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Enabling private sector adaptation to climate change among small businesses in developing countries: What role for multi-stakeholder partnerships? Experiences from Kenya.

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Abstract

This paper investigates the role of multi-stakeholder partnerships (MSPs) in supporting the development of enabling conditions for adaptation to climate change among micro, small and medium enterprises (SMEs) in developing countries. Specifically, through thematic analysis of key informant interviews, we explore the ways in which such partnerships are being mobilised to support SME adaptation in Kenya and the rationales underpinning interest in MSPs as a model to structure the delivery of adaptation resources in development practice. This study finds that a wide range of private sector actors can be mobilised to produce adaptation resources for SMEs through partnerships, including to support adaptation among groups, regions and sectors that would otherwise fall outside of market inclusion. MSPs are consequently often seen to present an exciting opportunity to plug gaps in adaptation and development finance and to upscale adaptation. Further analysis, however, suggests that, dependence on market mechanisms for delivering adaptation resources means MSPs may exclude the poorest groups, expose businesses to new risks and reproduce existing inequalities. Additionally, despite expectations that market-based approaches will support partnership sustainability, 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 the national governing public private partnerships framework. By paying particular attention to the ways in which stakeholders represent the distributional outcomes of MSPs, in this paper we identify opportunities to enhance the strategic design of MSPs to support more inclusive adaptation.

Keywords:

Multi-stakeholder partnerships / multi-sectoral partnerships; climate change adaptation; micro, small and medium enterprises (SMEs); private sector adaptation; business enabling environments; Kenya.

Highlights

- MSPs can mobilise a wide range of private sector actors to deliver adaptation goods and services that overcome barriers to adaptation for SMEs, including those in remote regions, that would otherwise fall outside of market inclusion
- MSPs may help upscale SME adaptation through more integrated approaches to adaptation that mobilise the strengths of different actors
- MSPs can reproduce existing politics of exclusion within adaptation action and may expose SMEs to new risks and vulnerabilities

- MSPs are currently a donor-led development practice in Kenya and operate outside of the partnerships framework envisioned by Kenya's PPP act
- To reduce the risk of MSPs reproducing existing inequalities, employing MSPs in development action may necessitate rethinking donor-programming to enable ongoing monitoring

1. Introduction

Micro, small and medium enterprises (SMEs) – businesses with between 1 and 99 employees (World Bank, 2009) – dominate enterprise landscapes and are fundamental to more inclusive and equitable development in developing countries. Yet SMEs are often highly exposed to climate risk. In developing countries this is typically exacerbated through economies being heavily dependent on agriculture, with SMEs most often taking the form of small-scale agricultural producers, and climate risk persisting and evolving along agricultural value chains (Canevari-Luzardo et al., 2019; Carabine and Simonet, 2018). Research has shown, however, that even in urban areas, 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).

To some extent, businesses of all sizes will innovate in response to changing climatic impacts and pressures, by adopting measures to reduce costs, manage their exposure to risks, minimise disruption to their operations and maximise opportunities where they arise (c.f. Mendelsohn, 2012; Fankhauser, 2016). Indeed 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). 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 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 Agrawala et al., 2011; Averchenkova et al., 2016; Chaudhury, 2018; Conway et al., 2019; Crawford and Seidel, 2013; Crick et al., 2018b; 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) (Carter et al., 2019; Crick et al., 2018b, 2018a). Such a holistic and multi-sectoral approach to supporting private sector adaptation is in itself a challenge, particularly since adaptation policy is often embedded within environment ministries (Pardoe et al., 2018), typically resulting in limited integration of (and capacity for) adaptation planning for the private sector within local and national development agencies. In this context, pathways to overcoming the multiple barriers in business enabling environments in developing countries and to implementing action to support SME adaptation are very sparsely treated within the literature (Crick et al., 2018b; Shackleton et al., 2015). In this paper we contribute to this gap within existing literatures by considering the role that multi-stakeholder partnerships (MSPs) – defined here as collaborative arrangements between at least one private organisation and at least one public or

one civil society organisation (see box 1) – may play in supporting private sector adaptation among SMEs in developing countries.

Box 1: Defining multi-stakeholder partnerships

MSPs have emerged as a transdisciplinary concept, explored in disciplines including management, politics, health, geography and development studies and they have been described under various labels (Rein et al., 2005). The language of MSPs is often employed in relation to partnerships that bring together actors from the three main social sectors: Government (national, regional and international), the private sector and civil society (including non-governmental organisations (NGOs), research organisations, faith and grass-roots organisations) (Dyer et al., 2013; Selsky and Parker, 2005). At other times, at least one public and at least one private organisation is deemed sufficient to constitute an MSP (Harman et al., 2015; Pauw and Chan, 2018; Ros-Tonen et al., 2007; Van Huijstee et al., 2007). While the exact combination of actors varies, a characteristic of MSPs that persists across definitions, is that partners converge around the ambition to address some form of social, sustainability or development challenge (Pinkse and Kolk, 2012; Selsky and Parker, 2005). Moreover, unlike more traditional forms of public-private-partnership (PPP) which have typically been associated with tender-based projects and the contracting out of public services or infrastructure delivery (Selsky and Parker, 2005; Stadtler, 2016), the function of an MSP may remain at the level of knowledge exchange, research and development, awareness raising or a lobbying function (Pinkse and Kolk, 2012; Surminski and Leck, 2016).

Since the 2002 World Summit on Sustainable Development (WSSD) called for ‘Type II’ partnerships to accelerate development (Forsyth, 2010), partnership approaches to development and adaptation have been advanced widely within international adaptation and development agendas, including under the Paris Agreement (Pauw and Chan, 2018) and the Sustainable Development Goals (SDGs) (Beisheim and Simon, 2016). Indeed, partnerships have often become part of official national development policies (Pinkse and Kolk, 2012).

Interest in partnerships has filtered into literature on adaptation, including for the private sector (e.g. Averchenkova et al., 2016; Crick et al., 2018b; Gannon et al., 2020; Pauw and Chan, 2018; Surminski and Leck, 2016). Within these literatures, MSPs have gained particular attention as a means of organising collectively for adaptation, alongside increasing recognition that the multidimensional challenges of climate change necessitate a more comprehensive and integrated approach to supporting adaptation, requiring collaboration and communication across multiple sectors, scales and actors (Surminski and Leck, 2016). Some have argued that MSPs have potential for coordinating action at multiple scales, to address existing fragmentation in adaptation action and for developing more integrated and holistic approaches to adaptation challenges, that harness different actors’ strengths, resources, knowledge and values to enable outcomes that single stakeholders could not solve alone (Crick et al., 2018b, see also Dodds, 2015; Dyer et al., 2013; Forsyth, 2010; Pinkse and Kolk, 2012; Selsky and Parker, 2005). Meanwhile, the potential for MSPs to adopt a flexible, decentralised and inclusive structure appeals – theoretically at least – to the idea that adaptation should be implemented locally, where vulnerability is experienced (Pauw and Chan, 2018).

Within these literatures, MSPs are also 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 adaptation goods and services to a wider community (Tompkins and Eakin, 2012). This reflects a notable category distinction, from what in this paper we call “private sector adaptation”, to refer to the processes through which firms institute strategies to manage climate risk within their own operations. This conceptual clarity is important, since both concepts are employed in parallel in this paper; to explore the way in which MSPs are developed with the goal of mobilising the private sector *for* adaptation, to deliver adaptation goods and services that support firm-level adaptation among SMEs.

2. Research Aims

Despite the prominence of MSPs in climate discourse, limited critical empirical attention has been given to the role of MSPs in supporting adaptation, including among SMEs and among those that are particularly vulnerable to climate change (Harman et al., 2015; Pauw and Chan, 2018; Pinkse and Kolk, 2012). 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 & Chan (2018) analysed SME participation in high-profile partnership mobilisation platforms and processes¹, focusing on the contribution SMEs can make as part of the private sector *for* adaptation². There has, however, been limited over-arching 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 addresses some of these gaps by empirically investigating stakeholder perceptions of the design and function of MSPs that seek to support adaptation among SMEs in Kenya. We do this through in-depth key informant (KI) interviews with partners actively engaged in the design and implementation of MSPs for SME adaptation, including from public, civil society and private sectors.

The research is structured around two primary components of empirical thematic analysis (c.f. Braun & Clarke, 2006). As a first contribution, we draw on the corpus of KI interviews to explore how MSPs for SME adaptation are being mobilised within the given national context and outline the key strategies through which KI’s identified MSPs pursuing actions designed to support SME adaptation within the Kenyan private sector adaptation landscape. This phase of the research suggests that non-governmental organisations and other donor-led international development organisations are strongly driving the landscape of MSPs seeking to support SME adaptation in Kenya. Thus, as a second contribution to the literature, we then adopt a more interpretative and critical approach to (1) identify key rationales employed by KIs for assembling MSPs to support adaptation among SMEs, and (2) to explore KIs varying accounts of the way in which they perceive MSPs to deliver on these opportunities in practice. In doing this, we reveal key challenges for achieving equitable adaptation among SMEs through MSPs, while identifying opportunities to enhance the strategic design of MSPs.

¹ Such as the Lima-Paris Action Agenda and its associated ‘Non-state Actor Zone for Climate Action’ online portal

² For examples of wider literatures that have explored the role of MSPs in agri-business development more broadly, see also Ferroni and Castle, 2011; Rankin et al., 2016; Thorpe, 2018; Thorpe and Maestre, 2015.

3. Methods

3.1 A focus on MSPs in Kenya

For at least two reasons, Kenya provides a particularly salient backdrop to consider the role of MSPs in supporting SME adaptation. Firstly, there are arguably few places where 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). Livelihoods in Kenya meanwhile are heavily dependent on a mixture of livestock, rain-fed agriculture and agricultural trade, making them particularly exposed to climate variability. And while Kenya has a large and burgeoning private sector, reflecting trends across sub-Saharan Africa (SSA) (Crick et al., 2018b; Dougherty-Choux et al., 2015), this tends to be characterised by a large number of micro and small enterprises which face multiple barriers to adaptation in their business environments, including limited access to finance, new technologies and safety nets and poor access to and use of climate information (Crick et al., 2016). These barriers are exacerbated through much private sector activity operating in the informal (unregistered) sector (Intellectap, 2015).

Secondly, Kenya has a comparatively strong policy landscape underpinning MSPs for climate change adaptation. From a climate change perspective, in May 2016, Kenya passed the Climate Change Act, which provided for the development of a National Climate Change Council chaired by the President³, giving a clear high-level mandate to climate change and the mainstreaming of equity in climate change responses (Government of Kenya, 2016). The Act provides for both enabling ‘private sector adaptation’, and for unlocking ‘the private sector *for* adaptation⁴. It 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 (including through the Climate Change Fund). Kenya also prioritises partnership approaches more broadly in its national development strategies. Underpinned by the development of The Public Private Partnerships (PPP) Act 2013 (Government of Kenya, 2013) and the PPP Unit located in the National Treasury, the PPP model is integrated into large-scale national development initiatives and flagship projects under Kenya’s Vision 2030⁵. The national Agricultural Sector Development Strategy (ASDS 2010-2020), (Government of Kenya, 2010), meanwhile, calls for the PPP approach to be embraced to accelerate growth in agribusiness and economic development. 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).

3.2 Research design, sampling and analytic strategy.

³ The Council is intended to serve as the overarching national climate change coordination mechanism and to oversee the implementation of the National Climate Change Action Plan (NCCAP), the official planning tool of the Act, across sectors and national and county governments.

⁴ The Act, for example, requires national and county governments to “mainstream and reinforce climate change disaster risk reduction into strategies and actions of public and private entities” and “build resilience and enhance adaptive capacity to the impacts of climate change”, as well as to “provide incentives and obligations for private sector contribution in achieving... climate resilient development” (Government of Kenya, 2016).

⁵ It is intended that most projects under the Lamu-Port-South-Sudan-Ethiopia Transport Corridor (LAPSSET), for example, will be implemented through PPP.

Our research design departs from the model of in-depth case studies of partnerships of earlier empirical literatures (Dyer et al., 2013; Thorpe, 2018). Instead we employed in-depth interviews with a range of stakeholders involved in a diverse collection of MSPs that seek to support SME adaptation in Kenya, to explore perceptions of the broader landscape of MSPs for SME adaptation. To draw on the breadth of experiences of MSPs for SME adaptation, these interviews targeted both the ‘implementing’ partners of MSPs, from public, private and civil society sectors, as well as the ‘beneficiary’ SMEs, whose adaptive capacity the MSPs sought to enhance.

Our research began with literature review and an initial scoping search of bibliographic databases and Google to identify relevant academic and grey literatures, as well as web resources, in order 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 key actors involved in the design and delivery of these MSPs. Through this scoping, an initial corpus of actors to approach to participate in KI interviews was identified, including representatives from public, private and civil society sectors. The review and sample of KIs then evolved iteratively, through a snowball sampling approach. KIs were asked to identify other MSPs supporting SME adaptation and encouraged to suggest other potential respondents who they anticipated may have different perspectives and experiences to their own. Many of the ‘implementing partners’ were based in Nairobi, thus this is where interviews began. However, the research identified MSPs operationalised across Kenya. To support a sampling strategy that would facilitate engagement with the breadth of actors involved in these MSPs – including ‘beneficiary SMEs’ – but that would remain feasible within the time available for the study, sampling was extended to include KIs located in Laikipia County. This is a county close to Nairobi, with a semi-arid climate, in which SMEs are highly exposed to climate risks, including frequent temperature extremes, droughts and floods.

The final sample (n=49) includes respondents that reflect the diversity of private sector actors involved in partnerships (n=21); from large ‘implementing’ private sector actors, including finance and insurance institutions and private sector partnership implementing agencies (e.g. consultants), to small-scale, informal and female-led SMEs and agricultural producers. Since civil society and other donor or grassroots organisations emerged as especially influential in the formation and administration of partnerships, 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 the types of activities taking place. However, the relatively large sample of in-depth interviews offered good opportunity for comparison, for cross-checking insights and for triangulating ideas and concepts across a diverse range of actors.

Interviews were conducted face to face, typically lasted 60-90 minutes and were semi-structured, allowing participants sufficient opportunity to talk within their own frame of reference, and enabling interview themes to be adapted to accommodate the heterogeneity of respondents and perspectives. Interviews explored KIs’ experiences of forming and implementing MSPs for SME adaptation, on operational and governance strategies in partnerships and on perceptions of the opportunities and challenges that surround MSPs for delivering SME adaptation. Interviews also focused on perceived and desired benefits and outcomes of MSPs. In most instances, interviews also elicited perceptions of the broader institutional landscape surrounding MSPs and particular attention was given to questions around equity in MSPs.

In many cases KIs focused discussion around specific MSPs that they were, or had been involved in. Some of the MSPs discussed during interviews were still in early stages, which limited some respondents’ ability to share concrete insights into whether these MSPs were meeting their aims. However, most often

respondents had been involved in many MSPs seeking to support SME adaptive capacity, often over many years – as well as in other MSPs with wider and alternative mandates. This allowed KIs to speak more broadly about their experiences of the successes and challenges that surround supporting resilience among vulnerable groups through MSPs. In some instances, KIs shared written materials on MSPs 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. Thus, our ability to evaluate outcomes of specific MSPs more directly through these means was more limited.

The interviews were mostly executed in English, with a number of the interviews with SMEs conducted in Kiswahili, based on the preference of the respondent. Initially a largely inductive analytical strategy was adopted, which sought to be open and sensitive to the empirical data, without forcing it to ‘fit’ pre-conceived theory or concepts (Birk and Mills, 2011). This involved iterative coding phases and concurrent constant comparison analysis, through which the data were repeatedly compared, contrasted, interpreted and reinterpreted to develop and refine themes emerging from the interviews (Charmaz, 2006). Yet, reflecting the researchers’ inevitably active role in data interpretation and theme development, and recognizing the role of academic literature as a ‘sensitising resource’ (Bowen, 2006; Charmaz, 2003; Glaser, 1978), during the course of analysis, interpretative overlap began to emerge between the rationales for employing MSPs for SME adaptation constructed by KIs, and those identified in the literature outlined in Section 1. To advance these theoretical understandings of MSPs, analytical focus was thus concentrated on exploring and clarifying the rationales for employing MSPs to support adaptation among SMEs, that were mobilised by KIs; and to exploring stakeholder perceptions of the related outcomes that are achieved by these MSPs in practice. A critical interpretative lens was also employed, as the researchers sought to determine underlying influences on different actors’ perspectives and the wider societal and equity consequences of employing MSPs to support SME adaptation.

4. How MSPs are being mobilised to support private sector adaptation in Kenya

4.1 A prevalent development paradigm

KI’s suggested MSPs are commonly employed as a model for delivering adaptation and development action in Kenya. As an outcome of our sampling strategy, all KIs identified as being active or recent partners within at least one MSP designed to support SME adaptation in Kenya. However, at the time of interview, KIs from all sectors described existing institutional membership of multiple MSPs that sought to support adaptation among SMEs – with many more linked to MSPs related to broader adaptation and climate resilient development objectives. Involvement in multiple MSPs was less commonly reported among KIs from the private sector, especially among SMEs. Although a number of informants from large private sector companies (such as insurance providers) described being actively involved in several MSP processes linked to delivering adaptation support to vulnerable communities.

While potentially a perception intensified by the sampling strategy, KIs almost uniformly suggested a trend towards increasing prevalence of MSP approaches across Kenya’s adaptation and development policy landscape. KIs suggested ‘partnerships’ – in all their forms – are increasingly pursued in national governance fora and development processes, particularly as an outcome of the national emphasis on more participatory forms of governance: *“I think if you were to walk to 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 non-governmental organisation (NGO)-based respondent explained.

4.2 Building resilience along the adaptation-development spectrum

KIs suggested that trends towards increasing development of MSPs occur across adaptation and development policy and programming landscapes in Kenya. However, for the purposes of our analysis, we asked participants to focus specifically on their experience of MSPs that have objectives related to supporting the adaptive capacity of SMEs. In doing so, respondents identified a wide range of MSPs that they had engaged with, with mandates that support this objective. Illustrative examples of partnerships that were identified by participants, and the ways in which partners within these MSPs seek to support SME adaptation, are provided in Table 1. Almost all of the participants interviewed were involved in at least one of the partnerships summarised in Table 1, although participants often identified additional MSPs that they were, or had been involved in, which are not included within this table.

Among the partnerships identified by KIs as ‘MSPs for SME adaptation’, the extent to which an MSP focused specifically 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 general business environments (e.g. CA4FS). 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, the ‘MSPs for SME adaptation’ identified by KIs, reflect the perspective that adaptation is intimately linked to broader vulnerability, with activities under the partnerships sitting across the adaptation-development spectrum (Mcgray et al., 2007; Singh et al., 2016).

4.3 A focus on supporting adaptation among small-scale producers

The MSPs identified in Table 1 below highlight that MSPs for adaptation in Kenya are diverse organisational structures in both intent and design. MSPs can operate at various scales, in terms of the number of actors integrated into the partnership and the scope of their activities. They also feature diverse combinations of actors including: national and county government departments and agencies; non-state actors such as NGOs, research institutes and other international development partners; and a range of private sector actors including individual 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).

In the course of the research it became clear that conceptual boundaries between ‘implementing’ and ‘beneficiary’ private sector partners blur within MSP practice. ‘Beneficiary’ SMEs, whose adaptive capacity a given partnership directly seeks to strengthen, often actively contribute to bolstering the adaptive capacity of a broader community (for example, through technology demonstration plots, or producer aggregation). Meanwhile, ‘implementing’ private sector actors, which also include SMEs, and which are inevitably driven to participate in an MSP at least in part through self-interest, often join partnerships to accrue internal firm-level resilience benefits (such as access to more reliable markets for input and service

providers, and more reliable suppliers for traders and distributors). In the MSPs identified by KI's in this research, however, almost all of the SMEs directly targeted by the MSPs as partnership beneficiaries were smallholder farmers⁶. It is quite possible that additional interviews would have uncovered further MSPs that seek to support adaptation among a wider range of SMEs. Nevertheless, our research suggests that currently in Kenya, MSPs for SME adaptation most often primarily target business enabling environments for small-scale agricultural producers, with action to support adaptation among other forms of SME currently less often pursued.

4.4 Adaptation resources and resilience objectives mobilised through MSPs

Through the MSPs identified by KI's, implementing partners seek to coordinate activities and investments to overcome a range of barriers in the business environment and deliver a range of adaptation resources for small-scale producers⁷. These most notably include:

- 1) increasing producer's access to markets, including for climate smart crops (e.g. KCEP);
- 2) increasing producer's access to knowledge of improved and climate-smart agricultural practices and/or provide broader business entrepreneurship training (e.g. CS4FS);
- 3) increasing producer's access to improved and climate smart inputs, technologies and pre- and post-production services (e.g. SWA);
- 4) increasing producer's access to finance and safety nets (insurance) (e.g. PREPARED);
- 5) supporting sustainable common-pool resource management (e.g. NRT Livestock WORKS);
- 6) supporting agricultural research and innovation (e.g. MaMaSe).

Through developing these adaptation resources, the MSPs identified seek to support small-scale producers to manage climate risk within their own operations and/or increase their resilience more broadly, through a range of strategies, which most notably include:

- 1) generating new, enhanced and sustainable sources of income (including through climate smart crops and products) (e.g. STARK+);
- 2) diversifying livelihoods (e.g. HFSP);
- 3) scaling up productivity to commercialise production activities (e.g. HortIMPACT);
- 4) pursuing more climate resilient production regimes (e.g. KCEP);
- 5) employing more effective coping strategies at times of climate shocks, including to protect assets (e.g. NRT LivestockWORKS);
- 6) increasing uptake of safety nets (e.g. KLIP)

4.5 A donor-led development practice

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. In the realisation of

⁶ In this sense, the MSPs studied in this research have parallels with the alternative terminology of public-private-producer partnerships (PPPPs), that has been used to similarly characterise MSPs focused on farmers (e.g. IFAD, 2016; Thorpe and Maestre, 2015).

⁷ Notably, many of these categories have notable overlaps with the categories of public private partnerships for agribusiness development identified in 15 developing countries by Rankin et al. (2016: 15).

these MSPs, however, KIs 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 building⁸. Kenya’s PPP Act sets out a regulatory framework for PPPs which mandates government departments, agencies and corporations play the role of a partnership broker, initiating, assessing and negotiating PPP projects and opening formal contractual arrangements to competitive bidding from potential private sector partners. In practice, however, KIs in this study reiterated findings in Santacoloma et al. (2013), which found little evidence to suggest that this policy framework is regularly shaping the formation of MSPs in Kenya. This disconnect is occurring in part because, as outlined below (see especially Table 2), MSPs are more diverse, multi-dimensional institutional structures than are envisaged under the PPP Act, seeking to support the delivery of adaptation resources through a much wider range of implementation mechanisms.

Instead, 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 and MSPs integrated into the design of development projects from their inception. KIs suggested NGOs and donor agencies are therefore currently the primary driving force behind the growth of MSPs for SME adaptation in Kenya. This finding is broadly reflected in the sample of MSPs captured in Table 1, where all but three of the MSPs identified are led by NGOs or other international development partners. Among these same MSPs, those led by public (KLIP and KCEP) and private (Enonkishu Conservancy and Mara Beef Partnership) sector actors, meanwhile, remain heavily influenced by – and linked to – donors and their funds.

⁸ For example, undertaking market analysis to identify gaps or barriers in the business environment, identifying, introducing and building trust between potential partners who can cooperate to overcome these gaps and barriers and supporting partners to define roles and negotiate any partnership agreement.

Table 1: Illustrative MSPs identified by KIs as supporting SME adaptation

The MSPs included in this table represent those which were discussed in sufficient detail during KI interviews to establish the function and composition of the partnership and for which sufficient written documentation (publicly available or shared by KIs during personal communication) was available to triangulate insights. Other MSPs discussed in less detailed terms during the KI interviews are not included within the table. The MSP objectives and strategies relating to SME adaptation outlined in this table are based on information provided by KIs, as well as from secondary data sources. However, this table does not connote success in achieving these objectives and delivering these strategies. At the time of publication, some of these MSPs are no longer active.

Name of MSP	How the MSP aims to support resilience of SMEs	Adaptation resources mobilised for producers	Examples of specific strategies adopted to mobilise adaptation and business development resources for small-scale producers through the MSP	Key partners identified ⁹
Conservation Agriculture for Food Security (CA4FS)	CA4FS aims to build the resilience of smallholder farmers in Machakos and Laikipia counties, through enhancing the adoption of conservation agriculture (CA) practices, promoted as a climate smart agricultural strategy.	Access to knowledge of adaptation strategies. Access to climate smart technologies and inputs. Access to markets, including for new climate smart technologies.	Partners in CA4FS mobilise the private sector for adaptation by linking producers to CA equipment fabricators and buyers, to improve access to both climate-smart technologies and to markets. To support these linkages, they also broker agreements and mechanisms for producers to access inputs on credit; mobilise training on CA and entrepreneurship for farmers, input providers, equipment fabricators and extension officers; and co-produce research on CA techniques.	African Conservation Tillage Network ; Kenya Agricultural and Livestock Research Organisation; County governments (Ministry of Agriculture); Smallholder farmers; Input and service provider SMEs
Enonkishu Conservancy and Mara Beef Partnership	This partnership aims to support integrated management of wildlife and livestock and to provide producers with a more reliable and consistent market for their beef, while helping them secure higher prices for their cattle, including at times of climate shock. In doing so, the partnership aims to increase financial security for small-scale beef producers, increase resilience to extreme weather conditions and increase food security through supplementary income.	Access to markets. Access to post-production services. Sustainable common-pool resource management. Access to knowledge on adaptive management techniques.	Within a holistic land management approach, Mara Beef links pastoralist communities with high value markets by breeding and buying cattle from pastoralist communities in Enonkishu conservancy, providing fattening and finishing services and working with rangeland processors to slaughter livestock at source (reducing transport costs and improving animal condition). Through business partnerships, it then markets and distributes branded beef products and, by negotiating regular orders with buyers, Mara Beef aims to make beef selling more predictable and competitive. A portion of Mara Beef profits are shared among the members of the conservancy for use in conservation, resilience and livelihoods projects.	Enonkishu Conservancy and local pastoral communities; Mara Beef ; Savory Network; World Wildlife Federation; UNESCO-Institute for Water Education

⁹ Lead or initiating partners highlighted in bold

<p>The Horticulture and Food Security Programme (HFSP)</p>	<p>HFSP aims to increase access to quality inputs, offer training in good agricultural practices and improve market linkages to national and international processing and export companies to support smallholder farmers to access domestic, regional and export markets to diversify their crop production, to build overall resilience.</p>	<p>Access to markets. Access to improved agricultural inputs and services. Access to knowledge on improved/climate smart agricultural practices. Access to finance.</p>	<p>HFSP develops business linkages between producers, traders, suppliers, processors and exporters. As part of these activities, it supports aggregation of producers, and brokers PPPs with Dutch and Kenyan processing and exporting companies, to construct infrastructure, such as grading and holding sheds that support bulking, warehousing and collective marketing. The partnership also develops producer trainings in good agricultural practices to increase produce quality, to meet international certification standards and to support marketing to domestic, regional and export markets. A revolving fund provides seed capital for SMEs, such as quality input providers, and to support producers to access credits for farm inputs, including those meeting certification standards for export markets. Much of the activity under HFSP was structured through identification of business cases for new crop value chains.</p>	<p>Solidaridad-Eastern and Central Africa Expertise Centre; Hivos; SNV; AgriProFocus; The Embassy of the Kingdom of the Netherlands (EKN) in Nairobi; Varying sized Dutch and Kenyan processing and exporting companies; Local processing SMEs; Farmer cooperatives; Local market traders; County governments.</p>
<p>HortIMPACT</p>	<p>HortIMPACT aims to integrate SME producers into fruit and vegetable value chains to build broader resilience through crop and income diversification, improving the safety of produce and reducing post-harvest losses through overcoming broader barriers in business environments, such as access to new technologies and access to markets.</p>	<p>Access to markets, including for new climate smart technologies. Access to knowledge on climate smart agricultural practices. Access to agricultural inputs and services. Access to knowledge on improved/climate smart agricultural practices. Access to finance.</p>	<p>Partners in HortIMPACT jointly identify and develop 'business cases' for agribusinesses and producers to develop businesses that support inclusive business, reduced food loss and food safety. Through an innovation fund, these partners then co-invest in strategies that are deemed to be economically viable, innovative, and scalable and which could potentially have a significantly positive impact on SME commercial farmers. Business cases developed under HortIMPACT focus on inclusive business among smallholder farmers, linking them with processing companies and exporting companies and with training in the use of improved inputs, such as hybrid seeds and new technologies, such as greenhouses and integrated pest management. HortIMPACT also works with national and county government agencies to formulate and implement policies to create an inclusive enabling environment and with financial institutions to make credit available to producers, to enable them to invest in the development of their farms.</p>	<p>SNV; Netherlands African Business Council (NABC); Large exporting and manufacturing companies; Processing and input providing SMEs; Smallholder farmers and farmers groups.</p>
<p>Kenya Cereal Enhancement Programme (KCEP)</p>	<p>KCEP aims to support SME cereal and pulses producers to access new climate smart technologies and services and to access new markets for climate resilient cereal commodities and pulses. It does this with the goal of enabling graduation to market-oriented and climate-</p>	<p>Access to markets for climate resilient crops. Access to knowledge on climate smart agricultural practices. Access to improved agricultural inputs and pre and post production services. Access to finance.</p>	<p>KCEP employs PPPs and other grant and cost-sharing arrangements to support SMEs to develop businesses that improve small-scale producers access to improved agricultural inputs and post-harvest management services and tools, such as storage and warehouse receipt systems. The partnership also aims to support producers to capitalise on gains arising from these investments through identifying new market and value chain opportunities, brokering business linkages, strengthening farmers' organisations and supporting aggregation, to allow smallholders to sell their produce on more favourable terms.</p>	<p>State Department of Agriculture, Ministry of Agriculture; International Fund for Agricultural Development; World Food Programme; European Union; Food and Agriculture Organization (FAO); Agricultural Market</p>

	smart farming, to support livelihood diversification alongside natural resource management capacity.		KCEP also mobilises training and other advisory services in good agricultural practices, conservation agriculture and water conservation techniques.	Development Trust; Kenya Agriculture & Livestock Research Organization (KALRO); Agricultural Market Development Trust (AGMARK), Cereal Growers Association (CGA), Eastern Africa Grain Council; Equity Bank; Processing and other agri-business SMEs; Small-scale producers and farmers groups
Kenya Livestock Insurance Program (KLIP)	KLIP aims to develop a livestock insurance scheme targeting vulnerable pastoralists, with the goal of providing affordable safeguards to support pastoralists to keep more livestock alive during times of drought.	Access to safety nets.	Partners in KLIP invest in research and innovation in the use of satellite data to develop a commercially viable weather index, to enable the provision of insurance in remote regions and among poor small-scale producers. The partnership also develops supportive technologies, such as the mobile money transfer to increase the efficiency of pay-outs, and delivers extension support, to sensitise producers and other stakeholders to the insurance.	State Department of Agriculture, Ministry of Agriculture; International Livestock Research Institute; Insurance companies (APA Insurance); World Bank; GIZ; Swiss Re Group; Micro-finance service providers
Kenya Markets Trust (KMT) agri-inputs and services partnerships	KMT agri-inputs and services partnerships aim to increase access to quality agri-inputs and services to increase production, enhance resilience of smallholder farmers and enable commercialisation of climate smart products and climate resilient agricultural inputs.	Access to improved agricultural inputs and services. Access to knowledge on improved agricultural inputs and services	KMT works with partners to adopt indirect-intervention based approaches to identifying opportunities to close gaps in value chains and overcome barriers in business enabling environments through market-analysis and partnership development. In one example, KMT partnered with inputs firm Homa Lime, as well as agro-dealers (and extension officers) to increase awareness of and access to lime, including through links to soil testing services and through partnerships with demonstration famers, to overcome challenges of low-production linked to soil-acidity. An assumption of the project was that, by increasing production among farmers and by sensitising agri-dealers, stockists and producers to a range of opportunities to manage and remedy soils, improve retail management and support climate resilience in production, additional purchases of new climate-smart hybrid seeds and fertilisers would also become easier for producers. Another partnership with Farmers Pride focused on increasing access to improved agri-inputs through supporting the development of Farmers Pride franchises.	KMT; The Gatsby Foundation, UKAid, AgriExperience Ltd, SNV; International Livestock Research Institute; Larger agribusinesses (e.g. Farmers Pride); Input, service provider and processing SMEs; Government extension services; Small-holder farmers.

<p>Mau Mara Serengeti Sustainable Water Initiative (MaMaSe)</p>	<p>MaMaSe aims to support sustainable resource use through increasing access to markets, inputs and training for products that support improved water quality, conserve or restore forests and support sustainable management of range lands.</p>	<p>Sustainable common-pool resource management. Access to knowledge on climate smart agricultural practices. Access to markets. Access to improved inputs and pre and post-production services.</p>	<p>MaMaSe is a broad-based partnership that aims to support structural poverty reduction, sustainable economic growth, and ecosystem conservation at a basin-scale. Within this agenda, MaMaSe develops business linkages and related trainings that build upon the business case approach adopted in HFSP (with similar provision for new financing mechanisms). However, compared to HFSP, more emphasis is explicitly placed on sustainability in the selection of business cases and target value chains.</p>	<p>UNESCO- Institute for Water Education; WWF Kenya; Large private sector processing and manufacturing companies; National finance institutions; Basin water resource management authority; GIZ; Wageningen University and Research; Massai Mara University; Egerton University; Deltares</p>
<p>Northern Rangeland Trust (NRT) LivestockWORKS</p>	<p>As part of a broader agenda to support resilient community conservancies LivestockWORKS aims to increase resilience to climate shocks by supporting strategic destocking among pastoralists, to avoid excessively large herds that cannot be sustained and are often sold at rock-bottom prices at times of drought. It does this through developing business linkages to increase access to markets and affordable inputs, such as feed supplements.</p>	<p>Sustainable common-pool resource management. Access to climate smart inputs and pre and post-production services. Access to broader entrepreneurship training.</p>	<p>LivestockWORKS adopts a value-chain linkage approach wherein NRT Trading purchases cattle from small-scale pastoralists, for processing, fattening and finishing. By transporting meat under cold chain to different markets in Nairobi, the partnership aims to help pastoralists access higher prices for their beef. The partnership also develops linkages with the Northern Rangelands Savings and Credit Cooperative to provide pastoralists with alternative saving opportunities, (to storing wealth in cattle). Entrepreneurship training is also offered through the partnership, to support pastoralists to access other domestic and international markets and to set up enterprises which provide new sources of income. As part of this, partners focus on developing supportive infrastructure, such as increasing hay production, for cost-effective feed supplementation through grass banking.</p>	<p>Northern Rangelands Trust and Northern Rangelands Trust Trading; Community conservancies; Producer groups; Northern Rangelands Savings and Credit Cooperative; Development partners (e.g. USAID; GIZ; UKAid) and other NGOs (e.g. The Nature Conservancy; Flora and Fauna International)</p>
<p>PREPARED (Planning for Resilience in East Africa Through Policy, Adaptation, Research, and Economic Development) weather index-crop insurance</p>	<p>As part of a broader suite of regional activities, the PREPARED weather-index crop insurance partnership aims to increase access to weather-index crop insurance and enhance broader weather advisory services) for producers and other actors in the agricultural value chain in</p>	<p>Access to safety nets. Access to weather and climate information.</p>	<p>Having identified climate data quality issues as a core challenge for insurance companies, who struggle to access a robust index through which to determine commercially viable premiums for crop insurance for poor farmers in remote areas, partners in PREPARED have leveraged expertise within the partnership to produce a blended weather dataset. Combined with investment in data collection (e.g. station upgrading) and capacity building within Kenya Metrological Department, the partnership aims to support the development of new techniques and tools for determining unit areas of insurance to set premiums and determine yields. PREPARED also works with the National</p>	<p>USAID; Jubilee Insurance; Kenya Meteorological Department (KMD); Insurance and finance institutions (e.g Rabobank, Jubilee Insurance); Tetra Tech and SSG Advisors; U.S. Geological Survey; FEWS NET; IGAD’s Climate Prediction and</p>

	Kenya, who otherwise lack safety nets in the event of climate shock.		Farmers Association, the Kenya Agriculture and Livestock Research Organisation and input-providing SMEs, to market the insurance and to devise tools for bundling it within the sale of inputs. It also aims to provide ICT based agro-weather advisory to producers via SMS prior to climatic events to provide forecasts for land preparation, postharvest management, and soil conservation	Applications Center; National Farmers Association; Kenya Agriculture and Livestock Research Organisation; Input providing SMEs
Smart Water for Agriculture (SWA)	SWA aims to increase access to climate smart water products and services that support resilience to climate change among producers, reduce labour demands and inputs and promote off-season production opportunities	Access to climate smart agricultural inputs and pre and post-production services. Access to markets, including for new climate smart technologies. Access to knowledge on climate smart agricultural practices. Access to finance	The SNV Smart Water for Agriculture programme partners with providers of smart water solutions (Kenya and Dutch private companies and entrepreneurs, as well as NGOs and county agencies) to promote commercial products and services, such as drip irrigation, which support sustainable resource use among 'entrepreneurial farmers'. The programme is structured around (1) irrigation acceleration platforms for multi-stakeholder engagement; (2) business linkages and demonstration of smart water products and services at local levels; (3) brokering business linkages and supporting Dutch and Kenyan companies to invest in the smartwater sector; (4) increasing awareness and marketing opportunities to adopt smart water solutions; and (5) engaging financial institutions and launching a Smart Water Loan facility to provide loans to smallholder farmers through saving and credit cooperatives.	SNV ; Aqua for All; PRACTICA Foundation; Large Kenya and Dutch private companies including technology and exporting companies; SME producers and input suppliers; Kenya Union of Savings and Credit Co-operatives; KIT Royal Tropical Institute
Strengthening Adaptation and Resilience to Climate Change in Kenya (StARK+) agricultural value chain partnerships	STARK+ was a large UK Department for International Development programme with a broad remit and which includes a wide range of partnership arrangements within it. Activities under STARK+ include the development of partnerships designed to increase access to finance, training and improved inputs to facilitate climate smart agriculture.	Access to markets for climate resilient crops. Access to finance. Access to knowledge on climate smart agricultural practices.	Within a diverse programme of activities, STARK+ and its implementing partners, facilitated a range of partnerships to scale up private sector innovation and investment in low carbon and adaptation products, services and assets, such as clean energy, sustainable agriculture, water management, and weather forecasting, to support adaptation and development within agricultural value chains. Partnerships between financial institutions, such as Rafiki Microfinance Bank, climate specialists and agricultural supply chain actors, for example, were brokered to support uptake of climate resilient crops such as sorghum and cassava, to diversify income generation (including through utilising indigenous chicken breeds), and to support production improvements in dairy and crops that reduce net emissions whilst increasing productivity.	UK Department for International Development (DFID) ; International Bank for Reconstruction and Development; SME agricultural supply chain actors (e.g. input providers); Act Change Transform; International Institute for Environment and Development; United Nations Development Programme; Alliance for a Green Revolution in Africa; National finance institutions (e.g. Rafiki Microfinance Bank).

Tosha Livestock Traders	This partnership aims to support female live animal traders in Marsabit to aggregate their sheep and goats, to improve their bargaining power and access reliable markets outside Marsabit, including through linkages to Neema Slaughterhouse and other terminal markets. The partnership seeks to build resilience among female livestock traders through income generation and diversification, as well as through wider entrepreneurship skill development.	Access to markets. Access to broader entrepreneurship training. Access to improved agricultural inputs and pre and post-production services.	Market and value chain analysis was used to identify gaps in business environments for female livestock traders in Marsabit. KMT then supported aggregation of sheep and goats through Tosha women's group, with the goal of supporting female live animal traders in Marsabit to improve their bargaining power and to access reliable markets outside Marsabit, (including to enable them to build contractual agreements with established end-market players and formal transport systems). KMT supported the establishment of a formal and registered institution, Tosha Livestock Traders, to run the affairs of the business of Tosha women's groups trading and financed a business manager to support business development alongside savings initiatives to enable reinvestment into the business (e.g. hiring a veterinarian to guarantee and quality assure livestock). KMT then brokered a deal between Tosha Livestock Traders and Neema Slaughterhouse with supply quotas, to support women traders to purchase more livestock from communities through guaranteed sales. The partnership also aimed to build capacity among female traders through entrepreneurship training.	KMT ; Tosha Womens Group; Neema Slaughterhouse; UK DFID
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5. Expectations and realities of MSPs for adaptation

Findings suggest that significant investment from donor and public sources is being made in developing MSPs for SME adaptation in Kenya. What remains of this paper, therefore, considers the rationales for employing MSPs as a mode of development practice to support SME adaptation, alongside stakeholder perceptions of the way in which these are being achieved in practice. Four main rationales underpinning KIs interest in pursuing MSP approaches to supporting SME adaptation were extracted from the corpus of KI interviews. These overlap strongly with theoretical interest in MSPs for private sector adaptation identified in earlier literatures (Section 1) and include the ideas that:

- 1) MSPs present the opportunity to upscale the adaptive capacity of SMEs through unlocking the private sector *for* adaptation;
- 2) MSPs can offer a more sustainable (long-term) model for implementing adaptation action, by mobilising the private sector in adaptation action;
- 3) MSPs offer the opportunity to coordinate a more holistic response to overcome multiple barriers in the business enabling environments of SMEs that limit adaptation; and
- 4) MSPs are participatory processes that can mobilise adaptation action at local levels and thus produce more robust outcomes to support SME adaptation.

Each of these rationales will now be explored in turn, alongside the opportunities and challenges for realising these in practice, that were outlined by KIs.

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

A core rationale for developing MSPs to support SME adaptation, identified within the KI interviews, rests in the idea of employing MSPs to upscale adaptation action through the private sector. This rationale for MSPs for SME adaptation is premised on the idea, captured in academic literatures, that private sector actors can generate adaptation benefits – and enhance adaptive capacity – for a broader community: What Tompkins & Eakin, (2012) refer to as privately provided, public and private adaptation goods and services. Yet 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 actor mobilising these public goods, that prevent them from implementing these independently¹⁰ (ibid). MSPs for SME adaptation are therefore presented as a tool through which public and civil society actors may support and incentivise private sector actors to take actions that provide these adaptation goods and services for SMEs. The MSPs identified in Table 1 have therefore been developed with the goal of overcoming barriers to ‘implementing’ private sector actors delivering activities, goods and services, which support the adaptation and wider resilience of ‘beneficiary’ small-holder producers.

Kenya’s PPP framework assumes partnerships are structured around formal contractual arrangements between a government entity and one or more private company with clearly specified roles, financial flows and risk sharing mechanisms, (see also Rankin et al., 2016; Santacoloma et al., 2013). KIs suggested that such contractual financial and risk sharing arrangements may be integrated into MSPs for SME

¹⁰ For example, for manufacturers and distributors of climate smart agricultural inputs, the cost of the marketing and infrastructure required to sell products to remote populations, may exceed the potential returns of such an investment, creating a lack of incentive for private sector actors to provide these adaptation goods and services.

adaptation. However, within the MSPs identified, they noted that 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 a varied range of 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.

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 that employ this strategy
<i>Value chain and market analysis</i>	Many of the MSPs identified by participants 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 (see Carabine and Simonet, 2018). 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. Within the MSPs identified by KIs, this approach was common to support identification of market opportunities to develop new product lines and to target new markets for improved and climate-resilient inputs and pre and post-production services.	KCEP was structured through identifying business cases and brokering business linkages between small-scale producers and larger scale processors, for new climate resilient crop value chains. Through market analysis the partnership also identified opportunities to assist other SMEs to develop businesses that would increase access of small-scale producers in these chains to improved agricultural inputs and tools, and to post-harvest management services, such as storage and warehouse receipt systems.
<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 (as well as other public and civil society 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. KIs suggested relationship and dialogue building between potential partners is often pursued with the same goals as value chain analysis: to support value chain actors to identify opportunities for shared-value from market interventions and the development of new practices, rules, technologies and market linkages to enhance resilience through learning and collective action.	Netherlands development organisation SNV held 'partner days', under the HortIMPACT and SWA partnerships, to bring together value chain actors including producers, aggregators, processors, input suppliers, financiers, development partners and government representatives, to identify synergies and potential future partnership opportunities.
<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, for example to support product development and innovation, as well as investments in data collection and provision 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 for small-scale producers in remote regions.
<i>Marketing</i>	KIs suggested MSPs often supported private sector actors to overcome barriers to accessing new markets, for example for climate smart inputs and technologies, by supporting the advertising of their products and services through activities such as training and technology demonstration and through partnering with local extension services.	The CA4FS partnership supported agricultural machinery suppliers, who produce tools for conservation agriculture, to create awareness about their products to engage new markets through demonstration plots and trainings.

<p><i>Access to finance, financial incentives and financial de-risking strategies</i></p>	<p>KIs identified a range of financial mechanisms through which public actors within MSPs sought to enable and incentivise private sector actors to provide goods and services that support producer adaptation. These include subsidies, loans, tax incentives, grants, co-investment models and other de-risking strategies.</p>	<p>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.</p>
<p><i>Incubation services</i></p>	<p>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 were also offered through MSPs, to support private sector actors to deliver adaptation goods and services.</p>	<p>KMT worked in partnership with actors, including Farmers Pride, to deliver business incubation services for young entrepreneurs to set up agri-business franchises, to increase producer's access to improved inputs.</p>
<p><i>Empowering the consumer base</i></p>	<p>In most of the MSPs highlighted by KIs, in addition to undertaking interventions to support implementing private sector actors to mobilise <i>for</i> adaptation (c.f. Pauw and Pegels, 2013), public sector actors also took action designed to address gaps within enabling environments for adaptation and business development directly at the level of beneficiary producers. This includes activities such as delivering producer 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 includes activities such as helping to mobilise producer aggregation, to improve the bargaining power of small-scale producers and to support end-market private sector actors, to access more reliable suppliers. KIs highlighted that such action has the potential to be mutually reinforcing in terms of unlocking the private sector <i>for</i> adaptation; providing a consumer base that is empowered and incentivised to respond to investments from the wider private sector and which can participate more consistently as suppliers of quality products within value chains.</p>	<p>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.</p> <p>Meanwhile, 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 get into contractual agreements with established end-market players and transport providers.</p>

KI interviews revealed close alignment between the strategies employed by public sector and civil society partners within MSPs to mobilise the private sector *for* adaptation, and the reasons why private sector companies participate in MSPs as implementing partners. For implementing private sector actors interviewed in this research, participation in MSPs was most notably driven by a desire to access knowledge and resources to take advantage of market opportunities presented by climate change, to de-risk investments, to diversify business models, to generate new revenue streams and to promote new or existing products to new or existing markets. Through the mechanisms identified in Table 2, KIs accordingly provided examples of partnerships helping to develop business cases that allow private sector actors to deliver adaptation goods and services that overcome barriers to adaptation for producers, while compensating these implementing private sector actors for the additional risk associated with developing these new products, services and markets for poorer groups, with higher barriers to access. As one KI from an insurance agency explained, *“[to deliver services to 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”*.

KIs emphasized that a wide range of private sector actors can be mobilised to produce adaptation goods and services that support producer adaptation through MSPs. Activities such as the development of demonstration plots, and new climate smart input and service providing businesses (for example under the Innovation Fund in HortIMPACT), 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”*. Within the MSPs identified by participants, depending on their design, producers can therefore play dual roles; as both target beneficiaries of the partnership and as implementing partners in their own right (c.f. Santacoloma et al., 2013). 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. And 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 particularly highlighted as a mechanism through which MSPs may create new, potentially fragile, dependencies between private sector actors. KIs highlighted that through MSPs, producers and other 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 KCEP, 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. Should EABL stop producing this beer, KIs suggested 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. Moreover, the opportunity for MSPs, dependent on market forces, to be inclusive was a primary 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 adaptation support to the poorest, most vulnerable and most geographically remote groups. 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... we are looking at private partners who are looking at the commercial sense of the project and the poor and vulnerable will not be part of that... [for example] 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”*.

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

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 continue to 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 delivering adaptation resources 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 cattle¹¹, was offered as one example of a partnership that developed “*genuinely commercial*” activities (see Northern Rangelands Trust, 2013). However, respondents suggested that, in practice, MSPs most often remain heavily dependent on donors for both resources and momentum. The strategies deployed by brokers, outlined in Table 2, frequently include subsidising the customer base (‘beneficiary’ producers), 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. Without ongoing participation from partnership brokers, KIs also suggested that 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 can offer the opportunity to coordinate a more holistic response to overcome multiple barriers in business enabling environments that limit adaptation

Another key rationale underpinning KI interest in MSPs to support SME adaptation, echoes wider literatures which suggest MSPs constitute a mechanism to leverage 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 producers face broad development deficits, 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: “*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*”¹².

¹¹ To prevent large herds, that cannot be sustained at times of drought, being amassed.

¹² A particular significance of this rationale in academic literature is captured in Tol and Yohe's (2007) “weakest link” hypothesis, which suggests that adaptive capacity may be disproportionately influenced by the least developed elements of enabling environments, wherein gaps in business enabling environments could disproportionately limit people's ability to adapt, despite additional public investment to support adaptation.

MSPs, meanwhile, were 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, 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. 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 also 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 suggested 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. The PPP framework in Kenya denotes that line ministries with a specific sectoral mandate will be responsible for initiating, steering and monitoring partnerships. Thus, in MSPs focused on producers and agribusinesses, the PPP framework envisages a partnership coordinating function for the Ministry of Agriculture. However, with the MSPs identified by KIs most often initiated by NGOs and other donor-led institutions, KIs suggested MSPs are often unsolicited by and evolve independently from the MOA. Indeed, in the corpus of MSPs identified in Table 1, where the MOA is involved in partnerships, with two notable exceptions (KLIP and KCEP) it is typically a more minor partner, or its role is consultative. The MOA is therefore not currently exercising its envisaged supervisory and harmonising role.

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

‘Partnership’ nomenclature played a powerful role within KI accounts of MSPs. Reflecting definitions of MSPs that are common to action research agendas in grey-literatures, KIs frequently positioned MSPs as emerging around assumptions of non-hierarchical social relationships based on mutual benefit and shared risk. Similarly, KI’s 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 seeming rhetorical power of ‘partnerships’ within the corpus of KI interviews, the salience of this term – and its associated implications of inclusion – varied within KIs accounts of MSPs for SME adaptation. 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. 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 relationships¹³. Reflecting analysis of partnerships in Timothy (1999), KIs suggested that the various relationships between partners within MSPs feature different levels of integration and participation. This occurs both within the partnership, in terms of the actors incorporated within the partnership and their ability to influence partnership trajectories, and outside of the partnership, in terms of which actors MSPs target 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 a particularly important role in shaping the conditions of participation within an MSP. KIs suggested that, in facilitating contact between potential partners, these actors are likely to work within their own established networks, which when considering beneficiary communities, typically include more visible groups. Meanwhile, their own internal planning process, which often require a partnership design and terms of reference to be established prior to meaningful collaboration, were suggested to often limit 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”*.

The nature of SME participation within partnerships was another key theme in the data set on inclusion within MSPs. KIs suggested ‘beneficiary’ producers are often seen as 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 producers are incorporated into MSPs, meanwhile, whether through consultation or more active forms of integration, KIs suggested that MSPs often relied on producers’ cooperatives and other forms of farmer group (or even aggregators, contact farmers or industry associations), to access these producers. Since such actors and groups have their own local power

¹³ The MSPs captured in Table 1 are typically structured around ‘primary’ partners signing a Memorandum of Understanding (MOU), as well as a series of other formal and informal bilateral and multi-lateral agreements (including sub-contracting and contract farming/outgrower agreements, financial service contracts and licensing agreements) developed to implement activities under the partnership (see also Santacoloma et al., 2013).

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.

6. Discussion and conclusions

Great expectation surrounds MSPs and their ability to contribute to enabling environments for SME adaptation in Kenya. Some of this hype appears warranted. 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 are being employed as a vehicle to enable the private sector to deliver adaptation resources to small-scale producers, including in remote regions, that would otherwise fall outside of market inclusion. Moreover, this research 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 such as increasing access to new inputs, technologies and services, these actors too have the potential to deliver adaptation goods to small-scale producers, and to support broader resilience along value chains through MSPs.

Implying MSPs have the potential to support upscaling adaptation action among some of the most vulnerable private sector actors, this 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). Meanwhile, the opportunity to support the delivery of business enabling conditions for adaptation through a wide range of private sector actors – which are closely integrated into local communities (Schaer and Kuruppu, 2018) – is also promising within a landscape where it is increasingly recognised that adaptation and adaptation funds need to be delivered locally (Ayers, 2011). Echoing Pauw and Chan (2018), this finding 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 producers 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.

This research has, however, identified a number of limitations to current applications of the MSP model for supporting SME adaptation in Kenya. Through the sampling strategy pursued, we did not identify any partnerships that seek to support SME adaptation outside of the agricultural sector, with partnerships particularly focused on supporting the resilience of smallholder agricultural production. These producers are highly exposed to climate risk and thus constitute an important target community for MSPs for adaptation. Yet research has demonstrated the need to take a broader look at climate risk within sub-Saharan African economies. Climate acts as a risk multiplier and even 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 (Gannon et al., 2018; Siderius et al., 2018). If MSPs are to respond to this wider need, innovation is likely required to identify and support business models that encourage private sector actors to develop products, services and value-chain linkages that enable them to deliver adaptation goods and services to a wider range of SMEs through partnerships.

This research also suggests that a number of MSPs in Kenya adopt a ‘development’ oriented approach to supporting adaptive capacity among producers. 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 partnerships.

MSPs in this research also tell a more cautious tale of the role of the private sector in adaptation action. MSPs are not easily becoming self-sustaining at present, as is often envisaged will be achieved through employing market-based partnership strategies. Instead KI's 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, 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 is required, to identify risks and prepare 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' (c.f. Forsyth, 2010), 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 draw on the lessons of literatures which have highlighted the potential for localised adaptation and development planning responses to reproduce existing politics of exclusion, subordination and vulnerability (Eriksen et al., 2015; Sovacool et al., 2015; Tanner and Allouche, 2011) and reflect critically on the ways in which their own role has the power to structure unequal power relations and an ability to dictate adaptation and development agendas and priorities. Equitable participation is going to require 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; Scoones, 2015, 2009). So too do the framings that justify specific sets of actions to support adaptation and which are used to define what transformational adaptation looks like for different actors (Adger et al., 2009; Eriksen et al., 2015;

Tanner and Allouche, 2011). 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.

The role of the public sector in delivering MSPs for SME adaptation also likely requires a rethink. In Kenya, disconnect between MSPs and national government adaptation and development processes appears to be arising in part because of the variance between the legal definition of PPPs and the types of MSPs that are emerging to support SME adaptation. This limited integration restricts opportunities for government ministries to deliver on the coordinating function for partnerships set out for them in the PPP Act, to support complementarity and cross-sectoral dialogue within and across the design and development of partnership activities, and to align MSP development with national development agendas. Greater alignment of the governing PPP framework with the practice of MSPs for delivering adaptation among SMEs in Kenya is likely to be key to maximising the opportunities for public sector actors to contribute to addressing the multi-dimensional roadblocks to adaptation that persist within business enabling environments through MSPs. Aligning partnerships more closely with sectoral development strategies, meanwhile, is likely an important step if MSPs are to avoid becoming a guise for international donors and NGOs dictating the terms of adaptation and development within developing country enterprise landscapes.

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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

- Adger, W.N., Dessai, S., Goulden, M., Hulme, M., Lorenzoni, I., Nelson, D.R., Otto, L., Johanna, N., Anita, W., 2009. Are there social limits to adaptation to climate change? *Climatic Change* 93, 335–354. doi:10.1007/s10584-008-9520-z
- Agrawal, B., 2011. Food Crises and Gender Inequality, Working Papers 107. Department of Economic and Social Affairs, United Nations.
- Agrawala, 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:10.1787/5kg221jkg1g7-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. *Wiley Interdisciplinary Reviews: Climate Change* 7, 517–536. doi:10.1002/wcc.402
- Ayers, J., 2011. Resolving the adaptation paradox: Exploring the potential for deliberative adaptation policy-making in Bangladesh. *Global Environmental Politics* 11, 62–88. doi:10.1162/GLEP_a_00043
- Beisheim, M., Simon, N., 2016. Multi-Stakeholder Partnerships for Implementing the 2030 Agenda: Improving Accountability and Transparency. Analytical Paper for the 2016 ECOSOC Partnership Forum. Analytical Paper for the 2016 ECOSOC Partnership Forum – March 11, 2016 Structure 1–33. doi:10.2139/ssrn.2767464
- Birk, M., Mills, J., 2011. *Grounded Theory: A Practical Guide*. SAGE Publications, London, UK.
- Bowen, G.A., 2006. Grounded Theory and Sensitizing Concepts. *International Journal of Qualitative Methods* 5, 12–23. doi:10.1177/160940690600500304
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 77–101. doi:10.1191/1478088706qp063oa
- 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.
- Canevari-Luzardo, L.M., Berkhout, F., Pelling, M., 2019. A relational view of climate adaptation in the private sector: How do value chain interactions shape business perceptions of climate risk and adaptive behaviours? *Business Strategy and the Environment* 1–13. doi:10.1002/bse.2375
- 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.
- Carter, S., Steynor, A., Vincent, K., Visman, E., Waagsaether, K.L., 2019. *Co-production in African weather and climate services: Manual*. WISER and FCFA.
- Charmaz, K., 2006. *Constructing Grounded Theory*. SAGE Publications, London, UK.
- Charmaz, K., 2003. Grounded theory: Objectivist and constructivist methods, in: Denzin, N.K., Lincoln, Y.S. (Eds.), *Strategies for Qualitative Inquiry* (2nd Ed). Sage, Thousand Oaks, CA, pp. 249–291.
- 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. *Journal of International Development* 11, 597–612.
- Conway, D., Nicholls, R.J., Brown, S., Tebboth, M.G.L., Adger, W.N., Ahmad, B., Biemans, H., Crick, F., Lutz, A.F., De Campos, R.S., Said, M., Singh, C., Zaroug, M.A.H., Ludi, E., New, M., Wester, P., 2019. The need for bottom-up assessments of climate risks and adaptation in climate-sensitive regions. *Nature Climate Change* 9, 503–511. doi:10.1038/s41558-019-0502-0
- 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, Birame, Diouf, Babacar, 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., Fankhauser, S., Diop, M., 2018a. How do African SMEs respond to climate risks? Evidence from Kenya and Senegal. *World Development* 108, 157–168.
- Crick, F., Gannon, K.E., Diop, M., Sow, M., 2018b. Enabling private sector adaptation in sub-Saharan Africa. *WIREs Climate 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. *Regional Environmental Change* 15, 747–753. doi: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 Climate Change*. doi:10.1002/wcc.341
- Dodds, F., 2015. *Multi-stakeholder partnerships: Making them work for the Post-2015 Development Agenda*.
- 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 Environmental Change* 35, 523–533.
doi: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.
- Ferroni, M., Castle, P., 2011. Public-private partnerships and sustainable agricultural development. *Sustainability* 3, 1064–1073. doi:10.3390/su3071064
- Forsyth, T., 2010. Panacea or paradox? Cross-sector partnerships, climate change, and development. *Wiley Interdisciplinary Reviews: Climate Change* 1, 683–696. doi:10.1002/wcc.68
- Forsyth, T., Evans, N., 2013. *What is Autonomous Adaption ? Resource Scarcity and Smallholder Agency*

- in Thailand. *World Development* 43, 56–66.
- Gannon, K.E., Conway, D., Pardoe, J., Batisani, N., Ndiyoi, M., Odada, E., Olago, D., Opere, 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. 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, 1–12.
- Glaser, B.G., 1978. *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press, Mill Valley, CA.
- 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. *Current Opinion in Environmental Sustainability* 12, 74–79. doi:10.1016/j.cosust.2014.11.001
- Huang, J., Ji, M., Xie, Y., Wang, S., He, Y., Ran, J., 2016. Global semi-arid climate change over last 60 years. *Climate Dynamics* 46, 1131–1150. doi:10.1007/s00382-015-2636-8
- IFAD, 2016. How to do public-private-producer partnerships (4Ps) in Agricultural Value Chains. doi:10.1109/TE.1958.4322031
- Intellectap, 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.
- 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.
- Mendelsohn, R., 2012. The Economics of Adaptation To Climate Change in Developing Countries. *Climate Change Economics* 3, 1250006-1–21. doi:10.1142/S2010007812500066
- Munyua, A.W., 2016. Exploring the multi-stakeholder experience in Kenya. *Journal of Cyber Policy* 1, 206–221. doi: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, 863–877. doi: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, 176–210. doi: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.
- Rein, M., Stott, L., Yambayamba, K., Hardman, S., Reid, S., 2005. *Working Together: A Critical Analysis of Cross-Sector Partnerships in Southern Africa*. Cambridge, UK.
- 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.
- 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, 171–196. doi: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. *Journal of Management* 31, 849–873. doi: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 Climate Change* 6, 321–344. doi:10.1002/wcc.335
- 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 Climate Change* 5, 616–618.

- Stadtler, L., 2016. Scrutinizing Public–Private Partnerships for Development: Towards a Broad Evaluation Conception. *Journal of Business Ethics* 135, 71–86. doi:10.1007/s10551-015-2730-1
- 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. *Journal of Sustainable Tourism* 7, 182–205. doi:10.1080/09669589908667336
- Tol, R.S.J., Yohe, G.W., 2007. The weakest link hypothesis for adaptive capacity: An empirical test. *Global Environmental Change* 17, 218–227. doi:10.1016/j.gloenvcha.2006.08.001
- Tompkins, E.L., Eakin, H., 2012. Managing private and public adaptation to climate change. *Global Environmental Change* 22, 3–11. doi: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? *Regional Environmental Change* 15, 783–800. doi:10.1007/s10113-014-0741-6
- Van Huijstee, M., Francken, M., Leroy, P., 2007. Partnerships for sustainable development: A review of current literature. *Environmental Sciences* 4, 75–89. doi: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/FDKM/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.