Reconsidering Climate Compatible Development as a New Development Landscape in southern Africa

Stringer LC\textsuperscript{1}, Sallu SM\textsuperscript{1}, Dougill AJ\textsuperscript{1}, Wood B\textsuperscript{1}, Ficklin L\textsuperscript{2}

\textsuperscript{1}Sustainability Research Institute, School of Earth and Environment, University of Leeds, LS2 9JT, UK
\textsuperscript{2}Humanitarian and Conflict Response Institute, University of Manchester, Oxford Road, Manchester M13 9PL, UK

Abstract

Climate compatible development (CCD) offers ‘triple-wins’ for climate adaptation, mitigation and development. Whether CCD really offers a ‘new development landscape’, as some commentators claim, has not been extensively assessed. This chapter addresses this gap through focus on Swaziland, Malawi and Tanzania. Results show that CCD does not make explicit current and historical tensions between climate change and development, nor demand thorough re-evaluation of risk, responsibility and inequalities. Although CCD facilitates consideration of trade-offs, it reinforces reproduction of the current political and economic system across multiple scales and stakeholder groups. Re-politicisation of CCD is needed.

Introduction

The world’s climate is changing, driven largely by anthropogenic greenhouse gas emissions. These changes affect both the biophysical environment and society. The Intergovernmental Panel on Climate Change (IPCC) recognises the challenges that climate changes pose to nations’ development. It is noted with high confidence in the IPCC’s 5\textsuperscript{th} Assessment Report that current development is moderately threatened by climate change, while climate change poses a severe threat to future development (Denton et al., 2014). There is also a risk that climate change impacts may reverse some of the development progress made to date (Burkett et al., 2014). From a societal perspective however, a changing climate is just one stressor amongst many (Tschakert, 2007; Stringer et al., 2009). Poverty and inequality, disease, lack of education opportunities, land degradation, biodiversity loss, poor governance, corruption, population growth, political economic factors, conflict and migration all interplay with climate change to determine development outcomes in a particular location (Stringer et al., 2010; Bennett et al., 2015). While the scale of climate change is global, the impacts will vary spatially. The
most exposed and sensitive populations are at highest risk of experiencing the most severe impacts. These same populations are often also least able to cope (Adger et al., 2003).

International responses to climate change have evolved significantly over time, with an historical distinction made between adaptation and mitigation (Stringer et al., 2009). Initially, global policy, led by efforts under the United Nations Framework Convention on Climate Change (UNFCCC), focused on climate change mitigation. Mitigation involves reducing greenhouse gas emissions, as well as managing carbon sinks to facilitate greenhouse gas absorption. Together, these mitigation actions reduce the magnitude and rate of climate change. This line of response was justified by the need to prevent further dangerous modification of the atmosphere’s composition (Barker, 2003). However, it is now acknowledged that mitigation alone is insufficient, and that adaptation is, and will be, critical, in dealing with what have become unavoidable impacts (Stern and Treasury, 2006), especially across the African continent (Niang and Ruppel, 2014). Indeed, society needs to adapt to climate changes brought about by historical emissions.

The 2001 Marrakesh Accords to the Bonn Agreements under the UNFCCC marked an important step forward in the recognition that both mitigation and adaptation have an important role to play in managing future climate change (UNFCCC, 2007). At the same time, the threat that climate change poses to development has been increasingly acknowledged (Ayers and Huq, 2009), and decision makers are realising benefits in reconciling mitigation, adaptation and development (Watkiss et al., 2015), such that efforts to manage climate change are embedded into nations’ overall development trajectories (Kok et al., 2008). This shift has stimulated interest in identifying opportunities that simultaneously address adaptation, mitigation and development, under the label of climate compatible development (CCD) (Mitchell and Maxwell, 2010).

This chapter unravels CCD to examine whether it does indeed mark a new development landscape, and identifies the challenges and opportunities in moving from CCD rhetoric towards its operationalization. It begins by reviewing the CCD literature published up to November 2015. It then draws on published and on-going research on CCD in southern Africa that uses policy analysis and semi-structured interviews with policymakers and other climate and development stakeholders, to identify the challenges and opportunities in moving CCD rhetoric into policy and practice. It concludes by using the empirical examples to evaluate claims that CCD presents a new development landscape.

**Challenges in moving CCD from rhetoric to practice**

When Mitchell and Maxwell presented the concept of CCD in 2010 as a core concept underpinning activities of the DFID-funded Climate and Development Knowledge Network, it was heralded as a basis
for a new development landscape (Mitchell and Maxwell, 2010). CCD was said to provide a framework through which climate change and development trajectories can be aligned, to minimise the harm caused by climate impacts while maximising human development opportunities created by low carbon emission endeavours. It was predicated on the idea that adaptation, mitigation and development are necessarily linked; whereby progress in each component has implications for and is dependent upon progress in the other two, over particular temporal and spatial scales (ibid.). As noted in chapter 1, CCD offers scope to move beyond silo approaches to mitigation, adaptation and development to provide ‘triple-wins’ for each component. It integrates climate-resilient development strategies that focus on adaptation, with mitigation initiatives to reduce carbon emissions and/or enhance terrestrial carbon storage, without compromising development (Mitchell and Maxwell, 2010). The CCD approach plays into the prevailing trend of ‘nexus thinking’ (Conway et al., 2015). It aligns to the policy discourse around shifts to a green (or low-carbon) economy, allowing a focus on interconnections and relationships across scales, stakeholders and sectors, between different components of a policy whole (Ringler et al., 2013). Such joined-up decision making is alluring in a policy sense, because it is seen as more cost-effective and efficient, both temporally and spatially, than piecemeal approaches (Ficklin et al., under review). Nevertheless, how CCD differs from climate change policies that claim co-benefits remains unclear. CCD could add to confusion about existing myriad concepts such as the green economy, climate resilient development and sustainable development, which also seek to foster more integrated policymaking (Nelson and Lamboll, 2012).

Analysis of the use and impact of CCD reveals that it occurs between and among different levels of government, civil society and the private sector (Dyer et al., 2013). Yet within existing CCD empirical evidence there is a lack of critical engagement among scales of state governance, scales of decision making and local participation. This raises questions not only about what kind of challenges already typify the multi-sector and multi-stakeholder aspects of CCD, but whether or not new forms of institutional processes are emerging to reflect the integration of climate adaptation and mitigation with development and the shift towards triple-win thinking (Ficklin et. al., under review).

Stringer et al. (2014) drew on data from a multi-stakeholder workshop involving participants from the Democratic Republic of the Congo, Mozambique, Zambia and Zimbabwe and found that the concept of CCD was generally welcome in the policy arena. Workshop participants noted that CCD provides scope to extend the analytical focus of climate change policies and actions beyond standard cost-benefit analyses of development decisions. They also considered that the ‘integrative template’ that CCD offers is useful when reviewing development policies, providing a reminder to actively consider climate change adaptation and mitigation. CCD further highlights the need to place climate change at the centre of cross-sectoral and inter-ministerial discussions. Nevertheless, participants also noted the importance of the existing institutional environment and that CCD does not take place independently from this. The
effectiveness of CCD when put into practice is determined by the institutional and coordination characteristics of the political economy and governance system already in place (Tanner et al., 2014), alongside the degree of buy-in and political will to pursue such an integrated approach.

The kinds of institutional structures that collaborate and compete within CCD’s conceptualisation, the ways in which they are established, and understanding of how they operate, have only gained minimal attention within CCD research. Gaining a clear overview of these aspects is essential to make sense of emerging empirical evidence. The multi-level and multi-sector nature of climate change policy implementation inherently produces conflicting governing processes, actors and outcomes. Adding a ‘development’ win to the mix suggests that CCD will impact even more processes, actors and outcomes, and by extension, more institutions, sectors and regulatory bodies. Operationalizing CCD thus requires more than an extension of existing climate policy initiatives to also include ‘development’ as there are significant implications for discursive and institutional shifts in environmental policies and regulation at all scales (Ficklin et al., under review). That environmental outcomes are largely the result of political choices, institutional structures, and power relations that cannot be separated from the broader political-economic dynamics of globalisation (McCarthy, 2004) has been recognised within CCD research (Tanner and Allouche, 2011). However, the details of such choices, structures and relationships require more rigorous exploration in order to make sense of the outcomes they produce and who wins and loses out in the process. Indeed, the social justice implications of CCD are underexplored yet potentially paramount (Mathur et al., 2014; Wood et al., Under Review).

CCD builds on the literature that notes that past, current and future development pathways, and the greenhouse gas emissions they entail, will determine the magnitude of climate change to be experienced. However, CCD glosses over past tensions between climate change and development, particularly in countries like those in southern Africa, where poverty and inequalities remain stark (Hulme, 2011). The vast majority of emissions have taken place in the developed world. Hertwich and Peters (2009) illustrate this in their analysis of greenhouse gas emissions associated with the final consumption of goods and services in 73 different nations around the world. They argue that the processes causing greenhouse gas emissions benefit society by providing consumer goods and services. However, the distribution of those benefits, and therefore responsibility for emissions, are uneven. They find per capita emissions in countries such as Malawi are less than 1 tCO₂e/y compared with >30 tCO₂e/y in countries such as the United States. It is therefore understandable that there are tensions between the developed world and nations in southern Africa which feel they are unfairly bearing the brunt of climate change impacts that stem from a problem caused largely by nations elsewhere. At the same time, because southern African nations do not want their development opportunities to be curtailed, they see value in a CCD approach. However, as Stringer et al. (2014) observe, based on their workshop and interviews with stakeholders from four southern African countries, the CCD concept
does not clearly set out the roles and responsibilities of different stakeholders. Providing clarification on this is vital if the current inverse distribution of risks and responsibilities is to be reversed and development successes are to be achieved (Barrett, 2013).

Development success is traditionally measured in economic terms, using macro-indicators such as changes in a country’s GDP. While focus on inequality and the reasons for inequality have become more central in the agenda international development researchers (e.g. through analyses using the Gini coefficient, or broader approaches focusing on development as freedom (e.g. Sen, 2001)), inequalities are worsening, particularly in Africa. UNRISD (2013) identify that policies seeking to promote equality of development outcomes have been neglected in favour of approaches that purport to offer equality in opportunities. However, the success of such ‘equality in opportunity’ policies is questionable. They argue that disparities in outcomes indicate inequalities in initial opportunities and note the urgent need for mechanisms such as land reform, corporate taxation, social protection and macroeconomic policies to ensure the labour force can absorb sufficient new entrants, alongside technologies that support the reproduction of labour that is disproportionately borne by (unpaid) women. These findings have important implications for managing climate change and its impacts, as vulnerability to climate change has been found to positively relate to inequality (Alberini et al., 2006). Some researchers have also argued that adaptive capacity is a key prerequisite that nations need to build prior to being able to engage in substantial mitigation actions (Janetos et al., 2012; Eakin et al., 2009), and that in turn, adaptive capacity can be facilitated by an enabling development context (Tompkins and Adger, 2005), showing the links between adaptation, mitigation and development. Nevertheless, as noted by Wood et al. (Under Review), reducing inequalities is not an explicit demand of CCD, even if triple-wins across all three components are achieved.

While examples of triple-wins are becoming more abundant in the literature (e.g. Klein et al., 2007; Zhou et al., 2012; Pramova et al., 2012; Ellis et al., 2013; Suckall et al., 2015), there is not a deterministic relationship between adaptation, mitigation and development. These three components do not necessarily operate harmoniously (D’Amato et al., 2011). The many possible ways in which adaptation, mitigation and development can interact, and whether or not they deliver triple wins, suggests there is a need for careful analysis of trade-offs. For example, some researchers have cautioned that mitigation activities involving biofuel development in Zambia can have negative social development impacts (German et al., 2011), while others, working in Tanzania, have found that adaptations can have negative development impacts, particularly as people adapt their livelihoods and encroach on the activities and space of others (Suckall et al., 2014).

While analyses in the literature have explored trade-offs at the project level, few have grappled with questions of value within the conceptualisation of CCD itself (Ficklin et al., under review). Efforts to
recognise, measure and evaluate CCD, have largely taken place against an economic backdrop, with a strong focus on carbon emissions, despite Mitchell and Maxwell’s (2010:1) claims that CCD can change “patterns of innovation, production and trade tied to climate responses”. It therefore could be asserted that CCD equates development with growth (Ficklin et al., under review). At the same time, consensus is needed to reconcile adaptation, mitigation and development, and this currently takes place through the lens of economic rhetoric. Ficklin et al (under review) argue that to innovate, produce and trade within a CCD approach that spans sectors, a measurable unit is required to ascertain value. Similarly, for trade-offs to be commensurable, they first have to be measurable, a task to which social, cultural and political interpretations of development add complexity. The dominance of carbon in mitigation and adaptation trade-off rhetoric can also be explained in this way. Carbon emissions are both quantifiable and measurable- qualities that facilitate their commodification and trade. Where CCD strategies create trade-offs between aspects that are fuzzier and more difficult to commodify, for example, cultural significance, wellbeing and community cohesion, achievement of triple wins becomes much more elusive. As Ficklin et al. (under review) note, while CCD claims to set out a new development landscape, it is not embedded within an alternative development agenda or paradigm. As such, it risks reproducing more of the same, as CCD is depoliticised both in its conceptualisation and its operation.

This section has highlighted key challenges and opportunities relating to conceptualisations of CCD in the literature. These include the long-standing tensions between development and climate change, dominated by economic thinking; the silo approaches within prevailing governance; and the dangers of a triple-win focus which reproduces the current system and masks injustices. The next section uses the cases of three southern African countries to examine how some of these key aspects emerging from the literature review are playing out in practice as countries operationalize CCD.

**CCD in practice in southern Africa**

Southern Africa provides an interesting regional focus from both a climate change and a development perspective. The region includes fifteen countries (Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe), all of which are members of the Southern African Development Community (SADC). We present specific examples focusing on Swaziland, Tanzania and Malawi, whilst also referring to literature on CCD in other SADC countries.

Regional climate models are projecting increased climatic uncertainty for southern Africa, especially for temperature, rainfall and wind patterns into the 2050s (Shongwe et al., 2009), with significant impacts projected for water resource availability (Kusangaya et al., 2014). These challenges mean it is very difficult to know which kinds of climate change impacts decision makers need to prepare for in
the future (Jones et al., 2015), and over what time frames and intensities particular changes will manifest. Coupled with this, the southern Africa region encompasses a range of agro-ecological and socio-economic conditions, and faces multiple development challenges. Particular concerns include poverty, poor sanitation, inadequate access to clean water, land degradation, pollution, biodiversity loss, deforestation, HIV/AIDS and other diseases, and poor urban conditions (SADC, 2012), each of which undermines nations’ abilities to manage climate change. Particular development priorities dominate national trajectories and the ways in which mitigation and adaptation are treated therein, as we now explore for our 3 case study countries.

Swaziland

Swaziland is a small landlocked country, surrounded mostly by South Africa, and sharing its easternmost border with Mozambique. The country presents a unique governance context within Africa. It is led by King Mswati III as monarch absolute, so the King has overall control. His political power is spread throughout the country’s remote rural areas by the traditional chiefs who have authority to allocate land to the Swazi people. However, the traditional system operates in parallel with a quasi-democratic parliamentary system in which eligible citizens can vote from a list of political candidates approved by the King. This dual system creates complex interactions that can present particular challenges and opportunities for policy formation and implementation.

The national economy is based largely on agro-manufacturing (sugar and wood pulp production, and citrus fruit canning), while agriculture dominates subsistence livelihoods. As such, the country is highly sensitive to climatic change. Swaziland’s climate is classified as subtropical with summer rains, though the country’s varied physiographic zones mean that the Highveld in the western portion of the country is characterised by sub-humid and temperate conditions, while the low veld to the east is warmer and semi-arid. Until 2014 Swaziland has lacked a policy framework through which it can tackle climate change. However, through 2014 and 2015, development of a climate change policy has been spearheaded by the Ministry of Environment and Tourism. The policy’s creation involved 30 organisations including other ministries, businesses, NGOs and the media.

Our on-going research in Swaziland sought to clarify the relationships between climate change adaptation, mitigation and development within the national policy context, considering wider climate governance questions about who is participating (and not participating) in climate policy development and the implications of this from a CCD perspective. Data were collected from government ministries, NGOs and businesses who were interviewed in 2014. Interviewees were identified starting with the Ministry of Tourism, the coordinator of climate policy activities. A list of stakeholders involved in developing the climate policy was sought, with further interviewees selected using a snowball sampling
strategy. Sixteen interviews were conducted in 2014. A workshop was then held in 2015, involving many of the interviewees or their nominees, to disseminate the research findings.

Our results suggest that development of Swaziland’s National Climate Change Policy has been characterised by uneven participation of different sectors and stakeholders. We found a relatively strong ministry presence in comparison to other stakeholders, with the more visible ministries being Environment and Tourism, Meteorology, Agriculture, and Energy. Economic Planning and Development, and Transport ministries were not represented, raising important questions for the balance between adaptation, mitigation and development. UNDP was the principal funder of the policy’s development, although other international agencies (e.g. the Food and Agriculture Organisation) had some input. Water and electricity parastatals, and NGOs, such as World Vision also participated to some degree. Stakeholders had varying access to external funding to support their engagement in developing the climate change policy. Financial support is generally project-based and not for coordinating efforts between sectors. Some interviewees believed that certain sectors had more opportunities to secure external funding due to international interest in clean energy and technology innovation.

Other important factors shaping uneven participation in policy development include the multiple and often competing agendas of different stakeholders and the relative power imbalances afforded by the country’s dual governance system. Lack of capacity is also problematic and due to the overarching nature of the National Climate Change Policy, it is unclear how all stakeholders can be involved in moving from policy design towards implementation. Furthermore, Swaziland developed its climate change strategy before drawing up its climate change policy, due to the timing of delivery of the external funds to support the process. While the draft National Climate Change Policy has been completed, there are genuine concerns that it could stall before becoming enshrined in national law. This has caused some sectors and government ministries to disengage, as they lack assurances that their views, time and efforts will be channelled into a policy that has legal backing.

Interviewees further noted the coordination challenges in working across multiple sectors, scales and stakeholder groups. Even scheduling meetings at times that all the necessary stakeholders could attend was highlighted as a challenge. Different climate change policy committee members also work with different external and internal stakeholders. Sometimes there are competing interests and different agendas may dominate. Interviewees reported that it had been difficult to address all of these agendas within a single National Climate Change Policy. Indeed, our interview data present different, and sometimes competing, interests and agendas, particularly in relation to adaptation, mitigation and development. For example, energy and water are required for most Swazi economic activities and therefore more national resources are invested in these sectors even though it can cause conflicts in
climate change priorities. As energy is water intensive, the more resources invested in energy production, the more water is required, creating a shortfall in water availability for domestic consumption and farming activities.

Some interviewees considered that mitigation will automatically improve with adaptation, presenting a rather deterministic understanding, while a clear dominance of adaptation emerged in both interview data and the workshop discussions. The exception to this was in the energy sector, which has a strong mitigation focus. Resource availability presents an important challenge and appears an important driver of the adaptation bias. Interviewees indicated that adaptation is appealing to funders such as the United Nations Development Programme (UNDP), the Common Market for Eastern and Southern Africa (COMESA) and the European Union (EU) and this stimulates engagement with the adaptation agenda in some ministries. Interviewees also reported that adaptation dominates the national climate change agenda because agriculture and food production are so central to the Swazi economy.

Interviewees further observed that when information about climate change is shared across sectors much of it is only available in inaccessible formats, and uses technical and/or scientific language. This excludes some stakeholders from discussions, especially local communities. NGO interviewees further lamented that local communities are not recognised as a direct stakeholder in tackling climate change, and that an assumption prevails that local people are only interested in policy implementation. Some interviewees thought that once the policy is in place it can be applied to other issues like poverty reduction that are assumed to be more of a concern than climate change to affected communities. This is potentially problematic as it means that community voices are not being heard within climate change policy. It also closes the space for development policy and local priorities therein to inform climate policy. These findings present a situation in which development is seen as separate from, or even in opposition to, addressing climate change. Indeed, development falls under the mandate of the Ministry of Economic Planning and Development, which is not an active stakeholder within the climate change policy discussions. This suggests an urgent need for improved knowledge sharing on how development links to mitigation and adaptation and demonstrates that CCD rhetoric has not been embraced within the structures and processes of Swaziland’s climate governance.

Tanzania

Tanzania is located north of Malawi and Mozambique, with the eastern edge of the country on the Indian Ocean. Tanzania is a member of both SADC and the East African Community. Tanzania has a socialist post-independence political history but recently followed a more neoliberal development path. Development partners and non-governmental organisations have significantly influenced development policy and climate change policy and programming, with international donor finance and intervention
deeply embedded within the fabric of the country. However, allegations of poor governance and misuse of funds have destabilised this relationship, with donors suspending budget support to Tanzania in 2014. Tanzania’s population was estimated to be 47.4 million in 2014, with approximately 28% considered poor (World Bank, 2015b). The national economy heavily depends on agriculture despite recent growth in telecommunications, financial services, retail trade, mining, tourism, construction and manufacturing. Agriculture contributes approximately 34% of GDP and supports three quarters of the population (AfDB, 2015). Suitable climatic conditions are instrumental for the performance of agriculture and the supply of energy from hydropower dams. Economic performance, energy access and poverty reduction in the country are therefore vulnerable to climate change.

Tanzania has a tropical climate with spatial and temporal variation due to topography, the positioning of the Inter-Tropical Convergence Zone (ITCZ), and changes in the ocean currents. Impacts of projected temperature increases (e.g. Jack, 2011) on heat stress will be higher in cooler locations where the length of the period experiencing heat stress conditions will increase most. Changes in precipitation are uncertain but wetter conditions for most locations and variations in the timing of rainfall are indicated. As well as being a Party to the UNFCCC since 1992, Tanzania was a UN-REDD programme pilot country (2009-2011) and has benefitted significantly from Norwegian finance for REDD+. Tanzania’s Vice President’s Office (VPO) has published a National Adaptation Plan of Action (2007), Climate Change Strategy (2012), National Strategy for REDD+ (2013) and National Action Plan for REDD+ (2013). The country is also developing its Nationally Appropriate Mitigation Actions (NAMA) and submitted its Intended Nationally Determined Contributions in September 2015.

Our on-going research investigated: a) the extent to which CCD policy rhetoric fits with current policy initiatives and b) the realities of mainstreaming such rhetoric into policy in the Tanzanian context. Analysis of national development and climate change policies was undertaken, alongside analysis of key sectoral policies (agriculture, energy and forestry). Twenty-six semi-structured interviews were conducted with policy makers and other staff from government ministries, NGOs and development agencies working at the national level during 2012-2015, prior to the 2015 general election.

Analysis of policy documents and interviews indicated that CCD is a new concept, and the term CCD is not used in Tanzania. Mitchell and Maxwell’s (2010) conceptualisation of CCD was considered effective in stimulating debate about relationships between adaptation, mitigation and development amongst interviewees, and was perceived to be of significant value to guide thinking and programming across adaptation and mitigation amongst ministry staff. However, there was also concern and resistance to the imposition of another externally constructed concept and any future application of it in Tanzania. A policymaker from the VPO noted that CCD is not internationally agreed and may cause
confusion with the phrase ‘Climate Resilient Development’ which is internationally accepted. The National Climate Change Strategy (GOT, 2012a) presents a slightly different conceptualisation of the relationship between adaptation, mitigation and development to that offered by Mitchell and Maxwell (2010). Finance is treated explicitly, featuring as a key pillar alongside adaptation and mitigation, whilst development (beyond financial aspects) is absent. The VPO interviewee stated that: “In Tanzania it is not possible to consider adaptation and/or mitigation in abstract without development in the way suggested by the CCD concept”. Contestation over how development, adaptation and mitigation are understood and presented was evident from both the policies and interview data.

The plethora of donor funded programmes and projects supporting policy creation and action on climate change and development in Tanzania, coupled with the constant requirement to meet national obligations to the UNFCCC, means that policies, strategies and plans have developed in parallel, are led and influenced by different players with varying motives, and varying levels of stakeholder engagement were pursued during their design. This had culminated in policies with different levels of buy-in from government and donor parties, complex institutional architecture and disparate governance, despite the top-down governance model articulated in the National Climate Change Strategy.

Interviewees reported MKUKUTA II, Tanzania’s national growth and poverty reduction strategy, has been superseded by the Presidential Plan in informing governmental decision-making. This is further supported through the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) programme, which shares the ‘resource exploitation for economic growth’ development rhetoric of the Presidential Plan; and the National Climate Change Strategy, which articulates an unwillingness to commit to development with reduced emissions without funding from developed nations.

Alongside different perspectives on development that emerged from our data, a more coherent, yet rather partial, understanding of mitigation was demonstrated. Almost all interviewees focused on sequestration mechanisms including carbon offsets, trade and finance, paying little attention to reducing emissions. This rhetoric has been heavily influenced by REDD+ pilot activities in Tanzania. With REDD+ funding of US$41.82m and US$4.28m from Norway and UN-REDD respectively between 2009 and 2011 (Norrington-Davies and Thornton, 2011), interviewees were enthusiastic about the financial opportunities this aspect of mitigation provides. The Ministries of Energy and Finance were the only government interviewees to mention opportunities to secure finance for alternative low carbon development pathways. However, historically limited interaction between these ministries with those engaged in UN-REDD, and a general lack of capacity and institutional support for low carbon development nationally (Wood et al. 2015), means these views were not widely shared.
Traditional silo working of government ministries and departments, coupled with a top-down model of climate change governance, has compounded emergence of discrete understandings of mitigation, adaptation and development between ministries and across sectors. Interview data suggest a poor understanding of climate change within ministries overall, and policy analysis illustrated inconsistent consideration of climate change within sectoral policies and plans. Ministries with functioning Environmental Management Units (a requirement of the Environmental Management Act (GoT, 2004) to coordinate environmental issues within Ministries and collaborate with other agencies and institutions) e.g. the Ministry of Agriculture and Ministry of Energy and Minerals, demonstrated greater understanding and capacity to consider climate change across their work, and were in a stronger position to share ideas and collaborate across sectors. Development partners preferentially worked with these ministries to support implementation of the Climate Change Strategy. For example, with donor support, an Agriculture Resilience Plan was developed, which comprehensively considers adaptation and mitigation and proposes to establish a Climate Smart Agriculture Task Force. During development of the REDD+ Strategy, again with donor support, a REDD+ Task Force was established. The Task Force initially comprised seven senior level representatives from the VPO, the President’s Office, the Ministry of Natural Resources, and Zanzibar. Following a mid-term review, its membership was broadened to include technical staff from the Ministries of Agriculture, Energy and Minerals, Finance, and Community Development, and a Forest Conservation NGO. This enabled establishment of technical working groups on governance, transparency, local issues, and drivers of degradation and deforestation (e.g. agriculture). According to interviewees, their involvement in the Task Force provided an opportunity to think and discuss collectively, facilitated learning about climate change, and built the expertise of individuals as climate change experts in their respective institutions. Despite these benefits, the Task Force was part of a donor-funded initiative, and, with limited political support for its continuation, it disbanded at the end of the programme.

Overall, to ensure more joined-up understanding of climate change and development, more sustainable engagement and a more coordinated approach to policy and action is needed. This needs to be supported by a more effective governance model that considers cross-sectoral engagement and learning more prominently, as per the REDD+ Task Force efforts. However, such structures need to be paired with a rebalancing of power, as well as needing to reconcile competing climate change and development rhetoric across policies and ministries. Although currently not used in Tanzania, CCD could offer a pathway to leverage the necessary changes.

**Malawi**

Malawi is a relatively small, landlocked country in the dry sub-humid zone of eastern southern Africa. In 2015, its estimated population was >17 million people, making it one of SADC’s most densely
populated countries. Malawi faces significant food insecurity and high levels of poverty (UNDP, 2015). These issues are exacerbated by population growth and climate change. The latter is leading to enhanced rainfall variability and longer dry spells in the maize growing season (Sutcliffe et al., 2015; Simelton et al., 2013), alongside prolonged intense storms. Regional studies highlight that Malawi is particularly vulnerable to climate change (Abson et al., 2012; Davis, 2011). 90% of the population depends on rain-fed maize agriculture for subsistence (Ellis et al., 2003) but production is particularly sensitive to changing patterns of rainfall (Simelton et al., 2013; Tadross et al., 2009).

Despite development and climate adaptation being considered pressing national priorities (GoM, 2006; GoM, 2011), the Malawian Government also regards climate mitigation as an important policy goal, considering that mitigation “will yield positive local and global socio-economic as well as environmental benefits” (GoM, 2012). Malawi’s national climate policy infrastructure encourages the use of sub-national projects to advance development, mitigation and adaptation, thereby facilitating CCD (GoM, 2012), so the CCD concept appears to be more widely understood in Malawian policy circles than in Swaziland and Tanzania. This may be partly due to the donor context, as the UK’s Department for International Development has been using CCD rhetoric in Malawi.

Through semi-structured interviews with climate and development professionals in April 2014, 12 projects which pursued CCD goals were identified nationally. Many other projects exist which involve similar activities and approaches but do not explicitly pursue CCD triple-wins. Largely, these projects aim at enhancing and diversifying livelihoods and transcend the agriculture, forestry, energy and water sectors. Project developers suggested that combining development, mitigation and adaptation within single projects helps them to attract new forms of funding which are contingent on the achievement of climate benefits (e.g. adaptation finance, carbon credits). CCD therefore creates opportunities. However, weaknesses in the Malawian governance context constrain the design and implementation of CCD projects.

Interviewees reported that a silo policy environment exists, whereby the Environmental Affairs Department within the Ministry of Natural Resources, Energy and Mining has sole responsibility for climate strategy and action. Meanwhile, mitigation and adaptation are ill-considered within policymaking across other ministries and departments. This is so even in those dealing with policy areas for which the consequences of climate change are likely to be profound, such as energy and disaster risk management. Co-ordination of projects and stakeholders at the national-level was regarded as ad-hoc, despite successful co-ordination being crucial for helping project benefits to spread across spatial scales and beyond finite project lifespans (Stringer et al., 2012). Existing coordinating bodies (e.g. the Centre for Environmental Policymaking and Advocacy — CEPA, as well as government task forces and working groups) were seen by most interviewees to suffer from capacity and resource shortages.
Although CCD goals are valued nationally, the concept has not yet entered the everyday lexicon of Malawian policymakers and practitioners. Moreover, there is disagreement over how best to define other concepts related to CCD, such as climate resilience and climate-smart agriculture. Consequently, interviewees suggested these concepts are operationalised in dissimilar and sometimes contradictory ways. Government policy seems to use the concepts interchangeably without defining their scope or relevance for the Malawian context. Agreement of nationally-appropriate definitions through multi-stakeholder deliberations would be an important step to encourage harmonisation.

Ongoing analyses are investigating projects implemented under the national-scale *Enhancing Community Resilience Programme* (ECRP) to assess the social justice implications of CCD practice. The ECRP constitutes a major donor-funded set of projects aiming to help Malawians achieve food security and economic development goals whilst enabling adaption to the consequences of dry spells and drought; heavy rains and flooding; and strong winds. Projects also contribute to mitigation co-benefits through support for energy-efficient cookstoves, forestry activities and conservation agriculture practices. Interviews and surveys with donor representatives, NGO implementing partners and national and district government employees revealed considerable overlap between their preferences for ECRP design. Each prioritised the achievement of CCD triple-wins and regarded packages of mutually-reinforcing community- and ecosystem-based activities as crucial for their achievement. Interviews and surveys with households participating in ECRP across six study villages revealed that local priorities for project design translated into the pursuit of double-wins across development and adaptation. Such common ground could encourage multi-stakeholder working and help advance CCD in Malawi. However, our research suggests that points of contention between stakeholders may have been obscured by power dynamics within project design spaces. Government and NGO dependence on donor funding and local people’s dependence on project resources create strong incentives for stakeholders to confirm, rather than challenge, donors’ convictions.

Analysis of cross-scalar cost-benefit trade-offs created by the ECRP shows that CCD ‘wins’ are distributed unevenly across time, space and between local people. Projects have resulted in highly-prized food security, income and asset-ownership gains for significant numbers of participating households. However, resource poor and female-headed households are least likely to participate in projects and least likely to experience benefits. As such, local people consider projects to have exacerbated local inequalities.

Households reported experiencing almost four times as many development benefits as adaptation benefits, on average. Evidence from our analysis of the ECRP and elsewhere (e.g. Ireland, 2012) suggests that limited adaptation benefits may result when NGOs re-package longstanding rural
development activities which are fundamentally unaltered in order to attract new forms of climate finance. Current climate variability already compromises the extent to which these activities translate into the achievement of CCD goals. Expected future climate change would further curb the delivery of benefits from these activities (McSweeney et al., 2010). Despite this, the ECRP could make a significant mitigation contribution. It is estimated that carbon savings from project forestry and cookstove activities could offset the annual footprint of 94,560 United States citizens or 239,929 Chinese citizens (World Bank, 2015a). However, capacity shortages and other barriers restrict projects’ abilities to generate mitigation finance that could be reinvested to fund additional development and adaptation.

Overall, our findings highlight that CCD is a new approach in Malawi which overlaps with a number of other concepts that seek to integrate climate and development goals in policy and practice. However, these concepts have been poorly defined and seem to be used interchangeably. Failure to define CCD in a nationally-appropriate manner could undermine its achievement, especially in a policy environment that still operates in silos, and where stakeholder co-ordination is limited. Development, mitigation and adaptation goals are valued by a range of stakeholders operating across governance levels, indicating broad support for CCD and triple-win project framings. Despite that Malawi has contributed a negligible amount of historical greenhouse-gas emissions globally the importance of mitigation is recognised by the government. Accordingly, and fostered by the country’s supportive policy infrastructure, numerous projects which pursue, or have potential to create, CCD goals, exist in Malawi. Finally, evidence from project-level research shows that CCD can create trade-offs that are concealed by its popularised depiction as a mechanism for achieving triple-wins. Re-packaging rural development activities as ‘adaptation’ threatens to undermine CCD benefit-creation. Moreover, there is a risk that CCD projects could reproduce and exacerbate inequalities in Malawi unless support is provided to help the most vulnerable local people participate.

Discussion
Analysis of case studies from Swaziland, Tanzania and Malawi demonstrates that many of the challenges in CCD rhetoric identified in the literature carry through into CCD implementation. In this section we synthesise three key findings and evaluate how they play into claims that CCD offers the opportunity for a new development landscape (Mitchell and Maxwell, 2010).

**CCD has multiple conceptualisations, sharing common ground with other approaches. While this can create opportunities to harness co-benefits and triple wins, it can also expose weaknesses in the existing governance context.**

Despite CCD’s multiple conceptualisations (which are understood differently within and across our case studies, their stakeholders and sectors), the common ground between CCD and other approaches is generally viewed positively, whether or not CCD is actively practised. CCD is seen as an opportunity
for more joined-up working and offers potential to create opportunities to harness co-benefits and triple-wins that may have otherwise been missed. The Malawian case in particular, shows that stakeholders appreciate the need to tackle adaptation, mitigation and development in a more joined up way than has been the case in the past. As such, CCD provides a normative frame for streamlining climate and development activities. Beyond these possibilities, CCD can nevertheless expose important weaknesses in the existing governance context – weaknesses that need to be addressed if CCD goals are to be achieved. In Swaziland, domestic efforts to simultaneously tackle climate change and development issues are stymied by the dual governance system combined with financial challenges, uneven stakeholder involvement in climate change policy development and an adaptation bias to activities. This contrasts with the Tanzanian case where mitigation through carbon sequestration dominates, largely due to donor funding made available through the UN-REDD project. It suggests a need for future CCD research to take into account governance and resourcing at multiple scales, critically assessing and questioning the roles of donors in shaping domestic and local level CCD outcomes.

To operationalize CCD in a holistic way requires a holistic understanding of the concept – an understanding that is currently lacking in our study countries. Across all three cases, the need for greater capacity in gaining this understanding is apparent. There is also a clear absence of institutional structures and processes that can foster learning and collaboration (cf. Stringer et al., 2012; 2014). These gaps need to be strategically addressed if advances are to be made in mainstreaming climate change concerns into development planning (cf. Stringer et al., 2014).

While the need for a redistribution of power to support cross-sector CCD activities is perhaps most starkly apparent in the Tanzanian case, this finding resonates with Swaziland and Malawi. Such rebalancing is not an easy task within the current national governance contexts but will be vital in order to effect change. Indeed, the Malawian case demonstrates that such power imbalances filter down all the way to the local level, exacerbating existing inequalities.

**CCD does not make explicit the current and historical tensions between climate change and development, nor does it demand a global re-evaluation of risk, responsibility and inequalities**

Our findings from Tanzania highlight the strong convictions of interviewees that developed nations have historical and moral responsibilities to provide financial support to developing nations to promote low-carbon development. Results from Swaziland illustrate that some countries are locked-in to pathways that mirror available funding and resources at the international level. This can perpetuate a focus on one CCD component, in the Swazi case, adaptation. In Malawi, climate change risks becoming an add-on to development activities instead of projects being designed and developed with the overall goal of delivering triple wins in an equitable and fair manner. Nevertheless, CCD does not explicitly demand resolution of these tensions and fails to offer guidance on the roles and responsibilities of
different stakeholders, as well as questions about who should participate – an issue that requires tackling in order to rebalance risks and responsibilities and reduce inequalities (cf. Barrett, 2013). The Swaziland case provides a useful example here because communities have been completely overlooked as a key stakeholder in policy development.

Inequalities at the project level are most apparent in the Malawi case, where the ECRP project insufficiently marries equality of opportunity to participate in the projects with equality of outcomes. CCD does not explicitly require a focus on winners and losers, so outcomes can be aggregated at a particular scale of interest without considering distributive justice. This raises important questions about whose definitions, understandings and perspectives count and where (and when) any trade-offs exhibit. As noted by Ficklin et al. (Under Review), the literature currently lacks critical assessment of whether CCD does create synergies and benefits (and for whom) by bundling together efforts to address both climate and development challenges. This pulls the question of how we measure achievement of CCD to the forefront of considerations, particularly given the dominant economic thinking within the current global capitalist system. Indeed, the Tanzanian development policy rhetoric with the greatest national political buy-in emphasises resource exploitation for economic growth, without acknowledging the implications for climate change.

**While CCD facilitates consideration of trade-offs, it is embedded within a paradigm that reinforces the reproduction of the current political and economic system.**

CCD emerged from the current political and economic system, and largely reproduces existing thinking and action. While innovation could stem from operationalization of the CCD concept and filter upward in a more bottom-up manner, stakeholders responsible for translating the rhetoric into action are also operating within the same current system. Despite nuances that play out at different scales, CCD acts as a fractal, where similar patterns reproduce again and again at progressively smaller scales. Issues within our case studies (such as a lack of cross-sectoral and multi-stakeholder working; a need for greater learning) need not just be addressed by donors working within single countries (e.g. the REDD+ Task Force developed useful cross-ministerial and multi-stakeholder relations in Tanzania while donor funding was present), but should be tackled at scale, with donors also working together more and learning from each other in their own arena, as well as seeking to institutionalise good practices at the national level so that they continue once donor funding stops. While it is easy to criticise national level stakeholders in Swaziland for jumping on the adaptation funding bandwagon, those in Tanzania for jumping on the REDD+ bandwagon, or stakeholders in Malawi for re-branding existing development activities as adaptation or mitigation initiatives, processes and structures in the wider political economy shape the possibilities and attractiveness of these pathways at the national level. Re-politicisation of the climate and development arena is required if CCD is to provide the basis to an alternative development landscape.
Conclusion
This chapter has analysed the wider CCD literature together with case studies from three SADC countries. We have shown that CCD can take place (somewhat successfully) at the project level, but for CCD to noticeably shift the development landscape requires change at all levels. Despite the many opportunities offered by CCD, results highlight the importance of: i) reorienting the existing governance context to accommodate CCD’s needs, looking carefully at the trade-offs occur between adaptation, mitigation and development and understanding how institutional changes can facilitate their reduction; ii) globally re-evaluating risks, responsibilities and inequalities in relation to climate change and development; and iii) moving beyond reproduction of the current political and economic system, to question it more critically. These aspects are closely interlinked and mutually reinforcing. In the absence of such progress, CCD risks coming to rest alongside the many other mechanisms and concepts that connect already existing development pathways to mitigation or adaptation, without creating the new, positive development landscape it purports to offer.

References


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