EXAMINE THE EFFECTIVENESS OF TOLL GATE IN ZAMBIA.

A CASE OF KAFULAFUTA

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ABSTRACT

Zambia is the landlocked country with land area of about 752,618 square kilometers, a population of about fifteen million people with approximately 92,000 km of road network. (Chokani 2011).

Construction of most famous Golden Gate Bridge in America started in 1933 completed in 1937, each vehicle was to pay 50 cent each way. The Golden Gate is 4.2 km long suspension span, making it the world’s longest suspension bridge. Since opening to the public, almost 2 billion vehicles have crossed the bridge, in both the north- and southbound directions. (Wirth, M. O. 1986)

The world’s oldest known paved road was constructed in Egypt sometime between 2600 and 2200 BC. Stone-paved streets are found in the city of Ur in the Middle East dating back to 4000 BC Egypt has 65,050 km of road of which 48,000 km are paved and 17,050 km are unpaved as at November 2013. (Fales and Alex 2013)

South Africa has about 747,000 km of roads network. It has modern well-developed transport infrastructure and it has quite a number of toll gates such as Kroonda toll gate, Donkerhoek, off-ramp toll gate, to mention just a few. (National Department of Transport South Africa 2017). In Zambia the road toll law was enacted in 2011 which saw putting up of toll gate in different part of the country. Katuba, Manyumbi and Kafulafuta toll gate were opened in January 2016. The toll gate is capable of collecting between K50,000,000 to K67,000,000 per month and the Money collected is banked within 24Hrs in an account called CONTROL 99 and the money is strictly paid to the road contractors. The tolls are very effective thus, more should be installed at designated places as stipulated NRDA.

Further research must be done on the durability of the Toll gate equipment and whether the toll gates have impact on the number of accidents or not.
1.0. INTRODUCTION.

Zambia is one of underdeveloped nations with approximately 92,000 Km of road network. The first tar roads network construction was done by the British popularly known as the colonial government in 1952 followed by Dr Kenneth Kunda a former and first republican president in 1964 and second major road infrastructure network was done by the second republican president FTJ Chiluba in 1992 where some roads where upgraded to double lanes and some broadened. For example, the great east road was upgraded to six (6) lane way and Broadway in Ndola was broaden to four (4) lane etc. (RDA booklet 2011)

There were no major roads maintenance or construction thereafter and roads which are shared by both heavy trucks and light vehicles become more deplorable. In 2011 the new president came in power and borrowed money through Euro bond which so construction of new roads under a program called L400, C400, pave Zambia 2000 and link Zambia 8000. The road network keeps on deteriorating such that the technocrats came up with the idea of toll gate, which works well in Developed countries like Australia, South Africa etc. (Bank of Zambia bulletin 2010).

A road is a thoroughfare, route, or way on land between two places that has been paved or otherwise improved to allow travel by foot or some form of conveyance, including a motor vehicle, cart, bicycle, or horse. (Word FAQ 2007)

Roads consist of one or two roadways (British English: carriageways), each with one or more lanes and any associated sidewalks (British English: pavement) and road verges. (OECD 2004).

Roads that are available for use by the public may be referred to as parkways, avenues, freeways, interstates, highways, or primary, secondary, and tertiary local roads. (Lay, Maxwell G 1992).

In March 2011 the tolls act No. 14 of 2011 was enacted to provide for the established and operation of toll roads in Zambia. The government through the toll Act. No 14 of 2011 appointed the Road Development Agency as the tolls Authority. The principle objective was to “introduce the road user pay principle as an innovative and self-financing mechanism for sustainable road rehabilitation and maintenance.” (RDA booklet 2011).

Zambia is the landlocked country with land area of about 752,618 square kilometers with a population of about fifteen (15) million people. The country is underdeveloped despite its potential prospective such supper grade one copper, diamond, gemstones and with good climate for agriculture prospective, the country supposed to be a middle-income country or even developed nation. (CBU Student’s research on Zambian development 2014 unpublished)

Economic conditions can be favourable or unfavourable. Yet in either case, an astute company can convert someone else’s misfortune into its own good fortune. Every place we look here in Zambia we find windows of opportunity. But to take full and prompt advantage of these windows of opportunity is to be truly successful managers who must have a repeatable process predicated upon speed and quality of execution economic advancement. (Adams 1990)
The problem with most countries is that setting strategic targets can occur quickly, but developing implementation plans and executing them are much slower processes. Why did it take us so long to truly recognize the benefits of project management and toll gates in particular? (Adams 1990)

1.1. STATEMENT OF THE PROBLEM

According to (Chishala 2015) the economy can develop if agriculture is well embraced and works in collaboration with good road networks. (Moffat 2009) also said “improved roads infrastructure can result into economic development thus change the living condition of the people in the country. “South Africa which started as one of the poor nation invested in mines and agriculture which fueled the development of roads network but their roads were also very vulnerable to damage and retards the country’s economic and infrastructure development it took the planner time to go and learn in Australia and UK how they managed their roads and the prominent solution was the toll gate fee collection which was effectively ploughed back into the road maintenance. South Africa has developed and placed toll gates at strategic way out and the collections are effectively and efficiently employed back into the roads maintenance.” (Isaac T.S 2007).

Zambia has adopted the same system of toll gate with the view of using the money on roads maintenance. Some scholars have argued that road maintenance cannot positively impact the economy. (Berry 2015) while some scholars have argued that road development and maintenance can bring about economic liberty (Sandra 2017). Therefore, the researcher would like to state the effectiveness of the toll gates project on Zambian roads.

1.2 GENERAL OBJECTIVE OF THE STUDY

To assess the effectiveness of the toll gate fees on the road maintenance in Zambia.

1.3 RESEARCH OBJECTIVES:

1. To investigate the extent to which the toll gate fees had enhanced communities where they are installed.

2. To establish the durability of the mechanisms used.

3. To ascertain how much is generated, the cost of running and cost of maintaining each toll gate.

4. To determine the effectiveness of the process of auditing financial resources from the toll gates in Zambia.

1.4 QUESTIONS

1. (General): How effective are the toll gates towards road maintenance?

2. To what extent are the toll gates enhanced communities where they are installed?

3. Are the tollgate equipment very durable?

4. How much are the toll gates generating and how much is ploughed back to the communities. How much is used for maintenance of toll gate equipment?

5. How effective is the process of auditing the financial resources from the toll gates?

1.5 SIGNIFICANCE OF THE RESEARCH
The significance of the research is to provide information that could be used by policy makers to pause checks and balances on the toll gate fees maintenance and monitoring. The research is also supposed to generate information that would make National Road Fund Agency and National Road Development Agency to improve their operations. The information would aid NRFA and NRDA in the process of finding solutions to the existing problems. In addition, the information generated by the research would also create awareness in the communities about the challenges of the toll gates in their respective areas. Furthermore, the research would help the communities to gain a broader understanding of the project and they could participate in the affairs thus, improve service delivery.

1.6 LIMITATION

The main limiting factor in this research was the resources, this is so because the researcher was financing himself, therefore to move from one toll gate to another was very difficult.

Secondly time was another limiting factor encountered. It was going to be necessary to do a comparative analysis of the toll gates in Zambia but time could not allow.

Some information was not given like how much is collected in terms of toll fees per day.

The other limiting factor was that the research was conducted while the researcher was working elsewhere and that made it difficult to devote all the effort to the project.

It was really difficult to get more books as was expected about the topic, in Ndola libraries except at National Road Development Agency and local Government authority where they have just a few scripts written on the project.

2.0 LITERATURE REVIEW

Golden Gate Bridge (Global perspective)

On this day in 3/1933, construction starts on what will become one of America’s most famous landmarks: The Golden Gate Bridge at which they charge 50 cents each way. When completed in 1937, the Golden Gate has a 4,200-foot-long suspension span, making it the world’s longest suspension bridge. Since opening to the public in May 1937, almost 2 billion vehicles have crossed the bridge, in both the north- and southbound directions. (Wirth, M. O. 1986):

The bridge was named not for its distinctive orange colour (which provides extra visibility to passing ships in San Francisco’s famous fog), but for the Golden Gate Strait, where the San Francisco Bay opens into the Pacific Ocean. The bridge spans the strait and connects the northern part of the city of San Francisco to Marin County, California. Prior to the bridge’s construction, the only way to travel between these two areas was by ferry boat. (Lay, Maxwell G 1992).

The bridge’s chief engineer, Joseph B. Strauss (1870-1938), an Ohio native who built numerous bridges across the U.S., was involved with the Golden Gate project by the early 1920s. From the beginning, Strauss and his collaborators faced numerous challenges, including opposition from skeptical city officials (who were concerned about costs), environmentalists and ferry operators (who were worried the bridge would impact their business). Some members of the engineering community said it
was technically impossible to build the bridge, and it was not easy to raise funding for the project at the beginning of the Great Depression (a $35 million bond issue to finance construction of the bridge was passed in California in 1930). Once construction began, workers had to contend with the strong ocean currents and heavy winds and fog in Golden Gate Strait. Eleven workers died during the building of the bridge, 10 of them on one day, February 17, 1937, when their scaffolding fell through a safety net. (Kragelund 2009)

Despite all of these issues, the Golden Gate Bridge, with its art deco design, was completed in four years and on May 27, 1937, some 200,000 people showed up to celebrate its opening. The following day, President Franklin D. Roosevelt pressed a telegraph key in the White House, signaling to the world that the bridge was open to vehicular traffic. The initial toll for the bridge was 50 cents each way. (Kragelund 2009)

The Golden Gate would remain the world’s longest suspension bridge until it was surpassed, by 60 feet, by New York City’s Verrazano-Narrows Bridge, which opened in 1964. In February 1985, the 1 billionth car crossed the Golden Gate Bridge. Today, more than 41 million vehicles travel across the bridge each year. (Dueitt 2015)

A toll road, also known as a turnpike or toll way, is a public or private roadway for which a fee (or toll) is assessed for passage. It is a form of road pricing typically implemented to help recoup the cost of road construction and maintenance. (Kragelund 2009)

Toll roads in some form have existed since antiquity, collecting their fees from passing travelers on foot, wagon or horseback; but their prominence increased with the rise of the automobile, and many modern toll ways charge fees for motor vehicles exclusively. The amount of the toll usually varies by vehicle type, weight, or number of axles, with freight trucks often charged higher rates than cars. (Kragelund 2009)

Toll Booths.

Tolls are collected at points known as toll booths, toll houses, plazas, stations, bars, or gates. Some toll collection points are unmanned and the user deposits money in a machine which opens the gate once the correct toll has been paid. To cut costs and minimize time delay many tolls today are collected by some form of automatic or electronic toll collection equipment which communicates electronically with a toll payer's transponder. Some electronic toll roads also maintain a system of toll booths so people without transponders can still pay the toll, but many newer roads now use automatic number plate recognition to bill drivers who use the road without a transponder, and some older toll roads are being upgraded with such systems. (Haswell and Reimers on 2016).

Criticisms of toll roads include the time taken to stop and pay the toll, and the cost of the toll booth operators up to about one third of revenue in some cases. Automated toll paying systems help minimizes both of these. Others object to paying "twice" for the same road: in fuel taxes and with tolls. (Lay & Maxwell 1992).

The world's oldest road (Regional perspective)
The world’s oldest known paved road was constructed in Egypt sometime between 2600 and 2200 BC. Stone-paved streets are found in the city of Ur in the Middle East dating back to 4000 BC. Egypt has a large road network of 65,050km (of which 48,000 km are paved and 17,050 km unpaved). Egypt has built a network of highways covering the country and extending around 18,000 km. Two highways connect Cairo with Alexandria. Other highways connect Cairo to Port-Said, Suez, and El Fayoum. Egypt also boasts a network of bridges, which contributes to smoothing the flow of traffic. So far, 181 bridges stand throughout the country: 36 of which are straddling the Nile and 85 suspended. Egypt has recently witnessed a great interest in enhancing and upgrading the highway and main road networks to cover all the country. (Alex 2013)

Government plane on toll gates. (National Perspective)

According to (Times of Zambia Newspaper 2015), Government says it is set to construct toll gates across major roads in the country. Minister of Transport, Works, Supply and Communications Christopher Yaluma says major roads such as Kitwe-Chingola road will be the first on the list to have a toll gate. Mr. Yaluma says introducing toll gates on major roads is the only way to generate funds to maintain roads.

The paper further said “In an interview in Lusaka Mr. Yaluma said currently feasibility studies are underway for Lusaka-Ndola and Chingola-Kitwe roads. “That is a key purpose of toll gates. Because we don’t have to use our own money to do road maintenance,” he said.”

He said although the toll project initiative is not in the plan, it is one of the projects that would be concluded immediately. In 2011, National Road Fund Agency (NRFA) completed the final feasibility study on tolling of roads, road links and bridges in Zambia.

A South African firm, Aurecon, and NRFA signed a contract for toll gates feasibility study and the agency was expected to hold a stakeholders’ workshop to look at the final report.

The detailed study was commissioned last year and the contract was awarded to Aurecon, which will provide specialist technical services on how the NRFA will proceed with the tolling system. Tolling is a way to build and rebuild roads without having to resort to taxes where road users pay toll gate fees.

### 3.1.1 CONCEPTUAL FLAME WORK

![Flame Work Diagram]

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INPUT
NRFA TOLL FEE COLLECTION

OUTPUT is Dispense and road construction

AS ROCESS
CONTROL 99 ACCOUNT
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### 4.1. RESEARCH DESIGN

In order to provide an accurate account as regarding to the toll gates revenue, challenges and benefit to the economy. The researcher followed survey research design that was aimed
at in-depth understanding of the phenomenon from point of view of the researched work. This design allowed the researcher to find out more about a problem, to collect information and present data systematically in order to give a clear a picture of the situation. For the collection of the data the researcher was relying on interview and questionnaires.

4.2. TARGET POPULATION

The collection of primary data was done from the combination of distributed questionnaires and semi-structured interviews of key informants. Fifty (50) questionnaires were distributed as (20), (20) and (10) respectively to National Road Fund Agency (NRFA), National Road Development Agency (NRDA) and Roads Transport Safety Agency (RTSA) workers and 100 randomly picked drivers were interviewed using semi-structured questions, these were motorist. The act enabled the researcher to collect accurate responses. 150 was a target population.

4.3. RESEARCH SETTING

The research was conducted at the actual site that is at the toll gate that is where most of the motorist were interviewed as regards to the challenges, effectiveness and potential to the development of the economy. While some questionnaires were administered just there at the toll gate while some were given at their respective offices. Triangulation method was used as well to add validity and diversify the research process. This also helped to leverage on the strengths of both methods (quantitative and qualitative) to complement their weaknesses (Saunders et al, 2003). According to Remenyi et al (1998), triangulation is useful in all cases and it helps the study to ensure that “the data are telling you what you think they are telling you.”

As a sampling technique which adopts purposive sampling techniques to generate the primary data because it involves choosing respondents whose views are relevant, important and of value to the research (Remenyi et al, 1998). This approach was appropriate for this study because of lack of reliable data which made it difficult to study constant collection at the toll as observed by Watson and Everett (1996). In this case it refers to limited number of toll gate which are in existence at the moment and literature is not much on the subject.

4.4. SAMPLE SIZE POPULATION

The sample consisted 150 of which 50 questionnaires were distributed as 20 to the workers at National Road Development Agency (NRDA) another 20 to National Roads Fund Agency and 10 questionnaires to Road Transport &Safety Agency (RTSA) then, 100 to motorists and these were interviewed at both toll gates and from the community. The total sample size was 150. For the sample size, Saunders et-al (2003) argued that for statistical analysis, a minimum number of thirty (30) provides a useful rule of thumb. However, for this study the researcher chooses a sample size of 150.

4.5. SAMPLING PROCEDURE.

This was purposive sampling of the motorists and random sampling from the workers of NRFA, NRDA and RTSA. The number 150 was better representing the total population.
4.6. DATA COLLECTION TOOLS/INSTRUMENTS

The instruments that was used for data collection were the questionnaires. Also interview guide designed for the motorist and the informant was developed. The questionnaire consists of structured questions which the respondents were required to answer. The reason for using the questionnaire was to make the respondents as freely as possible.

4.7. DATA ANALYSIS

The data analysis and interpretations were done using the SPSS and excel. The collected data was grouped and form the bar graph or bar chat to show the strength of each respondent and this was drawn from the data collected.

5.0. PRESENTATION OF DATA AND FINDINGS

FIGURE 2: SEX OF THE RESPONDENTS

In terms of percentages it was 40% women against 60% of men who participated in this research, the researcher feels the number was well representation of the population.

Table 3.0 above depicts the information from the question which said “is the money collected at the toll gates enough to maintain the roads” and the responses were as follow 10 interviewed people from the public said that they don’t know whether the money is enough or not 5 people from NRFA, 4 people from RDA and 3 People from RTSA said they don’t know. Total number of 22 respondent who said they don’t know which translates into 14.66% of the total people interviewed who do not know.

The other column shows the number of respondents who said No toll gates are not making enough money to construct roads those are 14 from the public, 7 people from NRFA, 6 from RDA and 3 from RTSA, total number is 30 respondents which translated into 20% and the other column shows the number of those who said that Yes toll gates are making enough money 76 from the public, 8 from NRFA, 10 from RDA and 4 from RTSA the total respondents were 98 which translates into 65.3%.

From the information collected from the respondents it is clear evidence that the money they are collecting can be used to maintain roads if well applied.

Going by the percentages it is clear that the public believe that the money being collected at the toll gates is very enough to construct and maintain the existing roads in the country.
Table 4.0 show that people entrusted with this huge task of collecting the money at the toll gate have never experienced any major problem except where vehicles could queue up and sometime, they have a few of being robbed when they collect enough money. The other respondent said that the equipment is working according to the expectation the only challenge is the fear that one might produce a gun instead of money.

FIGURE 4: HOW EFFECTIVE ARE THE WORKERS IN HANDLING THE MONEY.

(38% of the respondents said that money handling procedure by the workers is excellent, the other 20% of the respondents said that the handling method and the procedure is very good and the other 16% said that money is handle very well in other word the method and procedure of handling the money is good. 6% of the respondents said that the money handling method at the toll gate is bad. Generally, when we get 38 and 20 and 16, we get 94% of the respondents who acknowledged that money is handled very well and 6% refused.

FIGURE 5

(40, 27%, 10, 16% 100, 67% YES, 10, 6% NO, 40, 27% NOT SURE)

HAVE THE TOLL GATE FEES ENHANCED THE ROADS WHERE THEY...

According to the respondents 67% of them said yes, the toll gate fee has enhanced the site where toll is situated and if not enhanced then works are going on. 27% were not sure perhaps they have not seen the roads or the works going on at any toll site. 6% said no enhancement has
taken place at the toll site instead the roads have even become worse than before.

FIGURE 6.

(Source: Author’s Field Survey, 2017)

From the table it shows that the 40 questionnaires distributed to NRFA and RDA one respondent said they had once experienced a problem where vehicles piled up and some motorist were panicking, they wanted to go the equipment didn’t work as fast as we expected said the man. The solution was to allow payment in advance so that they can only pass at the second toll gate, a motorist can pay at kaumatua toll twice so that at Katuba gate he/she can just pass. At the moment the motorist cannot pay for three toll gates because the other one is not yet configured according to the respondent.

The same respondent further said that the system should allow payment of money at one point and the motorist pass through all toll gates, this will reduce the risk of losing money to the hands of the crooks.

The other 10 questionnaires that were distributed to RTSA workers they all said that they had no problem with the equipment. The figure shows that only 2% are the problems they have experience so far and 98% said the equipment works perfectly well.

The question from the questionnaire was Do you know how much money was collected last year from the toll gate?

The amount that was collected from the toll gates last year was K 6,239,003. In 2016. The money collected looks colossal amount especially to the public but we should consider other logistics such as salaries for the people who collect this money, security of the funds etc. (Kabuswe 2017)

According to table 5.0 above the 20, 20 and 10 questionnaires respectively were given to workers of RDA, NRFA and RTSA and their responses were as follow, 3 people out of 50 questionnaires said that the books of accounts are audited quarterly which translate to 6%. 12 people said the books are audited annually which translate into 24%. 15 people said that the books of account are audited when need arise which
translate into 30% and 20 people said they don’t know which translates into 40%.

However, this information tells us that indeed the fund are audited thus, there is accountability. Financial resources auditing is the beginning of financial discipline and financial discipline leads to proper financial application which subsequently lead to economic freedom and development.

**FIGURE 7**

(From: Author’s Field Survey, 2017)

From the graph it is very clear here that people who said not sure plus those who said maybe when needed makes 70% of respondents who had no idea as to when the books of accounts are audited from the toll gates. While 30% are people who either work for RDA or RTSA they had information on when the books are audited, all in all auditing should be done more often so as to avoid misapplication of the funds.

Auditing can also help to identify the points of leakage and points of weakness and strength of the system and it is through auditing that public can be made aware and ensures that the people in charge or directly linked stakeholders are held accountable for their action whether bad or good.

The other question which was asked on the questionnaire was, how accessible are the audit reports of the toll gate to the public? 50 questionnaires were collected but only 100 members of the public were asked this question and the total number went up 150 respondents.

**FIGURE 8**

(From: Author’s Field Survey, 2017)
According to the gathered data shows that most people do not have access to these reports. 75 respondents mostly from the public said that they have not accessed any financial report from the toll gate. This translates into 50% of the all target population. The other group of respondents that was 12 people from the public also said that the audited financial report was moderately accessible, which means they have only seen it from other Medias, while 60 respondents which translates into 40% said they have accessed the audited income statement report for the toll gate and finally the 3 respondents from RDA said they always see the income statement which are audited and indeed they corrected the researcher that it was not the financial audited report but the inspected income statement report. The findings further show that the level of knowledge on how and when audits were done was very low. When an analysis was carried out on the relationship between employee and the office bearers it was found that those that are not in offices were not sure of how often the books of account were audited.

This shows that the income from the toll gates are the Centre of focus by all Zambian especially the stakeholders or the users of such information therefore the monies are heavily monitored and accounted for every bit of it.

**Table 7.0** as shown the responses from the general public motorist and the workers of NRDA, NRFA as well as RTSA. 3 respondents from the public and 2 from the workers said that No Tolls cannot bring development, unless Zambian attitude changes towards work, reduce on selfishness late coming for work and nepotism among them. The task calls for serious dedication to work as it require to work for 24hours dairy otherwise late collection cannot be collected effectively. 97 respondents from the public and 48 from workers said Yes this can bring about development in terms of road network which will culminate to better economy. The roads which can be maintained are those near the toll gate because monies collected cannot be extended to the inner roads yet.

**FIGURE 9:** HOW EFFECTIVE ARE THE TOLL GATES.
(Source: Author’s Field Survey, 2017)

According to the graph 72% of the respondents they strongly agree that the toll gates are very effective while 24% of the respondents indicated agree and 4% of the respondents where neutral, they didn’t know whether the toll gates were effective or not. Therefore, if the two bars are combining the sum is 96% of the respondents who agreed that the toll gates are very effective way of collecting tax, construction and maintenance of roads in Zambia.

6.1.1 DISCUSSION

Looking at what people have said Roads indeed have several benefits to the nation. Money collected from the tolls is banked within 24Hrs in CONTROL 99 account. Most roads are being done in Zambia today for instance Ndola dual carriage where functional Rehabilitation is being done to Providing optimal functional qualities (smoothness, and safety of the road) they are also doing Interlayer which reduce/delay reflection cracking on the road and finally Leveling course. This was as the result of grantee which was given by the contractor.

A road like Lusaka/Ndola dual carriage way paged at K 4.7M per Kilometre is coming up and other roads around the country. Which are domestically funded the toll gate fee is part of the fund for this road, thus the only way to go if the nation is to see further development is the toll gate.

Toll gate fee is the most effective tool any government can use to collect the fee and it is the most effective way of maintaining, developing and constructing of new roads in the country. The toll gate is capable of collecting between K50, 000,000 to K67, 000,000 per month. Coming to the equipment repair very negligible amount because from the time they were mounted they have not posed any major challenges thus no major service or repair has been done since then. Example According to Mr. Chitotela Minister of transport and infrastructure dev by 6/11/17 toll gate had collected in excess of K470m. Toll gate have contributed to the economic development of the country by improving the roads which in return has reduced road accidents and improve the efficiency of doing business.

6.1.2 CONCLUSION

According to the research there are various bottleneck towards Toll gate fees application, this simply means that most of the money collected has quite a huge burden to attend to, thus ploughing back of the actual resources collected becomes very difficult if anything unattainable. Therefore, based on this statement, toll gates have a favourable response and positive impact towards economic development in Zambia and this can come to bearing of fruits by put up stringent measures on how to apply this money and minimizes the cost. One of the measures put in place is the networking of all the tolls so that when payment is done immediately it reflect to the central call centre and other centers.

Foo (2006) and SMIDEC (2007), identified various challenges facing toll gates in a globalized environment. The project sponsors should mainly focus in overcoming the challenges, which include, among others, recession, barrier from global sourcing, low productivity, lack of managerial capabilities, and
lack of financing, difficulty in accessing management, technology and heavy regulatory burden. In the same way, Teoh and Chong (2008) argued that the major obstacles to economic development are lack of access to proper accountability, lack of autonomous to financial control by the entrusted agency and social networks.

As stated by (Teoh and Chong 2001) agency has no full control of the finances collected at the toll gates, the government has a stake in it. Secondly just like many African nations, which are clipped with selfishness, jealous, envy and corruption. Even in Zambia, if these vices can be eliminated then the toll gate have capacity to turn around the economy of this country Zambia. Development will be showering like snow as evidenced by table 6 where the respondent agreed to this statement.

Auditing can also help to identify the points of leakage and points of weakness and strength of the system and it is through auditing that public can be made aware and ensures that the people in charge or directly linked stakeholders are held accountable for their action whether bad or good. Auditing regularly can reduce the misapplication of resources thus what is collected from the toll gates will be purely for the road’s maintenance and nothing else. This is shown by figure C above.

Project management are the food basket of any economy because the project fuels the economic development if well managed and resources well applied. (Hashim and Wafa, 2002). Projects in Zambia are not exceptional especially the toll gates project can fuel economic turn round.

Having a highly motivated workforce can determine how successful a project turns out in this case the toll gate project (Anchor, 2000). On the other hand, a lack of motivation coming from inadequate job satisfaction, which leads to high employee turnover and eventually loss of a company’s skilled and valuable human resource (Brief and Weiss, 2002). There are some factors that lead employees to be very demotivated. A study carried out by the Industry Advocates, Borcherding and Garnee, (cited in Nunnally, 2001: 83 - 84) therefore in view of this writing it is important that the workers at the toll gate are motivated not only in terms of money but how they are treated and taken care of is vital.

Toll gate fee is the most effective tool any government can use to collect the fee and it is the most effective way of maintaining, developing and constructing of new roads in the country. Toll gate have contributed to the economic development of the country by improving the roads which in return has reduced road accidents and improve the efficiency of doing business.

The other aspect the toll gates have contributed to the economy of this country is that it has reduced the accidents on this road because they are placed at strategic places where the driver supposed to speeds up or doze off but is made to stop relax a bit and gain consciousness as evidenced by the

RATSA in 2015 there was 12, 392 accidents while in 2016 there was about 7,342 Accident and third quarter of 2017 only 4, 552 accidents were recorded meaning the life of productive people are saved thus, their contribution to the country continues.
6.1.3 RECOMMENDATION

Toll gates have potential to develop the economy of Zambia and this can come true by the stakeholders putting up stringent measures on how to apply this money and minimise the cost.

Political influence on how the money is spend should be minimized or just put to zero so as to ensure that the resources collected at the toll gates are ploughed back to its intended purpose.

The system must be put in place to ensure that people are able to pay for toll gate cash less. So as to secure the toll gate from thefts or dangers which may arise from that angle.

Finances collected at the toll gates should be audited regularly and reports made known to the public as the way of preventing misappropriation.

The points of leakage and points of weakness and strength of the system should be identified and ensures that the people in charge or directly linked to such leakages are made accountable.

Project of such magnitude should be monitored by well qualified personal with well recognized project management agency in place.

More toll gates should be installed at designated place as stipulated by National Road Development agency and as required by law.

Further research must be done on the durability of the Toll gate equipment and whether the toll gates have impact on the number of accidents or not.

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