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The role of institutions in managing local level climate change adaptation in semi-arid Zimbabwe

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ABSTRACT

Significant efforts have been made to understand impacts and how communities adapt to climate change impacts, yet there is an urgent need to interrogate the capacity of institutions and institutional arrangements in local level adaptation processes. Literature highlights that the success of these adaptation efforts generally hinges upon the nature of existing formal and informal rural institutions. This paper uses largely a qualitative approach to understand institutional structural issues and the role of institutions and institutional arrangements in facilitating local level adaptation. From our research we note three salient findings and their implications for incorporating institutions in local level adaptation. First, the public and private institutions in the study areas play a key role in facilitating adaptation, which appears to be in contrast to previous research in which societal configurations indicate greater state retreat over the past two to three decades. Second, while there appears to be a straightforward distinction between public, private and civic institutions in terms of their functions, we suggest caution given the fuzziness and fluidity of institutional categorization on the ground. Third, it appears that institutions and institutional arrangements of an informal nature foster collective action, that they have remained important over the past decades and remain a critical entry point into dealing with exclusionary tendencies against the vulnerable in communities. Within a broader discussion of the role of institutional frameworks in facilitating adaptation our case contributes to the broader issues of the inevitability of ultimately dealing with development challenges in the process of fostering local level adaptation.

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1. Introduction

Significant efforts have been made to understand impacts and how communities adapt to climate change impacts, yet there is an urgent need to interrogate the role of institutions and institutional arrangements in local level adaptation processes. Local institutions shape impacts of climatic shocks on communities. Literature highlights that the success of these adaptation efforts generally hinges upon the nature of existing formal and informal rural institutions. Institutional arrangements are really key to adaptation as the latter rarely occurs in an institutional vacuum (Agrawal, 2010). It is important to understand the extent to which external interventions and policy enhance local adaptation and development of farming communities. Institutions have been studied for more than three decades now and have been considered over the years

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to be formal rules and arrangements that are dynamic, subject to reshaping, governing behavior in an organisational context and normalizing societal practices (Giddens, 1979; Ruttan, 2006; Scoones, 1998). Agrawal (2010) suggests four ways in which external intervention can contribute to climate change adaptation; provision of weather and climate information, technological interventions that help increase productivity (and which are not necessarily targeted towards climatic change but livelihood challenges in general), financial support to assist with implementation of these technologies and leadership efforts that promote collective action for adaptation.

Within the context of climate change adaptation, it remains important to take into account the recent framing of adaptation to not only climate change but to a range of stressors that face rural communities in the developing world. This framing in part stems from the acknowledgement of climate stressors as being adjunct to multiple stressors as opposed to climate as the sole challenge that rural communities have to contend with (Mubaya et al., 2012; Mubaya and Mafongoya, 2016). In addition, recent literature has illustrated climate change adaptation as a broader development challenge that can potentially be addressed through broader adaptation pathways within the development framework (Butler et al., 2013). Essentially, we embrace the analysis of governance and rural institutions within the context of development more broadly and in addition to the adaptation discourse that has already taken shape over the past two to three decades. In fact, we link adaptation to broader development efforts and our results demonstrate the inextricable link between the role of institutions for climate adaptation and development.

While there is evidence of deliberate efforts for governance systems that help respond to climatic and other challenges across the continent, institutional frameworks still fall far short of the requisite capacity (under-resourced and fragmented) to effectively coordinate implemented initiatives (IPCC, 2012). Relatively little research has been done systematically on the different roles of institutions to different forms of adaptation (Agrawal, 2010). Despite indications that institutions play an important role in facilitating local adaptation, research in this context appears to still be in its infancy. Literature that sets out to highlight climate change adaptations inevitably illuminates on adaptation options that deal with everyday vulnerability (which generally characterizes developing country rural communities who face many challenges) instead (Mubaya et al., 2015). Much of ongoing research on options tends to focus more on technological and infrastructure alternatives for reducing vulnerabilities, with little focus on social or institutional alternatives (Agrawal and Perrin, 2008). Institutional and social factors play a key role in shaping vulnerability on households depending on local governance and institutional arrangements. We emphasise on establishing institutional arrangements and capacities and how they contribute towards dealing with environmental change, by either decreasing vulnerability (Anderson et al., 2010) or increasing it (Eakin, 2005). There appears to be need for a reframing of issues from institutions that are reactive (solely based on responding to climatic shocks) to ones that allow for proactive planning (integrated with other challenges that affect community livelihoods as opposed to climatic adaptation) and implementation of adaptation as proposed by the World Bank.

In this paper, we develop a heuristic framework of analysis in which we consider 1. the institutional landscape that characterizes the study area and what functions the concerned institutions play within the context of adaptation and general resilience building (especially the nature and goals of these institutions and patterns in how specific types of institutions facilitate particular types of adaptation strategies), and 2. the role of formal vis a vis informal institutions in adaptation (in the context of linkages with each other and with different rural households). We discuss findings from this empirical basis for establishing the structure of institutions and consequent adaptation facilitation outcomes and the role that these institutions play in local level resilience building. A cross cutting theme in these objectives is that of whether the focus of intervention and strategies are targeted towards specifically climate adaptation or are development oriented or both. In this process, we examine how previous framing of rural institutions in adaptation play out in the study areas. A narrative has already been produced about local institutions and livelihood and sustainability transformation in poor communities. Agrawal (2010), makes three conclusions from his case studies on the role of institutions on local level adaptation; rural institutions are critical for all observed adaptation efforts, civil and public sector organisations are especially key to adaptation and private sector and market forces appear to be less important to adaptation in these studied cases.

1.1. Conceptualising institutions for climate change adaptation and rural development

Literature categorises institutions into three; private, public and civic, all of which are in turn either formal or informal institutions (Agrawal and Perrin, 2008). However, this distinction may not on the ground maintain the same structure and role since these institutions generally tend to transcend their roles, making relationships and interactions between these institutions intertwined. The current conceptualization of institutions for adaptation categorises institutions into formal and informal, both of which tend to demonstrate potential to reduce uncertainty and facilitate for improved adaptive capacity. Essentially, institutions encompass on the one hand tangible governance and organizational structures (formal) and on the other hand uncodified 'rules of the game', cultural norms and tradition (informal or institutional arrangements) which shape behavior and the nature of human interaction (Jones et al., 2010). In this paper, we present institutions as on the one hand, governance structures and stakeholders (actors) and on the other hand rules and regulations, norms, and values (institutional arrangements).

Within the highlighted categories (private, public and civic), types of institutions exist depending on the local context and institutional and governance factors mediate livelihood outcomes and tend to be considered as drivers of change (Agrawal, 2010). These institutional and political contexts are also considered to influence the adaptive capacity of a community (Smit and Wandel, 2006). While this conceptualization refers directly to the function of institutions in climate change adaptation,

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