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## **Vertical and Horizontal Dimensions in the Governance of Adaptation: Interactions between Agro-pastoralists and the State in the Ethiopian Dry Lands**

### Abstract:

*For centuries, pastoralists and peasant farmers in Africa have adjusted their livelihoods to periods of resource scarcity. However, more recently the combination of unsustainable resource use, inadequate national policies and increasing climate change stress has undermined the existing adaptive capabilities. This paper focuses on local adaptation practices, the national climate change policy and their interactions in Karrayu Agro-pastoral communities in Ethiopia. The Karrayu are recently settled nomadic pastoralists that live in the semi-arid upper Awash valley. The following three questions are addressed in the research using qualitative data collection and analysis methods. First, how do pastoralists and farmers choose between different adaptation alternatives? Second, what is the effect of state policies on local adaptation capacities? Third, how can the observed discrepancies between national policies and local adaptation strategies be explained in terms of power relations and governance structures? Through a more critical lens, using studies on *governmentality* as a starting point, this paper examines the mechanisms through which adaptation to climate change became thinkable as sites of governance in Ethiopia, and more specifically within the Karrayu community in upper Awash Valley. To this end, we conducted an *ethnography* using a triangulation of data collection methods, including extensive fieldwork and direct participant observation within the study community.*

*Key words: Local Adaptation, policy, governance, Agro-pastoralism, Ethiopia*

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## 1. Introduction

Over the past few decades, there has been a shift in environmental governance discourses, from an almost exclusive focus on traditional top down objectives and practices, to attention to 'community' and a range of strategies that seek to prevent and deal with environmental problems.

The terms 'risk prevention', 'risk reduction' and 'livelihood security' are all used within this shift, though the similarities and differences between these three approaches are not always well described or understood. The term risk prevention today is often used loosely to refer to the reduction of threats and victimization and the improvement in individual and community livelihood and security.

Regardless of the specific term(s) used, one of the most salient features of this shift in livelihood security and adaptation governance discourses is the appeal being made to 'community'.

However, the meaning of the word community in contemporary adaptation governance discourses is not always well defined, and there is little consensus as to what this term actually connotes. Nonetheless, there are generally two perspectives on the role of community within livelihood security and risk management. The first perspective sees community as both a cause of, and solution to, issues of livelihood risk and security. It conceives of community as a powerful symbol, an aspiration, or *ideal condition* we should foster or create in order to defend ourselves against risk and restore security. At

the heart of this conception lies a set of relationships and specific types of social relations. It often refers to a 'sense of community' and more specifically to notions of a sense of belonging, sense of ownership, community cohesion, community organization/disorganization, and informal social control. Secondly, community is seen as an *essential means* through which to govern the environment, a powerful site of intervention and/or a key delivery agent of intervention and control. It can refer a specific geographical area (i.e., a village, community), a specific group of agencies/organizations, and/or a specific group of people (i.e., farmers; pastoralists).

The objective of our study is to move beyond looking at the community approach to adaptation governance in climate change strictly through the lens of 'what works' and of implementation success or failure, by conducting an in-depth and critically informed ethnography of Karrayu community in Ethiopia.

We organized our paper in the following manner: First we present our theoretical approach to studying the adaptation responses at local levels and their interaction with other outside/external actors through a governmentality approach. Secondly, we discuss on some of our findings and present the results. Finally, we draw conclusions and reflect on the issue of scale concerning actions to govern adaptation to climate change.

## 2. Theoretical Framework

We use the work of Foucault (1989) and others on *governmentality* (Dean, 1999) to examine the mechanisms through which the community approach to adaptation to climate change became thinkable as a site of governance in Ethiopia. This allows us to examine the socio-political context surrounding the emergence and implementation of the community approach the governance of adaptation to climate change.

We argue that the 'grounding' of governmentality by exploring the messy actualities of the community approach to adaptation governance, including through the use of the concepts of translation (Latour, 1986) and resistance (Scott, 1985 and 1990) is very important. This renders visible how the community approach to adaptation governance relates to broader rationalities of government, without ignoring how the approach unfolds in time and place and through the actions of the chain of agents involved.

As we briefly mentioned it in the introductory section, there is an increased focus on community within adaptation governance can be linked to a growing emphasis on the local dynamics of livelihood security issues, on the role and responsibility of government agencies, and on a push to 'mobilize' and 'empower' communities to help solve 'their own problems'. However, the focus on the community approach to governing adaptation to climate change in upper Awash valley of central Ethiopia begs an important question: What are the conditions under which the community approach to the governance of adaptation became thinkable as a site of governance in Ethiopia?

The work of Foucault (1989) and others (Dean, 1999) on governmentality is useful in rendering visible some of these conditions. Governmentality can be seen as a theoretical lens that aims to shed light on the general mechanisms through which we are governed (Dean, 1999). The governmentality lens sheds light on the rationalities (ways of thinking), technologies (ways of acting) and forms of subjectivity associated with the emergence of the community approach to adaptation governance, and on the implications these have for the responsabilization of the community, and its consequences.

To Foucault (1978), the term 'government' meant not the political or administrative structures of the State, but rather all those mechanisms that try to shape, sculpt, mobilize and work through the choices, desires, aspirations, needs, wants and lifestyles of individuals and groups (Dean, 1999:12). In this view, the state is only the most readily apparent and visible articulation of the larger processes of government.

The word 'govern' is used by Foucault (1978) to describe "...the conduct of conduct': that is to say, a form of activity aiming to shape, guide or affect the conduct of some person or persons" (Gordon, 1991: 2). Governmentality studies therefore strive to render visible (1) ways of thinking, that is the reasoning or *rationalities* underlying the way people govern others and themselves; and (2) ways of acting, the practices that coincide with these rationalities, termed *technologies* by Foucault (1978). The goal is to explore the ways through which individuals are constituted as subjects of both governance and self-governance (Foucault, 1978; Gordon, 1991; Lemke, 2001).

As Rose (1996: 328) puts it, studies on governmentality seek to understand the "...deliberations, strategies, tactics and devices employed by authorities for making up and acting upon a population and its constituents to ensure good and avert ill".

### **3. The case study**

#### **3a. Methods: The Ethnographic Approach**

The methodology for this research was ethnography, broadly defined as the study of groups and people as they go about their everyday lives in a particular setting of interest (Hammersley & Atkinson, 1983). One of the main objectives of ethnography is to grasp and understand the meanings that actions and events have for those studied; to learn about the social world of a group of people as this world is subjectively experienced by them (Emerson, 1987; Goffman, 1959; Hammersley & Atkinson, 2007). This ethnography was in the interpretative tradition, in which "social phenomena is described, and its meanings and functions are further elaborated through the balanced commentary and philosophical descriptions of the researcher" (Madison, 2005: 6).

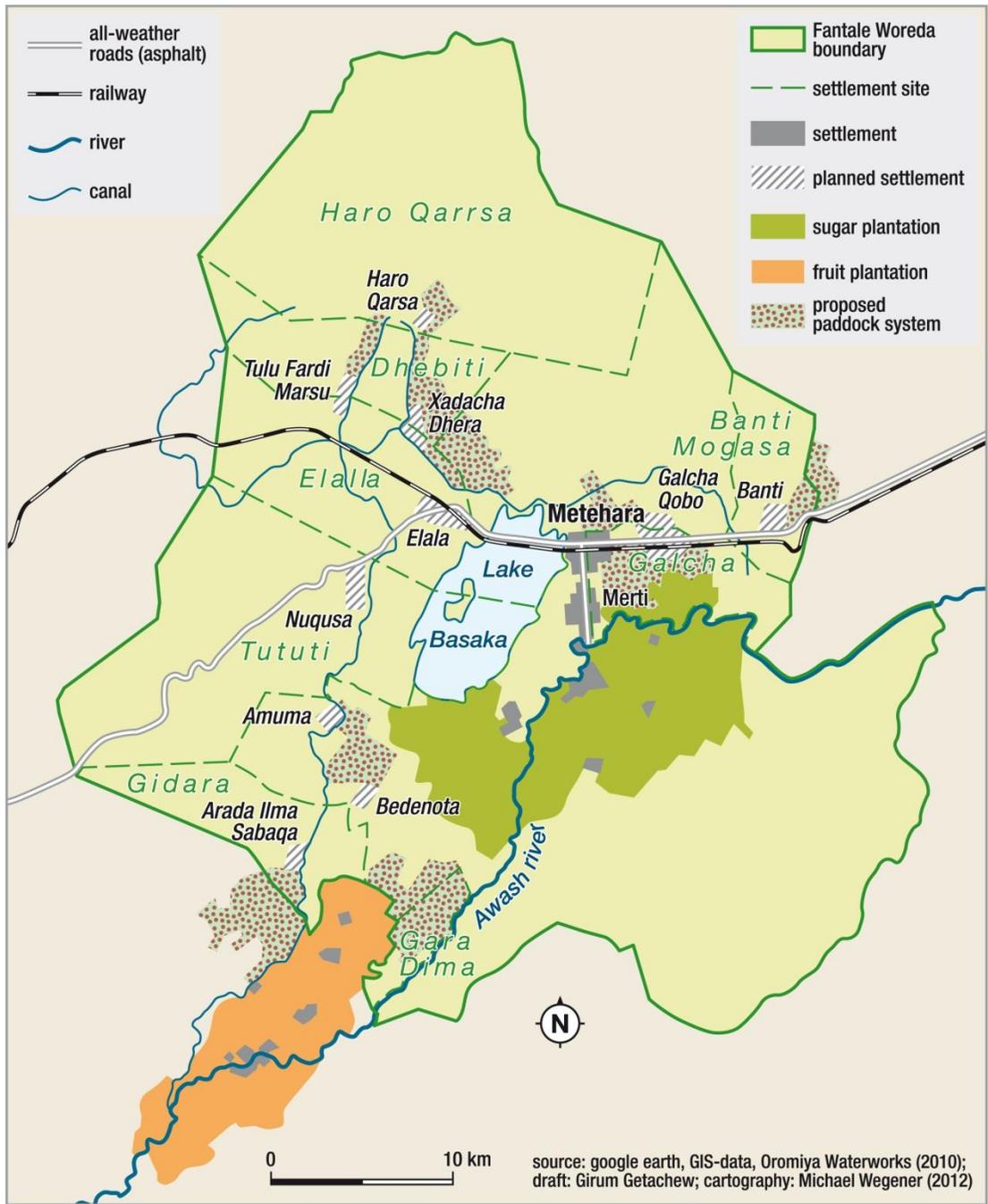


Figure 1:- Map of the study area (Karrayu community in Upper Awash Valley, Ethiopia)

### **3b. Processes of Decision making at a Local Level: Horizontal Governance**

Eventhough it is difficult to disentangle the adaptation of governance in climate change from 'other' everyday livelihood activities, through a critical ethnographic approach we tried to understand the horizontal aspect of adaptation governance in the unpredictable environment of the Karrayu agro-pastoral groups in Ethiopia. Ideally, the different Karrayu individuals' management of resources—land, livestock, labor, time, knowledge and social networks—will converge into the joint and collective goals of household, family and lineage. In this best case scenario, little negotiation is necessary: spouses share decisions that facilitate the smooth running of the household enterprise. When interests conflict, negotiation leads to compromise, grudging concession, or forced acceptance of the decisions of the dominant member of the household, usually the patriarch. Livestock's importance to the household and the husband's responsibility for livestock care, with the ultimate objective of food provision, give the husband the dominant decision making role. This everyday engagement of the households in the case study community can simply be seen as the 'horizontal governance of adaptation' by the locals. As they are at the fore front of the natural environment, their decision and governance mechanisms in an attempt to tame the unpredictable dry land environment is very crucial to sustain their livelihoods.

Amidst the insecurity of their unpredictable environments, what does it mean for a Karrayu household to have a "secure" or "sustainable" livelihood? Chambers and Conway (1992:1; see also Scoones 1998:5; Stone 2003:3) write that "a livelihood

comprises people, their capabilities and their means of living, including food, income and assets." Two categories for "sustainable" livelihoods include: environmentally sustainable, in which the "livelihood maintains or enhances ... assets on which livelihoods depend, and has net beneficial effects on other livelihoods"; and socially sustainable, in which the livelihood "can cope with and recover from stress and shocks, and provide for future generations" (Chambers and Conway 1992:1). The Karrayu attempts to balance cultivation, marketing and livestock husbandry—often successfully, sometimes failing—to achieve and maintain sustainability throughout the evolution of the household into the next generation. Success in sustainability depends on decisions of various household members, especially on those of the household head. In this regard, the governance of the various adaptation strategies in a concerted manner by the locals needs to be appreciated. For instance, in various households we came to realize that the options of mobility as an adaptation to changing environment depends not only on household members' asset holdings (e.g. livestock), skill sets and experience (e.g. with cultivation, herding or marketing), but also on their personal inclinations toward either cultivation or herding, or even toward an occupation based on trade or artisan fabrication. In line with the theoretical framework of governance that we proposed above, the actions of adaptation at the local level can broadly be seen as adaptation actions to govern the unpredictable environment.

One manifestation of local level horizontal governance of adaptation is their self-organization around common resources that have been challenged by top down and

vertical forms of governance. For example, through a patrilineal kinship system the Karrayu organize through clans and sub-clans down to the level of extended family. Two clans, **Dullaha** and **Baso**, are divided into sub-clans, and each sub-clan can be broken down into sub-sub clans. Each level of this structure is administered through a council of elders headed by a **damina** ('clan leader'), who is charged with a variety of responsibilities, from handling domestic issues of abusing husbands, to supervision of herd and pasture management practices, to conflict resolution at different levels. Elder councils at each level of the clan structure oversee the performance of the damina, forming a system of localized governance structure that respects checks and balances.

The first one is based on **ganda**, a territorial herding group roughly equivalent to a village. The head of the village, the **abba ganda**, along with other elders, makes decisions on the time of movement, the area of grazing, the composition of livestock, and the allocation of communal labor for the village. Through efficient traditional communication systems, almost all adult men have knowledge of the status and distribution of resources at a particular point in time, which then informs decisions on livestock movement patterns (Abdulahi 1998). The second level of grazing management involves the division between the two major clans, namely the Dullacha and the Baso. Consequently, Fentale is divided into two major grazing areas termed as Ona Dullacha (the grazing area of Dullacha) and Ona Baso (the grazing area of Baso) each with the three ecological zones of its own.

In addition to the governance of scarce natural resources to adapt to the environment, the Karrayu employ strategies ranging from keeping animals that can endure seasonal feed shortage and long intervals between drinking to diversification into cropping, and trade.

However, in the process of governing their environment, decisions made by individuals within the household interlink into the entwined social, economic, political and ecological environments. Within these environments, people analyze decisions rationally, according to their knowledge of the various options available to them, to come up with a solution that provides the best possible outcome, or more value gained than lost (Ensminger 1996:15). While making decisions and governing their adaptation strategies, the Karrayu households do not act totally independent of their socio-political environment. Various actors with different interests other than the 'style' of the locals' governance of adaptation come to play. In this regard, decisions and governance of adaptation involving multiple participants present different possible configurations of conflict or solidarity between individuals and various forms of social organization (Bentley 1989). In the following section, we try to lay out the various rationalities of adaptation governance and how they are manifested.

### **3c. Politics and Policy: The Vertical Dimension of Adaptation Governance**

As it is showed in the map above, since the 1960s, the creation of protected areas and the establishment and expansion of large-scale commercial farms throughout the Awash Valley, especially along the flood plains of perennial rivers, has led to reduced access to traditional grazing lands, watering points and ceremonial sites (Abdulahi 1998). Abdulahi (1998) estimated that these development schemes have expropriated more than 55 percent of traditionally accessed Karrayu land. The new development schemes not only denied the Karrayu access to dry season grazing areas, they have also blocked the seasonal livestock movement routes and almost all of their watering points along the Awash River. Primarily as a result of lost access to the critical dry season grazing areas, the pastoralists have become increasingly vulnerable to extended dry seasons and drought (Abdulahi 1998). Therefore, all these political and social factors related with resource access have exacerbated the impact of climate change that in turn has impacts on the governance of adaptation.

Recently, we observed that there is a tendency within the integrated irrigation program as part of helping the agro-pastoralists adapt to their changing environment to govern through climate risk, where various dimensions of social life and social problems are redefined under the rubric of 'climate change'. Major social issues identified around mobility (intra- and inter-regional), pastoralist-farmer relations (contract agreements and crop-sharing), and resource management (water users association and water

harvesting) were appropriated by climate change adaptation at the local level. Through this perspective, the entire population has been put into two categories to regulate them easily. Accordingly, the governance of adaptation in climate change is not a neutral process and the actions taken by the dominant actors in a particular context need to be scrutinized.

### **Political Change and Local Livelihood Strategies**

One of the areas where processes of decision making and governance are manifested are the interface of broader political changes and established local strategies. Recent and potential political changes in Ethiopia present both threats and opportunities to local communities. For instance part of decentralization and the establishment of the development groups, and pastoral standing committees at the local and regional level intends to create forums for regulating land tenure and access to land-based resources—water, fields and pastures— and resolving disputes.

### **3c. Battle Fields of Adaptation Governance at a Local Level**

In this sub-section we shed light on the various rationalities (ways of thinking), technologies (ways of acting) and forms of subjectivity associated with the governance of adaptation to climate change, and on the implications these have for the responsabilization of the 'community'. Such a perspective of seeing adaptation governance as a 'battle field' allows us to put the horizontal and vertical dimensions of adaptation governance in perspective. It also helps us to explore participants'

experiences and perceptions as to whether they were witnessing a *shift in power* from the State to the community, and whether they felt the community had *control over decision-making* in relation to the governance of adaptation. It also allows us to look at participants' experiences and perceptions as to whether there had been a *shift in resources* from the State to the community, whether the community felt it had the *knowledge, skills and resources (financial, material, human)* it needs to address the governance of adaptation to climate change in a sustainable manner. Finally, the governmentality lens helped turn our attention to participants' experiences and perceptions as to whether there had been a *shift in accountability* for issues of adaptation, which can also at times mean a *shift in blame*. These themes were supplemented by the notions of *translation* and *resistance* that form the basis of the literature on the messy actualities of governmental rationalities.

Beside the locals' everyday encounter of governing adaptation to climate change, there have been important institutional arrangements toward dealing with climate change and adaptation strategies and interventions by the central government. One of the measures taken was a formulation and implementation of 'sedentarization' policies in order to govern both the natural environment and people.

In general, pastoralism and farming do not represent polar opposites, but rather ideal types of economic activities along a continuum from 'pure' pastoralism to farming. Hogg (1997b) argues that most of Ethiopia's pastoral societies pursue multi-resource economies in which the balance between pastoral and non-pastoral activities is constantly shifting in response to the circumstances. Pastoralism is thus not a way of

life but a set of specialized economic activities and techniques revolving around the herding and care of livestock. Pastoral communities adapt to their changing natural environment. However, in the processes of governing the adaptation strategies of the locals through a vertical and monolithic perspective, one activity is labeled as back ward so as to facilitate the other. This leaves little room for the co-existence of various adaptation governance regimes in one locality and puts the concept of community that we have discussed above in question.

#### **4. Conclusion**

##### **The question of scale in Adaptation Governance**

The focus on the 'local' within governance discourses has increasingly been accompanied by a re-emphasis on place-based approaches to adaptation, such as community adaptation governance. This trend includes a strong focus on communities as sites, objects and agents of governance. These approaches typically involve identifying communities that are considered the most disadvantaged, vulnerable, distressed or 'at-risk', and focusing on them as priorities for intervention.

However, a consideration of the local and sole focus of the horizontal aspect of adaptation governance will preclude us from understanding the various actors who are involved in the process of governance. As the horizontal aspect of adaptation governance also requires the involvement of the vertical dimension, we need to consider the vertical aspect in order to understand the processes of adaptation governance and the actions that are at play. Therefore, based on our ethnographic

study of the Karrayu agro-pastoral groups in Ethiopia, we challenge the consideration of community as a shared geographic locality and a shared concern or 'sense of community' to effect the actions necessary for the governance of adaptation to climate change.

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