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What role for multi-stakeholder partnerships in adaptation to climate change? Experiences from private sector adaptation in Kenya

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ABSTRACT

Amidst increasing interest in multi-stakeholder partnerships (MSPs) in climate discourse, this paper identifies four rationales for why MSPs may be particularly suited to supporting adaptation from existing literatures. With a focus on MSPs that seek to support adaptation among micro, small and medium enterprises (SMEs) in Kenya, we then investigate the extent to which this potential is being realised in practice, through interviews with partners engaged in the design and implementation of MSPs. This allows us to examine some of the opportunities, challenges and distributional risks that may result from employing MSPs to support adaptation. We find that through action and investment from donors and the public sector in areas such as research, data access, relationship building, training and capacity building, access to finance and business incubation, MSPs can enable a wide range of private sector actors to deliver adaptation resources to SMEs. Beneficiaries include small-scale SMEs in agricultural value chains in remote regions, that could otherwise fall outside of market inclusion. As such, respondents in this research typically considered MSPs to present an exciting opportunity to plug gaps in adaptation and development finance. Further analysis, however, suggests that dependence on market mechanisms for delivering adaptation resources means that MSPs risk excluding the poorest groups, exposing businesses to new risks and reproducing existing inequalities. Additionally, MSPs often remain heavily dependent on donor-led organisations for both resources and momentum. In Kenya, opportunities to develop more integrated responses to supporting the adaptive capacity of SMEs are being missed through a disconnect between the practice of MSPs and national public sector development frameworks and institutions.

1. Introduction

1.1. Multi-stakeholder partnerships for adaptation

Since the 2002 World Summit on Sustainable Development (WSSD) called for ‘Type II’ partnerships to accelerate development (Forsyth, 2010), partnership approaches have been advanced widely within international climate and development agendas, including

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under the Paris Agreement (Pauw and Chan, 2018) and the Sustainable Development Goals (SDGs) (Beisheim and Simon, 2016). Indeed partnership approaches have often become part of official national development policies (Pinkse and Kolk, 2012).

In Africa, partnerships are perhaps most often associated with contracting out of public services and tender-based infrastructure projects, where national governments seek to leverage private sector investment through Public Private Partnerships (PPPs) (Selsky and Parker, 2005), including for flagship national development initiatives (e.g. Government of Kenya, 2018). Yet partnership approaches to development and adaptation take diverse forms and a wide range of collaborative approaches to addressing social challenges in areas such as health, education, water, and poverty alleviation have been observed, which also make use of 'softer' forms of collaboration including knowledge exchange, research and development, and lobbying (Pinkse and Kolk, 2012; Surminski and Leck, 2016). Partnerships are often labelled multi-stakeholder partnerships (MSPs) where: 1) they involve commitments and collaborative arrangements between at least one private organisation and at least one public or one civil society organisation (Harman et al., 2015; Pauw and Chan, 2018; Ros-Tonen et al., 2007; Van Huijstee et al., 2007); and 2) partners converge around the ambition to address some form of social, sustainability or development challenge (Pinkse and Kolk, 2012; Selsky and Parker, 2005).

While not exhaustive¹, at least four clear rationales for why partnership approaches could be particularly suited to implementation of adaptation action can be distinguished from the literature. Firstly, in the context of huge shortfall in adaptation finance, MSPs have been presented as an opportunity to mobilise private sector finance to support adaptation (Pauw and Chan, 2018). In this capacity, MSPs seek to mobilise what Pauw and Pegels, (2013: 258), label, "the private sector *for* adaptation" – wherein the focus is on activating the private sector as a tool for resourcing adaptation and for delivering privately provided adaptation goods and services (c.f. Tompkins and Eakin, 2012) to a wider community. Secondly – and relatedly – neo-liberal market-based development paradigms suggest that in mobilising the private sector, MSPs can offer a more sustainable model for implementing adaptation action, that does not rely on ongoing public or donor finance (c.f. Sharma et al., 2013; Thorpe, 2018). Thirdly, MSPs have been advanced as strategies for developing more integrated and holistic approaches to social challenges, that harness different actors' strengths, resources, knowledge and values to enable outcomes that single stakeholders could not achieve alone (Dodds, 2015; Forsyth, 2010; Selsky and Parker, 2005). Alongside increasing recognition that the multidimensional challenges of climate change necessitate collaboration and communication across multiple sectors, scales and actors, MSPs therefore have potential for coordinating action to address existing fragmentation in adaptation action (Crick et al., 2018b; Dyer et al., 2013; Surminski and Leck, 2016). Finally, the potential for MSPs to adopt a flexible, decentralised and inclusive structure (Brouwer et al., 2016; Hemmati, 2002) appeals – theoretically at least – to the idea that adaptation should be implemented locally, where vulnerability is experienced (Pauw and Chan, 2018).

Despite the prominence of MSPs in climate discourse, fairly limited critical empirical attention has been given to their role in supporting adaptation, including among micro, small and medium enterprises (SMEs) and among those that are particularly vulnerable to climate change (Harman et al., 2015; Pauw and Chan, 2018). Dyer et al. (2013), focused on identifying good practice for partnerships, structured around a small number of in-depth case studies of MSPs designed to reduce the vulnerability of small-scale farmers. While Pauw and Chan (2018), analysed SME participation in high-profile partnership mobilisation platforms and processes, focusing on the contribution SMEs can make as part of the private sector *for* adaptation. There has, however, been limited overarching investigation of the opportunities, challenges and distributional risks that may result from employing MSPs to increase the adaptation resources available to SMEs (hereon referred to as 'MSPs for SME adaptation'). This study contributes to this gap by investigating the extent to which the potential of the above four rationales for employing MSPs in adaptation is being realised in practice. We do this with a focus on MSPs that seek to support adaptation among SMEs in Kenya. This allows us to examine some of the opportunities, challenges and distributional risks that may result from employing MSPs to support adaptation.

1.2. MSPs to support SMEs to adapt to climate change

We adopt a focus on MSPs that seek to support SMEs – businesses with between 1 and 99 employees (World Bank, 2009) – to adapt to climate change, since SMEs dominate enterprise landscapes in developing countries and are fundamental to more inclusive and equitable development. Small-scale agricultural producers and pastoralists form a crucial component of the private sector in sub-Saharan Africa and even small-scale producers in the informal (unregistered) sector can be linked to large and sometimes highly competitive value chains, that incorporate a range of different sized businesses (Carabine and Simonet, 2018). These SMEs tend to be overlooked in national-level adaptation policies targeting the private sector, which generally recognise only a limited range of business and production models (Gannon et al., 2020). This re-enforces existing inequalities and marginalisation and is particularly concerning from an equity perspective, since these SMEs are especially exposed to climate risk (ibid.): Although research has shown that even in non-agricultural sectors, fairly moderate climatic changes can contribute to major disruption to SMEs, through multiple direct and indirect channels (Gannon et al., 2018; Siderius et al., 2018).

SMEs often have important existing adaptive capacities and actively respond to risks – including climate risks – as they perceive them (Crick et al., 2018a; Gannon et al., 2020; 2018) (c.f. Mendelsohn, 2012; Fankhauser, 2016). At the same time, and signalling a clear and strong role for public policy in the management of climate risk, recent research has identified that the ability of private sector actors to adapt effectively and sustainably to climate risk is strongly influenced by the external business enabling environment in areas which are often lacking in developing countries. Lack of access to business finance, inappropriate incentive structures and limited access to markets and technologies (including climate smart agricultural inputs), for example, are all factors that decrease the

¹ For an overview of the principal benefits associated with MSPs for sustainable development more broadly see (Hemmati, 2002).

probability of firms engaging in sustainable adaptation actions, such as changing to climate resilient product mixes and purchasing insurance (Crick et al., 2018a). Access to tailored climate information services, information about adaptation options and general business support from public sources, meanwhile, all increase the probability that businesses will engage in sustainable strategies to manage risks within their operations (ibid, see also Averchenkova et al., 2016; Crawford and Seidel, 2013; Crick et al., 2018b; Agrawala et al., 2011; Chaudhury, 2018; Davies, 2018; Dougherty-Choux et al., 2015; Stenek et al., 2013).

Sustainable private sector adaptation therefore requires structural deficits within general business environments (such as limited access to markets, and finance infrastructure) to be addressed, alongside conditions that support climate-specific adaptive capacity (such as access to climate smart technologies). Such a holistic and multi-sectoral approach to supporting private sector adaptation is challenging to realise, particularly since adaptation policy is often embedded within environment ministries, which are generally poorly empowered to support policy alignment (Pardoe et al., 2018). Pathways to overcoming the multiple barriers in business enabling environments in developing countries, to delivering adaptation resources (c.f. Tompkins and Eakin, 2012) and to implementing integrated action to support SME adaptation are rare within the literature (Crick et al., 2018b; Shackleton et al., 2015); motivating our decision to explore the potential for MSPs within this context.

1.3. A focus on MSPs in Kenya

We further focus our analysis on Kenya since there are arguably few places where climate risk and the challenge of SME adaptation is more pressing. 89% of Kenya is classified as arid or semi-arid (Republic of Kenya, 2012). These are regions that have been characterised as climate change “hotspots” (De Souza et al., 2015; Jobbins et al., 2016; Tucker et al., 2015), where global warming trends are expected to be particularly intense (Huang et al., 2016; IPCC, 2014). And while Kenya has a large and burgeoning private sector, this tends to be characterised by a high number of micro and small enterprises in the informal sector (Crick et al., 2016; Intelcap, 2015), which are heavily concentrated in a mixture of livestock, rain-fed agriculture and agricultural processing and trade, making them particularly exposed to climate variability.

Kenya, additionally, has a comparatively strong policy landscape underpinning MSPs for climate change adaptation. In May 2016, Kenya passed the Climate Change Act (Government of Kenya, 2016) which requires national and county governments to “mainstream and reinforce climate change disaster risk reduction into strategies and actions of public and private entities”, to “build resilience and enhance adaptive capacity to the impacts of climate change”, and to “provide incentives and obligations for private sector contribution in achieving... climate resilient development” (Government of Kenya, 2016). As such, the Act provides for both enabling ‘private sector adaptation’ – the processes through which firms institute strategies to manage climate risk within their own operations – and for unlocking ‘the private sector for adaptation’ (c.f. Pauw and Pegels, 2013).

The Climate Change Act also provides for collaboration with the private sector, civil society and other stakeholders in the form of financial and technical assistance for the development of innovative actions that support climate change responses. Partnership approaches are prioritised more broadly in Kenya’s national development framework. The Public Private Partnerships (PPP) Act 2013 (Government of Kenya, 2013), mobilised by the PPP Unit in the National Treasury, seeks to facilitate and oversee funding arrangements (contracts, risk sharing) for involving the private sector in the creation and management of services or facilities for the use of the general public (c.f. Hemmati and Dodds, 2017). While partnership models are pursued through large-scale national development initiatives under Kenya’s Vision 2030, (for example, the Lamu-Port-South-Sudan-Ethiopia Transport Corridor), as well as in sector policies, such as The Agricultural Sector Development Strategy (Government of Kenya, 2010). Participation rationales are also reflected in the consultative and multi-stakeholder approach to policy making that is enshrined in Kenya’s constitution and surrounding legislation and policy frameworks, and shaped the recent transition to devolution (Munyua, 2016).

2. Methods

The research is structured around two primary components of empirical analysis. First, we identify MSPs in Kenya that seek to support adaptation among SMEs and explore how these MSPs are structured, designed and mobilised. In this section, we pay particular attention to identifying the actors involved in the design and implementation of the partnerships; and to the strategies through which MSPs seek to support SME adaptation and climate risk management. This sets the stage for the main focus of our empirical analysis where we critically examine four rationales identified within the literature for using MSPs to support adaptation, in relation to how key informants (KIs) perceive the sampled MSPs to deliver on these in practice. Throughout the analysis we include specific focus on the role of equity and the extent to which climate risk features in activities.

The research began with literature review, web searches and scoping interviews with national stakeholders to: 1) examine the extent, range and nature of existing research; 2) identify examples of MSPs in Kenya that, within their remit, seek to support SMEs to adapt to climate change; and 3) identify both key actors involved in the design and delivery of these MSPs, (from public, civil society and private sectors), as well as SMEs whose adaptation the partnerships seek to support. Through this process, an initial corpus of actors to approach to participate in KI interviews was identified. Further MSPs and interview respondents were then identified through a snowball sampling approach.

We identified 13 MSPs which included specific commitments to support adaptation among SMEs and from which we were able to interview at least one KI during the period available for our fieldwork. The final sample of respondents (n = 49) includes 21 respondents from the private sector. These are drawn from two notable categories of private sector actor within MSPs: 1) ‘Implementing’ private sector partners, which are integrated into partnerships with the goal of resourcing adaptation and playing an active role in delivering adaptation goods and services to other SMEs through these partnerships; and 2) ‘beneficiary’ SMEs, which the partnerships

aim to support to manage climate risk within their own operations. As will be discussed in the results below, there is significant overlap between these groups within many of the MSPs identified in Kenya. Since civil society and other donor or grassroots organisations emerged as especially influential in the formation and administration of partnerships – and sometimes have monitoring and evaluation frameworks supporting critical reflection on MSP outcomes – these actors were particularly well captured within the sample ($n = 19$), compared to respondents from the Kenyan public sector ($n = 9$). The KI sample was not intended to be representative, but rather illustrative of the types of actors involved in MSPs for SME adaptation in Kenya and of the types of activities taking place. The research identified MSPs operationalised across Kenya. However, KI sampling focused on Nairobi, where many implementing partners were based, and Laikipia County; a county close to Nairobi, with a semi-arid climate, in which SMEs are highly exposed to climate risks.

In-depth interviews were conducted face to face and were semi-structured, starting with open-ended lines of questioning to allow participants to articulate their own priorities in the context of the research questions. Interviews explored KI's experiences of forming and implementing the MSPs, operational and governance strategies in partnerships and perceptions of the outcomes, opportunities and challenges of the MSPs for delivering SME adaptation, with a particular focus on equity. The interviews were mostly executed in English, with a number of the interviews with 'beneficiary' SMEs conducted in Kiswahili. Interviews were then coded iteratively using a combination of inductive and deductive approaches. In some instances, KIs shared written materials on MSPs that they were involved in, including monitoring and evaluation (M&E) reporting outputs. These were incorporated into the corpus of data and used to establish broader understanding of the design and structure of MSPs in Kenya and to triangulate findings. Routinely accessing these reports was nevertheless challenging, since M&E outputs are often maintained privately, as internal partnership documents.

3. The MSPs supporting SME adaptation that were identified in Kenya

A brief summary of each of the MSPs that were identified and from which KIs were sampled in the research is offered in [Table 1](#). A more detailed overview of each partnership, including key partners, the adaptation and resilience building resources they seek to mobilise for SMEs and the strategies that they use to do so, is provided within Supplementary Material.

The MSPs in [Table 1](#) are composed of diverse organisational structures in both intent and design. They operate at various scales, in terms of the scope of their activities and the number of actors integrated into the partnership. They also feature many combinations of actors including: National and county government departments and agencies; NGOs, research institutes and other international development partners; and a range of private sector actors including producers and pastoralists, producer groups and cooperatives, other types of SME (including local processors, traders and input providers) and larger private sector actors (including national insurance companies and exporting and manufacturing companies).

All of the MSPs identified in [Table 1](#) pursue activities designed to support adaptation action among small-scale agricultural producers. However, the range of SMEs targeted as beneficiary SMEs within these partnerships is much more diverse and includes the breath of SMEs involved in agricultural value chains; who are supported through partnerships, for example, to develop new agricultural adaptation technologies and new business linkages for distribution of climate smart crops. The majority of beneficiary SMEs directly targeted through the MSPs nevertheless constitute small-scale agricultural producers and other micro² (1–4 employees) and small-scale (5–19 employees) enterprises. It is possible that additional interviews would have uncovered further MSPs that seek to support adaptation outside of agricultural value chains. Yet we did not identify any within this research, suggesting that currently in Kenya, MSPs for SME adaptation primarily target business enabling environments for the agricultural sector.

The extent to which each of these partnerships focused on adaptation to climate risk varied significantly, with actions to support climate-specific adaptive capacity among SMEs typically pursued alongside actions focused on overcoming wider barriers and structural deficits within the general business environment. In some instances, the MSPs identified by KIs adopted a "pure" development-oriented approach to supporting adaptive capacity (c.f. [Mcgray et al., 2007: 18](#)), focused on developing general business enabling conditions to support broader SME resilience, and reduce overall vulnerability to risk, without specific focus on addressing the impacts of climate change (e.g. Tosha Livestock Traders). In this sense, these MSPs reflect the perspective that adaptation is intimately linked to broader vulnerability, with activities under the partnerships sitting closer to the development end of the adaptation-development spectrum ([Mcgray et al., 2007; Singh et al., 2016](#)).

The MSPs identified are typically structured around memoranda of understanding signed by 'primary' partners, as well as other formal and informal bilateral and multi-lateral agreements developed to implement activities under the partnership (c.f. [Santacoloma et al., 2013](#)). KI's reflected the idea in [Forsyth, \(2010: 683\)](#) that partnerships "have to be built", noting MSPs typically require an institution, or even a small number of individuals, to initiate the process of partnership building. Among our sample of KIs, MSPs were seen to be a donor-led development practice, initiated most often by NGOs and other donor agencies. Echoing this suggestion, all but three of the MSPs in [Table 1](#) are led by NGOs or other international development partners, with all MSPs heavily influenced by – and linked to – donors and their funding. KIs suggested that donor agencies and donor-funded national and international NGOs have often adopted the development of strategic partnerships as a fundamental principal underpinning their core institutional mandates and strategy. As such, MSP approaches are often embedded criteria within donor funding requirements, with MSPs integrated into the design of development projects from their inception.

KI's suggested MSPs are a prevalent model for delivering adaptation and development action in Kenya. Several KIs held membership of more than one MSP that sought to support adaptation among SMEs – with many more linked to MSPs related to broader

² As defined through the [World Bank, \(2009\)](#) Enterprise Survey methodology

Table 1
MSPs supporting SME adaptation from which KIs were sampled.

Name of MSP	Key ways in which the MSP aims to support resilience of SMEs
Conservation Agriculture for Food Security (CA4FS)	Aims to build the resilience of smallholder farmers and other SMEs involved in equipment fabrication and distribution in Machakos and Laikipia counties, through enhancing the adoption of conservation agriculture practices and building value chain linkages to improve access to climate-smart technologies, reliable suppliers and markets.
Enonkishu Conservancy and Mara Beef Partnership	Aims to support integrated management of wildlife and livestock and to provide producers with a more reliable and consistent market for their beef, including at times of climate shock.
The Horticulture and Food Security Programme (HFSP)	Aims to build resilience along value chains through a range of interventions designed to increase access to quality inputs and markets, alongside diversifying crop production.
HortIMPACT	Aims to build resilience along fruit and vegetable value chains through business linkages and increased access to new technologies, services and markets. It does this with the goal of supporting crop and income diversification, reducing post-harvest losses and supporting value chain development.
Kenya Cereal Enhancement Programme (KCEP)	Aims to support SME cereal and pulses producers to access climate smart technologies and services and markets for climate resilient cereal commodities and pulses.
Kenya Livestock Insurance Program (KLIP)	Aims to develop a livestock insurance scheme to provide affordable safeguards to support vulnerable pastoralists to keep more livestock alive during times of drought.
Kenya Markets Trust (KMT) agri-inputs and services partnerships	Aim to support commercialisation of climate smart products and inputs targeting smallholder farmers through closing gaps in value chains and overcoming barriers in business enabling environments.
Mau Mara Serengeti Sustainable Water Initiative (MaMaSe)	Aims to support sustainable resource use through markets, and through inputs and training for products that conserve water or restore forests, to support sustainable management of rangelands.
Northern Rangeland Trust (NRT) LivestockWORKS	Aims to support strategic destocking among pastoralists, to avoid large herds that cannot be sustained at times of drought, and to support access to inputs, such as feed supplements, through value chain integration.
PREPARED (Planning for Resilience in East Africa Through Policy, Adaptation, Research, and Economic Development) weather index-crop insurance	Aims to increase access to weather-index crop insurance and to enhance weather advisory services for producers who otherwise lack safety nets in the event of climate shock.
Smart Water for Agriculture (SWA)	Aims to increase access to climate smart water products and services for producers that reduce labour demands and inputs and promote off-season production opportunities.
Strengthening Adaptation and Resilience to Climate Change in Kenya (StARK +) agricultural value chain partnerships	Aim to increase access to finance, training and improved inputs to facilitate climate smart agriculture to scale up private sector innovation and investment in low carbon and adaptation products, services and assets.
Tosha Livestock Traders	Aims to support female live animal traders to access reliable markets through aggregation and business linkages and to support wider entrepreneurship skill development for income diversification.

adaptation and climate resilient development objectives. Increased emphasis on partnerships – in all their forms – was often considered to be an outcome of the national emphasis on more participatory forms of governance: “*I think if you were to walk into government offices today, or civil society offices today, everybody will be talking about partnerships and representation and participation and inclusion and all of that*”, one NGO-based respondent explained.

4. Expectations and realities of MSPs for adaptation: Experiences from MSPs for SME adaptation

With significant investment from donor and public sources being made in developing MSPs for SME adaptation in Kenya, the rest of this paper explores to what extent stakeholders consider MSPs to be living up to their promises in the context of supporting SME adaptation. We structure this section through the exploration of four key rationales for MSPs identified within the literature, each of which is examined in turn, to identify stakeholder perceptions of their relevance and outcomes in practice.

Rationale 1: MSPs can upscale enabling conditions for adaptation through unlocking the private sector for adaptation.

KI’s in our research strongly echoed the idea that unlocking private sector investment was a core goal within the MSPs for adaptation that they are involved in. These respondents emphasised the idea that private sector actors can generate goods and services that help broader communities – including SMEs – to adapt to climate risk. Yet they also emphasised that many of the possible actions and investments private sector actors could take to deliver adaptation benefits for other actors may lack a clear ‘business case’, may face other barriers to implementation (e.g. access to information), or may entail risks and costs for the private sector actor mobilising them. MSPs for SME adaptation were therefore presented as a tool through which public and civil society actors could support and incentivise private sector actors to take actions that provide such adaptation goods and services for SMEs.

Informants provided many examples of this dynamic being pursued and achieved through the MSPs within the sample. Partners within the PREPARED project, for example, invested in weather station upgrading and capacity building within the Kenya Meteorological Department. This enhanced the quality of climate data, to support insurance companies to access a robust index to determine

commercially viable premiums for weather-index crop insurance for poor farmers. The CA4FS partnership, meanwhile, linked agricultural producers to conservation agriculture fabricators and buyers and used grant and cost-sharing arrangements to support these private sector actors to develop businesses that improve small-scale producers access to climate-smart agricultural technologies and markets.

KIs emphasized that a variety of private sector actors can be mobilised to produce adaptation goods and services in this way. Activities such as the development of demonstration plots, and new climate smart input and service providing businesses (for example

Table 2

Strategies employed to unlock the private sector for adaptation within the MSPs identified by KIs.

Strategies	How this strategy is used within the MSPs outlined in Table 1	Examples of MSP activities employing this strategy
<i>Value chain and market analysis</i>	Many of the MSPs were underpinned by value chain and market analysis, through which development actors seek to identify weaknesses and opportunities within and along value chains that limit producers' resilience in the face of climate and other risks. In many cases, development actors then seek to identify opportunities for private sector actors to support horizontal and vertical transformations within the value chain and to create new products and services that support climate resilience among smallholder farmers. This is often accompanied with analysis of the enabling conditions required to close barriers to entry, which can then be used to guide strategic donor and public interventions.	KCEP was structured through identifying business cases and brokering business linkages between small-scale producers and larger scale processors, to develop new climate resilient crop value chains.
<i>Multi-stakeholder dialogue forums and brokering of business linkages</i>	KIs suggested MSPs almost always include some action designed to facilitate multi-stakeholder dialogue and create opportunities for private sector actors to share knowledge, learn about each other's needs and the needs of a given customer base, identify areas of complementarity and build trust.	Netherlands development organisation SNV held 'partner days', under the HortIMPACT and SWA partnerships, to bring together value chain actors to identify synergies and opportunities for collective action.
<i>Research and other investments in information and tools</i>	KIs identified a range of interventions through MSPs that were intended to overcome gaps in research and information that serve as barriers to entry for private sector in delivering adaptation goods and services. This included collaboration with research institutes and investments in data collection, as well as in areas such as market and climate information.	PREPARED led to a quality service improvement programme with Kenya Meteorological Department, which emerged in response to identification of climate data quality as a core challenge for insurance companies who struggle to access a robust index through which to determine commercially viable premiums for crop insurance.
<i>Marketing</i>	KIs identified cases of MSPs being used to support private sector actors to advertise products and services, such as climate smart inputs and technologies, through activities such as training and technology demonstration and through partnering with local extension services.	The CA4FS partnership supported agricultural equipment suppliers, who produce tools for conservation agriculture, to create awareness about their products in new markets through demonstration plots and trainings.
<i>Access to finance, financial incentives and financial de-risking strategies</i>	KIs identified a range of financial mechanisms through which public actors within MSPs sought to enable and incentivise private sector actors, including SMEs, to provide goods and services that support producer-level adaptation. These include subsidies, loans, tax incentives, grants, co-investment models and other de-risking strategies.	The Innovation Fund established within HortIMPACT provided start-up financing for SMEs to develop new products and services that support value chain upgrading and other adaptation and production constraints within value chains.
<i>Incubation services</i>	KIs provided examples of business incubation services such as mentoring support, support to set up contracts (e.g. for out-grower schemes) and other forms of business and climate information training being offered through MSPs, to support private sector actors to deliver adaptation goods and services.	KMT worked in partnership with actors, including Farmers Pride, to deliver business incubation services for young entrepreneurs to set up agri-business franchises that increase producers' access to improved inputs.
<i>Empowering the consumer base</i>	In addition to undertaking interventions to support implementing private sector actors to mobilise for adaptation (c.f. Pauw and Pegels, 2013), KIs also described ways in which MSP partners took action to address gaps within business enabling environments directly at the level of beneficiary SMEs, to allow them to access and benefit from partnerships and to encourage implementing private sector actors to provide adaptation goods and services to them. This included activities such as delivering trainings on adaptation strategies, providing loans and financial incentives to invest in new inputs, services and technologies and supporting producer organisation in sustainable common-pool resource management. It also included helping to mobilise producer aggregation, to improve the bargaining power of small-scale producers. KIs highlighted that such action has the potential to be mutually reinforcing in terms of unlocking the private sector for adaptation; providing a consumer base that is empowered to respond to investments from the wider private sector and which can participate more consistently as suppliers of quality products within value chains.	The SNV-led Smart Water for Agriculture programme engaged financial institutions to launch a Smart Water Loan facility to provide loans to smallholder farmers through saving and credit cooperatives to allow them to adopt smart water solutions provided by private sector partners. KMT partnered with Tosha Women's Group to support aggregation of sheep and goats among female live animal traders in Marsabit, to enable them to enter into contractual agreements with established end-market players and transport providers.

under an Innovation Fund in the HortIMPACT partnership), were offered as examples of ways in which micro and small enterprises – including producers, female-led SMES and SMEs in the informal sector – can contribute to enhancing the adaptive capacity of other SMEs in agricultural value chains through MSPs. “It may also be simply a supply shop or a service provider who is providing a specific service, even as an individual”, one respondent explained. “[So] when you talk about private sector, let’s not just look at big companies”.

KIs highlighted that in some instances, formal contractual arrangements with clearly specified roles, financial flows and risk sharing mechanisms, more akin to those envisaged within Kenya’s PPP framework (see also Rankin et al., 2016; Santacoloma et al., 2013), are integrated into MSPs for SME adaptation. However, as illustrated in the above examples, they emphasised that, in MSPs, both public and civil society partners most often seek to bolster private provision of adaptation benefits through a wider range of more flexible commitments to sharing various resources with private sector actors, including knowledge and expertise. The primary strategies employed within MSPs to mobilise the private sector for adaptation, identified by KIs, are summarised in Table 2. Alongside business loans and training, these include activities such as value chain analysis, investments in data products, and the development of multi-stakeholder forums, to identify and broker business linkages between private sector actors.

Both SME and larger-sized implementing private sector actors interviewed in this research echoed the idea that action and investment in areas such as research, data access, relationship development, business incubation and access to finance, could motivate their participation in MSPs and support them to deliver adaptation and business development goods and services to SMEs in commercially desirable ways. For these actors MSPs were seen as opportunities to access knowledge and resources, to de-risk investments, to diversify business models, to generate new revenue streams, to promote new or existing products to new or existing markets; and thus, to access opportunities to support internal business development and innovation in response – and to build resilience – to climate change. As one KI from an insurance agency explained, in this way MSPs can be used to compensate the private sector for the additional risk and cost associated with developing and delivering products, services and markets to poorer groups, with higher barriers to access. As one implementing private sector respondent explained: “[To reach the poorest groups], for us there is a greater cost of delivery and there is a higher risk... So, where the public sector [comes in, is it] provide[s] either some sort of extra marketing support or some sort of credit facility or, you know, a revolving fund or a first-loss facility against those higher credit risk individuals”.

Emphasising their own limited internal resources and the scale of the adaptation challenge, for many KIs from the public sector and civil society, MSPs were consequently seen to present an exciting opportunity to plug gaps in adaptation and development finance through a wide range of private sector actors. As such, KIs, from all sectors, expressed significant enthusiasm for partnership approaches to enabling SME adaptation and typically indicated interest in continuing to engage in MSPs in the delivery of their activities (c.f. World Vision, 2015). Indeed, during the interviews, a number of KIs – from all sectors – identified ideas for MSPs that they would like to develop in the future to support their work and, among civil society and public sector respondents, MSPs were presented as mechanisms through which the widespread global interest in mobilising the private sector for adaptation and implementation of the 2030 agenda, may be achieved.

This narrative of opportunity was, nevertheless, tempered by a range of concerns expressed by KIs about dependence on the private sector for delivering adaptation public goods; many of which echo critiques common to neo-liberal and market-based development paradigms. The risk that the public sector may scale back on its own responsibilities to directly support populations to manage climate risk, on the belief that the market will provide solutions, was one notable concern among KIs. So too was the idea that without sufficient planning and safeguarding built into MSPs, they may expose SMEs to new risks and vulnerabilities. Given the role that public-sector and civil society partners play in incentivising the provision of privately provided adaptation benefits through MSPs, KIs also suggested that SMEs may become dependent on payments, technologies, or other resources mobilised through the partnership, to perform their activities, leaving them exposed if these resources or payments are discontinued.

Greater integration of value chains and market linkages was highlighted as a mechanism through which MSPs may create new, potentially fragile, dependencies between private sector actors. KIs highlighted that through MSPs, SMEs may be encouraged towards high levels of upfront investment, or prompted to abandon old ways of life, based on unstable markets and within sectors that remain exposed to notable climate risk. MSPs that aim to support producers to diversify or transition into cash crops (perhaps with reliance on a single buyer), were held to be especially salient in this regard. One informant highlighted, for example, the business linkages brokered under the KCEP partnership, between East African Breweries Limited (EABL) and smallholder cereal producers, who have switched to producing the more climate resilient cereal crops sorghum and millet for EABL, to support the production of a new low-cost beer. KIs suggested that, should EABL stop producing this beer, producers may be left without a ready market for their produce. KIs suggested that weaker partners in MSPs, who are less able to negotiate and represent their interests within a partnership, may be disproportionately exposed to these risks in MSPs.

Rationale 2: By mobilising the private sector, MSPs can offer a more sustainable model for implementing adaptation action.

By mobilising the private sector for adaptation, KIs suggested that MSPs also present an opportunity to cultivate more sustainable – i.e. long-term – solutions to developing enabling conditions for adaptation. In this sense MSPs were felt to offer a meaningful response to the short-term, projectised, single-sector responses to development and adaptation action, which have tended to dominate development practice to date and which have often failed to build resilience over time (c.f. LDC Group, 2019). KIs described such sustainability in adaptation investments being possible where an MSP is able to facilitate the development of a robust business case for private sector actors to deliver an adaptation good or service, which they then have an ongoing, independently-motivated incentive to maintain. MSPs often emerge from time-bound and donor-funded development projects. Thus for KIs who advanced this logic, the role of public and civil society organisations within an MSP is to identify opportunities for shared value in the private sector delivery of adaptation goods and services, to remove barriers to business investments and to create ongoing incentives and capabilities for private sector partners to continue delivering these goods and services, beyond an initial support period (c.f. Thorpe and Maestre, 2015). As one KI explained: “Because we are a development organisation, most of the time we tend to partner with the private sector, because our projects

have a term and when it comes to the end of a term, the private sector can carry on, beyond the project period”.

For this reason, a number of KIs from NGOs identified their institutional partnership strategy as one of brokering ‘indirect interventions’. Most often this involved market or value chain analysis, to identify commercially scalable opportunities for private sector actors to support adaptation among producers, and then brokering business relationships to deliver these adaptation resources, with more limited direct investment in adaptation resources dependent on donor-funding. This role was explained by one KI as follows: “As intervention managers we look at the constraints, what is limiting this market growth, and then we design interventions that are targeted towards addressing these constraints... [We then] interrogate the system and find out who is the best placed person to do this work. And then we work with that person... So, we are trying to get the market to work as it should... Of course, there’s an element of coming up and removing some procedural risks... [but] the financial tactic is the last thing”.

Following this rationale, KIs provided examples of private sector activities under MSPs that have become “self-sustaining”, through the development of commercially viable value chain linkages. The Northern Rangelands Trust (NRT) LivestockWORKS programme, which adopts a value chain approach to supporting pastoralist communities to access new markets and fattening and finishing services for cattle, was offered as one example of a partnership that developed “genuinely commercial” activities (see [Northern Rangelands Trust, 2013](#)).

Respondents, nevertheless, suggested that, in practice, MSPs most often remain heavily dependent on donors for both resources and momentum. The strategies deployed within MSPs frequently include public sector or civil society organisations providing subsidies (e.g. for the customer base), meaning that, when donor funds dry up, the commercial viability of the private sector actions and activities mobilised by an MSP, is often undermined and activities die out. KIs suggested that the short duration of the donor-funded projects that typically initiate MSPs, often exacerbate these challenges; with projects discontinued before market linkages have had time to mature, and before the customer base has had the opportunity to benefit sufficiently from an initiative as to become independently empowered to maintain the market.

The opportunity for MSPs, dependent on market forces, to be truly inclusive also remained a key concern among KIs, who suggested that the frequent need for MSPs to support long-term and commercially viable business opportunities, which minimise financial risks, make MSPs less likely to seek to deliver long-term adaptation support to the poorest, most vulnerable and most geographically remote SMEs. This idea was reinforced by a number of KIs based within NGOs, who suggested that for these reasons their institutions specifically avoid structuring MSPs to target the poorest groups: “Actually, in interventions the bottom of the pyramid is not targeted. Because most projects are looking at the commercial angle to it... and the poor and vulnerable will not be part of that... The ability of the target group to make an investment is a key issue... We say, if you cannot put in the investment, then you are not our target group”. KIs also noted that, without ongoing participation from partnership brokers, communication and monitoring functions established under MSPs also often break down, limiting the ability of partners to re-evaluate and renegotiate the terms of their relationship in the context of dynamic market systems.

Rationale 3: MSPs offer the opportunity to coordinate a more holistic response to overcome multiple barriers that limit adaptation

KIs interest in MSPs to support SME adaptation was also motivated by the idea that MSPs constitute a mechanism to leverage and integrate the different and complementary resources, skills, knowledges and specialisms held by partners from different sectors (c.f. [Dyer et al., 2013](#); [Pinkse and Kolk, 2012](#)). In the context of the diverse business enabling conditions required to support SME adaptation ([Crick et al., 2018b](#)), this rationale specifically positions MSPs as offering a route to designing a more comprehensive package of activities to overcome the multiple barriers in business enabling environments that currently limit SME adaptive capacity. In Kenya, where SMEs face broad deficits in business enabling conditions ([Crick et al., 2016](#)), KIs articulated this need for a joined-up and holistic approach in the context of earlier experiences of pursuing other private sector adaptation support programmes through more fragmented initiatives. As one KI explained: “When you’re reaching out to micro and small enterprises... Perhaps you’re reaching out with a programme targeting only capacity building. But their needs are diverse and many. So, you’ll find, whereas on the one hand they do appreciate capacity building, they also require additional support which you’re not able to offer... They might require, say, market linkages for their produce, so that they’re able to scale their businesses... Without a partnership... it becomes difficult to harness that kind of a solution”.

MSPs were therefore seen by some informants as providing a route to overcome the weaknesses of more fragmented approaches, by providing greater opportunity to build a portfolio of activities that work with different partners, across sectors, activities and scales, to address multiple barriers in tandem. CA4FS, was offered as an example of an MSP that pursued such an integrated approach: While linking small-scale producers with climate-smart input and technology providers, CA4FS sought to support uptake of these technologies by building market linkages between producers, aggregators and buyers, holding training events for producers, input and service provider SMEs, extension workers and policy makers, and developing financial mechanisms to ensure the cost of finance was not a limiting factor. Indeed, all of the partnerships in [Table 1](#) seek to overcome multiple gaps in business enabling environments and KIs stressed that MSPs can evolve over time, with new partners and activities brought into the partnership, to respond to newly identified gaps in enabling conditions. Moreover, through bringing together different sectors, institutions and actors, KIs suggested MSPs offer the opportunity to break out of sectoral and institutional silos and to support greater coordination of activities across these domains, to enhance complementarities and reduce the chance of conflicting and contradictory activities, investments and policies.

Despite these opportunities, KIs suggested that, in practice, given the scale of challenges faced by SMEs in Kenya, weaknesses in the business environment not addressed within an MSP (for example as a result of insufficient consultation, evaluation or funding) frequently undermine and serve as roadblocks to the effectiveness, uptake and sustainability of partnership activities and investments. KIs highlighted, for example, cases of MSPs that they believed had faltered through failures to ensure adequate financing mechanisms, or through insufficient investment in awareness-raising, to ensure buy-in and uptake of new climate-smart technologies or services. Similarly, KIs commented that while partnerships allowed partners within an MSP to create more joined-up solutions among themselves, many felt that MSPs still operate in relative isolation in relation to other partnerships, initiatives and actors, with dialogue and

coordination not reliably extending outside of an MSP. In this sense, KIs highlighted cases where MSPs still faced challenges arising from parallelism, duplication of efforts and incompatibility with other initiatives.

Rationale 4: MSPs are participatory processes that can mobilise adaptation action at local levels and thus produce more robust outcomes

The concept of ‘partnership’ played an important role within KI accounts of MSPs. KIs frequently positioned MSPs as emerging around assumptions of non-hierarchical social relationships based on mutual benefit and shared risk. Similarly, KIs often directly linked MSPs to the national policy landscape on consultation as a constitutional requirement and the recent national transition to devolved systems of government. “Our constitution puts a lot of emphasis on public consultation and it emphasises that before you take any project, it should have adequate public consultation and go-ahead from the public. Therefore, that provides the first tenant of partnership”, one KI explained. Echoing well-established participation rationales, which suggest top-down approaches to adaptation and development practice often fail to account for the specific needs and realities of target populations and create new vulnerabilities (c.f. Agrawal, 2011; Cleaver, 2012; Eriksen et al., 2015; Ferguson, 1990; Leach et al., 2010; Scott, 1999; Tanner and Allouche, 2011), this rationale was broadened by KIs to position MSPs for SME adaptation as a strategy for implementing partners to incorporate stakeholders within adaptation action and to bring climate finance to local levels.

Despite the rhetorical power of partnerships within the corpus of KI interviews, the salience of this term – and its associated implications of inclusion – varied within KI responses. Indeed, KIs also provided a counter-narrative to partnerships as inclusive, which emphasized that MSPs operate in the context of existing resource and power asymmetries, which shape who participates in partnerships and influences decisions and outcomes (c.f. Bitzer and Glasbergen, 2015; Kilelu et al., 2017). These power and resource asymmetries, KIs suggested, emerge across multiple layers of deliberative governance within an MSP, stemming from complex partnership structures, which are often based around multiple bi-lateral and multi-lateral relationships. Reflecting analysis of partnerships in Timothy (1999), the various relationships between partners within MSPs feature different levels of integration and participation. This occurs both within the partnership, in terms of partners’ ability to influence partnership trajectories, and outside of the partnership, in terms of who is included within the partnership, which actors are targeted as partnership beneficiaries and how they are consulted. KIs therefore highlighted that MSPs themselves remain a product of hegemony, with the potential to reproduce existing politics of exclusion within adaptation action.

KIs emphasised that, as the typical MSP brokers, who often provide the initial frame of reference and resources for the development of an MSP, NGOs and donor agencies play an important role in shaping the conditions of participation within an MSP. In facilitating contact between potential partners, these actors are likely to work within their own established networks, which, when considering beneficiary SMEs, typically include more visible groups. Meanwhile, their own internal planning processes often require a partnership design and terms of reference to be established prior to meaningful collaboration, limiting the opportunity for other actors to shape the partnership and to negotiate mutually beneficial terms of participation. One KI from a community conservancy explained this situation as follows: “You find they already have a proposal they submitted to the donors... And when they bring it to the ground... it’s already decided that this is going to happen... And for the community, this may not be their priority”.

KIs also suggested that the level of inclusion among beneficiary SMEs targeted by an MSP varies significantly, with some SMEs seen as only end-users, or recipients of partnership activities and outputs, rather than as partners with an active role in the design and planning of MSPs themselves. Where MSPs target producers, KIs suggested that MSPs often relied on producers’ cooperatives, aggregators, contact farmers and other forms of farmer groups and industry associations, to represent these producers. Since such groups have their own local power structures, with opportunities for capture of processes by local elites, these groups create an extra layer of governance within MSPs, with partnership inclusivity hinged on the effectiveness of representation within these existing fora.

5. Discussion and conclusions

5.1. Opportunities to deliver adaptation through MSPs

Great expectation surrounds MSPs and their potential to support development and adaptation in Africa. Based on our analysis of MSPs designed to support adaptation among SMEs in Kenya, some of this hype appears warranted. This research has shown that through action and investment from donor-funded and public sectors in areas such as research, data access, relationship building, training and capacity building, access to finance and business incubation, MSPs in Kenya can enable a range of private sector actors to deliver adaptation resources to SMEs – including small-scale SMEs in agricultural value chains in remote regions – that could otherwise fall outside of market inclusion. This implies that MSPs have the potential to support upscaling adaptation action among some of the most vulnerable private sector actors and is an important finding among literatures which have suggested that there is little evidence that adaptation partnerships have raised additional funding for adaptation (Pauw and Chan, 2018).

This research also suggests that, while the role of smaller, informal and women-led enterprises is typically overlooked within the neo-liberal agenda on development via market-based mechanisms, through actions to overcome resource gaps and support business incubation and linkages, these actors too can be mobilised to support adaptation and broader resilience through MSPs. This means that these actors too can – and do – participate in what Pauw and Pegels, (2013: 258) call ‘the private sector for adaptation’. The opportunity to support the delivery of business enabling conditions for adaptation through private sector actors that are closely integrated into local communities, is promising within a landscape where it is increasingly recognised that adaptation and adaptation funds need to be delivered locally (Ayers, 2011; Schaer and Kuruppu, 2018). Indeed, echoing Pauw and Chan (2018), this finding also suggests that, through partnerships, SMEs may prove important intermediaries between the global framework on adaptation and local action on vulnerability reduction.

MSPs also appear to lend themselves to more integrated approaches to addressing the multiple barriers to adaptation and

development faced by SMEs within their business environments, through the opportunity for broad-based partnerships to mobilise the different strengths of different actors and thus to achieve outcomes that single partners alone could not.

5.2. Enhancing MSPs for SME adaptation in Kenya

We have, however, identified a number of limitations to current applications of the MSP model for supporting SME adaptation in Kenya. Of particular note, we did not identify any partnerships that seek to support SME adaptation outside of agricultural value chains and the partnerships identified particularly focus on supporting the resilience of small-scale agricultural producers. These SMEs are highly exposed to climate risk and thus constitute an important target community for MSPs for adaptation. Yet climate acts as a risk multiplier and fairly moderate changes in climate parameters can produce a wide-range of significant, but under-recognised, consequences for SMEs across a range of urban and rural sectors, including in service, hospitality, manufacturing and transportation sectors (Gannon et al., 2018; Siderius et al., 2018). Thus, if MSPs are to support adaptation within sub-Saharan African economies more broadly, innovation is required to identify and support business models that encourage private sector actors to develop products, services and business linkages that enable them to deliver adaptation goods and services to a wider range of SMEs through partnerships.

This research also suggests that many MSPs in Kenya adopt a development-oriented approach to supporting adaptive capacity among SMEs. This positions MSPs for SME adaptation within efforts to enhance resilience to climate change through wider efforts to support business development and reduce social vulnerability, but means MSPs do not always integrate climate projections and future uncertainties into their design (Burton, 2009; Forsyth and Evans, 2013). Integrating action to support both adaptation and broader business development among SMEs within MSPs, reflects the complex and multifaceted interlinkages and synergies between the conditions required to promote SME business development and adaptive capacity (Crick et al., 2018b). However, echoing literatures which highlight the limits of a 'no-regrets' approach to adapting to climate change (e.g. Dilling et al., 2015), where climate risk is not mainstreamed into the design of MSPs, this may present a notable threat to the sustainability of partnership investments.

The role of the public sector in delivering MSPs for SME adaptation also likely requires a rethink. During the research, KIs raised concerns about the potential for parallelism and duplication of efforts, arising from limited dialogue and coordination with other partnerships, initiatives and actors external to the MSP. KIs suggested that MSPs are most often initiated by NGOs and other donor-led institutions and are often unsolicited by, and evolve independently from, public sector institutions and processes. Indeed, in the corpus of MSPs identified in Table 1, with two notable exceptions (KLIP and KCEP), the Ministry of Agriculture is only a minor partner, or its role is consultative. Most partnership activities within MSPs are broader than the formal contractual arrangements envisaged through Kenya's PPP Act. Therefore, provisions under the PPP Act for sectoral departments and agencies to provide coordination and brokering functions within partnerships, do not appear to play a notable role in shaping MSPs (c.f. Santacoloma et al., 2013). This disconnect between MSPs and national government adaptation and development processes inevitably compromises opportunities for complementarity and cross-sectoral dialogue within and across the design and development of partnership activities. Greater alignment of MSP activities with national development agendas and processes in Kenya is therefore likely to be key to maximising the opportunities for MSPs to contribute to addressing the multi-dimensional roadblocks to adaptation that persist within business enabling environments. Aligning partnerships more closely with sectoral development strategies, meanwhile, is also likely to be an important step if MSPs are to avoid becoming a space in which international donors and NGOs dictate the terms of adaptation and development within developing country enterprise landscapes.

5.3. Challenges for enhancing the MSP for adaptation agenda

MSPs in this research also tell a more cautious tale of the role of the private sector in adaptation action. The MSPs explored in this research are not generally becoming self-sustaining at present, as is often envisaged will be the case. Instead, KIs suggest key MSP activities, designed to mobilise the private sector in the provision of adaptation public goods, often break down following pilot phases, when donor funding and brokering activities are withdrawn. Dependence on market mechanisms, meanwhile, also means MSPs are likely to exclude the poorest, particularly where donor investment and oversight is discontinued. More broadly, our analysis suggests that MSPs are subject to the same vagaries of power and opportunities for local capture as other forms of adaptation and development action. Within the context of frequent dependence on unstable market forces for the viability of MSPs, this may expose businesses to new risks, which themselves may reproduce existing inequalities.

With partnership approaches increasingly positioned as a key adaptation and development strategy within national and international development and adaptation policy landscapes, these challenges warrant serious reflection within the context of the Agenda 2030 pledge that 'no one will be left behind' and the Paris Agreement goal of taking into account the urgent and immediate needs of those that are particularly vulnerable to climate change. Since NGOs and other donor-funded development actors are currently the primary drivers behind MSPs for adaptation in Kenya, (and this is a model prevalent in many official development assistance-recipient countries), if MSPs are to avoid further entrenching marginalisation and creating new vulnerabilities, these actors face a key responsibility in supporting more inclusive and equitable risk and benefit sharing in partnerships. Sufficient investment into partnership design and strategy at the early stages of developing a MSP could support the identification of risks and preparation of mitigation measures (c.f. Thorpe and Maestre, 2015). Yet since market systems are dynamic and changing, MSPs are likely to require longer-term monitoring, evaluation and assistance that supports partners to change the course of an MSP in response to changing stakeholder needs and to support equity and inclusion.

To move beyond rhetorical uses of the word 'partnership', to mobilising genuinely co-produced and tailored solutions that are

responsive to the aspirations and social and political realities of MSP partners and the communities they seek to target, more fundamental critical reflection on participation mechanisms and internal power structures of MSPs is also required. In this, MSP brokers need to reflect critically on the ways in which their own role has the power to structure and reproduce unequal power relations (c.f. Eriksen et al., 2015; Sovacool et al., 2015; Tanner and Allouche, 2011). Equitable participation requires a more critical engagement with the norms and forums of decision making within MSPs: What decisions get taken, by whom, and to what extent embedded arrangements of authority reproduce social inequalities or create space to challenge them, require deep scrutiny (Cleaver, 2012; 1999; 2009; Scoones, 2015). Given that MSPs typically currently emerge from short-term development projects, the need for such continual reflexivity could necessitate a rethink about the nature of donor-programming for MSPs.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Author contributions

KG led the research design, data collection, analysis, interpretation, manuscript writing and revision. FC and DC contributed to literature review and interpretation. JA contributed to data collection and analysis. All authors discussed and reviewed the manuscript.

References

- Agrawal, B., 2011. *Food Crises and Gender Inequality*, Working Papers 107. Department of Economic and Social Affairs. United Nations.
- Agrawal, S., Carraro, M., Kingsmill, N., Lanzi, E., Prudent-Richard, G., 2011. Private Sector Engagement in Adaptation to Climate Change: Approaches to Managing Climate Risks. OECD Environment Working Paper No 39. doi:10.1787/5kg221jklg7-en.
- Averchenkova, A., Crick, F., Kocornik-Mina, A., Leck, H., Surminski, S., 2016. Multinational and large national corporations and climate adaptation: are we asking the right questions? A review of current knowledge and a new research perspective: Multinational and large national corporations and climate adaptation. *WIREs Clim. Change* 7 (4), 517–536. <https://doi.org/10.1002/wcc.402>.
- Ayers, J., 2011. Resolving the adaptation paradox: exploring the potential for deliberative adaptation policy-making in Bangladesh. *Global Environ. Polit.* 11 (1), 62–88. https://doi.org/10.1162/GLEP_a_00043.
- Beisheim, M., Simon, N., 2016. Multi-Stakeholder Partnerships for Implementing the 2030 Agenda: Improving Accountability and Transparency. In: Analytical Paper for the 2016 ECOSOC Partnership Forum. Analytical Paper for the 2016 ECOSOC Partnership Forum –. <https://doi.org/10.2139/ssrn.2767464>.
- Bitzer, V., Glasbergen, P., 2015. Business–NGO partnerships in global value chains: part of the solution or part of the problem of sustainable change? *Curr. Opin. Environ. Sustain.* 12, 35–40. <https://doi.org/10.1016/j.cosust.2014.08.012>.
- Brouwer, H., Woodhill, J., Hemmati, M., Verhoosel, K., van Vugt, S., 2016. *THE MSP Guide: How to design and facilitate multi-stakeholder partnerships*. Practical Action Publishing, Rugby, UK.
- Burton, I., 2009. Climate Change and the Adaptation Deficit. In: Schipper, L., Burton, I. (Eds.), *The Earthscan Reader on Adaptation to Climate Change*. Earthscan, London.
- Carabine, E., Simonet, C., 2018. Value Chain Analysis for Resilience in Drylands (VC-ARID): Identification of adaptation options in key sectors. VC-ARID synthesis report, Pathways to Resilience in Semi-Arid Economies (PRISE) Working Paper. London, UK.
- Chaudhury, M., 2018. Conceptualizing micro, small and medium enterprise engagement in climate change adaptation, in: Schaer, C., Kuruppu, N. (Eds.), *Private-Sector Action in Adaptation: Perspectives on the Role of Micro, Small and Medium Size Enterprises*. UNEP DTU Partnership, Copenhagen, Denmark, pp. 29–37.
- Cleaver, F., 2012. *Development Through Bricolage: Rethinking Institutions for Natural Resource Management*, Development Through Bricolage. Routledge, London, UK. doi:10.4324/9781315094915.
- Cleaver, F., 1999. Paradoxes of participation: questioning participatory approaches to development. *J. Int. Dev.* 11 (4), 597–612. [https://doi.org/10.1002/\(SICI\)1099-1328\(199906\)11:4<597::AID-JID610>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-1328(199906)11:4<597::AID-JID610>3.0.CO;2-Q).
- Crawford, M., Seidel, S., 2013. *Weathering the Storm: Building Business Resilience to Climate Change*. Centre for Climate and Energy Solutions, Arlington, VA.

- Crick, F., Diop, M., Sow, M., Diouf, B., Diouf, B., Muhwanga, J., 2016. Enabling private sector adaptation in developing countries and their semi-arid regions – case studies of Senegal and Kenya. *Grantham Research Institute on Climate Change and the Environment Working Paper No 258*.
- Crick, F., Eskander, S.M.S.U., Fankhauser, S., Diop, M., 2018a. How do African SMEs respond to climate risks? Evidence from Kenya and Senegal. *World Dev.* 108, 157–168. <https://doi.org/10.1016/j.worlddev.2018.03.015>.
- Crick, F., Gannon, K.E., Diop, M., Sow, M., 2018b. Enabling private sector adaptation in sub-Saharan Africa. *WIREs Clim. Change* 9, e505.
- Davies, J., 2018. Barriers and Enablers to Climate Change Adaptation in North - Central Namibia. ASSAR (Adaptation at Scale in Semi-Arid Regions).
- De Souza, K., Kituyi, E., Harvey, B., Leone, M., Murali, K.S., Ford, J.D., 2015. Vulnerability to climate change in three hot spots in Africa and Asia: key issues for policy-relevant adaptation and resilience-building research. *Reg. Environ. Change* 15 (5), 747–753. <https://doi.org/10.1007/s10113-015-0755-8>.
- Dilling, L., Daly, M.E., Travis, W.R., Wilhelmi, O.V., Klein, R.A., 2015. The dynamics of vulnerability : why adapting to climate variability will not always prepare us for climate change. *WIREs Clim. Change*. <https://doi.org/10.1002/wcc.341>.
- Dodds, F., 2015. Multi-stakeholder partnerships: Making them work for the Post-2015 Development Agenda. University of North Carolina US, Global Research Institute.
- Dougherty-Choux, L., Terpstra, P., Kammila, S., Kurukulasuriya, P., 2015. Adapting from the ground up. Enabling small businesses in developing countries to adapt to climate change, World Resources Institute and United Nations Development Programme. Washington DC.
- Dyer, J., Leventon, J., Stringer, L., Dougill, A., Syampungani, S., Nshimbi, M., Chama, F., Kafwifwi, A., 2013. Partnership Models for Climate Compatible Development: Experiences from Zambia. *Resources* 2, 1–25. doi:10.3390/resources2010001.
- Eriksen, S.H., Nightingale, A.J., Eakin, H., 2015. Reframing adaptation : The political nature of climate change adaptation. *Global Environ. Change* 35, 523–533. <https://doi.org/10.1016/j.gloenvcha.2015.09.014>.
- Fankhauser, S., 2016. Adaptation to Climate Change, Working Paper No. 255. Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, London, UK.
- Ferguson, J., 1990. *The Anti-Politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho*. Cambridge University Press, Cambridge, UK.
- Forsyth, T., 2010. Panacea or paradox? Cross-sector partnerships, climate change, and development: Cross-sector partnerships, climate change, and development. *WIREs Clim Chg* 1 (5), 683–696. <https://doi.org/10.1002/wcc.68>.
- Forsyth, T., Evans, N., 2013. What is Autonomous Adaption ? Resource Scarcity and Smallholder Agency in Thailand. *World Dev.* 43, 56–66.
- Gannon, K.E., Conway, D., Pardoe, J., Batisani, N., Ndiyoi, M., Odada, E., Olago, D., Operer, A., Kgosietsile, S., Nyambe, M., Omukuti, J., Siderius, C., 2018. Business experience of El Niño associated floods and drought in three cities in in sub-Saharan Africa. *Global Sustainability* 1 e14, 1–15. doi:<https://doi.org/10.1017/sus.2018.14>.
- Gannon, K.E., Crick, F., Atela, J., Babagaliyeva, Z., Batool, S., Bedelian, C., Carabine, E., Conway, D., Diop, M., Fankhauser, S., Jobbins, G., Ludi, E., Qaisrani, A., Rouhaud, E., Simonet, C., Suleri, A., Wade, C.T., 2020. Private adaptation in semi-arid lands: A tailored approach to ‘leave no one behind’. *Global Sustainability* 3 (e6), 1–12.
- Government of Kenya, 2018. Third Medium Term Plan 2018-2022. The National Treasury and Planning Treasury, Government of the Republic of Kenya, Nairobi, Kenya.
- Government of Kenya, 2016. The Climate Change Act, 2016. Kenya Gazette Supplement No.68. (Acts No. 11). 13th May, 2016. Nairobi.
- Government of Kenya, 2013. The Public Private Partnerships Act 2013. Kenya Gazette Supplement No.27 (Acts No.15). 25th January 2013. Nairobi.
- Government of Kenya, 2010. Agricultural Sector Development Strategy 2010-2020. Government of Kenya, Nairobi, Kenya.
- Harman, B.P., Taylor, B.M., Lane, M.B., 2015. Urban partnerships and climate adaptation: challenges and opportunities. *Curr. Opin. Environ. Sustain.* 12, 74–79. <https://doi.org/10.1016/j.cosust.2014.11.001>.
- Hemmati, M., 2002. Multi-stakeholder processes for governance and sustainability: Beyond Deadlock and Conflict. Earthscan Publications, London, UK. <https://doi.org/10.4324/9781849772037>.
- Hemmati, M., Dodds, F., 2017. Summary report of a Workshop on the Margins of the UN High Level Political Forum. New York. July 2017.
- Huang, J., Ji, M., Xie, Y., Wang, S., He, Y., Ran, J., 2016. Global semi-arid climate change over last 60 years. *Clim. Dyn.* 46, 1131–1150. <https://doi.org/10.1007/s00382-015-2636-8>.
- Intelcap, 2015. Closing The Gap Kenya: Update on Key Challenges for the “Missing Middle” in Kenya.
- IPCC, 2014. Climate change 2014: Impacts, adaptation and vulnerability. Part A: Global and sectoral aspects, in: Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., M. Chatterjee, K.L. Chatterjee, Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (Eds.), Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK.
- Jobbins, G., Conway, D., Fankhauser, S., Gueye, B., Liwenga, E., Ludi, E., Mitchell, T., Mountfort, H., Suleri, A., 2016. Resilience, equity and growth in semi-arid economies: a research agenda, Pathways to Resilience in Semi-Arid Economies (PRISE) Working Paper. Overseas Development Institute, London, UK.
- Kilelu, C., Klerkx, L., Omoro, A., Baltenweck, I., Leeuwis, C., Githinji, J., 2017. Value Chain Upgrading and the Inclusion of Smallholders in Markets: Reflections on Contributions of Multi-Stakeholder Processes in Dairy Development in Tanzania. *Eur J Dev Res* 29 (5), 1102–1121. <https://doi.org/10.1057/s41287-016-0074-z>.
- LDC Group, 2019. Delivering our Climate-Resilient Future: Lessons from a global evidence review. LDC Climate Change 2050 Vision. LIFE-AR LDC Initiative for Effective Adaptation and Resilience.
- Leach, M., Scoones, I., Stirling, A., 2010. Dynamic sustainabilities: technology, environment, social justice. Earthscan Publications, London, UK.
- Mcgray, H., Hammill, A., Bradley, R., Schipper, L.E., Parry, J.-E., 2007. *Weathering the Storm - Options for Framing Adaptation*. WRI Report, World Resources Institute, Washington DC.
- Mendelsohn, R., 2012. The economics of adaptation to climate change in developing countries. *Clim. Change Econ.* 03 (02), 1250006. <https://doi.org/10.1142/S2010007812500066>.
- Munyua, A.W., 2016. Exploring the multi-stakeholder experience in Kenya. *J. Cyber Policy* 1 (2), 206–221. <https://doi.org/10.1080/23738871.2016.1249898>.
- Northern Rangelands Trust, 2013. The Story of the Northern Rangelands Trust. <http://charliepyesmith.com/wp-content/uploads/2014/01/CPS-story-northern-rangelands-trust.pdf>, Isiolo, Kenya. doi:10.1002/j.2326-1951.1994.tb03771.x.
- Pardoe, J., Conway, D., Namaganda, E., Vincent, K., Dougill, A.J., Kashaigili, J.J., 2018. Climate change and the water–energy–food nexus: insights from policy and practice in Tanzania. *Climate Policy* 18 (7), 863–877. <https://doi.org/10.1080/14693062.2017.1386082>.
- Pauw, P., Chan, S., 2018. Multistakeholder partnerships for adaptation: the role of micro, small and medium enterprises. In: Schaer, C., Kuruppu, N. (Eds.), *Private-Sector Action in Adaptation: Perspectives on the Role of Micro, Small and Medium Size Enterprises*. UDP Perspectives Series, UNEP DTU Partnership, pp. 98–109.
- Pauw, P., Pegels, A., 2013. Private sector engagement in climate change adaptation in least developed countries: an exploration. *Climate and Development* 5, 257–267. doi:10.1080/17565529.2013.826130.
- Pinkse, J., Kolk, A., 2012. Addressing the Climate Change—Sustainable Development Nexus: The Role of Multistakeholder Partnerships. *Business & Society* 51 (1), 176–210. <https://doi.org/10.1177/0007650311427426>.
- Rankin, M., Nogales, E.G., Santacoloma, P., Mhlanga, N., Rizzo, C., 2016. Public–private partnerships for agribusiness development: A review of international experiences. Food and Agriculture Organisation of the United Nations, Rome, Italy.
- Republic of Kenya, 2012. National Policy for the Sustainable Development of Northern Kenya and other Arid Lands: ‘Releasing Our Full Potential’. Office of the Prime Minister, Ministry of State for Development of Northern Kenya and Other Semi Arid Lands, Nairobi, Kenya.
- Ros-Tonen, M.A.F., Van den Hombergh, H., Zoomers, E.B., 2007. Partnerships for Sustainable Forest and Tree Resource Management in Latin America: The New Road towards Successful Forest Governance?. In: *Partnerships in Sustainable Forest Resource Management: Learning from Latin America*. Brill, Leiden, pp. 3–35.
- Santacoloma, P., Gálvez-Nogales, E., Mhlanga, N., Rankin, M., Röttger, A., 2013. Agribusiness public-private partnerships- Kenya - A country report of Kenya. Food and Agriculture Organisation, Rome, Italy.
- Schaer, C., Kuruppu, N., 2018. Private-sector action in adaptation: Perspectives on the role of micro, small and medium size enterprises, Private-sector action in adaptation: Perspectives on the role of micro, small and medium size enterprises. UNEP DTU Partnership, Copenhagen.

- Scoones, I., 2015. Sustainable rural livelihoods and rural development. Practical Action Publishing, UK.
- Scoones, I., 2009. Livelihoods perspectives and rural development. *The Journal of Peasant Studies* 36 (1), 171–196. <https://doi.org/10.1080/03066150902820503>.
- Scott, J.C., 1999. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Yale University Press, US.
- Selsky, J.W., Parker, B., 2005. Cross-Sector Partnerships to Address Social Issues: Challenges to Theory and Practice. *J. Manag.* 31 (6), 849–873. <https://doi.org/10.1177/0149206305279601>.
- Shackleton, S., Ziervogel, G., Sallu, S., Gill, T., Tschakert, P., 2015. Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. *WIREs Clim. Change* 6, 321–344. <https://doi.org/10.1002/wcc.335>.
- Sharma, K., Aravazhi, S., Karuppanchetty, S., Dattamazumdar, S., 2013. Role of public-private partnership in the development of semi-arid tropics value chains. *Science et Changements Planétaires - Secheresse* 24, 367–373. doi:10.1684/sec.2013.0406.
- Siderius, C., Gannon, K.E., Ndiyoi, M., Opere, A., Batisani, N., Olago, D., Pardoe, J., Conway, D., 2018. Hydrological Response and Complex Impact Pathways of the 2015/2016 El Niño in Eastern and Southern Africa. *Earth's Future* 6, 2–22. doi:10.1002/2017EF000680.
- Singh, C., Gajjar, S.P., Deshpande, T., 2016. Policies, Projects and People: Exploring the Adaptation-development Spectrum in India., CARIAA-ASSAR Working Paper #2. International Development Research Centre, Ottawa, Canada and UK Aid, London, United Kingdom.
- Sovacool, B.K., Linnér, B.-O., Goodsite, M.E., 2015. The political economy of climate adaptation. *Nature Clim Change* 5 (7), 616–618. <https://doi.org/10.1038/nclimate2665>.
- Stenek, V., Amado, J.-C., Greenall, D., 2013. Enabling Environment for Private Sector Adaptation - An Index Assessment Framework, International Finance Corporation. International Finance Corporation.
- Surminski, S., Leck, H., 2016. *You never adapt alone – the role of Multi-Sectoral Partnerships in addressing urban climate risks*, Centre for Climate Change Economics and Policy (CCEP) Working Paper No.262 Grantham. Research Institute on Climate Change and the Environment, London.
- Tanner, T., Allouche, J., 2011. Towards a New Political Economy of Climate Change and Development. *IDS bulletin* 42, 1–14.
- Thorpe, J., 2018. Procedural Justice in Value Chains Through Public-private Partnerships. *World Development* 103, 162–175. doi:10.1016/j.worlddev.2017.10.004.
- Thorpe, J., Maestre, M., 2015. *Brokering Development: Enabling Factors for Public-Private-Producer Partnerships in Agricultural Value Chains*. International Fund for Agricultural Development, Rome, Italy.
- Timothy, D.J., 1999. Cross-Border Partnership in Tourism Resource Management: International Parks along the US-Canada Border. *J. Sustainable Tourism* 7 (3-4), 182–205. <https://doi.org/10.1080/09669589908667336>.
- Tompkins, E.L., Eakin, H., 2012. Managing private and public adaptation to climate change. *Global Environ. Change* 22 (1), 3–11. <https://doi.org/10.1016/j.gloenvcha.2011.09.010>.
- Tucker, J., Daoud, M., Oates, N., Few, R., Conway, D., Mtisi, S., Matheson, S., 2015. Social vulnerability in three high-poverty climate change hot spots: What does the climate change literature tell us? *Reg. Environ. Change* 15 (5), 783–800. <https://doi.org/10.1007/s10113-014-0741-6>.
- Van Huijstee, M.M., Francken, M., Leroy, P., 2007. Partnerships for sustainable development: a review of current literature. *Environmental Sciences* 4 (2), 75–89. <https://doi.org/10.1080/15693430701526336>.
- World Bank, 2009. Enterprise Survey and Indicator Surveys: Sampling Methodology [WWW Document]. World Bank Group. URL http://www.enterprisesurveys.org/Methodology/~/media/FPDKM/EnterpriseSurveys/Documents/Methodology/Sampling_Note.pdf (accessed 11.27.16).
- World Vision, 2015. Getting Intentional: Cross-sector partnerships, business and the post-2015 development agenda. The Post-2015 Agenda: Policy Paper. 15.