

## MANAGING ENVIRONMENT FROM BELOW: THE MATERIALITY OF COMMUNITY PARTICIPATION FOR ECOLOGICAL SUSTAINABILITY IN ZIMBABWE

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### Abstract

*There are growing global concerns about climate change and that resulted in environmental management becoming a global policy priority. The increasing focus placed on the environment globally, has shifted the responsibility from national governments to a more consensus based approach, where communities as environmental stakeholders have a role to participate in environmental management. The paper explores how the environmental management principles in Zimbabwe facilitate greater community participation in Chivi. Findings from this study suggest that though state argues that there is community participation through traditional leaders and environmental monitors, these people are actually disempowered. The paper concludes that there is existence of prescribed governance system in natural resource management. This study recommends bottom-up formalization in the management of environmental resources to enable communities to sustainably conserve and benefit from natural resources.*

**Key Words:** *Managing environment, Community participation, Ecology, Sustainability*

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### Introduction

Participation has gained momentum in coupled development-conservation programs and projects all across the world (Cornwall and Karen 2005). While the notion and theory of “participation” is rather simple, its implementation has had broad and varying result (Bixler *et al.*, 2015). The diverse actors in environmental management present complex interaction between different forces that shape natural resource management and use across different levels. Khan and Lynch (2013) argue that participatory forms of nature conservation must be understood as political project in

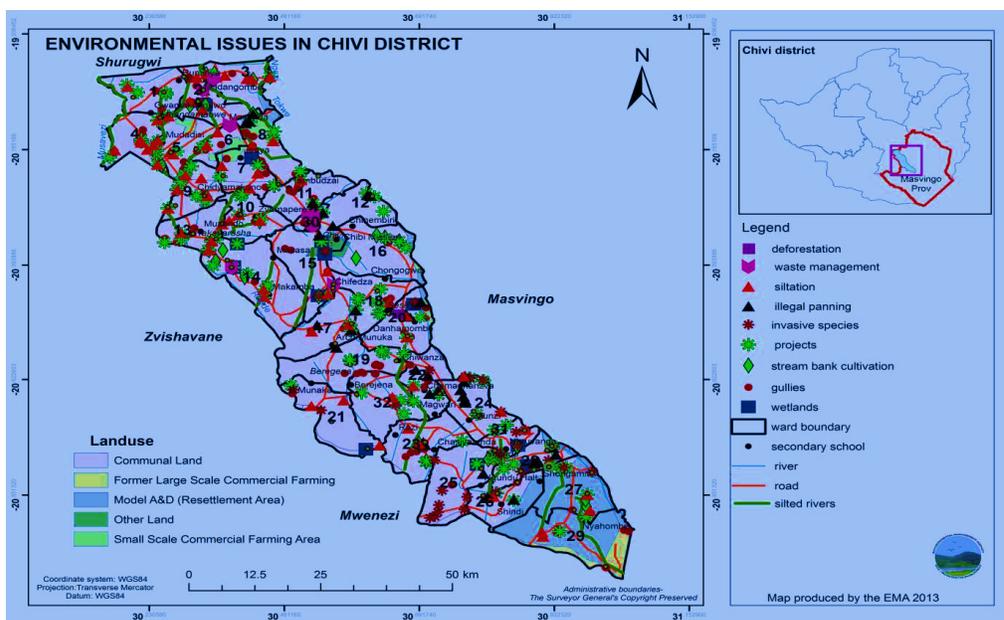
the context of a neoliberal accumulation regime. After clear failures of the state to manage natural resources to meet local needs, in the early 1990s community involvement and problem-solving at the lowest feasible level of organization (the subsidiary principle) became alternatives to top-down management of natural resources (Agrawal and Gibson, 1999, 2001; Brosius, *et al.*, 1998; Ribot, 2002; Scott, 1998; Western and Wright, 1994). The local actors are argued to be the best managers of their own natural resources. Studies by Grimble and Laidlaw (2002), Hulme and Murphree (1999) and Rinzin, *et al.* (2009), have also demonstrated the

failure of top-bottom approach to protect natural resources as well as promote rural development. Roe, *et al.* (2009), Scherr (2000), Stringer (2009) and Xu *et al.* (2008) offer mounting and indisputable evidence for the inherent capacity of local actors to act collectively in order to solve environmental problems. This trend has also led the Zimbabwe government to involve local environmental monitors and traditional leaders in natural resource management. However arguments from scholars such as Botes and van Rensburg (2000) are still applicable even today. The two argued that, this participatory development has offered a convenient way for the state to maintain existing power relations and to ensure the silence of the poor. In light of the above it is imperative for this paper to analyze if the shift of environmental management responsibilities from state actors to local institutions is really empowering the local communities as well as ensuring sustainable management of natural resources.

## Methodology

### Study Area

The location of the study is Chivi District, in the western part of Masvingo Province, Southern Zimbabwe. The area covers a total of 3195km<sup>2</sup> and is a semi-arid which falls under Agro-ecological natural region IV and V and in the drought-prone region of the country. Thirty- nine percent of the district falls under Agro-ecological natural region IV while sixty-one percent falls in Agro-ecological natural region V. The environment is not uniform due to the influence of the landscape, particularly the mountains, which have a considerable climatic impact and have influenced settlement patterns in the district since time immemorial (Mazarire, 2003). Subsistence agriculture is the mainstay of the economy in the Chivi District but agricultural production is, however, in turn, highly compromised because the district is vulnerable to climate change.



### ***Land and Forest Use in Chivi***

According to an unpublished report from Environmental Management Agency (EMA) at the District Office, the major subsistence land use types in most wards include livestock grazing and rain fed arable farming of subsistence crops with a limited market orientation. Much of the indigenous vegetation has been cleared for agriculture. The hills and non-arable areas are the only undisturbed areas. Vegetation is predominantly savannah woodland and grass. There are also trees which are classified as endangered species. The major drivers of land and forest degradation in Chivi District are farm brick moulding, illegal mining, firewood selling and crafting and these often lead to gully development, siltation and deforestation among others.

### ***Research Methods***

The article adopted a qualitative research approach and adopted a case study. Semi-structured in-depth interviews were used to gather data from the field. The ethical guidelines in dealing with human subjects in research were strictly followed.

### ***Results and Discussion***

#### ***Natural Resource Conservation***

The role of traditional leaders is significant since they are better placed to promote environmental conservation measures in their jurisdiction, as they are physically closer to the people than the government (Chigwata, 2016). Traditional leaders expressed that their role is to manage the use of environmental resources but they however, lamented the collapse of traditional conservation methods as a result of the introduction of environmental policies and acts by the government. They blamed colonialism

and modern ways of conserving the environment as responsible for the demise of local level resource conservation institutions.

The current set-up led to the decisions on the management of local resources being made by the state. Local leaders have to fit in the system and ensure that their Chivi community abides by the rules and regulation set by the state. Chief A, expressed that traditional leaders were deprived of their powers and as a result, communities do not believe in local conservation strategies but fear state actors such as EMA. He indicated that during the olden days, resources were being managed properly through the existence of Marambakutemwa (restricted forests) and zvidhunduru/chirambadarikwa (beacons). Restricted forests are forests set aside by traditional leadership for conservation purposes. The traditional structures put restrictions on the use of trees and ensured that deforestation did not take place. The forests were dedicated to the protection and maintenance of natural resources management through tradition. Beacons (zvidhunduru) are boundaries placed to demarcate and protects land that should not be cultivated.

The politics of the land in the early 2000s destroyed traditional leaders' powers over land use. The government of Zimbabwe embarked on the fast track land reform programme in a bid to address environmental damage, reduce population pressure on communal areas as well as empower the people. The programme, however, resulted in vandalism of existing structures such as restricted forests, contour ridges, abandoning of designated areas such as wetlands and stream banks which are then converted into farming units (Chigwenya, 2000). Similarly,

Zembe *et al.* (2014) posit that grazing land was reduced resulting in the tragedy of the commons and environmental degradation.

#### **Monitoring and Prosecution**

The traditional leaders monitor the environment and prosecute people in their area of jurisdiction. Traditional leaders engage village heads who are responsible for keeping the environmental resource base. There is a committee known as “machinda” (Chief’s Council) that help in the management of environment and educate the community on how to sustainably use the resources. The “machinda” and the village heads are also responsible for reporting the culprits to the traditional leaders on any damage done to the environment. The chiefs highlighted that normally culprits pay fines at the Chief’s court and if the case is serious, the culprit will be sent to EMA Officers.

There are also seven environmental monitors that man all the thirty-two wards in Chivi. The environmental monitors are community instruments who advise and alert RDC and EMA on any environmental situation that needed attention. Monitors revealed that their main duties entail maintaining and monitoring the natural resources. One monitor indicated that;

*I patrol Runde and Tokwe River catchment areas with the purpose of ensuring preservation of water; for example, the issue of illegal gold panning that disturbs movement of water. During patrols, I discovered people engaging in illegal mining in these rivers and I reported the case to the traditional leader, Headman X and the Chief’s police who then assisted me to address the problem (Environmental monitor A, personal interview, 2016).*

However monitors indicated that there are finding it difficult to control the other abusers of the environment, they need to engage law enforcement agents. As monitors they are not mandated by any law to prosecute the offenders but they just report them to RDC and EMA. The community has also developed an attitude towards the monitors because they are disrupting them from extraction of environmental resources which are their only source of livelihood.

#### **Land Allocation**

Traditional leaders in most parts of Africa always play a role in the allocation and management of communal land for residential and agriculture purposes. Zimbabwe is not an exception. Its traditional leaders are custodians of the land since the colonial time. Matondi (2010) argues that traditional leaders in Zimbabwe are generally regarded as the custodians of the land and other natural resources in their respective jurisdictions. Traditional leaders have historical and customary functions and proximity to rural communities. Traditional leaders who work in great proximity to the day to day use of rural land cannot be overlooked in the allocation and sustainable utilization of land. The Traditional Leaders’ Act sets the traditional leaders as the custodians of the land. They are responsible for distribution and conservation of land in rural areas. However, there is a dual system of governance because both the traditional leadership and RDC have the legal basis for their role in land allocation. The Communal Lands Act stipulates that allocation of land in communal areas is done by the traditional leader but is subject to the consent of the RDC.

### ***Community Participation and Environmental Sustainability***

The interaction with the community revealed that traditional conservation methods have been replaced by environmental policies implemented by EMA and RDC. The local traditional enforcement was based on the spiritual beliefs of the Chivi community that the communities should not evade the spiritual guardians of the land. In Zimbabwe, conservation by the state has tended to favor and privilege Western scientific models at the expense of the “indigenous” conservation practices of the local people (Mawere, 2013). With the introduction of EMA and its respective acts, the community no longer respects and uses the traditional environmental conservation strategies that were used at considerable success to conserve the ‘natural’ environment before western scientific methods. A study by Chitombe (2012), similarly established that after the independence of Zimbabwe in 1980, the authority of traditional leaders was emasculated by modern institutions in a bid to uphold the thrust of democratization, thereby leading to the wax and wane of traditional authority. The policy framework shows the duplication of roles and interests by giving supreme authority to both the chiefs and RDC to allocate and manage land use. The RDC is the lands authority yet the traditional leaders are also responsible for allocating land. This is a dual system of natural resources management. The management of land resources therefore becomes disorderly. Mawere *et al.* (2014) resonates well with this argument when he notes that the new institutions ran parallel to the traditional institutions already in existence, thereby creating the possibility for competing jurisdictions in the rural

areas. There is need for a clear division of responsibilities with regards to environmental matters. The RDC Act has indirectly disempowered and distanced local traditional leaders from conservation practices.

Legal entrustments of conservation jurisdiction are transferred mainly from the top to the local community, as opposed to bottom-up delegation. The acts and laws that govern the use of natural resources that are enforced by state actors such as EMA and RDC are prescriptive and do not embody the spirit of community participation. As a result of the top-down orientation, the plans often are not in sync with the priorities and coping strategies of rural people in Chivi District. The environmental acts and policies have replaced local environmental conservation but to effectively fight environmental resource problems, Singh (2000), and Adams (2001) argue that national environmental management laws should support local initiatives, not to replace local community conservation strategies. Similarly, formal science should be combined with indigenous technical knowledge.

Modern institutions introduced by the local council to deal with people who disobey conservation rules affect sustainable natural resource use. The disempowerment of chiefs in the post-colonial period in many African countries, in particular Zimbabwe, left a power vacuum in the sustainable natural resources management in rural areas where despite being community leaders, traditional institutions are not legitimized in natural resources management (Mawere *et al.*, 2014). The current environmental management structure is creating fissures that weaken the enforcement of sustainable resource use strategies. A

study by Akpalu and Martinsson (2011) proposes that communities benefit when institutions are endogenized by the community compared to the case when rules and regulations are externally enforced by the government. In Chivi environmental resource management relies greatly on state authorities to monitor and enforce rules and regulations.

EMA and RDC as legal persons in areas under their jurisdiction do not effectively represent the visions and aspirations of grassroots communities neither are they effectively accountable to the community. Vaccaro *et al.* (2013) also uphold that many contesting voices claim that imposed conservation of natural resources results in extensive environmental injustices associated with the violation of traditional local rights to land and resources. This is evident in the District because the more environmental controls are put in place, the more the resources are degraded. The lack of community responsibility and sense of ownership renders the environmental acts and policies punitive and not rehabilitating because the community is being punished for not respecting rules and regulations that were put in place without their effective involvement and consent.

The situation on the ground reflects that legislative pieces alone cannot sustainably protect the natural resources. The government of Zimbabwe has failed mainly because it had relegated local environment knowledge to the periphery of national environment conservation projects. The study by Makonese (2008) on Zimbabwe forest laws, policies and practices and its implications for access, control and ownership of forest resources by rural women exposed the legal obstacles that prevent rural women from

fully realizing their rights to sustain their families from forest produce and their role in preserving the forest resources.

Despite the fact that there are environmental monitors who are community members and are actively involved in the monitoring of natural resources, the locals view them as aliens and not local community representatives. As explained by Vaccaro *et al.* (2013), external imposition of legislative pieces of environment often lead to local opposition and attacks against outsider governance, and even against the natural assets themselves. The environmental monitors are largely seen as enforcing externally imposed regulations, and this impinges on the effectiveness of sustainable management of resources. The environmental monitors have been made to conform to bureaucratic environmental acts and policies developed by the state.

Chivi RDC and EMA also determine fines and put in place environmental monitors to apprehend offenders. This is contrary to the process of empowerment of the local communities as espoused in participatory approaches in sustainable utilization resources (Chitsike, 2000; Elliot, 1996; Murombedzi, 1993). The modern arrangement upsets the local leadership and effective practice whereby the traditional leaders rarely charge fines for violations. Mostly cases are referred to EMA where fines are imposed. The environmental violators do own up and agree to pay fines, though under protest, as they perceive the fines to be punitive and unfair. The Government of Zimbabwe authorized EMA and RDC through the Environmental Management Act, Chapter 20:27 and Rural District Act, Chapter 29:13, to fine and imprison those who abuse environmental resources in their areas of jurisdiction. The arrangement

criminalizes the local use of forests resources. The community expressed that the fines are extraordinary, given the economic conditions in the country. This view is, however, not to encourage the over-exploitation of the natural resources in the drought-prone area, but questioning how the fining issue is handled. The fines and imprisonments are done in order to reduce the plunder of natural resources. It is a noble idea, but it is only going to work if a voluntary system of local regulation for ensuring sustainable use of environmental resources is put in place. This paper and the study done by Mandondo (2001) in Chivi established that the levels of the fines are arbitrarily pegged by the RDC and EMA. They are not indexed to levels of community outrage to various forms of breach, or to community perceptions of the legitimacy of such fines.

The fines that are being charged are not compatible with the work being done to rehabilitate the environment; the revenues are siphoned to the revenues of RDC and EMA, and not directly addressing the environmental problems for which they will have been imposed. For instance, those who practiced illegal mining in Denga area, Chivi were made to pay a \$200 fine to EMA and made to close the pits. The cost of exploiting the natural resources is close to the people yet the benefit from the charges is far removed from the Chivi District community because the income may be used for other purposes by either EMA or RDC. The best scenario is that which identifies users of resources as owners and managers of the resources, so that the costs and benefits accrue directly to them. Ntuli and Muchapondwa (2015) who studied the role of institutions in community wildlife conservation in Zimbabwe established

that from a policy perspective, external enforcement of rules and regulations does not necessarily translate into sound ecological outcomes; rather, better outcomes are attainable when punishment is endogenized by local communities.

The idea that natural resources can be catalysts and forerunners in enhancing broad-based socio-economic growth for the benefit and development of its local people will only be realized if Chivi communities are actively involved in the management of their own resources. The state actors mystify their work as a professional scientific endeavor but this attitude side-lines the Chivi District community.

### **Conclusion**

This paper focused on the involvement of community in environmental management of natural resources in a bid to ensure sustainable management of resources. The paper concludes that there is existence of a prescribed governance system in natural resource management that devolves power in distinct ways. It was established that despite the existence of state actors, traditional leadership, monitors and other bodies in management of natural resources, the resources in Chivi District are severely deteriorating and degrading. There are several flaws and shortcomings in the allocation of responsibility and authority over management of these resources. There is a top-down approach system but natural resources can be managed sustainably if the territorial approach (bottom-up approach) is used.

Many scholars, such as Berkes and Folke (1998), Cash *et al.* (2003), Ostrom (1990) and Raymond *et al.* (2010) and this paper, have called for greater inclusion of local knowledge in resource management

and development planning. The study recommends a situation where the traditional leadership and local community are given a chance to come up with solutions and rules that govern how the local people use the natural resources.

However in as much as state actors are perceived to have failed to solve the issue of environmental degradation in the district, traditional leadership and local community are also bound to fail if they do not co-opt each other. The state actors, local leadership and community should not work in isolation of each other but there is a need to engage local people, hear them out, listen to forces that affect them and then together they will discover ways to promote sustainable conservation and rural development. Policy should consider the option of granting full autonomy to local communities so that local communities can monitor and control environmental resource use.

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