

Towards a Conceptualisation of Power in Fuelwood Access in Zimbabwe

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Abstract

Fuelwood scarcity in sub-Saharan African countries is a pressing challenge to rural households. However, what is not appreciated is that the scarcity is conceived by the power dynamics constraints, which impede fuelwood access. That being so, the growing body of work on fuelwood does not as yet pay adequate attention to the relationship between power asymmetries and fuelwood access, hence there is a gap in fuelwood policy. In the face of this wider problem, the case of Buhera District demonstrates power dynamics of fuelwood access in Zimbabwe. Based on extensive qualitative fieldwork, the article illuminates the relations between state actors and the local people in accessing fuelwood. This is important because access is determined by the policing action taken by the powerful state actors. The questions at the centre of this article are how rural people's access to fuelwood is influenced by power dynamics and how these dynamics contribute to fuelwood scarcity in their villages. From the study it emerged that there are various techniques of power, which are used by state actors in controlling and regulating fuelwood access, leading me to draw two major conclusions. First, there is no one fuelwood scarcity (shortage in a specific location), but rather even where fuelwood is available, power relations play a role in determining accessibility. Second, hidden power is used to present fuelwood scarcity as apolitical, leading to flawed solutions which intensify rural people's plight. Accordingly, by showing the workings of power relations, I endeavour to provide the foundation for well-informed fuelwood policy.

Keywords: fuelwood scarcity; political ecology; access; power relations; environmental subjects; environmentality; governmentality

INTRODUCTION

The prevailing driving force behind much environmental policies in Africa is a set of widely perceived images of negative environmental change (Leach and Mearns 1996:1). One such instance is the 'fuelwood crisis.' The fuelwood crisis is believed to be a result of felling trees for fuelwood and charcoal, which presents a classic case of demand for fuel outstripping supply. The supply 'gap' is then projected into the future, often in direct proportion to population growth, so that

it widens even faster as sustainable yields diminish, thus there is a 'crisis' (1996:2).

The fuelwood scarcity debate that arises from these conceptions has been ongoing for over 30 years (Matsika et al. 2013), but the socio-political issues behind it are rarely raised or questioned. Among the exceptions Ribot (1998) examines the dynamics of control and maintenance of commercial forest access: the ability to derive commercial benefits from Senegal's forests. Bradley and Campbell (1998) refute the 'fuelwood crisis' narrative and argue that it must be understood within the political-economic context. While their argument resonates with this study, they did not pay attention to how the government actors use power in regulating or controlling fuelwood access (the techniques and methods of power). We need to understand how rural people, who solely depend on this resource, are disadvantaged by the status quo (Paulson and Gezon 2005).

In Zimbabwe, as in many sub-Saharan African countries, fuelwood is an integral component of the household energy

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mix, even in the urban areas and in areas where electricity is available (Campbell et al. 2003). Despite a number of existing studies, there is scant appreciation of the workings of power in accessing fuelwood in Zimbabwe. This might be due to the fact that 'political governance issues are rarely debated in Zimbabwe, given its recent political history' (Chipango 2018: 216). Other studies report that Zimbabwe's environmental emphasis throughout the 2000s is shifting from natural resources management to climate change mitigation and carbon sequestration (Harrison 2015). Existing work belabours site specific shortage of fuelwood and ignores the more difficult power relations which create that scarcity. Existing literature includes Chandiwana et al.'s (1988) work on energy for rural development in Zimbabwe, Hosier and Dowd's (1988) study on fuelwood use in Zimbabwean communal areas, Katerere's (1988) investigation on fuelwood consumption and supply patterns in rural areas, and Vermuelen et al.'s (2000) work on shifting patterns of fuelwood use by households in rural Zimbabwe. A quick review of these works reveals that most of the studies have focussed on the physical availability and consumption of fuelwood without considering the power dynamics of accessibility. Put differently, it is taken as given that fuelwood, if available, is easily accessible to rural villagers.

The contribution of this article lies in challenging the inevitability of fuelwood scarcity and questioning the control measures governing access to fuelwood instituted by the state. Following Skocpol (1985), the article adopts the Weberian definition of state as compulsory associations claiming control over territories and the people within them. Accordingly, administrative, legal, extractive and coercive organisations are the core of any state. Just like Ribot's (2004) work in Senegal shows how the presence of informal institutions and powerful actors at different levels can influence who gains power in the charcoal supply-chain, the examination of power relations here helps to identify underlying processes and seek to give voice where there have been imposed silences.

I will argue that fuelwood scarcity is socially constructed and not naturally given. Drawing on Gezon (2005), my approach of embracing the material environment as socio-politically constructed does not deny its actual materiality. Instead, it provides an analytical lens through which to understand how social processes contribute to empirically observable—social differences in accessing fuelwood. Further informed by Gezon (2005), seeing nature as constructed takes away the natural inevitability of fuelwood scarcity and raises questions of how, when and by whom (at the expense of whom) fuelwood access can be understood. A political approach does not trivialise the ecological aspect; instead it strengthens the ability to understand the processes through which humans appropriate, contest and manipulate the environment around them. Appreciation of the workings of power is critical especially when considering the development of policies to deal with rural fuelwood problems.

Using the Buhera case study, this article presents new evidence on how workings of power, such as domination and disciplinary power, operate. In this instance, the article employs

a post-structural political ecology perspective (Escobar 1998), drawing on Foucault's concept of 'governmentality' (Foucault 1988) as well as some applications of this concept to describe environmental governance—environmentality (Agrawal 2005a; 2005b). For this article, workings of power involve the social relations among various stakeholders and the techniques, strategies and means used by the powerful (state actors) to regulate, control, command over fuelwood access by the rural people.

This article attempts to reveal hidden power dynamics behind the people's accessing of fuelwood and how they think about their indigenous trees. In addition, by empirically examining the interplay of power involving various actors (state actors and the rural people), this analysis explores how power is conceived at a higher level by elites, with its effects felt and endured by the grassroots households. The lack of up-to-date and reliable information about the *status quo* of the environment and social dimensions of the continued use of fuelwood is a major factor hindering the development of pertinent national policy and planning (Shackleton et al. 2007).

The article proceeds as follows: Section 2 introduces the case study area and methodology. Section 3 analyses literature through the lens of political ecology and its power relations. Section 4 presents findings and their discussion. Finally, section 5 presents conclusions, policy implications and suggestions for future research.

STUDY AREA AND METHODOLOGY

Buhera falls under Buhera District which is one of the seven districts in the Manicaland Province (see Figure 1). I chose Buhera as an extreme case with high dependence on fuelwood, where 93% of people use wood, an insignificant 3.2% use electricity, 0.1% use paraffin and 3.2% rely on other sources (Zimbabwe National Statistics Agency 2012:144). At the national level fuelwood provides the bulk (61%) of the total energy supply to the local people in Zimbabwe, followed by liquid fuels (18%), electricity (13%) and coal (8%) (Ministry of Energy and Power Development 2012:1). Rural communities in Zimbabwe meet 94% of their cooking energy requirements by using traditional fuels, mainly fuelwood (2012: 2). Based on the statistics above, it is apparent that fuelwood is an important source of energy in the rural Zimbabwean economy. The reason could be the disparity in the electrification rate where 83% of households in urban areas are electrified as compared to 13% in rural areas (Ministry of Energy and Power Development 2012: 2); a case different from South Africa where approximately 55% of the 2.4 million rural households across the country have access to electricity (Pereira et al. 2011).

I conducted fieldwork between September 2016 and January 2017. Being a study driven by political ecology, it was appropriate to adopt a case study. Political ecologists typically operate from case studies, often using immersive techniques to understand both values and practices of people within the households and communities (Robbins 2012). Case studies are appropriate when there is an interesting story to be



Figure 1
Map of Zimbabwe
Source: FAO/WFP (2009)

told (Tellis 1997). Working across multiple villages in ward 24 of Buhera District, I used convenience sampling (which is appropriate for selecting participants based on their relative ease of access) to recruit 60 participants and this includes 20 women who were targeted in order to address the power dynamics of gender on fuelwood scarcity. While convenience sampling has its limitations, it was ideal for this research because a rural demographic does not commute. Consequently, the participants were accessible all the time to participate in this study. In addition, this study is qualitative, and the aim is to make the maximum use of the participants' narratives, with particular interest in how people construct meanings, identities and realities and not to focus on large numbers as is the case in quantitative research. To counteract convenience sampling's inadequacies, I used triangulation. This involved the review of environmental policies such as the Forest Act (GoZ, Chapter 19: 05), Communal Lands Forest Produce Act (GoZ, Chapter 19: 04) and the Environmental Management Act (GoZ, Chapter 20: 27). In endeavouring to get information from the experts, I recruited 10 key informants from the Ministry of Environment, Water and Climate, Environmental Management Agency (EMA) and the Forestry Commission. I conducted semi-structured interviews, and in some cases, held intentional conversations with the local people in order to facilitate less formal interaction. Semi-structured interviews were important in capturing the diverse social actors' views on how they negotiate and fight over access and control of fuelwood.

I used thematic analysis, with themes inductively emerging from the data, to examine commonalities, differences and relationships (Gibson and Brown 2009). To manage the

large volumes of data, I used Atlas.ti 7 as a tool to integrate and systemise data. Confidentiality is maintained by use of pseudonyms.

ANALYTICAL FRAMING: POWER INFLUENCING FUELWOOD ACCESS

Power is a slippery, complex and contested concept (Nunan 2015). This article defines power as 'social relations built on the asymmetrical distribution of resources and risks and locate power in the interactions among and processes that constitute, people, places and resources' (Paulson et al. 2003: 205). Paulson et al. (2003) further define politics as the practices and mechanisms through which such power is circulated, wielded and negotiated. By using a political ecology approach and focusing the analytic gaze on power relations (Robbins 2012), this article sets itself three main tasks: 1) to examine the regulatory rules that led to the current situation on fuelwood acquisition regulation; 2) to show how explanations of environmental problems reflect or fail to reflect the perspectives of different social groups; and 3) to establish who are the winners and losers as a result of control over fuelwood access.

I will use ideas of Foucauldian governmentality to understand how governments administer citizens to act in accordance with government priorities (Foucault 1991). Put differently, it refers to the 'ways in which various authorities administer populations, ... individuals shape their own selves, and ... these processes get aligned' (Lukes 2005: 91). These processes enable us to understand power in the multiplicity of 'micro-practices,' that constitute everyday life in modern

societies (Fraser 1989: 18). Governmentality allows the study to attend to those aspects of power that are least accessible to observation—least invisible forms of power (Lukes 2005). In keeping with Agrawal (2005b), governmentality shows how power is acted out and ultimately how subjects are produced. Agrawal uses ideas of governmentality to understand the creation of ‘environmental subjects,’ that Agrawal calls environmentalism—‘a framework of understanding in which technologies of self and power are involved in the creation of subjects concerned about the environment’ (2005b: 166). Foucault (1982) also contends that power should be investigated through forms of resistance to power (counter-resistance). Later in the article (section 5), evidence will be presented on how rural people resist power when accessing fuelwood.

Previously the discourse on fuelwood scarcity has centred on locational limitations on access—reflecting features of the landscape such as hills, rivers, gullies, steep slopes which significantly lead to the increase of collection time (Mercer and Soussan 1992; Brouwer et al. 1997). For Brouwer et al. (1997), fuelwood scarcity in sub-Saharan Africa is a chronic landscape condition. On the other hand, Dewees (1989) contends that even in the absence of physical scarcity, there may be an economic scarcity of fuelwood, defined by the household’s access to labour, income and land. He emphasises the view that labour shortages are often more important for household fuel use decisions than physical scarcity of wood. Put differently, this is consistent with the notion of economic scarcity of fuelwood. Agarwal (1986) observes that in many localities biomass fuels are gathered freely from the environment, and the main cost of fuelwood use is the time to collect the fuelwood. In rural communities, household energy is secured at the opportunity cost to the household of time spent usually by women in fuelwood collection (Dovie et al. 2004). Ownership of the land on which the fuelwood grows has also been discussed (van ’t Veld et al. 2006). Matsika (2012) investigates the spatial and structural changes in fuelwood supply in response to fuelwood extraction as well as the changes in use patterns over time in an African savanna woodland, focussing on the sustainability of wood collection. In a similar vein, Masera et al. (2003) stress the importance of using the spatial variability modelling tool which facilitates projections regarding where fuelwood harvest hotspots are and will be in the future. This modelling tool also tests the potential for implementing rotational harvesting schemes.

While I do not deny the validity of the above arguments and observations, they are inadequate. Contrary to the existing conventional arguments, fuelwood problems are manifestations of heterogeneity of interests, that is, a conflict of interest between state actors who promote the solid science of conservation and the society which requires fuelwood as a source of energy. This social construction of fuelwood scarcity evinces how difficult it is to have a collective policy that serves the society as a whole when individual members have conflicting interests. I contend that environmental policies (on fuelwood access) have often been formulated based on the analysis of physical observable symptoms of the problem

(environmental forces), rather than the political manifestations of the problem.

Furthermore, appreciating the power dynamics of fuelwood access helps to address the issue of equity between men and women. Approaching fuelwood scarcity as only a shortage within a specific locality masks important intra-household differences which determine access. There is vast existing literature on how women are disadvantaged by fuelwood scarcity as compared to their male counterparts. In Tanzania, it is observed that women spend up to 12 hours per week collecting fuelwood and in Kenya they spend between 30 and 60 minutes per day (Tinker 1987). As a result, poor women work longer hours when processing food and gathering fuels than men (Tinker 1982). In some instances, the adaptations to fuelwood scarcity may have serious long-term health effects. For example, in the Sahel, uncooked millet mixed with water serves as a midday meal which may cause digestion disorders (Tinker 1980; Cecelski 1984). Varinder and Prakash (2014) show that fuelwood scarcity increases women’s time burden and Matinga (2008) shows the health impact caused by carrying fuelwood manually. Similarly, Laxmi et al. (2003) in India observe that women suffer from backaches and injuries during fuelwood collection. Kangwaja (2000) reports on rape experienced by displaced persons from refugee camps as they walk long distances to collect fuelwood. In Zimbabwe, Chirau (2015) contends that a lack of access to secure energy sources for cooking affects women in numerous ways, which includes health challenges, time poverty, collection trauma and multiple environmental burdens.

However, another line of reasoning suggests that fuelwood collection is not necessarily just a female task, as often assumed in the forestry and development circles. Studies from Ethiopia, Madagascar, India, Nepal, Vietnam and Indonesia all find that both men and women collect fuelwood, and in some occasions men are the primary collectors (Cooke 1998; Cooke et al. 2008). Köhlin (1998) finds that men actually collect more fuelwood than women and that the marginal products of men for the collection activity are greater than the marginal products of women. Charmes (2006) corroborates that surveys in four sub-Saharan African countries (Benin, Madagascar, Mauritius, and South Africa) confirm that both men and women spend time on wood fetching, although women may experience it much more frequently than men.

That said, this current article attempts to locate women’s position in the fuelwood sector. Informed by Agarwal (2001: 9), ‘the scarcities that women are experiencing appear to have less to do with aggregate availability than with women’s limited bargaining power in the community.’ Annecke (2003) concurs with Agarwal (2001) and elaborates that women are seldom in control of resources and equality in fuelwood access is unlikely to be achieved unless women’s subordinate positioning changed. In the same line of reasoning, O’Keefe et al. (1989) observe that men own the land and make land-use decisions, and in consequence trees are grown reflecting men’s interests. As a result, women acquire wood from dwindling bushland supplies (normally of poor quality).

Legislation that affects fuelwood access in Zimbabwe

Three Zimbabwean policies are pertinent to fuelwood access. These include the Communal Land Forest Produce Act (GoZ, Chapter 19: 04), the Forest Act (GoZ, Chapter 19: 05) and the Environmental Management Act (GoZ, Chapter 20: 27). The Communal Land Forest Produce Act imposes a strict regulatory framework which is highly state interventionist as it vests the administration of exploitation of all communal area forest produce with the national minister for the environment. A range of authorities are provided for, and these include licences, agreements and permits. The Act criminalises the collecting of fuelwood from one village and transporting it to another village, insisting that exploitation of forest produce by communal area inhabitants is restricted to 'own use' and the sale or supply of any forest produce to any other person is prohibited. On this account, the Communal Land Forest Produce Act effectively removes the management of natural forest resources from the inhabitants of its area of application. Similarly, the Forest Act of Zimbabwe (GoZ, Chapter 19: 05) deals with the wrongful possession of forest produce and authorises the police and the forest officers to confiscate any forest produce which they reasonably suspect to have been wrongfully acquired and to arrest the person found in possession of such produce (Section 85).

These Acts show the interference of the state in fuelwood access from a policy perspective, long before material environmental consequences may be observed. It seems these policies follow a restrictive practice of fuelwood access; hence reflecting an unchanged legacy of colonial rule. Mapedza (2007: 834) made a similar observation that 'both the colonial and post-colonial governments in Zimbabwe have perpetuated oppressive forestry legislation and practice despite the ZANU-PF's pre-independence rhetoric of giving power over land and natural resources to the rural people.' In other words, fuelwood management is characterised by a command and control system that is contained in old forest management legislation such as the Forest Act and the Communal Land Forest Produce Act. While the government attempted to address access to environmental resources such as fuelwood, it did not revisit and amend all the relevant pieces of legislation to ensure uniformity between them and the new legislative's intentions (Makonese 2008).

There is also the Environmental Management Act (GoZ, Chapter 20: 27) which was passed in parliament in 2002 and came into force in 2003. Whilst the Environmental Management Act encourages sustainable use of natural resources, the afore-discussed policies such as the Communal Land Forest Produce Act still have restrictive provisions in relation to forest produce such as fuelwood. On the face of it, it seems that there is a lack of coordination in terms of environmental laws and that makes it difficult to realise the right to access fuelwood. In addition, the Environmental Management Act's major flaw is that it is gender neutral and assumes that the legislation is equally applied to men and women. Experience has, however, 'shown that gender neutral

legislation does not necessarily mean that the law will be equally applied for men and women' (Makonese 2008: 41). Makonese (2008) contends that because of women's unequal standing in society, while there is apparent equality in terms of the written law, 'de jure' (legal or formal) equality, there is 'de facto' (substantive or actual) discrimination. It is in light of these policies that this article argues that fuelwood access in Zimbabwe is more politically embroiled than what is conventionally perceived.

FINDINGS AND DISCUSSION: BUHERA AN EXAMPLE

Domination power in action

It is instructive to understand why people care for the trees in their locality. Asked how they have come to care so much about their indigenous trees, BM3 said:

The Environmental Agency Officers came to our ward and they taught us that we should not cut live trees otherwise we will receive erratic rainfall. They told us that there is a connection between trees and rainfall, also trees help to prevent soil erosion and they warned us that should we not be careful, desertification will come soon. Ever since then, we have been following what we were taught by the experts.

In this instance it appears that the local people's perceptions are influenced by expert discourse and thus how the social framing of environmental change emerges in Buhera. In the same line of reasoning with BM3, BF5 said:

When it comes to issues to do with our trees, we follow the government actors' views. They are trained for this job and who are we to question them? They say by not cutting trees in our area we will get more rainfall [*sic*]. We simply obey them despite that we need the wet wood because the dried fuelwood is finished in our ward.

It is not clear that this local view, learnt from government officers, is correct. As long ago as Buxton (1948) argued against forestry as the best form of land use for water conservation. He further elaborates that forests neither increase rainfall, nor prevent large scale floods rather these issues should be approached in a context specific manner. Hydrologists have challenged many taken-for-granted assumptions on the universal hydrological benefits of forests. For example, there is a belief that forests do not prevent large-scale floods. Rather their protective role against flooding are effective only in small catchments (Calder 1998, 2005; Walker 2002). Their role in driving rainfall patterns at small scales has not been confirmed.

However, in Buhera it appears that the control measures on wet fuelwood (i.e., cut from live trees, not dead wood) access are predicated on this flawed belief.

Asked about their view on the teaching they receive from the experts such as the EMA officers. BF3 explained: We have no option; we just follow what they teach us because they are

experts. Furthermore, it is not easy to resist them because we fear the powers of the offices they would be coming from [*sic*].

BF10 elaborated: We are now clever in the rural areas, faced with questions about deforestation and environmental change; we simply tell them what we know they want to hear.

Local people's concern about their indigenous trees is shaped by the knowledges and ontologies imposed on them by the state actors whose interest is predicated on conservation.

To substantiate this argument, an official from the Forest Commission said: Look, I am here to serve the commission, my government and also this is where my bread is buttered. So, by the end of the day, before I look at what people say, those two interests should be fulfilled without fail.

The empirical evidence is important for two reasons. First, the absence of the needs of the rural people who solely depend on fuelwood on the official's list is intriguing. Second, it appears that the official and those who work for the commission are more concerned about the security of their jobs and the accruing of benefits than the needs of the local people.

On the question of whether rural people can be good stewards of their environment, a Forestry Commission senior executive said:

Well, I am tempted to say yes and no. Yes, in the sense that from time immemorial they were looking after those resources sustainably. No, in the sense that given the current situation on their own it may be a challenge in that there is technical input they need for them to look after those resources such as the Forestry Commission, the EMA, the Ministry of Agriculture will need to assist them. When they are assisted, I think they can look after those resources.

These remarks are important in illustrating how the experts think that they can impart their technical knowledge to the rural poor, hence the justification for their interference in fuelwood resource management. In other words, the fuelwood scarcity question becomes a political question involving the perceived rights of peasant livelihood versus the attempt by the state authorities and its agencies to exercise state control on the fuelwood resources.

Asked how accessible fuelwood in their villages is, the dominant response was that:

It is now difficult, yes, the woodlands are no longer as dense as they used to be, but our major problem now is the EMA. They are monitoring us day and night because we are now using wet wood which is not allowed if it is from indigenous trees. No one is allowed to cut wet wood. But our message to them is that don't monitor us day and night; instead give us electricity (Interview with BF2).

In addition, I was told by a ward councillor in Buhera that EMA adopted a new strategy in 2012 whereby they appoint local people in the village as their 'agents' (Personal communication, November 2016). It is claimed that EMA appointed these people to act as their 'eyes' and 'ears' and provide them with reports on people who cut trees for whatever

purpose. Moreover, these are regarded as knowledgeable people about the environment who can guide their fellow villagers.

Asked about their views on EMA 'agents,' most of them had a sharp resentment of them. BF4 said:

I wonder how those people think if ever they do think. They do not see that they are being used against their fellow villagers! Why is EMA not doing the job on its own, why hiding behind the local people? What are they afraid of?

Contrasting, however was BM5: I think these 'agents' are doing a great job. Without them this area was going to be a desert soon. They are teaching us how to take care of our woodlands.

There is evidence that the agents are advancing 'intimate government' as a tool of governmentality in this instance (Agrawal 2005b: 178). What is unique about 'intimate government' is that while it captures similar issues addressed by action at a distance and government at a distance, it also stimulates 'self-government' as local people shape their own conduct in accessing fuelwood (Agrawal 2005b: 179). This is evinced by BM5's observation which defends the restrictions imposed on them by the EMA:

They are teaching us how to take care of our woodlands and we have accepted it as the only way to go. They are learned people and surely their restrictions are not meant to harm us, but they are good for us and good for our woodlands.

In a similar vein, an EMA officer supports the role of the 'agents' in the villages, 'What is wrong with that, it's local participation isn't it?' From the officer's perspective, just involving local people as 'agents' constitutes local participation. However, BM2 retorted: '*Vakati tione vanotema miti asi ini handina uniform yeEMA zvichireva kuti handina masimba*' (=They gave us the duty to look after the trees especially from those who cut them for fuelwood, but I do not wear a uniform as the EMA officers do and that means I am powerless). So-called participation without recognition of power relations is tantamount to subjectivism.

The section shows the asymmetrical relationships of power in which the subordinate persons have little room for manoeuvre in accessing fuelwood because their 'margin of liberty is extremely limited' (Foucault 1988: 12). In other words, inaccessibility to fuelwood is conceived by dominant powers and that implies fuelwood scarcity is socially constructed as well as reflecting change in availability of wood. In the next section, evidence is presented on how self-discipline is practised by the rural people in Buhera when accessing fuelwood as their main source of energy in the absence of electricity access.

Disciplinary power in action

Interviews with the local participants revealed that governmentality is not only in the form of domination, rather it can embrace a disciplinary form.

An interview with the village head BK2, revealed that:

As for fuelwood, each household is now expected to harvest from its own field, but in the event that one needs a bulk of it for example, if one wants to brew beer or burn bricks because they are fuelwood intensive activities they need to come and seek permission from us. The same applies when you are pruning a tree in your field for fuelwood; one has to seek permission from the village head first. Then we tell them how they are supposed to cut the trees, or in some cases I send them with my 'policemen' whom will show them the tree to cut and how to cut.

Clear in this quotation is the understanding that the village heads and the EMA 'agents' are considered as the 'experts' who know better the way to environmental sustainability and hence have a prerogative to guide others.

For some of the rural poor, this form of social control is profound. Asked about their feelings and attitudes towards the seeking for permission to cut trees either from common pool sources or from their own fields. BF20 responded: We are happy with the arrangement because we are staying in the village head's area under his leadership. For that reason, it is our obligation to follow whatever he tells us to do because we know it is for our own good.

Empirical evidence highlights how some rural people are prepared to produce themselves as 'environmental subjects'-people who care about the environment (Agrawal 2005b). The respondent shows that she voluntarily wishes to be a subject. On the face of it, that is disciplinary power par-excellence, which is used by the state through securing compliance from the rural people. In a similar vein, subjects can be formed. This is done by advancing a narrative which targets the welfare of the populations; in this case, there is persuasion that subjects should modify their behaviour for their own good environmental welfare.

Others are less accepting. BF1 retorted:

No, no we are not happy at all. We feel stripped off of our powers. Imagine asking for permission to cut some branches of trees for fuelwood? Although they say it is for our own good, it is beyond ridiculous. We feel the fields which we once owned now belong to the EMA. Also, the oversold 'good' way of cutting trees they are preaching is not new to us. We have been always practising (*kuturura*) which is the selective cutting of tree branches such that it will regenerate. But we don't have option besides following their teachings.

The fact that the knowledge of the local people is marginalised evinces an instantiation of 'subjugated knowledge.' It appears that the regeneration of trees through coppicing has not been well accounted for, hence the ecosystem is viewed as a system which cannot replenish itself. Twine et al. (2016) state that despite substantial impacts of harvesting on woody vegetation, the 'fuelwood crisis' predicted since the 1970s has not materialised because of the generation capacity of the trees.

In addition, it emerged in Buhera that Foucault's (1979: 113) 'punitive city' strategy is frequently used to make people self-

regulate their fuelwood harvesting activities. This discipline creates in the subjects the awareness of what will happen before any crime is committed so that the very thought of infringing rules may be avoided in the first place (Agrawal 2005a). A village head in one of the villages in Buhera said:

When EMA became active in this area especially through its 'agents' in 2012, I called my people and warned them of what would befall them should they be found on the wrong side of the stipulated regulations of cutting trees. First, one is brought to the village head (*sabhuku*), if he/she fails to co-operate then is taken to the headman, if it fails then to the chief (*mambo*) and the last resort is the EMA. The fine increases as one goes through the hierarchy and EMA's fine is the most punitive based on the number of trees cut and the species.

The village head's sentiments are important in showing how power instils fear such that people can self-regulate their actions. They exercise caution when they cut live trees for fuelwood and other uses in the home. Moreover, the fact that EMA's fine is the most punitive shows how the state generally allocates rights to extract and protect resources in ways that benefit the state itself. Accordingly, it is important to appreciate that as the state benefits, the local people lose-this happens in a simultaneous manner. BM4 explained:

EMA brought us poverty. We are poorer because of them. It's no secret that we depend on our woodlands. But look, should I be caught cutting wet wood, I am charged a fortune which I don't have. The only way would be to bribe the 'agents,' but still they want money. So, either way, I am the loser.

Another mechanism of power applied when accessing fuelwood in Buhera is the Foucauldian panopticon. It is a 'technology of power' which induces in the rural people a state of 'conscious and permanent visibility that assures the automatic functioning of power' (Foucault 1979: 201). The local people confessed that they always think that they are always being watched and consequently, they subject themselves to such form of power.

Certainly, the Buhera people are neither living in prisons nor are they inmates. Nonetheless, this Foucauldian analogy applies to the observation that just like the inmates in prison, the villagers never know when their actions are being monitored when fetching wet fuelwood. In other words, there is no need for actual gaze any more; people act as if there is somebody watching them. BF19 admitted how she lives in fear:

Ever since those EMA 'agents' became active in our area we live in fear. This is because even if I want a pole for my cattle pen, it's hard to go out there and get one because I won't know who is watching me; even my neighbour can report me to the EMA.

It seems that the fear of the unknown is indirectly regulating the local people's actions when collecting fuelwood. Arguably,

this proves to be a cost-effective strategy for the environmental agency as they would not need to be on the ground all the time. Rather, the local people constantly monitor their own and others' behaviours.

Criminalisation and punishment

Asked whether the rural villagers are meeting the rules set for them when accessing fuelwood, almost all the participants said they are not, and they are resorting to 'stealing' fuelwood. Probing further why they call it 'stealing' and why they 'steal,' BF12 explained: I call it stealing because EMA does not allow us to cut wet wood and unfortunately dead wood is finished in our ward. In that situation, I am forced to steal the wet wood for survival.

BF13 elaborates: We do not want to steal, and we know stealing is bad, but what option is there? None. So, we steal the wet wood, bring them home, let them dry and then we cook food and survive. Simple!

Criminality is a matter of perspective. In a situation like this, where the power relations are skewed, illegal access can be considered as a rights-denied mechanism of access (Ribot and Peluso 2003). What EMA considers as theft can be considered as only a means of survival by the peasants. In this case, it implies there is a lack of coordination in the exercise of power because criminalisation of a means of survival jeopardises livelihoods.

The assistant village head explained about the state's indifference:

EMA 'agents' receive their instructions from the EMA and us, as the local people we do not stay with the EMA and as such they do not understand our plight. EMA officers and their 'agents' simply think of office work, but to apply it to everyday life, it is really impractical. Hence, they make our life just difficult because they are out of touch with what is really happening in the villages. It's tough!

In Buhera it seems that the laws are made to conserve wet fuelwood without considering that these people do not have access to electricity. Moreover, the fact that people are using wet wood shows a high degree of desperation. In her study McGregor (1991) states that women in the Shurugwi Area of Zimbabwe select dry fuelwood because it is light to carry, easy to burn and produces good fire. However, in Buhera the reliance on wet fuelwood means it is not easy to carry, not easy to burn and does not produce good fire which shows a high level of desperation. In addition, it is important to appreciate that criminalisation is not gender neutral; rather it is skewed against women. In a personal communication with a Zimbabwe Republic Police (ZRP) community liaison officer mentioned that the majority of culprits who are caught fuelwood poaching are women. He explained:

The reason is no-brainer; it is because of their social gender roles. What has worsened their situation is the change or restructuring of accessing common pool resources where

people are now expected to fetch fuelwood from their own fields. Remember all fields are in the men's names.

This finding supports Agrawal's (2005b) earlier observations that in some areas of India, the proportion of detected violations by women is far higher than their proportion in the village population. This similarity shows the pervasiveness of how women's subordinate positioning makes them vulnerable especially in the face of institutional restructuring.

Furthermore, in part this reflects the fact that it is women who are primarily responsible for collecting fuelwood for the household. For this reason, one may expect therefore that they are the ones caught breaking rules far more often than men. While men in Buhera highlighted that they assist women in energy acquisition, it is the frequency which differs. BM5 observed:

For us men, it is an activity which we do once in a while, but for women, it is a daily activity. Moreover, in some cases we chip in to assist women by buying from firewood traders for instance a scotch-cart load lasts for about two weeks.

Empirical evidence reveals that due to their gender positions, women have to collect fuelwood more often and this; they have to do so because they cannot buy as men do because of a lack of money. However, asked if they enjoy cooking, almost all respondents indicated that they like their social role, but it is inaccessibility to good quality energy carriers which makes it difficult.

Resistance to domination and disciplinary power

Buhera locals resist the norms and regulations which they are expected to follow. What makes this case study interesting is that those who are supposed to be enforcing the regulations such as the EMA 'agents,' village heads and their 'policemen' and even the ZRP are found in a dilemma of conflict of interest. BM4 explained:

The same village head who is supposed to be policing me does not have electricity; for him and his family to survive, they also cut trees. There lies the problem. How can he then arrest me when I know he is also committing the same crime? I will resist!

This is typical of 'counter-conduct' mechanism which is a 'resistance to a special kind of power which makes individuals subjects' (Foucault 1982: 781). Nonetheless, due to the state actors' failure to realise their 'policy failure,' they consider the local people as 'ignorant ecological disrupters' and as such efforts are doubled on the part of implementing the flawed policy. An EMA official's sentiments evinces this claim. He said: Surely, we can't leave it to them (rural people) and expect to see trees in this area in the next 5 years. We need to monitor them and that is why we have the 'agents' in their midst.

Another reason cited as the contributing factor to resistance is the corrupt dealings which the village heads and EMA 'agents'

engage in. It was discovered that some simply misuse their powers to square off their differences and ‘fix’ their targeted subjects.

BM31 said, “EMA brought hatred and divisions amongst us.” Ensuing from this claim, I made observations to establish the divisions which were referred to. It emerged that there are two groups; one which feels that EMA is harassing them and this group does not report others whom they see cutting trees, especially for fuelwood. There is another group which feels that EMA and its ‘agents’ are doing a good job by monitoring their relation to their environment. This group reports others to the authorities when they see those who cut trees. The research investigated further why they think EMA is doing a good job and it emerged that their attitude was influenced by the desire to be ‘modern’ and ‘learned,’ hence their inclination to the conservation paradigm. On the other hand, those who are against EMA and do not report others had their own reasons. Chief among their reasons was ethics. BM19 said:

Even if I see my fellow villager cutting wet trees for fuelwood, I will not restrain him because I know he will ask me what I am using for cooking myself? So, I cannot stoop that low to serve the interests of EMA by selling out my neighbour. How do I expect him to survive? *Hazvina hunhu.*

The concept of *hunhu*¹ (Shona) or *ubuntu* (Ndebele) shows how rural people operate in the face of asymmetrical power relations. The group which identifies and shows solidarity with others is inclined to what Metz (2017:118) calls ‘communion or harmony.’ He elaborates that by identifying with others that is considering oneself part of the whole, belonging and being bound up with others. By exhibiting solidarity with them, that is achieving the good of all, being sympathetic, advancing the common good, servicing and being committed to other’s good. Sentiments expressed by BM19 show that he is cognisant of the sense of belonging and exhibiting solidarity by being sympathetic and responding to others’ fuel needs and acting for their good, ‘How do I expect him to survive?’

Conversely, those who subscribe to a paradigm of conservation are not considerate about the harmonious relationships. The same applies to the government and the environmental agency. BM19 opines:

I think the government is getting it twisted somehow. Why sending EMA to make our life difficult when they know we do not have other sources to use for energy. Let them give us electricity and then they send their officers that would be reasonable. Why do they act as if they live in Mars that they do not know what is happening here?

The evidence reveals that the government is not exhibiting solidarity and is expressing indifference towards the rural people’s energy needs.

CONCLUDING REMARKS: WAY FORWARD

This article demonstrated the workings of power involved in fuelwood access in Buhera. These techniques and strategies

of power are revealed by the asymmetrical power relations between the state actors and the rural people. Accordingly, one conclusion that can be reached is that there is no one fuelwood scarcity (shortage in a specific locality) as conventionally appreciated; instead fuelwood scarcity is a political phenomenon. On this account, fuelwood scarcity is socially constructed. Power circulates with the state and its agencies such as the EMA, and the Forestry Commission and its relationship with the local people and in how local people interpret and respond to institutional decisions on accessing fuelwood. In the same light, it was established that the powerful (environmental agencies) use expert knowledge to define fuelwood scarcity in a way which favours its interest (conservation) at the expense of the rural people who then subject themselves to the prevailing discourse.

Better policy would require appreciation of the workings of power—that fuelwood scarcity is not a simple consequence of wood availability. Currently, there is no such understanding and appreciation due to the belief that fuelwood scarcity is only a physical site-specific phenomenon. The failure to appreciate the power dynamics of fuelwood scarcity allows the adoption of technical and control solutions. These solutions contribute to impoverishment of the rural people because fuelwood is indispensable in the Zimbabwean rural energy economy. Furthermore, based on such flawed views the state justifies its control on fuelwood access. More often than not, rural people are found abrogating the rules. Hence, they are viewed as ecological ‘criminals.’ Drawing on the Buhera case study, the onus is upon social scientists to bring hidden power inequities to light. Only then can rural people realise their situation, otherwise they will remain silent because of the silences imposed by power. In addition, the socio-political framing of fuelwood scarcity can help to address key international and national concerns about sustainable fuelwood management.

Ensuing from this article, two areas for possible further research are suggested. First, while the current article has revealed how governmentality in its domination and disciplinary forms inculcate ethical norms vis-à-vis the environment, another study could investigate the experiences about neo-liberal governmentality/environmentality in Zimbabwe—an approach which creates incentive structures intended to influence individual use of natural resources by altering the cost-benefit ratio of resource extraction so as to encourage *in situ* preservation. Second, this study exposed that domination involves constraint upon rural people’s energy interests—what is the impact of a lack of access to fuelwood on the rural households and their livelihoods, especially on women and children because in sub-Saharan Africa they are traditionally responsible for fuelwood acquisition? This requires further investigation.

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NOTE

1. The maxim sums up ethical perspectives associated with the talk of *ubuntu* (*Ndebele*) and *hunhu* (Shona) is ‘a person is a person through other persons.’

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