



Efficacy of the Multi-Sectoral Approach in Dealing with Road Carnage in Marondera Urban District

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Abstract

This descriptive research was conducted to examine the efficacy of the multi-sectoral approach in dealing with road carnage in Marondera urban district. The population was drawn from Zimbabwe Republic Police, Vehicle Inspection Department, Traffic Safety Council, Local Council, Hospital, Zimbabwe National Roads Administration and the Judiciary as well as private sector within Marondera Urban District that include non-governmental organizations, Marondera taxi association and the members of the public. The total study population was about 50 000 which is the population of Marondera urban where the sample size was derived. A total of 20 residents filled in questionnaires, 10 heads of the different sectors were interviewed. The sample was obtained through stratified and random sampling procedures. It was concluded that the trends of road carnages in Marondera urban district persisted due to lack of collaboration, resources and complementarity of efforts by various sectors involved. It is recommended that multi-sectoral members increase awareness campaigns on the causes of road carnages and strengthen mechanisms that ensure various roles of different sectors complementary.

Keywords: Multi-sector approach, Road carnage, Efficacy

1.0 Background to the Study

Road carnages are referred to as the unplanned mishap or phenomenon that results in death or injury of people or property according to Michael (2003). Road accidents involve various people in the society that include motorists, cyclists and pedestrians and the causes of accidents vary from place to place and region to region. Zimbabwean roads in recent years have been a menace owing to accidents claiming lives and injuring many attracting community attention. Road accidents in Marondera Urban District are not peculiar to this district but reminiscent of the national road character. Marondera district has recorded an average of 1200 accident cases per annum of which 20% of the incidences results in deaths of people according to District Traffic Accident report (2014). The situation in Marondera continues to escalate as more accidents occur to the extent of retarding development in Marondera.

Lusaka declaration on road traffic safety is one of the major international instruments agreed to mitigate road carnages around the globe of which Zimbabwe is a signatory. The United Nations General Assembly resolution 66/260 recognized the global public health and development burden resulting from road traffic crashes which, if unaddressed may hinder sustainable development and achievement of the millennium development goals according to United Nations (2009). According to Rieker (2004), Africa has for long been hard hit by road accidents living the poorest countries on the continent worst affect. The SADC protocol on road signs and signals was adopted to ensure that roads in the sub region are safe and carnages mitigated to the minimum.

Regional and international levels programmes to reduce road carnage have been used as benchmarks in formulating Zimbabwean laws that regulate the road transport industry as efforts to bring sanity on national road network. The Road Motor Transportation Act Chapter 13:15(2001),

Road Traffic Act Chapter 13:11(2000) and Vehicle Registration and Licensing Act Chapter 13:14(1994) are the major Statutory Acts used in protecting lives of citizens in Zimbabwe supported by other relevant statutory instruments and amendments. The occurrence of road accidents in Marondera Urban District continues to be on the rise despite such laws being available to reduce road carnages.

The Multi-sectoral approach to road carnages in Zimbabwe is an approach of including the various players like the police, local authority, traffic safety council of Zimbabwe, Zimbabwe National Roads Administration (Zinara), road users and the Judiciary as key players who safe guard the tranquillity of Zimbabwean roads by way of coming together, sharing ideas and working as a unit to reduce the problem. Despite the multi-sector approach being available to combat accidents road carnages as a community, the problem remains a question that needs an answer in Marondera Urban District. It is therefore against this background that the researchers sought to evaluate the effectiveness of multi-sectoral approach to road accidents in Marondera Urban District.

2.0 Statement of the Problem

Road safety in Marondera Urban District continue to be compromised in spite of the government initiatives, such as putting in place statutes and facilitating for the multi-sectoral approach, to no reprieve. This research sought to interrogate the efficacy and extent to which the multi-sectoral approach is reducing road carnage in Marondera Urban District.

3.0 Research Questions

1. What are Multi-Sectoral Approach and the causes of road carnage carnages in Marondera Urban District?
2. Explain the role of various sectors involved in reducing road carnages in Marondera Urban District.
3. Critically analyse the trends of road carnages before and after the introduction of multi-sectoral approach in Marondera Urban District.
4. To what extent has the multi-sectoral approach been effective in reducing road carnages in Marondera urban District?

4.0 LITERATURE REVIEW

4.1 CONCEPTUAL FRAMEWORK

4.1.1 Participatory governance

The concept of participatory governance has gained a lot of popularity in today's world, both in academic discourse and actual practice. Some people are using the approach in two dimensions namely deliberative democracy and empowered participatory governance in a bid to study citizens' participation and contribution to issues of governance. Participatory governance in Brazil and South Africa have set a standard world over according to Brown(1984), as their citizens have proved to have a big and respected voice on issues that concern them ranging from service delivery to the day to day administration of the public affairs in their respective nations.

The concept of participatory governance is applied in the context of a multi-sectoral approach to road carnages motivated by the view that when various stakeholders including citizens are given a chance to speak and contribute to issues that concern them. They deliberate on issues that need attention on roads like environmental situation, mechanical factors, road infrastructure and human error.

4.1.2 Participation-empowerment and social capital

The link between participation and empowerment has far reaching consequences given the understanding that most marginalised people are relegated to the periphery of social structure thereby limiting their chances of progressing and breaking the walls set by social elite in

decision making on issues that concern them. With this view role players like the Police, Vehicle inspection department, Local Municipality, Traffic Safety Council, Ministry of Roads, Zimbabwe roads administration, the judiciary and the public at large engage in a mutual way of finding solutions and answers to the rampant road carnages in Marondera Urban District. Consultations should be done in all local communities so that people have a chance to engage with other stakeholders and policy makers and influence decisions that are owned by the people and relatively acceptable in the battle against road carnages.

4.1.3 Participation-efficiency and equity.

A continuous engagement of the community results in efficiency and equity according to Fawcett(1991), in terms of how issues raised are responded to and improving the equity of opportunities to resources and means of production which give all community members to respect each other as they will be on the same social status. In road carnages this aspect will apply to a greater extent as members of the community will be able to effectively participate on issues like high death rate due to road accidents being perpetuated by various reasons spanning from human error to mechanical errors. The communities' participation will also contribute to the efficiency of the participatory governance and eventually a success story on the rampage of road accidents. A growing body of evidence shows that when this happens, participatory institutions managing service delivery and common property resources at the community level can perform better in terms of both efficiency and equity compared to alternative institutions such as market mechanism and bureaucratic management which are common in most organizations like the Zimbabwe Republic Police and other related parastatals.

The participatory governance coordinates with the traffic ecology concept where the former views social inclusion as giving way to people to contribute to what they see as solutions to the problems affecting.

4.1.4 Traffic Ecology Concept

Jorgensen and Abane (1999) developed the concept for traffic accident as inspired by the ecological concept of a disease. They adjusted the concept to suit road traffic accident analysis. The concept is characterised by three main components. The first being the vehicle which is likened to the vector in disease ecology is put into its composition of age, technical conditions and safety equipment like seat belts in a car. This explains vehicle defects as a contributory to road traffic accidents. Secondly, the environment accounts for road accidents as explained by the road system, wider physical and built up environment, the weather conditions and the road conditions. The general behaviour of the general of drivers as attributed by the driver characteristics such as age, sex, driving experience, driving style and risk driving influenced by alcohol and drugs. All these factors attribute accidents to human error in the same way they contribute to spread of diseases.

4.2 THEORETICAL FRAMEWORK.

4.2.1 Social Capital Theory

Social Capital Theory is a theory that encourages local communities' involvement in identifying and solving their own problems Kolanchu (2011). Putnam (2000) indicated that social capital refers to connections among individuals, social networks and the names of reciprocity and trustworthiness that arise from them. Social Capital Theory therefore is about the value of social networks, bonding similar people and bridging between diverse people with names of reciprocity according to Claridge (2004).

The theory advances a rationale of belonging, emphasising diversity in others and similar life opportunities according to Babb (2005). Local communities and their networks are significant in the management of multi sector approach taking into account that when an accident occurs, local communities assist one another before the arrival of professional assistance from the government agencies or private sector.

4.3 The causes of road carnages in Marondera Urban District

Causes of Road accidents

Different opinions have been asserted by a number of scholars on the causes of road carnages. According to Moodley and Allopi (2008), an accident is caused by a number of deficiencies associated with the human factor, road infrastructure, vehicle defects and the environmental factors.

Human Factor

Moodley and Allopi (2008), points out that human error is the most frequent contributing factor to the occurrence of road accidents. Statistics according to the World Report on Road Traffic injury Prevention (2004) show that 80% of the road traffic accidents were as a result of human error, 15% were due to vehicle defects, 4% as a result of environmental factors and 1% caused by engineering problems. This therefore depicts that human error contributes the highest percentage in accident causes.

A high proportion of accidents is directly blameable on man according to Hajar (1998), who further asserts that drinking and driving is one of that negligent behaviour on the side of mankind. Supporting this view of human behaviour as the major contributor to road carnage Mao (1997), articulated that the role of intoxication with drugs and alcohol is important in the aetiology of road accidents worldwide.

Human errors may be as a result of emotional status, fatigue and driving speed among others according to Oluwasanmi (1993). However, Brookhuis, Ward, and Janssen (2001), also argue that the drivers' pre accident behaviour which may include inattention or misjudgement, alcohol or drug abuse, speeding and disregarding traffic flow may lead to the occurrence of road accidents. According to Dube and Mawere (2011), speed limit law exists in Zimbabwe and awareness campaigns on dangers of speeding are carried out but speed remains the key cause of vehicle accidents.

Pearce and Maunder (2000), also said that long distance bus operators use speed as a marketing tool and a criterion for employment for long distance drivers while in urban areas it is used to maximize profits. This shows that the public views speeding only in the positive way disregarding the negativity thereof. Nilsson (1991) said that the chances of a road accident occurring and the fatality of the crash is directly related to increase in average speed. Speed contributes highly to the road accidents as well as to injuries and deaths given the fact that as speed increases stopping distance becomes long and chances of accident occurrence increases.

Environmental Factors

According to Whittingham (2003), the focus on human error as the sole cause of failures ignores other issues that make it unavoidable on part of a human to commit errors. Brookhuis, Waard and Janssen (2001), agreed and pointed out that environmental factors contribute to the occurrence of a road accident. They further postulated that weather conditions can contribute to crashes giving examples of wet roads that reduce friction, while fog and rains reduces visibility. Marondera urban district usually experiences these conditions however it will be revealed whether the conditions have been contributing to the occurrence or not.

Ouwerkerk (1986) came up with another view when he said that, a few road traffic injuries occur in pedestrians and cyclists involving dangerous road conditions but excluding motorised vehicles. They further indicated that in number and severity the most road traffic accidents involve motor vehicles. Ouwerkerk (1986) seems to differ with other scholars as they seek to give the sole blame on vehicle defects ignoring other issues like the rainy environment that has contributed to a number of accidents that even claimed people's lives.

Vehicle Defects

Komba (2006), argue that accidents can be as a result of conflict situations involving the driver, the environment and the vehicle. They further asserted that the use of defective vehicles causes accidents in most places. According to Asogwa (1992), it is the onus of every vehicle operator to ensure the safety of the vehicle he or she operates; the state has agencies or authorities charged with the

responsibility of ensuring that vehicles that ply public roads are in safe conditions. In agreement Komba (2006), asserted that failure by governments to acquire machinery to check and enforce laws to do with vehicle defects continually negatively impact on the side of citizens in developing countries.

RoSPA (2014), also argue that related to vehicle defects is the issue of vehicle age. It has also been observed that older vehicles are over representing serious injury crashes than newer vehicles .Most of the vehicles on our Zimbabwean roads and in particular Marondera district are used vehicles imported mostly from Japan and South Africa. There are a significant number of vehicles that are generally old and passed their roadworthy life span. These other vehicles have their fair share of defects, which could be causing increase in road carnages in Marondera Urban District.

Road infrastructure

Road conditions are important factors in road traffic accidents world-wide according to Komba (2006). Komba further states that in the developing world the road is the major cause of road accidents. Komba further explains that many roads have become death traps with potholes dotted along the length and breadth of the roads. Sangers (1999), asserts that sometimes road traffic accidents are caused by bad road design .He went on to say that when a part of the road or traffic control has been poorly placed or designed, it can lead to increased accidents in the area.

However, Muviringi (2012) came up with a different view when he indicated that the volume of vehicles on the roads in Zimbabwe has grown tremendously over the years whilst the road infrastructure has remained stagnant or with little improvements. Muviringi (2012) further asserts that there are various factors affecting road safety in Zimbabwe which includes lack of segregated lanes for different users, lack of pedestrian crossing facilities for busy roads, insufficient lighting and absence of road signs which may lead to the driver to exceed speed limits.

4.4 Multi -sectoral Approach and roles of sectors in fighting road traffic accidents

Multi sector approach according to Crawford (1997) refers to the inter-organizational and synergistic working alliance, partnerships and cooperative relationship between two or more organizations to achieve some common goal. The collaborations become more effective when organizations come together to effectively share information and complement each other. The Global Road Safety Council (2014) asserted that the solution to the global road safety crisis can only be implemented through multi sectoral collaboration and partnerships.

The international Transport Forum (2008) reported that in the United Kingdom a number of groups work together in road safety partnerships. The Automobile Association makes sure that motorist does not avoid speed traps and also assist in the erection of roadside warning signs. According to Road Safety Efforts in Nigeria (2010), there are three institutions who work together in road traffic safety in Nigeria that is Nigerian Police Force, Federal Road Safety Commission and the state owned Road Traffic Agency also known as the Vehicle Inspection Officers.

The Traffic Safety Council of Zimbabwe Act chapter 13:17 and the Road Traffic Act chapter 13:11 gives the police and the Vehicle Inspection Department power to arrest impound and prosecute offenders of traffic laws. Through its by-laws the municipality also empowers the municipal police to enforce traffic laws and working in conjunction with other departments like Police.

The Road Traffic Act (Chapter 13:11) empowers the ZRP, VID and the Judiciary to enforce the act of which most common offences are exceeding the speed limit, driving without due care, negligent driving and driving under the influence of alcohol. Multi-sectoral approach is being implemented to ensure safety in the roads of Zimbabwe according to the literature reviewed it works however the occurrence of accidents remains on the increase due to a combination of factors ranging from lack of resources to corruption as compared to other countries like United Kingdom where the approach has been successful , Muviringi (2012).

4.5 Trends of road carnages before and after the introduction of multi- sectoral approach in Marondera urban District

Trends of road carnages

Since the inception of formal policing initiatives after colonization in Zimbabwe the Road Motor Transportation Act and the Road transport Act were put in place by the then government of Rhodesian front to regulate and implement the provisions of such laws which targeted peace and tranquillity in the roads across the then Southern Rhodesia and later Zimbabwe. After the birth of Zimbabwe little in terms of the face of the law changed thereby leaving the provisions of the laws still standing. Despite the fact that acts gave powers and provisions for the Vehicle inspection department to enforce traffic laws together with other agents like the local council and Police the duties of maintaining peace and order in the road remained the duty of the Police.

As time progressed and civilization increased in tandem with the population vehicles on the roads increased and by early 21st century road carnages started showing signs of becoming the major cause of death in Zimbabwe. The major cause of the carnages were attributed to poor road systems which were failing to carry the total number of vehicles due to the fact that the roads were constructed for the whites who were the sole users of the roads together with few elite natives. The Continued increase of death rate resulted in the Local people of Marondera district coming up with an initiative of fighting road carnages using means and resources at local level.

The initiative gave birth to the multi-sectoral committee which encompasses organizations such as, Police, Traffic Safety Council, Local Council, Zimbabwe Road Administration, Vehicle Inspection department, rank marshals and the general public representatives. The multi sectoral committee targeted to reduce the occurrence and impacts of road carnages in Marondera district as the graph of the occurrence was continually going high. Despite the implementation of the programme at local level some statistics were obtained and indicated on the table below that the road accidents occurrence and impacts remained on the rise due to reasons around factors which needs to be identified hence the identification of this study gap.

4.6 Effectiveness of multi-sectoral approach

According to the world report on Road Traffic Injury Prevention (2004), multi-sectoral approach by dedicated institutes on road safety has in many cases produced major changes in many countries including Sweden, United Kingdom, Australia as well as in the United states, where research units were embedded with the national traffic agents so as to feed more directly into policy making.

Formal advisory bodies such as the national transportation body were also set up to provide independent advice and guidance. Multi-sectoral approach worked very well and produced fruits in other countries and if well implemented it should produce the same results in Zimbabwe especially in Mashonaland East Province and Marondera urban district in particular. The good practices of the approach which were put in place in other countries could also be recommended for Marondera district and Zimbabwe in General.

Charlton and Smith (2003) carried out a research where they sought to establish the causes of road accidents and the ways of reducing them with the assistance of other stakeholders. The researchers established that in about one-third of recorded road traffic accidents inappropriate speed was the major cause. According to study by the department of Transport cited in the same journal, the introduction of speed cameras reduced casualties the immediate vicinity by 47% and in surrounding areas by 18%. The findings of the research were that figures for road crash deaths could drop by as much as 20% if vehicles comply with the recommendations of the European Vehicle Safety Committee (EEVC). However this would require changes in the design of motor vehicles to minimize road traffic accidents.

Odero et al. (1995), on how the National Road Safety Council of Kenya (NRSCCK) was coordinating road safety measures within the country and assessing the effectiveness of measures put in place. It was established that the NRSCCK set a national policy on road safety and work with all organizations responsible for the promotion of road safety. The council is also responsible for developing strategies, coordinate acquire and monitor the use of resources and personnel for road safety work

and formulate long term programs for effective road safety in the country. However as in other countries in Africa these interventions have not achieved the desired impact as the road traffic accidents were still on the increase.

In a research carried out by Muvuringi in 2012 on Road Traffic Accidents in Zimbabwe, influencing factors impact and strategies, the researcher sought to establish factors influencing road traffic accidents and strategies that can be employed to combat them. However public transport was found not to be safe due to lack of seat belts, overloading, speeding and poor road conditions. The research also established that the Zimbabwe's national transport policy does not favour walking because there are no pedestrian paths in the design of the roads. This was seen as one of the risk exposures of pedestrians who contribute the second highest percentage of deaths.

Previous studies show that investigations were made on causes of road accidents, their impacts and how best to prevent them. Little has been researched on why inter-agencies approach in traffic management has failed to reduce traffic accidents in Marondera district hence the researcher realised the gap in knowledge which must be filled with this research given that despite the availability of the multi-sectoral approach road carnages continue to be a problem in Marondera district translating to the fact that the effectiveness of this approach poses more questions than answers in Marondera district.

5.0 Research Design

In this research study, the researcher used the mixed method approach of quantitative and qualitative research. The descriptive research design was used as the study sought to explain a phenomenon by the use of both numeric and non-numeric data gathering tools. Merriam and Simpson (1984) noted that descriptive research design is concerned with those studies which describe the characteristics of a particular individual or a group. The central focus of descriptive research is to examine facts about people, their opinion and attitudes. Descriptive research design assisted the researcher to have an insight of the attitudes, opinion and beliefs of people in Marondera Urban District concerning the multi –sectoral approach to road carnages.

5.1 Population

In this research study, the population was drawn from government being represented by organizations such as Zimbabwe Republic Police, Vehicle Inspection Department, Traffic Safety Council, Local Council, Hospital, Zimbabwe National Roads Administration and the Judiciary as well as private sector within Marondera Urban District that include non-governmental organizations, Marondera taxi association and the members of the public. The total study population was be 50 000 which is the population of Marondera urban according to the 2012 census and this is where the sample size was derived.

5.2 Sample and Sampling Procedure

A total of 20 residents were issued with questionnaires whilst 10 heads of the different sectors were interviewed. The sample was obtained through stratified and random sampling procedures. The stratified method was used in organizations that constitute the multi-sector as they are people of the same level whilst random method was used to pick the respondents as it promotes neutrality in selecting respondents.

5.3 Data collection Instruments

The researchers used the questionnaire, document analysis and interviews to collect data. The researcher used the above mentioned instruments with a view that these instruments allows public opinions to be heard in a more free ,precise and understandable manner and allows the researcher to make observations of what is expiring on the ground and in the roads.

6.0 Data Presentation and Discussion

6.1 Knowledge of the causes of road accidents

Asked on their knowledge of cause of road accidents, 2(5%) of the residents were not aware of the causes of the road carnages in Marondera urban district whilst about 18(95%), of the residents showed that they were aware of the causes of road carnages in their district. Respondents named the causes as espoused by Moodley and Allopi (2008), human factor, road infrastructure, vehicle defects and the environmental factors. All the ten heads of departments interviewed were quite aware of the causes of road accidents in Marondera. The information displayed above translates to the fact that most residents of Marondera are aware of what is causing the problem of road carnages in their neighbourhood. It is imperative that knowledge of the causes makes it easier to come up with sound intervention strategies.

(Awareness of the multi-sectoral approach to road accidents reduction efforts)

Table 1: Responses on awareness of the multi-sectoral approach to road accidents efforts.

N=20

Responses	Number Respondents	Percentage
Yes	11	55%
No	9	45%
Total	20	100

In Table 1, above 11(55%) of respondents were able to define multi-sectoral approach to road carnages while 9(45%) were not able to define multi- sectoral approach to road carnages. The table shows a marginal difference between those that know and those that do not know what the multi-sectoral approach to road carnage. The respondents defined the multi-sectoral approach as the inclusion of all sectors to fight road carnage and also indentified the aspect of reducing fatalities and collectively curb road carnage as the major issues behind the formulation of multi-sectoral approach to road carnages in line with Crawford (1997).

6.2: The ability to identify sectors in the multi-sectoral stakeholder approach.

Respondents were asked to identify stakeholders in the multi-sectoral approach. Fourteen (70%) of respondents were able to identify sector stakeholders as the Police, Local Council, Traffic Safety Council, and Vehicle Inspection Department as the major stakeholders. These findings are in line with the International Transport Forum (2008), in the United Kingdom where a number of groups work together in road safety partnerships. Six (30%) were not able to identify the multi-sectoral stakeholders. The statement points to the fact that the community has ideas on who is supposed to contribute to the decline the road carnage in Marondera Urban District.

N=20

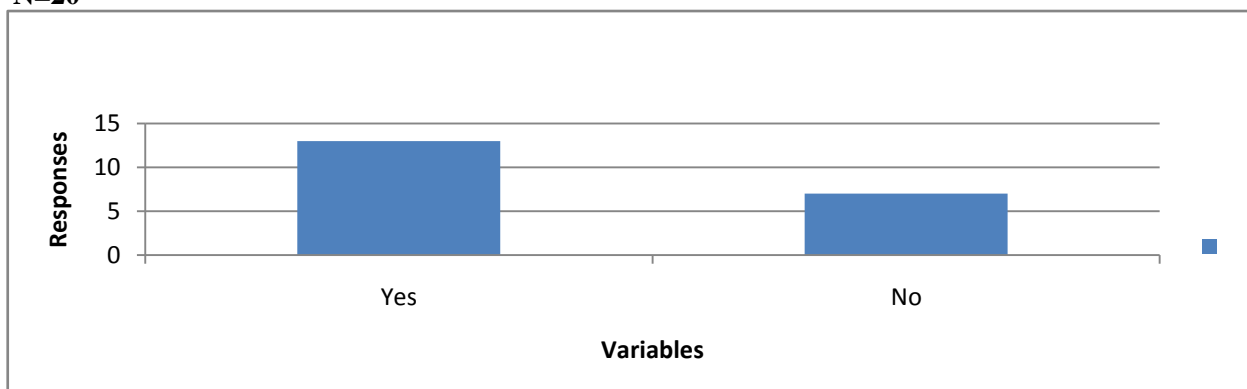


Figure 1: Awareness on the roles of various sectors.

The above figure shows that 13(70%) of the respondents were aware of the roles played by different actors in the multi-sectoral approach where, so were the ten heads of institutions interviewees who expounded that, legislators and responsible authorities provide for the legal framework, such as The Traffic Safety Council of Zimbabwe Act chapter 13:17 and the Road Traffic Act chapter 13:11. The police and the Vehicle Inspection Department educate, train the public and enforce the traffic laws. Figure 1 indicates that about 7(35%) of members of the public were not conversant with the varying roles of the multi sector stakeholders and about 13(75%) proved that they were aware of the roles of different stakeholders in the multi-sectoral approach to road carnages. It can therefore be concluded from the above information that generally the people of Marondera urban are aware of the basic roles of the sectors involved in this regard.

Document analysis indicated that the various roles that the actors play. The Traffic Safety Council Act 13; 17 gave birth to the Traffic Safety Council of Zimbabwe. Its main functions and powers being to promote safety on roads, to disseminate information on road safety, to publish the Highway Code, and to advise the Minister on all matters relating to road safety, and to control and regulate driving schools and persons who provide instruction in the driving of vehicles on roads. Various activities have been conducted by the Traffic Safety Council of Zimbabwe in collaboration with the police, such as disseminating information to the motoring public on the roads.

Part 38 subsection 3 of the Traffic Safety Council Act regulations provides for the Traffic safety council to provide penalties for contraventions thereof, but no such penalty shall exceed a fine of level five or imprisonment for a period of six months or both such fine and such imprisonment. Law enforcement agents have enforced this Act albeit with minimum effect this far.

The local council which is part of the multi-sectoral approach has got the mandate of enforcing laws together with other sectors such as the Police, Traffic Safety Council, Vehicle inspection department and the public. The Road Traffic Act Chapter 13:11 seeks to promote peace and tranquillity on the roads of Zimbabwe and Marondera district included. The Act provides for the persons driving vehicles to drive with due care and attention and reasonable consideration of others using vehicles according to Road Traffic Act chapter 13; 11 as amended by section 38 of Act 3 of 2000. This therefore attends to the need for the people to be under this provision of the law which comes to address the cause of road accidents explained as human error. The Act provides for due care of those involved in an accident and exercise of civility in the matter. The Act further, through the Urban Councils Act [Chapter 29:15] or Part XI of the Rural District Councils [Chapter 29:13], mandate the responsible authorities to provide for the general maximum speed at which all vehicles or vehicles of a particular class may be driven on any road within the whole of the urban area under its jurisdiction or any specified part of that area.

Table 2: Knowledge on the meaning of trends of road carnages.

N=20

Responses	Number of Responses	Percentage
Yes	12	60
No	8	40
Total	20	100%

Table 2 above shows that 12(60%) were able to describe the trends of road carnages in Marondera Urban District; whilst about 8(40%) were not able to draw out the trends of road carnages in their neighbourhood. Seven of the ten interviewed head of departments respondents showed knowledge that they knew the trends of road carnages in Marondera urban district whilst 3 heads of departments showed that they had sketchy ideas of the rising trends of road carnages in the district. Trend analysis is essential in conscientising the stakeholders of the output of their efforts. This is essential in strategising and re-strategising as the case may be towards addressing road carnage. This information

translates to the fact that although residents were aware of the occurrence of road carnage, the trend analysis thereof seems to be a challenge for many local residents.

Table 3: The frequency of road carnages in Marondera Urban District.

N=20

Responses	Number of Responses	Percentage
Low	2	10
High	18	90
Normal	0	0
Total	20	100

The table above indicates that 18(90%) respondents indicated that the road carnages were high in Marondera Urban District against a figure of 2(10%) which indicated that the accidents were low. This makes a clear indication that although many people view road carnages as a rampant and ever increasing problem some were of the view that accidents were low.

N=20

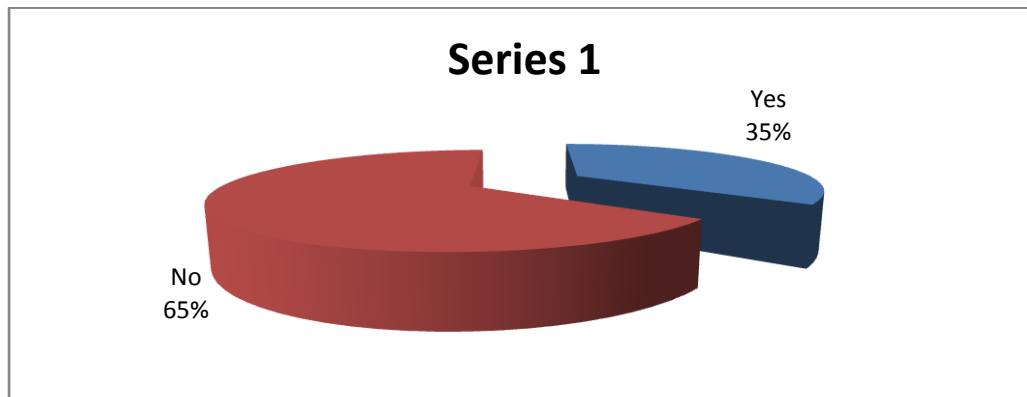


Figure 2: Responses on perceived changes in road accidents as a result of the implementation of the multi-sectoral approach.

Figure 2 above indicates that 13(65%) of the respondents were of the opinion that the multi-sectoral approach has not brought positive change to the situation on the roads of Marondera Urban District whilst 7(35%) of the respondents indicated that they have seen a positive response.

Table 4: Collaborations by multi-sectoral stakeholders in the approach.

N=20

Responses	Number of Responses	Percentage
Yes	9	45
No	11	55
Total	20	100

The table 4 above indicates that 11(55%) of the respondents showed that there was no collaboration amongst the multi-sectoral stakeholders in the fight against road carnages in Marondera urban district. However on the other end 9(45%) indicated that there were collaborations and working together in the said approach. This then translates to the fact that there is a very small variance on these two variables

meaning that the general public is almost equally divided on what they view regarding this matter. The findings are contrary to The Global Road Safety Council (2014), which asserted that the solution to the global road safety crisis can only be implemented through multi-sectoral collaboration and partnerships. Respondents pointed out that collaborations could be more effective when organizations honestly share information and complement each other and all actors shunning corruption.

Table 5: Whether multi-sectoral approach improved efficiency on enforcements.

N=20

Responses	Number of Responses	Percentage
Yes	5	25
No	15	75
Total	20	100

Table 5 above indicates that 15(75%) of respondents are against the fact that there was improvement on efficiency by multi-sectoral approach whilst 5(25%) of the respondents were saying that there was an improvement on enforcements after the adoption of the multi- sectoral approach to road carnages. This then clearly suggests that the general public is not seeing any improvements in this regard brought by the approach. The above sentiments were shared by 8 heads of department interviewed who noted that the multi-sectoral approach to road carnages were not being efficient and effective citing various reasons ranging from under resource to corruption and lack of collaboration by members of the multi-sectoral approach. A total of 2 respondents commended the approach in addressing the challenges faced in communities in Marondera Urban District.

N=20

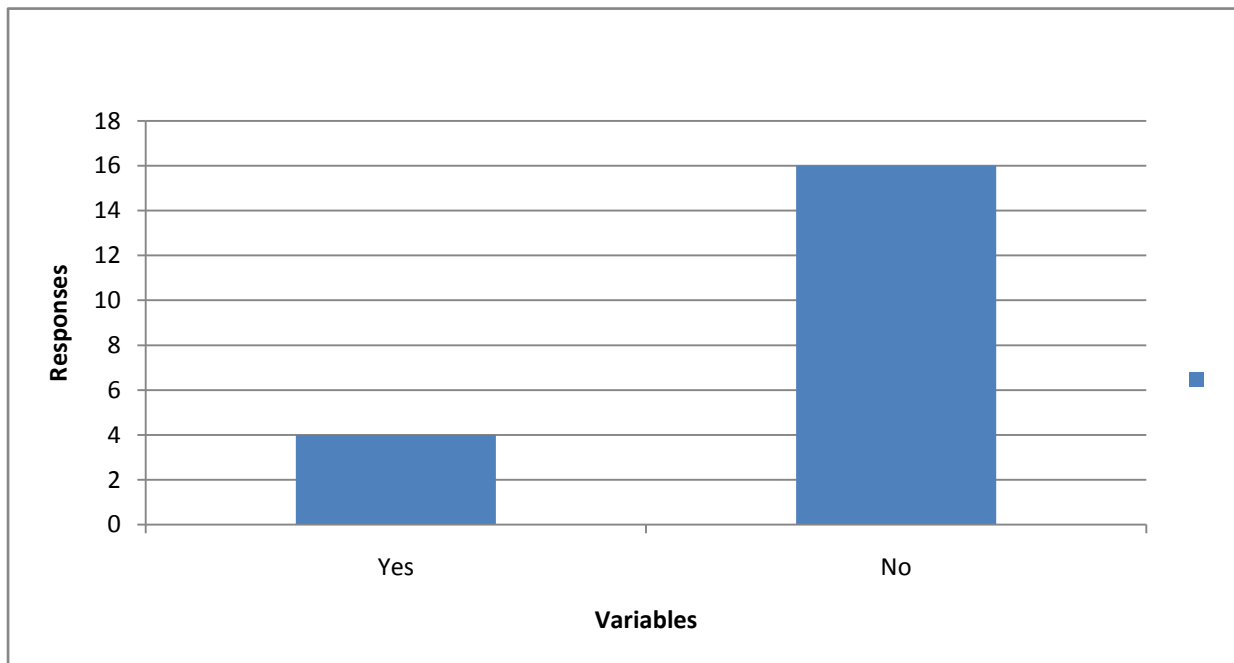


Figure 3: Whether road carnages have been reduced since the adoption of multi-sectoral approach.

Fig 3 above shows that 4(20%) of the respondents indicated that there was a reduction of road carnages after the adoption of the multi-sectoral approach whilst 16(80%) of the respondents acknowledged that there was no reduction yet recorded of road carnages since the adoption of multi-sectoral approach in Marondera Urban District. The above information translates to the fact that

generally the public has not seen the reduction of the occurrence of road carnages. These findings were corroborated by the results of document analysis which showed no improvement in reported road accidents and their severity as recorded before and after the implementation of the multi-sectoral approach.

Table 6: Table of traffic accidents adapted from Zimbabwe Republic Police, Marondera Traffic Accident Analysis Chart (2010).

YEAR	2000	2001	2002	2003	2007	2008	2009	2010
NUMBER OF ACCIDENTS	249	262	271	269	278	302	315	322
NUMBER KILLED	8	11	13	15	12	21	19	18
NUMBER INJURED	39	56	71	66	82	93	101	96
TOTAL	296	329	355	350	372	416	435	436

Table 7: Traffic accidents in Marondera Urban District 2011-2014.

YEAR	2011	2012	2013	2014
NUMBER OF ACCIDENTS	329	315	336	342
NUMBER KILLED	23	30	37	42
NUMBER INJURED	115	126	135	127
TOTAL	467	471	508	511

Table 7 above shows a table of occurrence of road carnages in Marondera Urban District before while table 8 displays road accidents data after the adoption of multi-sectoral approach to road carnages. A comparison of the tables shows that there was no change in terms of trends of road carnages after the adoption of multi-sectoral approach to road carnages as accidents proved to continue flying the graph high even after the 2004 when the initiative was adopted and implemented.

Table 8 reflects that years after the implementation of multi-sectoral approach the road carnages are still on the rise with number of accidents increasing every year, death toll increasing whilst the number of those injured is fluctuating however it does not have much impact on the number of carnages in total as other variables remain on the increase and generally road carnages in recent years continue to be on the rise as compared to years gone by.

7.0 Conclusion

The issue of road carnages in Marondera urban district remains a thorn in the flesh of the community due to some issues that continue to be stumbling blocks to the success of the various interventions by the various sectors. The aspect of knowing the causes of road carnages together with the knowledge and reasons behind the formulation of multi-sectoral approach to road carnages, the roles of various sectors have not been clearly spelt to the people and there is need for that to be done in a bid to achieve more in this regard. The multi-sectoral approach also appear to be a policy adopted without full consultation and free will as at one point and time it has been discovered in the findings that there is no complementation of efforts by the sectors of which it should not be like that, stakeholders should participate and cover each other's short comings. It can be concluded that the trends of road carnages in Marondera urban district are continually being rampant due to lack of robust reactions and interventions by the multi sector approach to reduce this level. Due to a combination of reasons the multi-sectoral approach is struggling to achieve results chief among others

includes lack of collaborations by sectors, lack of resources and lack of complementation of efforts by various sectors involved.

8.0 Recommendations

This study revealed important findings on the effectiveness of multi-sectoral approach to road carnages in Marondera urban district. It is hoped that the following recommendations would yield a lot on addressing the stumbling blocks of the effectiveness of multi-sectoral approach to road carnages. The following were the suggested recommendations which resulted from the findings of the research study:

- There should be increased awareness campaigns on the causes of road carnages as well as the explanation of what multi-sectoral approach is all about together with its objectives.
- There should be mechanisms that ensure various roles of different sectors are complementing each other.
- The identified causes of road carnages should be attended and a remedy brought about to reduce the current trends.
- There should be systems available to promote and supervise collaborations among the multi-sectoral stakeholders in view of increasing efficiency and effectiveness.
- In future study there is need to research on the causes of reluctance to collaborate by multi-sectoral stakeholders.

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