

GENDER, POVERTY AND ENERGY NEXUS: UNPACKING THE CONFLICT IN ZIMBABWE

Obediah Dodo¹ --- Chamunogwa Nyon²

¹Bindura University of Science Education, Zimbabwe and Doctoral Student: Department of Post-Graduate Studies University of Lusaka, Zambia

²Bindura University of Science Education

ABSTRACT

In year 2000, the Zimbabwean government embarked on a national land reform programme meant to redistribute land between the minority white commercial farmers and the majority black peasant farmers. In the roll-out of the programme, women were considered an important cog though they had no specific quota in the allocation of land. The eventual land ownership structure was that over three hundred thousand black indigenous peasants had suddenly become new and larger land owners, over-crowding the once sparsely populated commercial farming areas. What did not get into the minds of many especially women and the youth was the impending challenge to do with the firewood availability for their energy requirements. Now over ten years into the land reform exercise, the youth are now embroiled in firewood poaching for resale in both the neighbourhood and the nearby urban areas where electricity availability is a nightmare. This massive criminal activity has also negatively affected women who have to bear the exorbitant firewood prices and deforestation, experience land degradation and witness cat-and-mouse wars between the youth and law enforcement agents. This paper examines the gender, poverty and energy nexus in rural areas of Bindura district, Zimbabwe. The study specifically focuses on two administrative wards; 3 and 4 in the Matepatepa commercial farming area of Bindura. It is the submission of the researcher that indeed, women have massively degraded and deforested the once thick forests for self-sustenance and in the process created conflicts amongst themselves.

Keywords: Gender, Poverty, Energy, Conflict, Land reform, Development.

1. INTRODUCTION

When the Zimbabwean government embarked on national land redistribution and empowerment programme in year 2000, it believed that the process was going to help and benefit most Zimbabweans, women included. Amongst some of the objectives of the programme was to empower women ensuring the restoration of some of their rights. However, well after the programme roll-out, a variety of problems began to emerge: conflicts over firewood and unavailability of firewood for energy use.

The paper therefore sought to examine the gender, poverty and energy nexus in rural areas of Bindura district, Zimbabwe post land reform programme. The study specifically focused on two administrative wards; 1 and 4 in the commercial farming area of Bindura Rural District Council (BRDC). Bindura district is one of the eight administrative districts in the province of Mashonaland Central. Ward 1 is called Manga and is about 50 kilometres North of Bindura Town along Matepatapa road and ward 4 is called Chevakadzi about 15 kilometres north-east of Bindura town along Mt Darwin road.

The province under discussion lies in the north-east of Zimbabwe; bordering with Zambia to the north, Mozambique to the east, Harare to the south and Mashonaland West to the west. The wards in question are located to the north of the district. Precisely, ward one is sandwiched by Mt Darwin Tabex area to the north, Chiweshe Chideu area to the west, Madziva communal area to the east and Bindura commercial farming A2 area to the south. Ward four lies between Madziwa to the north, Bindura Dawmill farming area to the east, Mazowe River to the south and Mt Darwin road to the west.

1.2. Background

Before the land reform programme, the white commercial farmers grew crops and reared cattle while a few had small animal sanctuaries within their farms. Each commercial farmer would spare large tracks of forests ostensibly for future development. It was then in these forests and the sanctuaries that wild animals and potential firewood trees were found.

According to Moyo (2000), in 1999, there were over 6 million of an estimated 12 million Zimbabweans who lived in the communal areas. Communal areas comprise 42% of Zimbabwe's land area, with as much as 75% of it located in drought-prone agro-ecological regions. Primarily, the Land Reform Programme sought to alleviate population pressure in the Communal areas, improve the base of productive agriculture in the peasant farming sector and avail land for residence purposes (Chitsike, 2003; Sachikonye, 2003). It is also important to mention that in most areas of the former rural areas of Bindura, meaningful forests are long depleted owing to pressure for firewood and other domestic purposes. This is further compounded by the fact that electricity supply in most of Zimbabwe's districts, Bindura included has been erratic so much so that people have resorted to firewood for domestic energy. Besides, in the wards under study, very few households have access to electricity. In the two wards, over five hundred and ten (510) new settlers were added on to the over six thousand (6000) people resident.

2. METHODOLOGY

This compilation was born out of an intensive triangulated survey on the nexus between gender, poverty and energy requirements in respect of the dwellers in Bindura Rural District Council ward One (1) and Four (4) between 2012 and 2013. The study specifically followed a survey design supported by desk research. The study adopted face-to-face unstructured in-depth interviews with 15 selected participants and distant observation of the activities on the ground as a way of confirming some of the goings-on.

Of the 15 interviewees, 10 were from the study wards and 5 were conveniently sampled from technocrat departments; ([Environmental Management Agency \(EMA\), 2012](#)), Ministry of Local Governmentⁱ, Department of Landsⁱⁱ, Forestry Commissionⁱⁱⁱ and Zimbabwe Statistical Agency (Zimstats)^{iv}. Meanwhile, of the 10 ward-based respondents, 7 were purposefully sampled so that they could furnish with well-placed and participant data while the other 3 were a result of emergent sampling. Of the 10 respondents, 4 were male youth while 6 were women, all evenly drawn from the 2 wards. This was arrived at after realising their placement in the whole conflict triangle: level of participation, level of subject knowledge, and societal influence. Precisely, 5 participants were sampled from each ward for uniformity and on average; each interview lasted about 30 to 50 minutes. Discussions were lengthy so as to extract as much as possible from the few but well placed participants. On the other hand, unstructured observation was applied on women fetching firewood in selected woodlands and on selected youth selling firewood both to the women in the villages and to other buyers from Bindura town. Particularly, 4 situations were monitored for an average of a day each to closely understand how the participants were fetching firewood, carrying them either to their homes or selling markets and check whether there were any forest management systems on other previously tree-felled areas. The four situations that were observed are; Ward 1 (Kurukeni village and Chihumbiri popularly called *Kudhaga* {soil} and Ward 4 (Chevakadzi/Shamva turn-off and Chevakadzi/Reed boundary) and they were selected for their prominent and known hive of activity in firewood sales. It may be important to highlight that the two wards share features which are almost the same; wooded areas, former commercial farming areas, wood source for residents of Bindura town and proximity to Bindura town. Otherwise all the other features and characteristics are the same for both inhabitants and natural elements. Again, all the 10 ward-based participants use firewood for domestic energy and none has access to electricity in the former farm houses. The study was conducted in the summer season when there is plenty of dry firewood and yet it is very hot for heavy and manual jobs.

To analyse data, Content Analysis was employed to help appreciate what respondents had said. This was complimented by Heuristic Analysis which looked at how concerned participants experienced the world. To help the above data analyses and ensure rigour, the study employed NVIVO computer programme to analyse some of the data collected on the ground.

The study specifically sought to answer the following questions; the nexus between gender and poverty, women coping mechanisms during energy-needy times, the gravity of youth/women hostility over firewood and the impact of the conflict on the environment and women themselves and how the conflict could be addressed.

2.1. Theoretical Framework

To properly study the relationship between women/youth, poverty and energy needs in Bindura, it was important to appreciate the need for an understanding of both conflict concepts and conflict resolution dynamics. This therefore raised the question whether the conflicts had been a result of greed or grievance as posited by [Collier \(2000\)](#) or were simply a motivation of either a culturalist or premonialist ideology as posited by Thandika Mkandawire in 2002. However, to further understand the conflict, the study was also supported by [Nafziger and](#)

Auvinen (2000) hypothesis on the failure of the social contract which derives from the view that social stability is based on a hypothetical social contract between the people and the government. In instances where government fails to deliver as per its promises or pledges, the people respond by venting out their anger variedly. In this case, it is assumed that when the government resettled people in new areas, it failed to institute adequate measures to ensure that inhabitants have a clear source of income and energy to avert potential conflicts and criminal activities.

2.2. Youth and Women

The Zimbabwe Youth Council Act (25:19) defines youth as anyone between the ages of 10-30 years, (GOZ, 2000). However, this concept has for a number of years in Zimbabwe, been defined differently and practically implemented differently. Youth can be defined functionally as a process of transition from childhood to adulthood as well as culturally as different roles individuals play in a given context. According to the *Situation of Youth (SOY) (2003)*, in Zimbabwe, the youth constitute about 56% of the total population thus, out of the 14 million (approximate); there are more than six million young Zimbabweans who are roaming the streets of towns and villages. The figures are also confirmed in the 2012 Zimstats census. This therefore means that their needs have to be attended to, lest they graduate into a problem lot. As noted by *UNECA and AUC (2010)*, the challenges of youth unemployment and poverty are expected to continue rising in Africa thereby rendering same to be vulnerable and marginalised.

Always, the talk of the most vulnerable groups in society is not conclusive without mentioning women alongside girls and children. However, this study only focuses on the former as they are involved in household chores. Women are defined differently but most prominently as relatively old enough to run household chores and be able to conceive. This category, especially in Zimbabwe constitutes the majority of the population with about 52% (*Zimbabwe National Statistics Agency (Zimstat), 2012*). In this study, while women may be taken as a gender group, primarily, they are considered a socio-economic group specifically for the following reasons: their role in productivity, they own labour that has been 'under-priced' and that because of poverty; they have become implements of productivity.

2.3. Energy Use

Energy is a basic need which is supposed to be accessed by every household the world over. However, because of some structural and economic challenges, some households fail to get it.

Energy could be found in various forms depending on the location, geographical region, and climatic season and in most instances the level of development of respective countries. However, for the purpose of this study, energy refers to firewood though the studied people on the ground may have access at other instances to the energy from electricity, kerosene and gas. The same energy is also used for different purposes chief amongst them; cooking, heating and lighting.

Most of the Africans have up till this date been displaced in some form or the other. Prominent talk is usually through wars but in other cases like in the Zimbabwean, it is through forced relocation as a result of economic challenges and in some instances fleeing from political persecution. After all these have been experienced, people need to prepare their food and the

question is, where does the energy come from? The Women's Refugee Commission [Women's Refugee Commission \(WRC\) \(2013\)](#) has had a programme on the ground to try and help lessen the susceptibility of women, displaced women and children to the damaging consequences related with firewood collection and its use, gender-based violence, environmental dilapidation and other respiratory infections caused by energy fuels' smoke and ensure that women access firewood safely.

2.4. Women/Youth Resource-Based Conflicts

Conflicts over resources between women and the youth have been reported in most developing nations especially where poverty characterise society. Some of these conflicts have been noted in the farming areas where women assume a leading responsibility in food security ([UNHR, 2013](#)).

According to [Agri \(2003\)](#), women have always conflicted with the youth over a variety of issues. Besides water which they all need for their vegetable gardens, they have also clashed over firewood and the 'claimed' territories for harvesting the wood. The two resources that they conflict over have become major sources of the rural people's livelihood as they cannot either find jobs or experience sustainable crop harvests from their fields. Official records of women/youth conflicts could not be obtained as the Zimbabwe Republic Police cited confidentiality as the reason for denying giving such information.

2.5. Motivation for Conflicts

Some of the youth and women are motivated to engage in violent activities and acts of criminality by a host of factors, chief amongst them, lack of employment opportunities, failed marriages and poverty, ([Situation of Youth \(SOY\), 2003](#); [Zimbabwe Election Support Network \(ZESN\), 2009](#)). Zimbabwe is one of the few countries that have managed to establish schools within the shortest walking distances so much so that the literacy rates have improved drastically.

This literally translates to the production of more higher education graduates who then expect to be absorbed into the job market. Unfortunately, that is not to be hence the Youth Bulge Theory ([Urdal and Hoelscher, 2009](#)) conception whereby unemployed youth bulge at some point of the growth ladder before they vent out their anger through some other means.

According to Kasukuwere^v, Zimbabwe has over 300,000 young people who drop out of school each year. It is from these that the political militia and other criminals have been bred and unleashed terror on innocent civilians under the guise of political retribution ([Dodo, 2012](#); [Dodo and Musorowegomo, 2012](#)).

2.6. Developing Energy Sources in Rural Areas

It is undisputed that most developing economies have not instituted any formal and meaningful programmes to ensure the delivery of energy sources to their people, especially the rural dwellers.

What it means is the absence of such programmes and policies is a daily challenge for women (Barrueta, 2009). Realising the trauma that most rural women suffer perpetuated by the pressures that they experience in trying to satisfy the needs of their families, there is some need for the development of some energy sources in the rural areas.

In developing countries like China, India and Mexico amongst others, there have been concerted efforts towards the distribution of efficient firewood stoves to address the plight of women carrying heavy loads of firewood on their heads and alleviate forest degradation (Boy, 2000; Barrueta, 2009). That may be possible only if other variables like women’s rights and poverty issues had been addressed.

3. RESULTS

After gathering data on the ground and consulting with relevant government departments, it was revealed that the two wards combined have a population of over 6600 people with about 3600 having come as a result of land reform. What it means is that an average family has 7 members.

The implication is that during the pre-land reform era, there were about 3000 people (workers and dependents) and the former commercial farmers who owned the 16 farms that existed. After the land reform exercise, there are now 6600 people all congested on the same piece of land and its resources.

The following details are for the participants after they were coded for identification and concealment of personal identity. The column labelled Code shows the sex, ward and number of the participant in the study, the Living Status shows whether the participant was a land owner or a farm worker while Employment Status shows whether one has a formal job for sustenance or not. The other columns are self-explanatory.

Table-1. Participants’ Profiles

Code	Sex	Age	Marital Status	Education	Employment Status	Living Status	Interview Duration
Y11	M	19	Single	O’level	Unemployed	New farmer	32 mins
Y12	M	25	Married	Grade 7	Unemployed	Farm worker	50
Y43	M	30	Married	Form 3	Employed	New farmer	45
Y44	M	23	Single	O’level	Unemployed	Farm worker	35
W11	F	35	Married	Form 3	Unemployed	New farmer	35
W12	F	51	Widow	Grade 7	Unemployed	New farmer	50
W13	F	18	Single	Grade 3	Unemployed	Farm worker	50
W44	F	30	Single	Grade 7	Unemployed	New farmer	50
W45	F	42	Divorced	Form 4	Employed	New farmer	30
W46	F	20	Married	Form 3	Unemployed	New farmer	40

Code Key:

Y: Youth

W: Women

^{2nd} Figure: Ward

^{3rd} Figure: Participant Number

3.1. Themes

3.1.1. Nexus between Gender and Poverty

Four participants: W11, W13, W44 and W45 presented sad stories about their daily chores that involve waking up in the early hours of the day to ensure that there is water for the day (drinking, cooking and bathing), clean both the homes and their residential yards, prepare breakfast before going out to fetch firewood for domestic use. They also revealed that the programme of fetching firewood was two-pronged; for domestic use and commercial use so that they raised income for other needs. On average, a pile of about 10 logs, about a metre in length each cost a dollar (US\$1) while a one tonne truck load costs about sixty dollars (US\$60) and a seven tonne truck load costs around United States four hundred dollars (US\$400).

Participants Y11, Y13, Y44 and W46 indicated that the land reform programme had at some stage exposed most new farmers to financial resources; new farmers harvesting what they had found on the farms, new farmers selling farm equipment left behind by white farmers, government grants and supporting facilities and past lucrative farm commodity prices. That had allowed new farmers to procure a variety of facilities and household products like solar panels, gas stoves and electricity generators thus slightly transforming their lives for the better. Participants W12 and W45, a widow and divorcee respectively indicated that they needed to work harder, fetching as much firewood as possible for resell so that they could fend for their families since they were the sole breadwinners.

3.1.2. Women Coping Mechanisms During Energy-Needy Times

According to a Zimstat participant, out of an average village with 40 households, probably 2 or 3 households have access to the farmhouse electricity. The other 37 rely on either firewood or paraffin for their everyday cooking and for water and space heating. However, because of the poverty and the ever suppressed farm commodity prices, few can afford paraffin energy. Zimstat revealed that firewood use was at an average annual use of 4 tonnes per household as at 2012 and that over 15% of this firewood was being procured from the rural markets and not directly fetched from the wooded areas.

According to one participant W13, during the times when law enforcement agencies would be on the ground conducting operations to arrest firewood poachers, women were left with no option but to resort to the mobilisation of old plastic material for use as energy. This however had a problem of emitting thick black choking smoke which at times affected their 'chests' (respiratory infections) and caused eye discomfort and even destroyed their utensils.

EMA, Department of Lands and Ministry of Local Government participants gave out that as a measure towards addressing women energy needs in the new settlement areas, the government through the Farm Mechanisation Programme that was funded by the reserve Bank of Zimbabwe, had availed some relevant facilities and gadgets. Specifically in ward 1, 27 households got scotch carts, 5 got diesel powered generators and I got a small tractor and a trailer. In ward 4, 10 benefitted scotch-carts.

3.1.3. The Gravity of Youth/Women Hostility Over Firewood

In both cases; Manga and Chevakaadzi, there have been running battles between women and some youth over access to firewood. It was revealed by some officials from relevant departments

and some women that particularly in Ward 4, some youth involved in the sale of firewood had formed some vigilant groups specifically to either scare away or fight women found collecting firewood in the forests.

The above conflict has led to threats to people's lives and security, limitations on the liberty of movement and restricted access to sufficient means of survival. Besides women, other firewood collectors are being threatened by the same youth who have developed a habit of bullying other residents. According to W41, W43, W44, women are now insecure as they fear that if caught in the forests, they may be exposed to sexual abuse. W43 remarked '*zvatic hanyoporiwa nevavakidzani muno?* (Aren't we going to be raped by our neighbours?)' The same respondents also revealed that the threats by the youths had equally affected their efforts to fetch water for domestic purposes and could no-longer attend to their vegetable gardens along the river banks. Apparently villagers in village 3, 4, 5, 6, 8, 9, and 10 have their gardens along Mazowe River tributary called Kamazowe River. Some of the families actually sustained their lives through commercial vegetable production in these gardens. All these threats were coming against a backdrop of a case where a local village woman resident at Rosetta Rust farm was run over by a car which did not stop in 2005. Reportedly, the deceased was carrying a load of firewood which she had collected about three kilometres away and was probably tired that she did not hear the approaching car and simply crossed the road leading to the hit-and-run incident.

In ward 1, W11, W13 and Y12 indicated that there were isolated cases where women had been either harassed or threatened by the youth. However, they revealed that the youth had already sent out a word of caution to the entire community that they were going to be regulating the use and extraction of all natural resources especially firewood. Although these women and youth were from the same communities and villages, when it came to firewood domain, all the relations were ignored bearing serious hostilities. It was revealed that the most affected women were from villages 1, 2 and 3 and those near Lilistock Farm villages and Kurukeni village along the tarred road to Manga. In these villages close to the main road to Bindura, some youth had once (in November/December 2012) threatened to confiscate all the firewood staked at suspicious homesteads for sale.

3.1.4. Impact of the Conflict on the Environment

The (Environmental Management Agency (EMA), 2012) has raised severe concern over degradation of wetlands in the resettlement areas as a major challenge especially around Kurukeni, Ruya Falls, Chuma and Roseta Rust villages since 2000 so much so that through EMA Act (Chapter 20:27), some culprits have been arrested. A total of 15% of these wetlands are still in a stable condition while 59% are moderately degraded and 26% are severely degraded. In the district according to EMA^{vi}, Matepatepa area has the highest number of wetlands approximately taking up 2.4% of the entire area while Nyava area has the least number of wetlands approximately accounting for 0.8% of the total land. According to a research by EMA, wetlands in the district have been threatened through human actions especially in areas where people were recently resettled post-2000.

Generally, the establishment and intensification of agricultural activities, infrastructural development, over-harvesting of wetland resources, overgrazing, deforestation and firewood collection and excessive burning of wetland ecosystem have played a prominent role in depleting wetlands (ibid, 4).

In ward 1, two participants: Y11 and W11 indicated that the fact that people were felling trees arbitrarily along the same plane and pulling them along the same paths, there were signs of serious soil erosion that is likely to develop into deep donkas unless the relevant authorities instituted some remedial systems. According to the respondents, this was visible in villages 2, 3 and 5 of Manga.

Meanwhile, another three participants from ward 4: Y44, W45 and W46 almost echoed the above sentiments indicating that they acknowledged that the fact that there was no other viable source of energy for both cooking and curing tobacco meant that deforestation was not likely to end in any foreseeable future. According to EMA and Forestry Commission respondents, the natural forests and wooded areas in the Matepatepa farming area of Bindura were being destroyed at a rate of 0.6% per annum due to the following; veld fires, agricultural activities, overgrazing, over utilization of timber for construction and poaching of firewood thus risking the extinction of these vital trees amongst others; *muzhanje* (vapaka kirkiana), *muhacha* (parinari curatellifolia), *mutohwe* (azanza garkaena), *mutamba* (strychnos species), and *munhengeni* (ximena).

3.1.5. Impact of the Conflict on Women

All the six participants generally felt that the government had some responsibility to play in order to address their challenges over firewood and the subsequent harassment by both the youth and the law enforcement agents. Participant W45 revealed that “*Kutsvaka huni mumapurazi atinoziva aine magetsi nguva yevarungu zvinoshungurudza; zwichida hurumende ichatigadzirira ipapo*” meaning ‘fetching firewood in the farms that had electricity during the era of the white farmers is disappointing; we hope the government is going to address that’. The study revealed that in Manga Ward 1, exclusive breastfeeding proportion was disturbingly low staggering at 20% (2 out of the noted 10 cases). The low rate of exclusive breastfeeding was attributed to poverty while the delayed breastfeeding was attributed to both ignorance and poverty.

The use of solid fuels in cooking and heating often results in incomplete combustion which then emits sulphur dioxide, carbon monoxide, polyaromatic hydrocarbons, and several other toxic elements. It was revealed during the study that of the 6 women participants, 4 had at some point suffered from acute respiratory illnesses. However, it could not be ascertained whether the respiratory illnesses were a result of firewood emissions. To the women and the society at large, seeking medical expert advice on the illnesses was not a priority. The study also established that of the 6 women participants, 3 had experienced some birth complications. Participant W12 had 2 birth complications; 1 involving low birth weight and another affected with asthma. Participant W44 had a birth complication where the baby was born infected with pneumonia while participant W46 had a baby born with low birth weight. According to this respondent, she indicated that “*Mwana wangu akaroyirwa zvekuti akanga asina muiri*” (My new born baby was bewitched that she was born tiny). This implied that the respondent did not know the challenges

that she faced health-wise. According to health officials in the Local Government, these might have been caused by a variety of factors like; chronic obstructive lung infections, acute respiratory illnesses and low nutrient content, all a clear sign of the use of solid fuels for domestic purposes. Zimstats also confirmed the above when it revealed that the use of solid fuels in households is highest in Mashonaland Central province with 93% than any other province.

The level of women involvement in firewood collection had seriously affected their time and need for routine medical consultation so much so that some were no-longer taking their medication for high blood pressure and contraception. Participant W11 who is married was taking hypertensive pills erratically, W44 who is unmarried was taking contraceptive pills inconsistently while participant W12 a widow had become inconsistent in taking her antiretroviral drugs. Participant W44 actually revealed that she was no-longer able to conceive due to the load of work that she handled when she said, “*Mati ndichazvara here nebaso randinoita, kana mapiriti ekuronga mhuri handichamwa*” (Do you think I can still conceive babies given my work, I even no-longer take contraceptive pills).

3.1.6. Economic Returns

Firewood is sold both at domestic and commercial levels in the two wards and families are sustaining their lives. What has not been captured at both individual and state level is whether the practice is earning the national economy any dividends mainly owing to lack of a systematic harvesting and pricing of firewood. The absence of standardisation in methods employed in the commercial harvesting and sale of firewood, brings with it challenges in comparing expected tree yields. Some households were reportedly selling firewood as part payment or in lieu of school fees for their children attending local schools. Reportedly, in Ward 1, there is a farmer who sells stacked firewood to a named boarding school in Chiweshe. In such instance, the school collects from the point in Manga. However, there is another option whereby the farmer can deliver to the school and in this instance payment excludes transport. There are also instances where trees are sold as ‘standing trees’ and price negotiation is per tree with no processing or conversion costs.

The practice is difficult to control or stop as most youth are now involved given what they perceive more ‘lucrative returns’ ‘*zvinobhadhara*’ especially in an era where there is more electricity load shedding than expected. Besides, from almost each household, there is at least a youth who is now into firewood sales. According to EMA, from a population of over 3000 in Ward 1 and over 3500 in Ward 4, at least 150 youth and 200 respectively were into firewood poaching, making it extremely over-subscribed and prone to over depletion of the resources.

3.1.7. Others Issues

According to the Provincial Administrator’s (PA) office^{vii}, the province is involved in an exercise called Placement of Villages and Boundaries in all the resettlement areas with a view to establishing defined villages where village heads could be sworn-in and gazetted. That way, according to the PA’s office would help in the collection of taxes in the villages and pave way for the conduct of traditional leaders’ responsibilities like conducting courts legally and protecting natural resources.

On the question of who collects firewood most in households, EMA, Forestry Commission and Local Government participants revealed the following; that adult men collected firewood in 12% of cases (6 cases in every 50 cases), male children (10-20 years) collected firewood in 5% of cases (3 in every 50 cases) while the rest were taken care of by either women or girls. According to EMA and Forestry Commission records of arrests involving firewood poachers, there were more women who had been fined for fetching firewood for domestic use. In 2012 only EMA had recorded 313 cases in the 2 wards and 280 cases in 2011. Men (210 cases) had been arrested in the 2 wards for fetching firewood for resale in Bindura and nearby schools. All the firewood had been subsequently confiscated by the policing authorities.

3.1.8. How the Conflict could be Addressed

According to EMA, Forestry Commission, Local Government, and Lands respondents, the conflicts; fetching firewood by women for energy needs against the law and the clashes between women and the youth over firewood had seriously impacted on other activities' development.

Realising that traditional vegetable gardens were being ignored and that neighbours had become hostile to each other, there was a serious need for either dialogue or law enforcement agency intervention. However, besides the above suggestions, there were several others that were raised by different stakeholders.

The technology of charcoal stoves (*mbaura*) should be explored to see whether it is able to address some of the rural people's concerns regarding domestic energy. In other countries and places along the Zambezi escarpment where Mopani tree (*mupani*) and other hard wood trees are found, locals produce charcoal for domestic and export purposes. According to EMA, a 20kg bag of charcoal costing about US\$5 must be able to last for a month in an average household of five people assuming that on average a family takes breakfast and supper and that they do not resort to some foods that require a lot of heat like beans and trotters/hooves (*mazondo*) and off-course the time of the season (winter/summer). This cost, according to EMA and Forestry Commission is relatively affordable to most rural villagers who are involved in other income generating projects.

However, charcoal production should be closely supervised by the Forestry Commission and EMA to avoid over-depletion of resources in an unsustainable manner and soil erosion effects.

Enhancement of the rural electrification programme at affordable rates was also raised. Respondents: Y11, Y12, Y43, W13, W44, W45 and W46 suggested that the government resuscitate the rural electrification programme which was once rolled out during the early 2000 era with a view to accessing more villages to electricity. The respondents added that given a successful cropping season, they may be able to draw electricity into their homes at least for basic services like entertainment, cooking and lighting provided the electricity connection is subsidised for affordability.

Some youth respondents: Y12, Y43 and Y44 proposed that the relevant traditional leaders responsible for local governance like kraal-heads, village-heads and Councillors initiate the establishment of village management councils which will then spell out traditional gender roles of respective members of the society. During the process, the youth expected that the Council would

assign the role of firewood collection for commercial purpose to the youth since they were unemployed.

4. SOME NOTED CAUSES OF THE CONFLICT

According to the Ministry of Lands^{viii}, there were a variety of challenges in the resettlement programme especially in view of the fact that the programme was a spontaneous event whereby people settled first before any settlement plan was drawn. That chaotic settlement pattern brought with it massive destruction of forests and exotic tree plantations mainly because people were not sure if they were to be settled permanently and so resorted to looting.

In Mashonaland Central province, there was also a problem of technical decision overrule by the security sector. Because land then had been declared a security commodity, the provincial Joint Operations Command (JOC) on several occasions would overrule, override or nullify decisions made by the provincial committee of the technocrats. When the Land Acquisition Act (2002) was instituted to pave way for the formalisation of the resettlement programme, there was no effort put to ensure a supporting clause alongside which could then cater for the provision of other energy needs. This according to EMA could have been fulfilled through either enacting a new law or revising the already existing Forestry Act, Environmental Management Acts and others so that firewood collection and tree felling for firewood could be provided for. According to the Ministry of Lands, the resettlement programme also faced high staff turnover so much so that all the programmes were continually disturbed.

When people moved into their new homes in the farming areas, most were ill-prepared for such new lives hence the delays to relocate. However, with the political pressure to relocate or lose their land, most complied but without any economic bases to start from. During the early years, (Sachikonye, 2004) some survived on the proceeds of the equipment and crops that they had found on the farms. Some households, according to the Local Government respondent managed to procure some household gadgets like electricity generators, and solar panels for domestic use.

However, as the Reserve Bank funded Farm Mechanisation programme was launched in 2004/5, some farmers were provided with tractors and related implements, power generators, scotch-carts and Lorries amongst others. These, besides serving in the agricultural sector, could also alleviate the problems of energy needs like the provision of electricity and ferrying firewood from the forests.

4.1. Synthesis of Findings

The study made numerous findings some of which were already documented elsewhere. Generally, all the respondents revealed that one's ability to fetch large quantities of firewood was determined by a variety of factors chief amongst them being an availability of an option for sustenance. This is evident in the cases of W12 and W45 who are a widow and divorcee respectively and have managed for years in an endeavour to fend for their children. It was also observed that poverty in the rural areas is usually associated with the most vulnerable groups in society. This therefore forced the poor to sell their labour for almost nothing. This phenomenon

was noted in the amount of labour that is required to collect firewood and the corresponding selling price of the same quantity of firewood. The prices are so low that firewood collectors have to remain collecting more for lifetime survival. According to the study, about 83% of the women in the 2 wards collect firewood for either domestic or commercial purposes. Most people who collect firewood expect little returns. It was observed that some respondents (Y11, Y12, Y43 and Y44) are prepared to earn just enough for family survival; that is a seven tonne truck load which can be filled by 2 people in 2 weeks fetching about US\$400.

It was also established from the study that the availability of a ready market in Bindura and surrounding schools was a motivation enough for the residents of Ward 1 and 4 to keep felling trees for firewood. Soon after receiving scotch carts, some residents actually increased their firewood output as it was now easy to transport to the market.

From the responses that were gathered from some of the participants, it is evident that most women were socially and economically excluded from some communal and basic facilities like accessing electricity from the main farm houses. Out of an average of 40 households, only 3 had access by virtue of their liberation war credentials. What it therefore meant was that most of the members in the 37 households were exposed to acute respiratory illnesses as a result of solid fuels' smoke. Some other women in this situation were also susceptible to diseases like hypertension, depression, backache and sore legs because of the nature of the work that they performed. What also worried was the alarming high rate of maternal mortality in these areas due to poorly equipped health centres and the quality of staff manning them.

The research discovered that firewood collection was causing serious land degradation, soil erosion and depletion of wetlands. Lack of a government policy guiding farmers and these firewood poachers on how to sustainably fell trees and manage the environment was also a major contributing factor. If ever there was any policy, then very little must have been done in the form of advocacy and trying to educate people on the merits and demerits. Another worrying development on the part of the firewood poachers was the rate of consumption at which they were collecting firewood versus the replenishment rate. The consumption standing at 4 tonnes per year/household, the available forests may not last.

The impact of some of the raised problems on women is that family members are exposed to poverty, infectious diseases and that they are a load to female heads of households whose wellbeing is no important than theirs. These terrorised women also have the duty of actually looking after the old, the sick, and the minors.

To guarantee that some of the needs of women are taken care of, the following amongst others could be considered. The government and all its agencies and probably supported by other concerned stakeholders should treat the welfare of women with the attention and urgency that it deserves. First and foremost, rural electrification could be enhanced at subsidized rates so that more households could access. Secondly, there could also be some consideration on the issue about the production of charcoal and the adoption of charcoal stoves (*mbaura*). Rural management councils could also consider collective mobilization of firewood for distribution to needy consumers. Finally, relevant natural resource management institutions should avail more

resources towards the protection and policing of the identified areas to curb continued poaching of resources.

5. CONCLUSION

The study noted that almost all the participants were comfortable revealing their feelings and views about the subject matter. Their participation was purely out of interest and never out of any expectation for any salvation. Therefore, the above environment made the outcome of this study almost as accurate, credible and certain as is possible. It was also observed that there are more women out in the countryside who are still suffering in bondage largely as a result of cultural practices and poverty.

REFERENCES

- Agri, S., 2003. Findings and recommendations on Zimbabwean land reform, Mimeo: 6.
- Barrueta, V.R.M., 2009. Energy performance of wood-burning cook-stoves in Michoacan, Mexico. *Renewable Energy*, 33(5): 859-870.
- Boy, E., 2000. Fuel efficiency of an improved wood-burning stove in rural Guatemala: Implications for health, environment and development. *Energy for Sustainable Development*, 4(2): 23-31.
- Chitsike, F., 2003. A critical analysis of the land reform programme in Zimbabwe. Paper Presented at the 2nd FIG Regional Conference: Marrakech, Morocco, December 2-5.
- Collier, P., 2000. Economic causes of civil conflict and their implications for policy. Washington: World Bank.
- Dodo, O., 2012. Youth unemployment and the question of insurgency: A case of Zimbabwe. *International Journal of Humanities and Social Sciences*, 2(13): 182-191.
- Dodo, O. and C. Musorowegomo, 2012. Political intolerance, diversity and democracy: Youth violence in Bindura Urban, Zimbabwe. *American International Journal of Contemporary Research*, 2(6): 134-143.
- Environmental Management Agency (EMA), 2012. Gullies – a case of mashonaland central province. Harare: EMA Protecting the Environment. EMA.
- Environmental Management Agency (EMA), 2012. Wetlands in mashonaland central province. Harare: EMA Protecting the Environment. EMA.
- GOZ, 2000. Zimbabwe national youth council act (25:19). Harare: Government Printers.
- Moyo, S., 2000. Land reform under structural adjustment in Zimbabwe: Land use change in Mashonaland provinces, Uppsala. Nordiska Afrika Institutet. pp: 7.
- Nafziger, E.W. and J. Auvinen, 2000. The economic causes of humanitarian emergencies. In: Nafziger E. W, Stewart F, Vayrynen R, (Eds). *War, hunger and displacement: The origin of humanitarian emergencies*. Oxford: Oxford University Press. pp: 91-145.
- Sachikonye, L., 2003. Land reform for poverty reduction? Social exclusion and farm workers in Zimbabwe. Paper Prepared for the IDMP Conference, Manchester, England. April 2003.
- Sachikonye, L., 2004. *Inheriting the earth: Land reform in Southern Africa*. London: CIIR.
- Situation of Youth (SOY), 2003. *The situation of youth in sadc*. S.A: YDN.

- UNECA and AUC, 2010. Economic report on Africa 2010: Promoting high-level sustainable growth to reduce unemployment in Africa. UNECA: Addis Ababa, Ethiopia.
- UNHR, 2013. Discrimination faced by rural women impacts negatively food security. Available from www.ohchr.org/EN/NewsEvents/pages/RuralWomenFoodSecurity.aspx [Accessed 15/09/13].
- Urdal, H. and K. Hoelscher, 2009. Urban youth bulges and social disorders: Empirical studies in Asian and Sub-Saharan cities. Policy Research Paper 5110, Washington DC, WB.
- Women's Refugee Commission (WRC), 2013. Fuel and firewood initiative. NY: International Rescue Committee (IRC).
- Zimbabwe Election Support Network (ZESN), 2009. 2008 post election report. ZESN, Harare.
- Zimbabwe National Statistics Agency (Zimstat), 2012. Quarterly digest of statistics: 1st Quarter April 2012. Zimstat, Harare.

ⁱ This is the Ministry responsible for the administration, allocation and custody of all the land both urban and rural.

ⁱⁱ This is responsible for all the farming land, farming land allocation and administration.

ⁱⁱⁱ This is charged with the mandate to ensure that forests are not endangered.

^{iv} This is an agency responsible for collecting national census data.

^v Savior Kasukuwere is the immediate past Minister of Indigenisation and Youth Development, Zimbabwe. He made the remarks addressing an indigenization workshop in Harare in January 2012.

^{vi} Interview with an EMA official in Bindura in 2012.

^{vii} Interview with Officials responsible for traditional leaders in Mashonaland Central province.

^{viii} Interview with a Lands official in Bindura in 2012.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Sustainable Energy And Environmental Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.