and historical legacies such as colonialism contribute to knowledge production.

How adaptation is defined determines to a large extent what and who is and is not addressed by adaptation funding. And while financing commitments, as well as funding released, are currently increasing globally, the very understanding of adaptation remains technocratic – over 40 per cent of all adaptation resources are spent on infrastructure projects (ODI and Heinrich Boell Stiftung 2015). Another 32 per cent is spent on agriculture and includes technocratic adaptation measures as well as capacity-building and empowerment initiatives. (In other words, stating that 40 per cent of adaptation funds are spent on infrastructure does not mean that 60 per cent are spent on non-technocratic adaptation initiatives.) Likewise, adaptation funding remains insufficient and not always targeted at the more vulnerable countries (Rahman and Ahmad 2016).

Based on an analysis of literature, and reflections from ongoing projects, this chapter provides a critical examination of how climate change adaptation has been framed by governments in developed countries and other powerful institutions, such as Southern elites, private sector, and international non-governmental organisations (NGOs). It looks at the effects this is having on the adaptive and developmental potential of people targeted by these efforts.

The chapter concludes that adaptation work has mostly extended the development paradigm, failing to introduce transformational thinking in

the sector, or to shift power structures. This is, possibly, an act of self-preservation by the ruling institutions, which has been compounded by their ability to paint an incomplete, biased picture of the climate problem, underplaying the importance of its social dimension, while overemphasising natural sciences as its solution space. The chapter also concludes that making adaptation inclusive, representative, and consultative will require radical changes in the way that adaptation research, knowledge, and narratives are currently formulated. Such changes should aim to build structures that allow knowledge which remains marginalised to become influential.

What's in the word 'adaptation'? Knowledge and politics at play

The IPCC defines adaptation as:

the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.

(IPCC 2014, 5)

Translating this concept into practice requires contextualising its meaning by acknowledging different worldviews around what adaptation should be, as well as by examining the historical context that has shaped the way people interact with climate change and other hazards.

It is not naive, I believe, to think that finding a common ground on adaptation and development begins by building trust and empathy between stakeholders. De Vries *et al.* (2017) found that conversations focused on 'connecting', where people openly share their ideas and are receptive to other views, build trust and promote the co-creation of knowledge. In contrast, conversations where the speaker 'sends', 'defends', or 'misunderstands' have the opposite effect. If we accept Dahlberg and Blaikie's (1999) premise that deconstructing adaptation narratives of actors with different values and ways of articulating meaning can lead to surprisingly complementary propositions, then a strategy of 'connecting' can lead to levelling the playing field of 'adaptation framing', which has historically been biased in favour of the Global North and powerful actors.

Furthermore, setting adaptation priorities in a top-down, exclusionary way that prioritises technical solutions and undermines local knowledge results in frustration and distrust of those, ironically, targeted by the adaptation measures (Otto-Banaszak *et al.* 2011). This is partly because adaptation thinking cannot be separated from a holistic understanding of development or well-being; in other words, it cannot reduce the question of vulnerability to issues of climate change impacts. For example, a vulnerability and risk assessment (VRA) exercise conducted in 2016 in Malawi, which included

unskilled tea labourers in a discussion with private sector and national-level government actors on the competitiveness of the domestic tea industry, enabled a nuanced exploration of social factors affecting competitiveness, beyond a focus on exclusively economic, climatic, and infrastructural perspectives (Morchain *et al.* 2016).

Bridging this knowledge gap is not easy and should not be oversimplified. In a compelling examination of the role of politics in defining the knowledge that shapes the adaptation discourse in the Canadian Arctic, Cameron (2012) highlighted two key factors: (1) failing to acknowledge the importance of the colonial past in the present debate around vulnerability and adaptation has profound consequences in the way its narrative is produced; and (2) there is a widespread mainstream misuse of the notion of ‘indigenous’ and ‘local’ that acts to contain their relevance and influence to indigenous or local practices and knowledge alone. This effectively bars indigenous people and people from rural communities from informing the bigger picture of adaptation and development agendas, which nonetheless have a direct impact on them. Both factors prevent the examination of present-day adaptation and development practices in a way that challenges power structures and their implications. Furthermore, it perpetuates colonial worldviews in development research, policy, and practice, limiting any efforts of stabilisation and ‘re-organisation of political-economic relations’ (Cameron 2012: 104).

De-romanticising indigenous, traditional, and local knowledge is fundamental in making adaptation and development narratives more accurate and in prioritising responses more effectively. To that end, it is important to recognise the strengths and weaknesses both of local knowledge systems and systems based on scientific knowledge – so that a meaningful and constructive hybridisation can result (Lebel 2013).

This hybridisation, nevertheless, should be undertaken with a clear awareness of the existing power disparities and prejudices about the different knowledge sources and the biased arena where ideas are debated. Not only is there a wide recognition of international adaptation fora being tilted toward knowledge from the natural sciences and from the Global North, as this chapter explores, but also of the prevailing discourse embedding and promoting a colonial hierarchy of knowledge (see for example Spiegel 2017).

Having considered the relation between different types of knowledge and the development of an adaptation and development discourse, now look at the present dynamics of the sector and examine their possible implications.

Current framing of climate change adaptation in the development context

Whereas science has succeeded in causally linking human-induced greenhouse gas emissions to global warming and climate change adaptation

has increasingly become an element and sometimes a driver of development efforts, what adaptation is and what shapes it takes ‘on the ground’ remains little explored and understood (Ford *et al.* 2015). People’s lives, livelihoods, and, similarly, development pathways are shaped by circumstances and responses to a multitude of hazards and opportunities. As such, it is necessary that adaptation is understood and framed in all its complexity: as a problematic within development that is founded on social concerns, and is supported by the scientific understanding of climate phenomena and their impacts – not the other way around.

There is, of course, no single approach to adapting to climate change impacts because sound adaptation responses vary considerably from one place to another: who lives in a given place, what people and governments value and prioritise, what institutions are in place, who funds the measures, and what is the addition of a climate change response to the overall picture of vulnerability/capacity, etc. Furthermore, political interests and different approaches to development play a determining role in framing climate change adaptation and dictating who is and who is not likely to benefit from adaptation efforts – for example, broadly speaking, some Asian official development assistance tends to focus on physical infrastructure projects, while some Western donors have shown a tendency to combine infrastructure and social development investments, or in some cases emphasise social development.

By the ‘framing’ of adaptation I mean: what information is sourced and used in decision-making, how and by whom; what data are prioritised or discarded as irrelevant; who is consulted in the process; what questions are asked; who analyses the findings; and how relevant, representative, and inclusive are the findings for a given territory and the different groups of people inhabiting it. Likewise, who, how, and what is *not* consulted/analysed/used is an equally relevant consideration to understand the representativeness of adaptation. The kind of knowledge that forms part of understanding adaptation, and the epistemic practices that are excluded, largely determine the impact that planned climate change adaptation will have on populations and environments.

Furthermore, the climate change sector, having gained global relevance, has the opportunity to present itself as a new way of doing development, thus challenging a long-running model of development that has too often failed to deliver sustainable results. However, its efforts so far have mostly taken a narrow, sectoral focus that have failed to be representative and to address the root causes of vulnerability, and have not challenged the institutions that have shaped development thinking for decades (e.g. Nagoda 2015). Indeed, adaptation efforts have yet to prove their contribution to a new and more equitable approach to development and to people’s lives beyond the short and medium term. Hence, there is a strong case for a reorientation and reorganisation of power relations,

and for the prioritisation of equitability and redistribution as core elements of the climate agenda.

'It is Northern countries that have set the global climate change policy agenda since the beginning' and in a top-down manner, and in so doing, have swayed the focus of it away from the needs and priorities of lower-income countries (Blicharska *et al.* 2017: 21). For instance, overall climate resources have mostly been allocated to mitigation, while adaptation needs remain underfunded, despite the official position of the United Nations Framework Convention on Climate Change (UNFCCC) being that 'adaptation and mitigation need to be accorded the same level of importance' (UNFCCC 2010). Nexus between mitigation and adaptation have also not materialised sufficiently (Ayers and Huq 2009).

Furthermore, highly influential literature, such as IPCC assessment reports and IPCC special reports, has traditionally overwhelmingly relied on peer-reviewed natural science publications at the expense of other sources of information, such as grey literature (e.g. project reports or publications by multilateral organisations), or local and indigenous knowledge. The concept of vulnerability to climate change is, similarly, often wrongly framed in the sector as something static which can be defined by biophysical impacts more than by socio-economic factors, and which can be understood by technical experts without stakeholder and community engagement (Preston *et al.* 2011). Eriksen *et al.* (2015) further argue that Northern scientific knowledge has been the dominant force in shaping the understanding of adaptation, while the profile of local knowledge has been kept low and has lagged behind (*ibid.*), making scientific knowledge a steering force for setting adaptation priorities. It also predisposes the framing of adaptation solutions within a 'climate science first' perspective, reducing the influence that social science research on vulnerability can (and should) have on integral adaptation responses.

The emphasis and reliance on external 'expert' knowledge, such as fly-in consultants, reduces local ownership of the adaptation process and the relevance of its findings, limiting the insightfulness of the social analysis conducted (Conway and Mustelin 2014). This predominant practice in adaptation represents a science-centric framing of the subject that undermines the potential that social learning processes can contribute.

But the top-down approach of adaptation practice is not as simple as Global North over/versus Global South. The approach that Southern national and sub-national governments, as well as powerful elites, take vis-à-vis adaptation and development can be an equally important determinant of its outcomes. Spiegel (2017), for instance, described how national policies in the Maldives have in some cases promoted a 'colonial' relationship between the national government and the least powerful groups that the policies intend to benefit.

Several reviews of the adaptation literature have revealed that climate change adaptation initiatives often lack dynamism, innovation, and transformational elements, and that hard infrastructure solutions tend to be the

default choice. For instance, Kates *et al.* (2012) showed that 95 per cent of all implemented adaptation measures across seven key sectors in the United States are merely incremental replications of existing measures, whereas much needed transformational and innovative actions remain a rare exception. By contrast, governance structures that recognise the complexity of social contexts and invite the adaptation agenda to be set by a multitude of knowledge have a higher potential to promote both transformational and transformative adaptation actions (Few *et al.* 2017).

In relation to academic research on new ways of thinking and doing adaptation, only 3 per cent of published articles on the adaptation subject ‘focus on the social roots of vulnerability and the necessity for political economic change to achieve transformative adaptation’ (Bassett and Fogelman 2013: 42). This shows that not only is the nature of existing adaptation measures overwhelmingly incremental, but also that research on the subject fails to acknowledge the climate change problematic as a broader, social, and political problem.

Eriksen *et al.* (2015) understood the crucial role that power dynamics play in framing climate change adaptation, and consequently the need to contest the status quo that restricts the potential for adaptation space to be more representative of a multitude of knowledge. These dynamics can be evidenced in an institution such as the IPCC. According to Corry and Jorgensen (2015), the way the IPCC views adaptation solutions is too narrow: it is based on a ‘linear model’ that derives vulnerability from scientific evidence and that limits the space for social processes to shape a proper understanding of vulnerability and of adaptation needs.

An international conference organised by the Red Cross Red Crescent Climate Centre in collaboration with the IPCC on climate risk management in April 2017 aimed to address this shortcoming by bringing together the IPCC and adaptation stakeholders who do not normally have an opportunity to engage with the IPCC cycles: practitioners, social scientists, and operational-level government officials (unfortunately no community voices were present). Conversations highlighted the importance of bringing governance, as well as knowledge from grey literature and other non-academic sources, to the fore of discussions on climate risk and vulnerability – a discussion that in the IPCC has traditionally been heavily framed around climate science. The conference report recommended that ‘in the coming years, it will be critical for scientists, policy-makers and practitioners to collaborate in developing and co-producing the literature base [...] and [co-develop] research agendas’ (RCRCCC 2017: 9). The event served as a warning that unless the ways of working of influential institutions in the climate arena begin to welcome and value presently de-prioritised sources of knowledge, they risk retaining post-colonial undertones and practices that can decimate the social justice element of adaptation.

The next section explores on-the-ground initiatives that have sought to influence the adaptation narrative, such that it understands climate change

adaptation as a mainly social construct. They have tried to open up a space for knowledge on the fringe to enter the political spectrum shaping climate change adaptation.

Efforts in re-framing climate change adaptation

Against the backdrop of shortcomings in adaptation and development efforts, the vulnerability and risk assessment (VRA) methodology and the Adaptation at Scale in Semi-Arid Regions (ASSAR) project have sought to increase the representation and relevance of adaptation research and implementation.¹

The VRA, designed by Oxfam, has focused on opening up spaces for multi-stakeholder interaction and on including marginalised people and those most at risk in these spaces. It has sought to develop a joint understanding by stakeholders from local to national about the key hazards and issues affecting a landscape, as well as about the characteristics of social groups inhabiting it and the need for their active role in the adaptation debate. Furthermore, the VRA intends to support a joint process of designing climate change adaptation measures based on acknowledging the complexity of the issues and the capacities of diverse actors to contribute to it, effectively initiating social learning and promoting transformation in planning processes. It is precisely the lack of properly identifying and differentiating social groups (partly due to top-down approaches and insufficient engagement with local actors and marginalised groups) that can result in an inaccurate understanding of vulnerability, making climate change adaptation efforts inefficient at best and, at worst, harmful by perpetuating inequality and injustice (Nagoda 2015).

A key challenge for processes such as the VRA is making stakeholder engagement long-lasting and influential. Well-conducted participatory processes can generate immediate enthusiasm among participants, but maintaining the momentum, as well as getting buy-in from the participating organisations beyond the person who attends, is challenging and requires considerable resource investment. Furthermore, assessing the direct impact that the process has on people and organisations is extremely difficult. However, in the case of Botswana, tangible positive impacts resulted from the implementation of a single VRA in 2015. Principal economist and district planning officer of the Bobirwa Sub-District, Pelaelo Master Tsayang, indicated at the end of the VRA that ‘this exercise will influence and contribute to draft our district development plan, particularly the activities related to climate change. Because of the useful outcomes the VRA generated, we will fund workshops like this in other parts of the district’. Both expectations were met: a chapter on climate change adaptation was introduced in the district development plan, and nationwide training of district officials from all of the 20 districts in Botswana is planned in 2018, co-funded by the national government.

A key outcome of the VRA, in addition to its more tangible contribution to development and adaptation planning, is behavioural change. This, however, takes time to sink in – if it does – and its effects are hard to pinpoint. Furthermore, social learning processes may result in positive changes in people’s lives that are never measured. Until development actors – chiefly donors – become comfortable with the uncertainty and the long timeframe needed for these behavioural changes to come about, and until there is recognition that impacts will be heterogeneous and difficult to measure, progress in climate change adaptation efforts risk remaining largely within the construct of incremental adaptation (e.g. technocratic, infrastructure projects) and falling short of stimulating social transformation.

Some of the main impacts of VRAs conducted between 2013 and 2016 in six countries were cited as: increased awareness and knowledge by communities and government officials of the origin and impacts of hazards; more informed agricultural planning and the development of adaptive agricultural techniques; increased recognition of the need for increased investment in climate change adaptation by the national government (in the Philippines); enhanced involvement of government officials with local stakeholders in planning at district level to include climate change risks, as well as to better understand gender issues and respond. In Pakistan, communities have used this framework, identified adaptive capacities for resilience and newly established relations with stakeholders to set up an advocacy plan for budgetary allocations, in addition to the usual disaster risk reduction/climate change adaptation plan. In Armenia, the design of an agricultural insurance mechanism model and a local risk assessment methodology has resulted from the application of the VRA and from subsequent stakeholder round-table discussions at national level, which are being increasingly implemented nationwide. In Ghana, Oxfam has strengthened its recognition and legitimacy among NGOs and the government as a result of its representative and inclusive participatory processes – being cited frequently by government and invited to discuss its participatory approaches in events. In the Philippines, the VRA has broadened the municipal-level framing of disaster risk reduction and climate change adaptation to include non-climatic stressors – this has enabled including, for example, conflict in a more nuanced discussion about vulnerability and manifested the importance of cross-sectoral planning.² In Malawi, the VRA served to shift the focus of the development conversation in the tea industry from an emphasis on climatic and economic issues to one that addressed social elements, such as the harsh treatment and sexual harassment of unskilled workers; a fundamental element of their vulnerability (Morchain *et al.* 2016).

Despite its positive outcomes, the potential for participatory approaches like the VRA to reorganise power structures should be welcomed with caution. Perhaps the VRA’s most fundamental contribution in addition to

the empowerment of marginalised groups, as Cameron's findings (2012) would suggest, might be to continually challenge multi-stakeholder spaces to acknowledge historical power relations honestly and their implications on present-day knowledge production, policymaking, and practices.

The second brief reference about initiatives aimed at re-framing climate change adaptation is the ASSAR project, led by the University of Cape Town and funded by the UK's Department for International Development and Canada's International Development Research Centre. Arguably, ASSAR's main contribution is to challenge the business-as-usual of climate change research by giving stakeholders an active role in shaping its agenda and making it relevant to their lives. This starts by involving stakeholders at all levels in refining the project's research questions, by encouraging their participation in the assessment of vulnerabilities and risks, by seeking their contribution in designing possible adaptation pathways, and by creating opportunities for stakeholders to interact and discuss adaptation concerns and priorities. Furthermore, ASSAR's so-called research-into-use (RiU) modus operandi embeds the influencing of climate change adaptation policy and practice among its core objectives, ensuring that the social elements of its research drive adaptation and well-being goals. ASSAR's mid-term internal review on RiU confirmed that one key objective of ASSAR's members – most of them are researchers – is to generate behavioural change and changes in social norms, as well as to influence formal policy channels (Morchain and DeMaria-Kinney 2016). The report also concluded that a key outcome of RiU work must be for researchers in fields such as climate change adaptation and development to recognise their duty to engage in the policy and practice debate, effectively as forces to shift the way societies think about and respond to climate change and other challenges. Pushing traditional science beyond its boundaries is perhaps *the* fundamental contribution of ASSAR to climate change adaptation – in addition to its production of new research findings. This approach would, potentially, represent a transformational shift in adaptation research by making it more relevant to people in climate change hotspots, moving away from research agendas driven by Northern institutional interests.

Building this link between research and adaptation needs on the ground is critical. Operationalising adaptation without a thorough understanding and consideration of the complexity of politics and power dynamics of a place risks disempowering the very groups that an adaptation initiative sought to support (Cochrane and Tamiru 2016). Donors and development agencies need to acknowledge the complexity of the task at hand and carefully assess the implications of the initiatives' intended changes. Strategic alliances and coordination at international and national levels is another crucial factor of a rigorous framing of adaptation.

The social learning element of the VRA and ASSAR's ambition to transform adaptation research addresses key gaps that, if left unaddressed, risk

jeopardising the relevance and the impacts of adaptation efforts. But what can be learned about good practices; what elements should be incorporated in the framing of adaptation?

By building on an existing framework, the next section proposes a structured way to think about the framing, design, and implementation of climate change adaptation prioritising a joint development of the understanding of adaptation.

Supporting a more equitable framing of climate change adaptation

Eriksen *et al.* (2015: 529) developed a framework that seeks to explain the key interactions framing the politics of adaptation. It is underscored by an understanding that ‘climate change adaptation processes have the potential to constitute as well as contest, authority, subjectivity and knowledge, thereby opening up or closing down space for transformational adaptation’. The framework also sees power dynamics and politics as foundational elements needing to shape the climate change adaptation discourse – yet rightly claims that it is precisely politically powerful actors and the set-up of global/multilateral institutions that advance agendas that exclude the least ‘established’ knowledge (e.g. local knowledge, voices of the marginalised and poorest) and that promote a technocratic understanding of adaptation.

Authority is a major driver of adaptation decisions and outcomes in the framework developed by Eriksen *et al.* (2015). Stakeholders with authority further influence adaptation by claiming the right to legitimise or undermine different types of knowledge. Subjectivity helps explain how power influences the way a person or a group identifies and acts – or is prevented from acting – in social domains. Authority and knowledge produce socially differentiated groups, which can be an empowering or a devaluing exercise for adaptation ‘subjects’, but which implicitly dictates who is and who is not capable of contributing to adaptation thinking. Figure 3.1 depicts a reworking of the framework developed by Eriksen *et al.* (2015). While the original framework assesses existing power relations, I propose a revision based on promoting empowerment for more equitable adaptation.

Authority and knowledge have a self-reinforcing relationship that will often reaffirm powerful actors and perpetuate the status quo, excluding non-influential yet crucial knowledge from adaptation debates. There is a need to challenge institutions to open up spaces for dialogue that are representative, interdisciplinary, and invite participation from different levels of governance. Beyond the issue of knowledge needing to gain legitimacy from authorities, the interaction between authority and knowledge needs to rely on accountability mechanisms. While NGOs and civil society organisations are often champions of these processes, they cannot always uphold or maintain long-term multi-stakeholder dialogues, or hold governments to account. Donors,

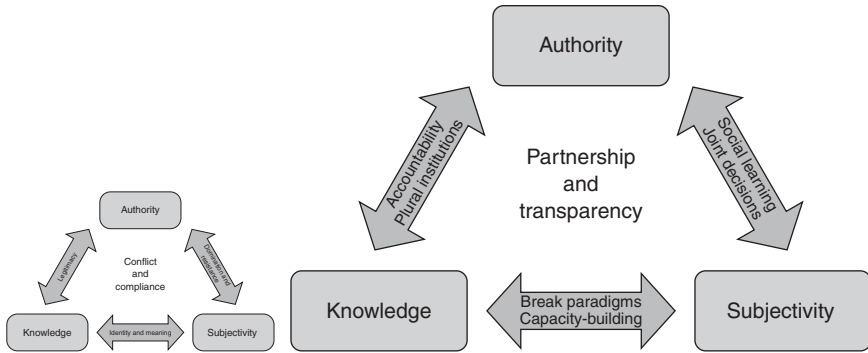


Figure 3.1 A reworking of the framework originally developed by Eriksen *et al.* (2015) describing key interactions framing the politics of adaptation, where empowerment takes on a central role. Left: The original framework by Eriksen *et al.* (2015).

however, could use their leverage to promote and enforce a more open and equitable relationship about what knowledge is and is not legitimised by authority figures at national, regional, and even multilateral levels.

In rethinking adaptation, the relationship between authority and subjectivity needs to be seen as one where subjectivity serves to legitimise marginalised groups, and where they and gender equality are recognised as priority themes in adaptation – which can, in effect, positively influence the attainment of adaptation goals. This implies a process of social learning and joint decision-making by stakeholders across governance scales, and where groups addressed by development and adaptation agendas play a protagonist role. Recent VRAs in Botswana and Malawi, for instance, have enabled the initiation of a collaborative social differentiation exercise that has contributed to deepen the understanding of vulnerabilities and capacities of groups considered vulnerable or marginalised – aiming to transition them from passive to active in the adaptation debate.

These processes require long-term engagement to be meaningful and avoid being ‘tokenistic’. In order to foster a long-term engagement, parties need to feel that their participation is beneficial to themselves and that the dialogue space is legitimate and influential. In Honduras, local NGO Asociación Ecológica San Marcos de Ocotepeque (AESMO) has been leading a multi-stakeholder participatory process for the collective management of the Hondo River basin since the 1990s. It has ensured a sufficient and clean water supply to households and to local small-scale farmers, and has established an ongoing dialogue for joint decision-making between landscape stakeholders (communities, private sector, and government), considerably changing the behaviour of the more powerful actors. It shifted, for example, the attitudes of some landowners from an original

indifference towards governance processes to submitting to the rule of law and using official channels for requesting permits for water extraction. AESMO considers that some key elements for the successful long-term implementation of this process are: building understanding and ‘social conscience’ about the importance of water and other natural resources in people’s lives; empowering the community to voice concerns and to keep momentum of the process in the face of short lifespans of municipal governments; empowerment of other actors to navigate governance processes (e.g. for large-scale farmers to act less as a strictly business outfit, and more as a landscape steward); accurate knowledge of laws and regulations by all stakeholders engaged in the process; established clear boundaries of the area to be managed; a municipal government that is engaged (in this case, they bought lands within the basin and declared them ‘protected’); regular coordination and communication with municipal authorities; inclusion of women in the group and in decision-making roles; and continual participation and co-facilitation by local NGOs or civil society organisations (Saravia and Bustillo 2010).

Underscoring the framework that this chapter proposes is the connection between subjectivity (the way power structures influence people’s ability to engage in the adaptation process) and knowledge. Two things are proposed to facilitate the proper inclusion of non-scientific, non-technocratic knowledge, as well as knowledge from disenfranchised persons and non-official institutions. The first refers to the need to break paradigms, such as beliefs, barriers, and prejudices held by multilateral and government bodies, social norms that violate human rights or marginalise minorities, or gender-based inequalities, and explore mechanisms through which these new values can be institutionalised. One example is the ongoing institutional change at the IPCC to make their Sixth Assessment Report (AR6) more inclusive and representative by embedding in its structure a senior social scientist (Dr Debra Roberts) to coach the Working Group II lead and authors. Another example is efforts by NGOs and women’s rights organisations to achieve official recognition of unpaid care work in order to facilitate its insertion in budgetary planning and policies.

Capacity-building of climate change adaptation stakeholders across all levels is the second element proposed to ease the connection between subjectivity and knowledge. One aspect that should be covered is the capacity-building of people mostly excluded from formal governance and decision-making processes to better engage with these. Likewise, capacity-building should be targeted at powerful actors to shift their worldviews. In ASSAR, capacity-building of national- and district-level planners is being undertaken to promote bottom-up development planning.

The dynamic interplay described here between authority, knowledge, and subjectivity could thrive in an atmosphere of partnership and transparency, where conflict is addressed openly and fairly, and compliance – understood as submission to an authority set up by inequitable power

structures – is ruled out. The changes proposed in the framework, which are aimed at enhancing the positive impact and relevance of adaptation for marginalised groups, require transformation – and not just incremental fixes – in the adaptation and development sector.

Conclusion

As several studies in the field of adaptation have shown, there exists a discrepancy between the conceptual apparatus that has emerged around climate change adaptation, and the adaptation needs of communities on the ground. This chapter has explored the possible reasons for this disconnect and some possible solutions.

Findings of a survey administered by the author to 33 adaptation researchers, practitioners and donors showed that a majority of respondents perceive an existing power imbalance between, at one end, the Global North and Southern elites: dictating the adaptation agenda; and, at the other end, the Global South: mostly lacking power and influence – particularly at local levels. The survey also showed that over half of respondents believe that climate change adaptation is predominantly used by the North as a way to forward its own geopolitical interests in the South; and that climate change adaptation efforts often undermine local values and traditions. Overall, the survey findings suggest that adaptation and development efforts are not focusing on empowering people nor on shaking up the systems that perpetuate their marginalisation.

This chapter looked at two initiatives aimed at shifting the nature of adaptation work. The VRA promotes a constructive dialogue that seeks to legitimise vulnerable people's and Southern institutions' knowledge in front of power-holders. ASSAR contributes to shifting the way climate change research is framed and conducted. But three questions remain as yet unanswered. First, will these types of initiative empower marginalised groups and non-technocrats to play influential roles in adaptation decision-making – and in doing so enable different types and sources of knowledge to contribute fairly to adaptation and development thinking? Second, can they facilitate the hybridisation of knowledge from different disciplines and epistemologies in such a way that they lead to a jointly owned narrative? Third, how effective will – and can – they be in reorganising historical legacies (e.g. resulting from colonialism) and embedded power disparities and injustices in present-day governance structures at all levels?

In terms of translating adaptation thinking into practice, incremental efforts are likely to remain the focus of adaptation funding and are essential to attain risk reduction and food security goals, but transforming the essence of adaptation thinking and doing is what holds most promise in bringing equity to climate governance. Addressing the relation between climate change and social inequalities is more pressing than ever, given that rising temperatures will result in 'a huge redistribution of wealth from the

global poor to the wealthy', according to Solomon Hsiang of the University of California, Berkeley (Rotman 2016).

Transformation, nevertheless, entails risk: there will be many unknowns when profound changes are pursued. The implications of initiatives that aim to generate transformation must be analysed carefully. Even so, the need to consider radically different ways to address the climate change challenge is undeniable, particularly as I have argued in this chapter, in relation to reorganising governance and power structures so that they include knowledge that has been restricted from, or hardly influential in, the debate.

Re-politicising the adaptation agenda offers an opportunity to be more inclusive of a wide range of (situated) knowledge and practices, and in so doing reduce the prevailing climate science-centric bias of the field. Fortunately, there is also reason for optimism, as thinking about adaptation is indeed changing. For example, this chapter discussed the shortcomings of the IPCC's position on reporting on climate change and adaptation. For AR6, however, the IPCC has indicated that it intends to incorporate more input from social sciences and grey literature, and to shift its focus from science analytics to supporting decision-making through a more practical exploration of adaptation and mitigation. It has shown openness to having a closer engagement with practitioners and decision-makers (RCRCCC 2017).

Institutional donors also have powerful tools at hand to drive change: money and influence, and with them an opportunity to play equitable politics. There are encouraging signs of development programmes fostering multidisciplinary work and including climate change as a theme, such as the UK government's GBP 1.5 billion Global Challenge Research Fund (GCRF 2017). This implies that adaptation responses are being increasingly understood as not merely sectoral or technical fixes, but as one component of development as a whole.

However, the framing of adaptation remains tied to a system of mostly Northern institutions that cling to power, despite having proved dysfunctional and incapable or unwilling to address the full complexity of the challenge. The gaps are evident especially in failing to address the social component of adaptation in the context of development and in excluding from the debate knowledge that is considered not established by parameters of academia. On the importance of understanding adaptation as a human issue, Weisser *et al.* (2014: 113) suggested that 'the answer to one of the key questions in adaptation research [...] will remain incomplete as long as one talks only about changing climatic conditions'. It is indeed the *so what* about people and the planet that will not only complete the answer, but should also be its foundation. At present, though, solutions to the adaptation challenge remain overly focused on climate and natural sciences. As such, powerful Northern stakeholders and Southern elites continue to hold ownership of the adaptation agenda.

This exclusion of certain voices from adaptation decision-making is used as a reactionary vehicle to sustain power structures. Cochrane (2017), reflecting on the book *Decolonising Methodologies* by Linda Tuhiwai Smith, illustrated it well:

even when exploitation is not explicit, there is [...] ‘a cultural orientation, a set of values, a different conceptualization of such things as time, space and subjectivity, different and competing theories of knowledge, highly specialized forms of language, and structures of power’, which act to reinforce the dominance of one way of knowing over another.

A re-politicisation of adaptation requires transforming the stakeholder landscape to enable an institutional framework that formalises the contribution of a wide range of knowledge to the adaptation problematic within development. This will require establishing partnerships that, while seeking consensus-building, do demand a revision of the status quo where it is deemed necessary. Fairness, transparency and participation are pillars of this approach – which does not negate the relevance that ‘established’ knowledge can bring to adaptation – but which does frame adaptation as inclusive, representative, and consultative.

Acknowledgements

This work was carried out under the Adaptation at Scale in Semi-Arid Regions project (ASSAR). ASSAR is one of four research programmes funded under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAS), with financial support from the UK Government’s Department for International Development (DfID) and the International Development Research Centre (IDRC), Canada. The views expressed in this work are those of the creators and do not necessarily represent those of DfID and IDRC or its board of governors.

Notes

- 1 The VRA is a methodology designed by Oxfam that develops a holistic, landscape-wide understanding of vulnerability and connects actors across various levels of governance to jointly identify and analyse root causes of vulnerabilities for distinct social groups and later design programmes and strategies to tackle these. For more information visit <http://policy-practice.oxfam.org.uk/our-approach/toolkits-and-guidelines/vulnerability-risk-assessment>. Using both research and practice to address the present information shortfall on how to minimise vulnerability and promote long-term resilience, the primary aim of the ASSAR project is to produce future-focused and societally relevant knowledge of potential pathways to well-being through adaptation. It is a consortium led by the University of Cape Town, the University of East Anglia, the Indian Institute for Human Settlements, Oxfam, and START, and is funded by DfID and IDRC under the Collaborative Adaptation

Research in Africa and Asia (CARIAA) initiative. I have a direct connection with both the VRA and ASSAR: I led the development of the VRA and I am a collaborative principal investigator, as well as Oxfam's lead, for ASSAR.

- 2 The examples above are based on emails and conversations with Abdul Latif Walizada (Oxfam in Afghanistan), Vadim Uzunyan (Oxfam in Armenia), Ana Caspe (Oxfam in the Philippines), Asim Saqlain (Oxfam in Pakistan), and Lillian Mwintome Kuutiero (Oxfam in Ghana).

References

- Adger, W., Butler, C., and Walker-Springett, K., 2017. Moral reasoning in adaptation to climate change. *Environmental Politics*, 26 (3), 1–20.
- Ayers, J., and Huq, S., 2009. The value of linking mitigation and adaptation: A case study of Bangladesh. *Environmental Management*, 43 (5), 753–64.
- Bassett, T., and Fogelman, C., 2013. Déjà vu or something new? The adaptation concept in the climate change literature. *Geoforum*, 48, 42–53.
- Blicharska, M., *et al.*, 2017. Steps to overcome the North–South divide in research relevant to climate change policy and practice. *Nature Climate Change*, 7 (1), 21–7.
- Cameron, E.S., 2012. Securing indigenous politics: A critique of the vulnerability and adaptation approach to the human dimensions of climate change in the Canadian Arctic. *Global Environmental Change*, 22 (1), 103–14.
- Cochrane, L., 2017. *Decolonizing Methodologies* [blog]. Available from: www.logan-cochrane.com/index.php/decolonizing-methodologies [Accessed 21 June 2017].
- Cochrane, L., and Tamiru, Y., 2016. Ethiopia's productive safety net program: Power, politics and practice. *Journal of International Development*, 28 (5), 649–65.
- Conway, D., and Mustelin, J., 2014. Strategies for improving adaptation practice in developing countries. *Nature Climate Change*, 4 (5), 339–42.
- Corry, O., and Jorgensen, D., 2015. Beyond 'deniers' and 'believers': Towards a map of the politics of climate change. *Global Environmental Change*, 32, 165–74.
- Dahlberg, A.C., and Blaikie, P., 1999. Changes in landscape or in interpretation? Reflections based on the environmental and socio-economic history of a village in NE Botswana. *Environment and History*, 5 (2), 127–74.
- de Vries, J.R., *et al.*, 2017. Where there is no history: How to create trust and connection in learning for transformation in water governance. *Water*, 9 (2), 1–15.
- Eriksen, S., *et al.*, 2011. When not every response to climate change is a good one: Identifying principles for sustainable adaptation. *Climate and Development*, 3 (1), 7–20.
- Eriksen, S., Nightingale, A., and Eakin, H., 2015. Reframing adaptation: The political nature of climate change adaptation. *Global Environmental Change*, 35, 523–33.
- Few, R., *et al.*, 2017. Transformation, adaptation and development: Relating concepts to practice. *Palgrave Communications* 3 [online]. Available from: www.nature.com/articles/palcomms201792 [Accessed 8 November 2017].
- Ford, J., *et al.*, 2015. Adaptation in climate change hotspots: Analysis from Africa and Asia. *Regional Environmental Change*, 15 (5), 747–850.
- GCRF, 2017. Global Challenges Research Fund official website [online]. Available from: www.rcuk.ac.uk/funding/gcrf/ [Accessed 21 June 2017].

- IPCC, 2014. *Climate Change 2014: Impacts, adaptation, and vulnerability: Part A: Global and sectoral aspects: contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change: summary for policymakers*. Cambridge: Cambridge University Press.
- Kates, R.W., Travis, W.R., and Wilbanks, T.J., 2012. Transformational adaptation when incremental adaptations to climate change are insufficient. *Proceedings of the National Academy of Sciences of the United States of America*, 109 (19), 7156–61.
- Lebel, L., 2013. Local knowledge and adaptation to climate change in natural resource-based societies of the Asia-Pacific. *Mitigation and Adaptation Strategies for Global Change*, 18 (7), 1057–76.
- Manuel-Navarrete, D., and Pelling, M., 2015. Subjectivity and the politics of transformation in response to development and environmental change. *Global Environmental Change-Human and Policy Dimensions*, 35, 558–69.
- Morchain, D., 2015. *Our Common Future under Climate Change: Where science meets social justice* [blog]. Available from: <http://policy-practice.oxfam.org.uk/blog/2015/07/our-common-future-under-climate-change> [Accessed 21 June 2017].
- Morchain, D., and DeMaria-Kinney, J., 2016. *Stocktaking in Research into Use: Progress and thinking to date*. ASSAR project publication. Print.
- Morchain, D., et al., 2016. MALAWI2020: *Vulnerability and risk assessment in the tea industry* [online]. Oxford: Oxfam International. Available from: <http://policy-practice.oxfam.org.uk/publications/malawi2020-vulnerability-and-risk-assessment-in-the-tea-industry-620101> [Accessed 21 June 2017].
- Nagoda, S., 2015. New discourses but same old development approaches? Climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal. *Global Environmental Change*, 35, 570–79.
- ODI and Heinrich Boell Stiftung, 2015. *10 Things to Know about Climate Finance in 2015* [online]. Available from: www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10093.pdf [Accessed 21 June 2017].
- Otto-Banaszak, I., et al., 2011. Different perceptions of adaptation to climate change: A mental model approach applied to the evidence from expert interviews. *Regional Environmental Change*, 11 (2), 217–28.
- Paavola, J., and Adger, W., 2006. Fair adaptation to climate change. *Ecological Economics*, 56 (4), 594–609.
- Pelling, M., O'Brien, K., and Matyas, D., 2015. Adaptation and transformation. *Climatic Change*, 133 (1), 113–27.
- Preston, B., Yuen, E., and Westaway, R., 2011. Putting vulnerability to climate change on the map: A review of approaches, benefits, and risks. *Sustainability Science*, 6 (2), 177–202.
- Rahman, S.M., and Ahmad, M.M., 2016. Perception of local experts about accessibility to international climate funds: Case of Bangladesh. *Journal of Developing Areas*, 50 (3), 53–68.
- RCRCCC, 2017. *Bridging Science, Policy and Practice: Report of the International Conference on Climate Risk Management*. Red Cross Red Crescent Climate Centre. Print.
- Rotman, D., 2016. *Hotter Days Will Drive Global Inequality* [blog]. Available from: www.technologyreview.com/s/603158/hotter-days-will-drive-global-inequality/?utm_content=bufferf7a21&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer [Accessed 21 June 2017].

- Saravia, V., and Bustillo, J.A., 2010. *Hallazgos y reflexiones sobre gestión compartida de los recursos naturales: Microcuenca de Río Hondo*. Print.
- Shackleton, S., *et al.*, 2015. Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. *Climate Change*, 6 (3), 312–44.
- Spiegel, R.H., 2017. *Drowning in Rising Seas: Navigating multiple knowledge systems and responding to climate change in the Maldives*. BA thesis. Pitzer College.
- UNFCCC, 2010. *The Need for Adaptation* [fact sheet]. Available from: http://unfccc.int/press/fact_sheets/items/4985.php [Accessed 21 June 2017].
- Weisser, F., *et al.*, 2014. Translating the adaptation to climate change paradigm: The politics of a travelling idea in Africa. *Geographical Journal*, 180 (2), 111–19.

