

Interrogating Factors Associated with Littering along Road Servitudes on Zimbabwean Highways.

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Abstract

Littering along highways in Zimbabwe is abysmal. Legislation to curb littering has been put in place under the watchdog of Environmental Management Agency through Environmental Management Act Ch 20:27 section 83 and Statutory Instrument 6 Of 2007. Besides legislation, packaging for many products is clearly labeled ‘place litter in bins’, but many do not regard this instruction. Clean-ups and anti-littering campaigns have proved to be an avalanche of charades for the public fail to justify their existence. Moreover, these could face a stillbirth if there is no concomitant behavior change amongst local communities. The study sought to investigate the causes of littering along road servitudes on highways, examine the strategies that have been put in place to curb littering and assess challenges faced in implementing the strategies employed. From the study it was evident that littering continues to take place due to socio-cultural consumption style of Mac-donaldization (fast foods). Apart from public conveyances flouting environmental regulations, illegal vendors and transport route operators have increased despite the economy’s resuscitation. Their reluctance in providing bins is a warrant for wanton littering by the public from moving vehicles. To further worsen the predicament road authorities (Department of Roads, District Development Fund (DDF), urban and rural district councils are not well financed to maintain the roads by ZINARA (Zimbabwe National Roads Authority) under Ministry of Transport and Communication because of limited funds. Even when they cushion the councils the funds are swallowed by salaries and wages which are always in perennial deficits.

Keywords: littering, clean-ups, Mac-donaldization, legislation, public conveyances

1. Introduction

Littering is a worldwide phenomenon and not only peculiar to Zimbabwe. However, littering in Zimbabwe has become a nuisance not only within urban areas but even along road servitudes on major highways. In 2010 Zimbabwe was dubbed an African Litter Heroine after London following the economic crisis which had signaled galloping inflation leading to massive print out of bearer cheques. Despite efforts by the Environmental Management Agency (EMA) and other civil society stakeholders to stop this undesirable behavior through anti-litter campaigns the problem seems to be beyond control of law enforcers. Anti-littering campaigns have not completely addressed littering problems. Even when litter bins are available individuals simply decide to litter and this has tended to begin within the mindset. Keep America Beautiful (2009) argues that, like many social problems, litter is caused by human behavior. Whether intentional or accidental, litter begins with the individual. The causes of littering are numerous: (1) some individuals simply decide to litter, (2) littering is most likely to take place in littered environments hence litter begets litter; (3) some people just believe that it is others responsibility to come and clean litter up.

According to Legislative Council State of Michigan (2013) Litter means rubbish, refuse, waste material, garbage, offal, paper, glass, cans, bottles, trash, debris or other foreign substances or a vehicle that is considered abandoned. Environmental Management Agency (2011) defines littering as throwing (often man-made) objects to the ground and leave them unremoved as opposed to disposing of them properly. EMA (2011) argues that there are numerous causes of littering. These include (1) pedestrians dropping garbage in the streets or gutters, (2) motorists discarding garbage out of windows, (3) uncovered loads- items that are not secure can easily be blown out of trailers and cause roadside littering, (4) household refuse disposal and collection, (5) commercial refuse, (6) construction projects, (7) people at leisure, (8) entertainment events, (9) illegal dumping and (10) intentional or habitual littering.

Littering itself has proved to have some various ecological footprints. EMA (2011) asserts that litter costs money since it means high council rates in order to employ more workers to clean up streets. Apart from that litter also threatens public health. Accumulated litter and carelessly discarded cigarette butts are potential fire hazards, litter attracts litter since people are more likely to litter in already littered environments. More to that litter can harm or kill wildlife especially plastic litter which chokes animals. Litter also harms waterways through pollution (Ibid, 2011).

The United Nations Conference on Environment and Development (UNCED, 1992) popularly known as the Earth Summit marked the birth of Agenda 21. Agenda 21 was a comprehensive blueprint for action to be taken globally towards realizing the goal of sustainable development. The most striking feature was that it was the first UN document to identify roles and responsibilities for stakeholders (Stakeholder Forum for a sustainable future, 2012). This is an approach based on participation of various groups and stakeholders. This was therefore the brainchild behind clean up campaigns involving local communities worldwide. In Zimbabwe since the inception of clean up campaigns in the 1990s it was hoped that these would act as platforms for encouraging and involving educational campaigns

regarding waste reduction programmes (see Marais and Armitage, 2004). On the contrary despite efforts by both state and non-state actors on anti-littering campaign including bin it Zimbabwe these efforts have proved inadequate.

Although the clean-up operations in Zimbabwe existed from the 1990s they became popular during the controversial vigorous Operation Murambatsvina which started in 2005. In May 2005 Government of Zimbabwe launched a month long clean-up campaign in urban cities termed 'operation Murambatsvina' translated as Drive out Filth. According to the Human Rights Forum (2005), Operation Murambatsvina officially known as Operation Restore Order was a large scale Zimbabwean campaign to forcibly clear slum areas across the country. The President Comrade Robert Mugabe described it as a crackdown against illegal housing and commercial activities and as an effort to reduce the risk of the spread of infectious disease in these areas whilst Chombo described it in terms of restoring order in Zimbabwe. However, this so called militaristic approach was ridiculed by civic groups who considered it as a nomenclature due to its inhumane approach (see Dube and Chirisa, 2012). This therefore led to the launch of clean up campaigns. According to EMA (2011) on 3 September 2009, the Vice President Comrade Joyce Mujuru officially launched the National Clean-up Campaign. All citizens, organizations, churches, businesses, schools and communities were encouraged to engage in activities and programmes that positively improve local environments.

The situation in Zimbabwe has been so decadent due to stern economic doldrums faced over the past decade. For Chikobvu and Makarati (2011) the economic meltdown and political upheaval of 2000 created a financial paralysis for City councils rendering waste collection and disposal skeletal. In the same vein Feresu (2010) opines that since 1998 Zimbabwe's macro-economic environment has been unstable, dogging local authorities with serious socio-economic challenges leading to dwindling service delivery. Brugmann (1994) eludes that sub Saharan African countries like Zimbabwe experienced externalities such as the Structural Adjustment Programme (SAPs) which resulted in the inability of local authorities to deliver urban services. Feresu (2010) echoes the same sentiment that due to Zimbabwe's macroeconomic environment urban local authorities were dogged with socio-economic challenges such as deteriorating infrastructure, nonpayment of bills, huge debts and dwindling government funding. ESAP also brought a lot of retrenchment that promoted the growth of the informal sector as an alternative means of livelihood. Deregulation of the economy resulted in mushrooming of backyard workshops and vending as a livelihood portfolio churning out uncontrolled amounts of solid waste.

Following dollarization of the economy it was hoped that service delivery would improve but however, contrary to that there has been perpetual deterioration in quality of services offered by City Councils (see Gukurume, 2011). In urban areas the Councils have surpassed the ability to deal with solid waste disposal. This has actually compounded waste collection which has become erratic and at times non-existent in big towns like Harare. This has resulted in indiscriminate dumping as well as throwing litter from moving vehicles. Brugmann (1994) contends that as a result the urban poor are left to contend with the disposal of their own rubbish through creation of illegal rubbish dumps. This in essence actually dawned a new dispensation of clean-up campaigns which would reduce the strain on the local

authorities (Ibid 1994).

The economy which was on a free-fall has gained momentum signaling a growth in littering amongst citizens. People have developed a habit of scratching off the airtime recharge cards and throw away or drop them on the ground (EMA Bulletin, 2011). This habit is mostly pronounced amongst many shoppers who throw away till slips at exits of supermarkets and retail outlets. Some even throw litter through windows of moving or travelling vehicles like buses. Consumers have developed a habit of dropping litter everywhere even in undesignated places. Apart from till slips and recharge cards litter manifests in various forms such as biscuits packages, flickering lollipops plastics, beer and soft drinks metal cans, 500ml empty plastic bottle and 24g corn snacks packages (Ibid, 2011).

Vending in undesignated stop points has emerged to be a black spot for promoting littering behavior. Mitullah (2003) argues that street vending is increasingly becoming an option for many citizens due to high unemployment rates. In the past street trade has been viewed as an underground activity that undermines the healthy function of formal economy. Informal trading has emerged as a livelihood portfolio for many and not only confined within the Central Business District (CBD) and city seams (see Dube and Chirisa, 2012) but also along highway routes. These highway routes such as Harare-Bulawayo- Plumtree, Mutare -Harare, Harare-Masvingo - Beitbridge and others are populated by vendors jostling for buyers since the CBD has become congested. Apart from confectionaries mentioned above fruit merchandise of bananas, oranges, mangoes, apples, maize cobs (which are seasonal) are also sold on the open market along highways. Illegal fuel dealers also frequent these routes and resort to nocturnal dealings (active during the night) as a mode of operation to flee from law enforcement agencies. For Chazovachii and Chuma (2013) in rural highway stopovers vending tends to promote rural livelihoods in Ngundu through selling of agriculture produce. Legislation on one hand has proved beyond no reasonable doubt to be inadequate until and unless people improve their littering habits.

Most studies have tended to focus on solid waste disposal within Central Business Districts in big towns and residential areas within high density areas of urban cities whilst leaving out road servitudes along highways. Empirical evidence from research reveals that studies also focus on provision of remittances amongst rural dwellers in informal trading along road servitudes on highways. However, contrary to legislation on littering regarding maintenance of such places these have been abandoned by responsible authorities leaving them unattractive and an environmental boon. Besides urban and peri-urban communities litter has emerged to be common along highways. In spite of numerous clean-up and anti-litter campaigns people continue to litter (see Makwara and Magudu, 2013). The lay-bye points that used to exist soon after independence are no longer existent. To further worsen the situation conspicuous food consumption has heightened leaving passengers developing a throw away culture. Plastic litter, kay-lite, pet-bottles, and other cardboard take away containers have proved to be on the top list. Moreover, legislation does not cater for abandoned vehicles along road servitudes. This could be also attributed to absence of hazardous waste landfills within the country (see Chitotombe, 2013). This is however, raveled in mystery. The road authorities responsible for maintaining road servitudes along

highways are preoccupied with rehabilitating roads and not about littering itself. ZINARA is constituted under the Road Act Ch 13:18 and empowered to fix in consultation with Ministry of Transport Communication and infrastructure Development. The Department of Roads which is Ministry of Transport communication and infrastructural Development constructs, maintains and rehabilitates all state roads. District Development Fund (DDF) is responsible for maintenance of all rural roads that fall under them. Urban councils construct, maintain and rehabilitate feeder roads within urban areas approved by ZINARA. Rural District Councils carry maintenance work in all tertiary roads within their jurisdiction. This on its own is problematic for there is duplication by ZINARA which audits the road funds. ZINARA is solely responsible for all roads connecting to main highways. This therefore means they should man highways. This leaves out littering since road rehabilitation takes the top priority considering the fact that most roads are in a sorry state and potholed.

There has been a dearth of literature on the persistence of littering especially on road servitudes along highways. Contrary to the Road Act Ch 13:18 road authorities have to maintain road services and prevent occurrence of any soil erosion by reason of the existence of the road, but this has not been the case. Littering has been fuelled by conspicuous food consumption due to Mac-donaldization where food stuffs are packaged to be consumed on the run. Furthermore, the boomerang of illegal route poachers in the transport industry has intensified littering. Moreover, even licensed vehicles do not have bin provisions which contravene environmental regulations pertaining to littering on provisions required for public conveyances in Zimbabwe. Apart from that graffiti (unwanted writing on walls) through usage of paper posters have left the environment unsightly, which the law does not clearly stipulate. Whilst Department of Roads is the responsible authority it remains a chimera on who should be responsible for cleaning up servitudes along highways. The presence of various road authorities in itself is a constraining factor due to dwindling revenue. Moreover, ZINARA being the responsible road administrators controls and approves usage of funds acquired to DDF (District Development Fund), Urban City Councils and Rural District Councils.

2. Legislation Regarding Littering in Zimbabwe

In Zimbabwe it is the mandate of Environmental Management Agency to ensure that every citizen has a right to a clean, safe environment which is not harmful to the environment and it is actually enshrined in the constitution of Zimbabwe. Environmental law in Zimbabwe actually criminalizes littering under Section 83 of Environmental Management Act (Ch 20:27). It is an offence to discard, dump or leave any litter on any land, street or road except in a container provided for such purposes or at a place which has specifically been designated for such purposes. Public transporters must put in place sufficient waste bins within their vehicles for use by passengers as stipulated in section 23 subsection (2) and (3) of Statutory Instrument 6 of 2007. Section 83 of the Environmental Management Act subsection 1 states that no person shall discard, dump or leave any litter on any land or water surface, street, road or site in or at any place except in a container provided for that purpose or at a place which has been specially designated, indicated, provided or set apart for such purpose.

EMA Bulletin (2011) argues that public operators do not regard the issue of littering very serious yet there is legislation in place on Section 83 subsection 2 which stipulates that an owner of a transport conveyance shall ensure that no litter is thrown from his transport conveyance. Most of the litter at bus terminus emanate from commuters who throw litter through the window. This is because the transporter has no provision for litter receptacles yet legislation clearly spells out that they are required to put bins in their transport conveyance. On the contrary the law stipulates that it is illegal to throw littering undesignated points and if there are no bins available in the commuter omnibuses passengers should hold on to the litter until they get off and drop it in bins. Section 23 subsection (3) of SI 6 of 2007 authorizes the imposition of penalties and fines against offenders who dump litter in violation of its provisions.

3. Materials and Methods

The research was purely qualitative and employed both primary and secondary sources of data. To validate the interviews (unstructured and key informant), the researcher corroborated data from unstructured interviews and key informants with observations. Silltitz et al (1959) describes observations as a specific tool which serves a formulated research purpose which rather than being a report of a set of certain issues involves seeing events as they progress. Qualitative methodology provides detailed and enriched data on measures that have been put in place to curb littering in Zimbabwe. Qualitative research methodology by nature enabled the research to assess the challenges faced in enforcing measures put in place. Unstructured interviews and key informant interviews with law enforcement agencies helped the researcher to gather detailed data in order to corroborate secondary sources of data.

4. Results and Discussion

Empirical evidence from the research revealed that littering has become a nuisance and environmental law in Zimbabwe criminalizes littering. The causes of littering are numerous and on the top list priority is Mac-donaldization (fast food phenomenon). Following dollarization of the Zimbabwean economy there has been conspicuous fast food consumption not only within the city but even more common amongst long distance travelers. It emerged that the Council has been castigated especially in urban environments due to unavailability of bins and poor service delivery but this should not be used as a scape-goat for wanton littering. The same predicament faced by City Councils bears testimony regarding littering along highways. However, there are various players constituted under the Road Act Ch 13:18 making it very difficult to execute clean up duties on road servitudes along these highways. Councils are of the opinion that if ZINARA is chiefly responsible for maintenance of highways then they should also clean up road servitudes on these highways. Councils are of the opinion that if ZINARA is chiefly responsible for maintenance of highways then they should also clean up road servitudes on these highways. Whilst environmental law criminalizes littering by individuals and companies it is not just enough making implementation lethargic.

4.1 Mac-donaldization (Fast Foods Phenomenon) and Informal Trading

Unstructured interviews that were conducted indicated that people now have a strong preference especially for fast foods that they can consume whilst travelling. Kay-lite 'take away' affords people the opportunity to enjoy food on the go. This is in line with Makwara and Magudu's (2013) sentiments that littering is fuelled by consumerism of fast foods and social culture of packaging food to the convenience of the public. Since the regularization of the plastic bag it was indicated that the ban would extent to polystyrene packaging. However, the plastic ban was partial and only a total ban could have sufficed (see Chitotombe and Gukurume, forthcoming). This therefore makes the move on kay-lite ban face a stillbirth since only a few outlets such as Innscor (chicken inn, pizza inn) have resorted to usage of cardboard containers serve for food outlets such as OK Zimbabwe, TM, Spar to mention but a few. This move was meant to avoid accumulation of kay-lite which takes over 1000 years to decompose just like plastic grocery bags. Sticking to use of cardboard containers would not really solve the issue but only lessen the ecological footprints. In most instances when people buy from fast food outlets they request for plastic bags to ferry their purchased food. Plastic bags should have been recalled off completely from the system and even extended further to kay-lite from the onset (see Chitotombe and Gukurume, forthcoming). Banning the kay-lite has proved to be a mirage and efforts to do so have been going on lackadaisically due to popularity and convenience of the kay-lite to the business community. Illegal dumping of solid waste disposal is also a common phenomenon on road servitudes along highways. Shops dotted along highways have resorted to dumping waste on the verges of roads particularly when they do not have orthodox ways of dealing with accumulating waste.

Following the downward trajectory of the economy that left many unemployed informal trading has resurfaced as a livelihood option. Vendors selling fruits, biscuits, pet bottle drinks and airtime also frequent these highways which are on the fringes of the Central Business District (CBD) to avoid congestion in the city and police raids. To fleece from law enforcement agencies vendors in the city have resorted to nocturnal vending in some instances by disguising their operations during the day (see Chirisa and Dube, 2012). As a result vending on the urban fringes and along highways has become the safest mode of operation. Road side vending of maize cob roasting, sweet selling, juice cards, biscuits, pet bottles, bananas, apples to mention but a few have risen on the toll. Fuel dealing has also recuperated on the outskirts of urban areas and along highways. Although vending tends to promote livelihoods particularly for small scale farmer holders in rural communities who sell along rural highway stopovers (see Chazovachii and Chuma, 2013) the predicament still lies on littering. The Councils are confronted with problems of revenue generation and are henceforth unable to cope since they used to rely on government and donor aid. Moreover, Councils feel that bin provision and clean up of highways should be the prerogative of ZINARA since they are now in charge. ZINARA only duplicates activities pertaining to road maintenance works.

Pet-bottles, cardboard boxes, kay-lite and empty can containers are also evident on road servitudes along highways. However, after consumption people throw them away from moving vehicles along roadsides and dealing with this litter becomes problematic.

4.1.1 Informal Transport Businesses and Illegalities of Unlicensed Operators

Unavailability of bins on lay-by points and public conveyances has also intensified littering activities. The bins that used to exist in the 1980s have been demolished and since then they have not been revived by Ministry of Roads. Environmental law has made it clear that all public conveyances must have bins and in the absence of these people should hold on to their litter until they get where there are bins. Despite the blitz and environmental regulations most public conveyances have been defiant and have not provided bins. This situation has been exacerbated by the informality within the transport sector. Toyota Noah and Ipsum models have emerged quite dominant and frequent long distance routes. This has made environmental enforcement difficult since pursuing them to place bins in their vehicles is legalizing the illegal for they do not have permits to ferry passengers.

From the observations contrary to environmental law provisions some transport operators have posters in their commuters flouting environmental regulations prohibiting littering clearly labeled '*marara panze*' literally transferring to throw your trash outside. This statement is substantiated by EMA Bulletin (2011) which alludes that some transporters have messages in their buses saying '*marara panze*'. In other cases where the operators are courteous posters are written, '*huchapa hatirambidze asi itirai kumba kwenyu*' literally meaning littering is a virtue that can only be tolerated under the comfort of people's home. Most food packages have an instruction written keep your country tidy or place litter in a bin as well as please recycle. Despite these people still continue to litter due to social cultures inculcated in them during the economic recession when environmental law was too lax. This has made it very difficult for people to do away with their old habits.

4.1.2 Graffiti on Undesignated Points

Graffiti (unwanted writing on walls) has also emerged to be a source of litter along highways. Posters and flyers are placed everywhere even on trees and erected structures. Legislation has not catered for the issue of graffiti making it very difficult to deal with litter. It simply mentions that no one should discard litter on streets, roads or specially designated places making it not laudable on the issue of posters. These papers are carried away by wind making it unsightly losing aesthetic beauty. These are very common particularly for companies advertising their products to the public as well as during poll elections. Though some undesignated areas are very clear and written 'no posters', people simply ignore that.

4.1.3 Abandoned Motor Vehicles

From the observations it was evident that abandoned motor vehicles are also found on the verges of the roadsides. These are a source of litter on its own if they are left unattended and need to be dealt with. Road accidents are common sources of disasters along highways. However, remains of scrap metal from the damaged vehicles some of which are burnt beyond recognition are left idle leading to grave ecological footprints.

4.2 Strategies Put in Place to Deal with Littering

In response to littering various activities have been initiated to instill responsibility amongst

people to be good corporate citizens. Clean up Campaigns have been lobbied for by the then Ministry of Environment and Natural Resources now Ministry of Environment, Water and Climate under EMA. There has been stakeholder engagement from Environmental Management Agency and environmental lobby groups. Several anti-littering campaigns have been launched but failed to achieve intended results. The Ministers, Vice President, music icons in Zimbabwe have also taken part in clean up campaigns to serve as examples. The Environmental Management Agency has hosted Miss Earth Pageants towards a sustainable environment.

4.2.1 Clean up Campaigns

Evidence from secondary sources of data reveals that in 2012, 48 voluntary clean ups had been witnessed since their inception. In a bid to revisit the issue of unavailability of bins Proudly Zimbabwean conducted an audit under the Bin it project in Harare and found that bins were not being used though available. The challenge has been in spatial distribution and not necessarily availability (see Standard, November 2012). However, contrary to this assertion the road servitudes along highways do not have adequate receptacles. More to that most stop-overs along highways do not even have bins and there is no personnel to clean-up along highways. At times volunteers who are skeptical about their environ team up to clean up these areas though not on a daily routine basis. In as much as these need community participation people have not been willing to take up the initiative hence they become a once of event. The month of September has been declared as a day for Clean up Zimbabwe. The reluctance on the part of local communities could be linked to lack of incentives attached to taking part in these clean-up campaigns. In as much as clean-up campaigns call for community engagement on the part of church organizations, business and local communities these do not provide a lasting solution to the problem of littering. Though they are valid local communities bemoan on the provision of social services. Others felt that the Councils are simply covering up for their failure to deal with pertinent pressing issues. Moreover, others thought that the issue was not littering per se but a default on the part of Councils to recruit personnel since they get revenue from rate payers.

However, following the 2013 presidential polls the Councils were heavily indebted following the cancellation of outstanding bills for ratepayers. This further burdened the Councils that were already in a comatose due to failure by ratepayers to owe up to their debts. Moreover, the Councils are still in salary arrears for their personnel making the situation more decadent. This is in tandem with Chigwenya's (2010) assertion that the government continues to interfere with the day to day running of the local authorities and making the current situation even worse as the local authorities lack autonomy in independent decision making on the policies towards effective waste management.

4.2.2 Environmental Law

Moreover, law enforcement agencies such as Environmental Management Agency have been working together with the police. For public conveyances, blitzes have been conducted to enforce the placement of bins within these vehicles. However, this has been very difficult because of the resurgence of many illegal route flouters in the transport industry.

Implementing environmental regulations is actually a warrant for operation of unlicensed public conveyance operators. The dilemma is that most of these illegal public conveyances are owned by the police who are mandated to issue out arrest warrants to unlicensed operators. This on its own is symptomatic of a drooling economy in which the law enforcers also need to supplement their meager salaries. In the same vein it is ironical that environmental law further incriminates people who throw litter from moving vehicle. This is enshrined within the Environmental Management Act Ch 20:27 section 83 and SI 6 of 2007 on solid waste disposal. The plastic bag ban under SI 98 of 2010 was also embarked on in a bid to curb littering problems. According to the law public conveyances without litter bins are subject to US\$20 fine. SI 6 of 2007 on Effluent and Solid waste disposal states that a person who litters is liable to a fine not exceeding 6months or to such fine and such imprisonment. However, US\$20 is too lenient to make a positive difference. Although EMA constantly engages the police to ensure effective enforcement of littering laws, law enforcement still have some loopholes. In addition the police are often labeled as corrupt and toothless bulldogs making enforcement elusive. This has been the case in instances where the vehicles are owned by ordinary citizens. Following the inauguration of the new Minister of Environment, Water and Climate the Minister has put in place stiffer penalties for offenders. Offenders will be held hostage under the hands of the police before being instructed to pay the US\$20 fine by the end of the day. This move is meant to deter offenders to avoid littering in addition to the fine. However, the only solution is to give people the custodianship of the environment to effect citizen arrest on littering offenders.

4.2.3 Environmental Education

Environmental education has also been used as a medium of communication on issues related to littering. According to IUCN (1971) environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture and his biophysical surroundings. It also entails practice in decision making and self formulation of a code of behavior about issues concerning environmental quality. EMA under its publicity section has been engaging communities through road-shows imparting environmental education. In schools environmental clubs, debates and public speaking have been fostered and integrated in the school curricular under the auspice of ‘catch-them-young’. The media (both electronic and print) have been used as a source of communication for environmentally related issues. However, media coverage on environmental issues is very minimal owing to lack of skilled reporters (see Mapira, 2013). In Zimbabwe the situation has been limited in scope due to one TV station (ZTV-Zimbabwe television). Moreover, most people do not watch the local television and frenzy DStv (Digital Satellite television) to which they subscribe to. Mapira (2013) argues that challenges confronting media in provision of Environmental Education (EE) in Zimbabwe include resistance from communities, political climate and language barriers.

5. Conclusion

Empirical evidence from research reflects that it will go a long way to deal with littering

problems in Zimbabwe. It is quite evident that though the public are aware they have not been cooperative enough to assist in halting the littering problem. Even the law enforcement agencies particularly the police are the main masterminds of illegal operations by the Toyota Ipsum's and Noahs making it very difficult to apply environmental regulations. Whilst environmental law makes reference to prohibition against littering implementation has been very difficult due to local community resistance, ignorance and apathy. Public awareness through clean-up campaigns, bin it, integration into school curricular and media publicity have not assisted much in ameliorating littering. It also emerged though people are aware in most instances some still believe that these are not really pressing problems since they are not aware of the imprints. Moreover, in as much as these are very crucial they are not appealing to the public at large who in most instances fail to justify their existence. Henceforth, these measures will not provide lasting solutions since littering has become culture bound.

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Glossary

DDF District Development Fund

DOR	Department of Roads
EMA	Environmental Management Agency
GOZ	Government of Zimbabwe
ZINARA	Zimbabwe National Roads Authority

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