

**THE ASSESSMENT ON THE IMPACT OF DELAYING ROAD  
CONSTRUCTION PROJECTS IN ZANZIBAR: A CASE STUDY OF URBAN  
WEST REGION UNGUJA**

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**CERTIFICATION**

The undersigned certifies that he has read and hereby recommends for acceptance by The Open University of Tanzania a dissertation entitled: *“The Assessment on the Impact of Delaying Road Construction Projects in Zanzibar: A Case Study of Urban West Region Unguja”* in partial fulfillment of the requirements for the Degree of Master of Business Management of the Open University of Tanzania.

.....

Dr. Emmanuel Tonya

**(Supervisor)**

.....

Date

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**DECLARATION**

I, **Abdulkhikim Ramadhan Makame**, do hereby declare that this research report is my own original work and that it has not been presented and will not be presented to any other University/ Institute for a similar award or any other award.

.....

Signature

.....

Date

## **DEDICATION**

The research report is dedicated to my parents and relatives for their love, care and support.

## **ACKNOWLEDGEMENT**

I indebted to the Almighty God for his unlimited blessings and grace which have enabled me to successfully complete this work, May His Name be praised always and forever.

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## ABSTRACT

This study was intended to assess the impact of the delay road construction project in Zanzibar. The objectives of this study were to identify the factors that contribute to the delay in road construction project in Zanzibar. Also it aimed at assessing the social and economic impact of delays in roads construction project in Zanzibar. Finally the study expected to suggest the way to reduce the delay in road construction project in Zanzibar. The study was conducted in Zanzibar, using a case study design. A total 60 respondents were selected from the ministry of construction, UUB officials and local peoples. Information was collected from the respondents using focus group discussion, interview and questionnaires and analysed by spread sheet of Microsoft Windows where editing, coding, classification and tabulation were performed. Results have indicates that the major factor for the delay of road construction project is financial problems. Other factors were low supervision, corruption, low technology and poor tendering. On the side of the impact the findings indicates that environmental problems, low business activities and diseases were resulted from the delay road construction project. Meanwhile, the findings indicate that good financial management, proper planning and knowledge and skills were the possible measures to reduce the problem of the delay road construction project. The study recommend that the policies should be integrated and realistic, there is high need on integrating nongovernmental organizations and individual stakeholders of the road construction project on formulating, implementing and evaluation of the road construction project progresses in Zanzibar, this will bring together all the road construction project stakeholders and create sense of total participation and recognition on the duty of improving the road construction project and not be seen as mere duty of the government.

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**LIST OF ABBREVIATIONS**

AIQS	Australian Institute of Quantity Surveyors
CRB	Contractor Registration Board

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

Delay of roads construction projects is a universal phenomenon (Ahmed et al. 2012). The construction industry is subject to risk due to its complexities and technological advancements in this field (Mok, 2015). The construction industry require huge amount of capital, followed by large scale and volatility in projects (Ibid). Due to nature of this industry and its complexity the construction projects are subject to delays and different factors are causing these delays (Pintu *et al*, 2011). These delays also differ from developed countries and developing countries, project to project and from country to country (Ibid).

#### **1.2 Background of the Study**

Studies conducted in various contexts have deduced that delay in the completion of infrastructural projects appears to be more common in developing than in developed countries (Aziz, 2013). Among the developed countries, delay in the completion of infrastructural projects has been reported in Canada, the United States, Australia, and Britain, among others. In Canada for instance De Souza, (2009) puts that delays in the completion of infrastructural projects were attributed to various factors, including reduced funding by sponsors, communication breakdown, delayed disbursement of funds, poor site management by contractors, and tedious legislative procedures. While (Baldwin and Manthei, 1971) associated project delays in the United States with weather vagaries, labor supply, and poor management of sub-contractors.

In Africa the issue of delay on roads constructions have been reported in different countries, example the case of South Africa, have been observed that up to 45% of the roads upgrading projects in troubled Soweto slums were not delivered in time between 2004 to 2009 due to factors that ranged from: political disagreements especially when refugees from Zimbabwe infiltrated into the country, Thabo Mbeki's failure to command the majority votes in the ANC that could favour him in allocating this project funds, the regular strikes by mines led the partners walk away in the view of bad governance, corruption, low level of technology applied in construction industry (Karim & Marosszky, 2012). According to The World Bank (2014), the political issue especially with the uprising Malema and his opposing youths has left up to 30% of roads unattended because the youths feel that the tenders were irregularly awarded.

In Nigeria, seven out of ten roads construction projects in Borna and Kano Plains surveyed suffered delays in their execution (Hussin and Omran, 2011). The same to (Fugar & Agyarkwa, 2010) observed that in Nigeria 5-10% of construction pre-contract cost is based on contingency. The situation is seemed caused by many factors including corruption as stated by (Chiocha, 2011) argues in his book, 'Corruption and its effects on the development of the construction industry in Nigeria' that, up to 78% of the roads in rural Nigeria and its northern part will be under dust for the coming 15 or more years because of factors that can be controlled like: corruption from the local chiefs (Ogas), governors, national government, NGOs and many.

In Sudan the construction ranging from the simplest to more complex roads projects platforms have increasingly experienced cost overruns due to silly delays that could be prevented up to 95% (Omran, 2012). While investigating the subject of roads projects

delays in Sudan (Olatunji, 2010) observes that it is a phenomenon that can be attributed to the inability of the client/his representative and the project team to have a comprehensive view of the construction project from inception to completion. According to Aibinu and Jagboro (2012) “construction delay has become endemic in Nigeria, Sudan, Uganda, Eritrea etc. Delay they found out had significant impact on completion cost and time of 61 building projects studied”.

In his writing, Waihenya (2011) argues that the delay in implementation of development projects like roads, electricity, water and sewerage projects in the Kenya’s coast date back to the Arabs and Portuguese infiltration into the region who made the region dependent on the ideas of the masters, live at their comfort zones, reject any European associated technology and be in constant religious repulsion among themselves. This has been a challenge for example for the roads construction sector to get enough support from the community in terms of expertise, dedicated laborers, modern technology, necessary development resources, political support and many more (ibid).

In Zanzibar infrastructure has become increasingly run down during the last decades and already is limiting further investments in the promising tourism sector. Most of the main island's 120 kilometres of main roads were constructed before independence 40 years ago and maintenance has been occasional (Article, 2016). Zanzibar has roughly 1,234 km of main, urban and rural roads. Zanzibar’s Ministry of Infrastructure and Communications (MOIC) is responsible for construction and maintenance of road network in Zanzibar. About 70 percent of the Zanzibar’s roads are located on Unguja Island, which contains the main urban centre and main port and

plays host to a large tourism industry. Although this gives Unguja one of the most dense road networks in Africa, most of the roads were constructed after the revolution in 1964 and have not been sufficiently maintained (Rehabilitation, 2003).

### **1.3 Statement of the Research Problem**

The governments of Zanzibar together with developmental agencies have been putting efforts in implementing different projects such as the government projects relating the road and bridge projects, the hydropower projects, the thermal power projects, or the low income housing projects in order to promote economic development and people's lives.

Although efforts are taken there are some challenges in implementing the executing construction projects. And these cause a serious problem relating to projects delaying. The project delaying problem seemed directly to affects the lives of people, social welfare of the people as well as economic income of the people particularly in Zanzibar. This is evidenced through the existence of various indicators such as high unstable people lives and destruction of people's sources of economic development.

That situation necessitates the need to assess how the project delaying problem seemed directly to affects the lives, social welfare of the people as well as economic and the other social impacts particularly in Zanzibar. As that need rise, the challenge become the limited information available on the impact of the delaying of construction projects. The intention of this study then comes to fill that gap in knowledge by providing the information on how the delaying construction projects affect the people's lives.

## **1.4 Research Objectives**

### **1.4.1 General Objective**

The general objective of the study was to assess the impact of delaying government road construction project on the society.

### **1.4.2 Specific Objectives**

- (i) To identify the factors that contributes to the delay in road construction project in Zanzibar.
- (ii) To assess the social and economic impact of delays in roads construction project in Zanzibar.
- (iii) To suggest the way to reduce the delay in road construction project in Zanzibar.

## **1.5 Research Question**

This study will answer the following question.

- (i) What are the factors that contribute to the delaying in road construction project in Zanzibar?
- (ii) What are the social, economic and residential impacts of delaying in roads construction project in Zanzibar?
- (iii) What are the ways to reduce the delaying in road construction project in Zanzibar?

## **1.6 Significance of the Study**

This study provides important information concerning the impact of delaying government road construction project to the society. The information is useful in the

correction and formulation of better policies concerning to government road construction project to the society to both government and non government agencies for sustainable development that will ensure stability and sustainability of government road construction project.

Practically the information are used in many areas such as; academically the study is useful in constructing empirical knowledge concerning the impact of delaying government road construction project to the society in Zanzibar.

The study is vital in finding out the effectiveness to those programs and plans implemented by government concerning to road construction project in Zanzibar.

Finally, it is used as a reference for further study in the delaying of government road construction project.

## **1.7 Scope of Study**

The scope of the study is:

### **1.7.1 Geographical Scope**

The study was conducted in Zanzibar, particularly in Urban West Region of Unguja. The area was chosen because it occupies the higher number of delay road construction.

### **1.7.2 Content Scope**

This study focuses on assessment on the impact of delaying road construction. The study also covers the factors that contribute to the delay in road construction project in the study area, the study assess the social and economic impact of delays in roads

construction project in the study area. Finally the study suggests the way to reduce the delay in road construction project in the study area.

### **1.8 Organization of the Study**

The study organized by three chapters. Chapter one covers, an introduction of the study in which it highlights the statement of the problem, objectives, significance of the study and scope of the study. In Chapter two, the information that covers the theoretical and empirical literature review from other studies. Chapter three focused on the whole aspect of methodology, Chapter four focuses on the research findings and Chapter five focuses on the conclusion and recommendations of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Overview**

This chapter presents the review of literature related to this study. The chapter is divided into four parts. The first part presents operational definitions. While the second part presents theoretical framework and the empirical studies on the delay road constructions as reflected in different literatures. The last part gives conceptual framework.

#### **2.2 Operational Definitions**

Operational definition in a common language refers to the process of establishing a conceptual definition that is explicitly stating what a concept means in the context of a particular study (Singleton, 1999). Cozby (2007) gives the meaning of the term as defining a concept in terms of operations or techniques the researcher uses to measure or manipulate it. He further argues that operational definition forces researcher(s) to discuss abstract concepts in concrete terms. Operational definition helps to avoid misconception to the users of a particular study. Based on the above elucidation, the key concepts which are brought into operation for the present study includes project, delay and road construction.

##### **2.2.1 Construction**

Construction can be defined as an activity of the physical creation of infrastructure, superstructure and related facilities. It therefore comprises all civil engineering works and all types of building projects including; housing as well as maintenance and repair of existing structures (Wells, 1984).

Another definition states construction is a broad process or mechanism for the realization of human settlements and the creation of infrastructure that supports development. This includes the extraction and beneficiation of raw materials, the manufacturing of construction materials and components, and the construction of the project cycle from feasibility to deconstruction and the management and operation of the built environment (Plescis, 2002, p.4).

A broad definition of term stipulated that construction is that sector of an economy which through planning, design construction, maintenance, repairs and operation, transforms various resources into constructed facilities. The types of public facilities produced range from residential and non-residential to heavy construction (Moavenzadeh, 1978).

### **2.2.2 Delay**

In construction, the word “delay” refers to something happening at a later time than planned, expected, specified in a contract or beyond the date that the parties agreed upon for the delivery of a project (Pickavance, 2005). Lo, Fung and Tung (2006) define delay as the slowing down of work without stopping construction entirely and that can lead to time overrun either beyond the contract date or beyond the date that the parties have agreed upon for the delivery of the project.

Syed, Azhar, Castillo and Kappagantula, (2002) classify delays into non-excusable delays, excusable non-compensable delays, excusable compensable delays and concurrent delays. Non-excusable delays are delays, which the contractor either causes or assumes the risk for. Excusable non-compensable delays are delays caused

by factors that are not foreseeable, beyond the contractor's reasonable control and not attributable to the contractor's fault or negligence. Compensable excusable delays these are compensable delays are excusable delays, suspensions, or interruptions to all or part of the work caused by an act or failure to act by the owner resulting from owner's breach of an obligation, stated or implied, in the contract. Concurrent delays occur when both owner and the contractor are responsible for the delay.

### **2.2.3 Construction Delay**

Delay in construction is a state in which the actual progress of the phases of a construction project becomes slower than as planned or completing the project late (CIOB, 2008). Delay in the setting of construction refers to prolonged period of construction and interruptions of events that distracts the programme of the construction. Delay is acknowledged as the most risky, costly, common, and complex problem encountered during projects (Cheung *et al.*, 2001). Delays are synonymous with construction projects. Delay has been established as one of the commonest experience in the construction project globally (Ahmed, *et al*, 2003). Multiple studies have identified incident of delay as a major problem facing construction projects in the world (Kaliba, *et al*, 2009).

A project is considered delayed only when its postulated time of completion has been accomplished (Majid, 2006). According to Pourrostam *et al.* (2011) project delays form the major challenges for the industry of construction in the emerging countries. However, delays are not only experienced in the emerging countries, delays are a global phenomenon (Memon *et al.*, 2011).

## **2.3 Theoretical Framework**

### **2.3.1 Motivation Theory**

Need for higher productivity in the construction industry has led to her use of motivating techniques based on the basic motivation theories described above. The industry has used techniques based on the three broad streams of motivation, viz, KITA, carrot and stick and attitude, and those based on Herzberg's and Maslow's basic theories on motivation. There have also been research efforts on possible application of Magregor's theories (Aina, 2014).

The industry has used financial motivators, semi financial motivators and non-financial motivators. Financial motivators, based on cash rewards are the closest connection between individual effort or performance and individual pay. Two main types are used, based on non-rated output, the piece rate system and the standard hourly rate. The system determine an appropriate amount of work to be accomplished within a period of time and defines it as a standard, a fair rate is then set (Aina, 2014). The piece rate is then calculated by dividing the base wage by the standard. This basic piece rate provides a production incentive based on production beyond standard.

This approach suffers from production variability, which disturbs the flow of production, variability occurs because employees may be willing to forgo extra effort and pay on some occasion of ill health and boredom. Its other major problem is that it promotes an adversarial relationship between workers and management; where workers make every effort to maximize their financial gain by attempting to manipulate the system of setting rates. Some of the financial motivators used in the industry are profit sharing, piece work plan, measured day work, standard hour system

hour saved (Aina, 2014). Plus rate and geared schemes, Semi financial motivators were developed to fill the gaps that exists between the companies and workers objectives that the financial motivators cannot fill.

In order to establish mutual loyalty and commitment on both sides, there motivators also termed fringe here fits do not rely on cash motives, but concentrate an benefits such as holidays with pay, staff canteens, luncheon vouchers, sports facilities pension schemes, temporary bus, paid telephone bill and expense accounts. These help to satisfy Herzberg's hygiene factors and Maslow's higher needs. Non-financial motivators are fairly intangibles and are related to Maslow's higher needs and Herzbergs motivating needs. It acknowledges the importance of the individual, gives self fulfillment, self expression and recognize the need for group participation to provide social satisfaction. Examples of this in construction are the highly skilled craftsmen who obtain their fulfillment from the use of such skills and the public's acknowledgement of their expertise (Aina, 2014).

#### **2.4 Empirical Literature Review**

Several empirical literatures were reviewed pertaining to the delay of road construction projects. The study done by Mohamed (2015) on project delay in Sudan construction industry, the aim of this paper was to find out the main causes of delay in Building construction projects in Sudan. The research design used by the author was quantitative, where the data was collected from clients, consultants and contractors using questionnaires. The questionnaire had a list of delay causing factors of which the respondents were ask to rank each according to the 5 point likert scale. The data obtained were analyzed using the Statistical Program for Social Scientists (SPSS). The

results obtained indicate that the top major causes of delay were; fluctuation of prices of construction materials, shortage of materials, inaccurate time estimation, and errors during construction.

In addition the top major effects of delay were; Cost overrun, acceleration of losses, time overrun, negative social impacts and litigation. Also the top major risks associated with construction delay were; too much pressure on project stake holders, price inflation of materials and overall project, disputes amongst project participants, project abandonment, overall cost increase and decline in revenue. And finally the top major delay mitigating measures were; Information sharing, Total Quality Management (TQC), Quality cycles, Benchmarking, and Joint risk management.

While the study done by Simon (2017) factors causing delay road construction project in Tanzania, a case of TANROAD of Dar-es-salaam. This study was aimed at finding the causes of delay in road construction projects in Tanzania. A questionnaire was sent to the TANROADS Officials, Contractors, Consulting Firm and other Stakeholders. The collected data were analyzed using the both qualitative and quantitative techniques for data analysis. Politicians are the leading variable with 68.9% to the road constructions delay. The findings show that involvement/performance of other parties and environmental conditions. It is therefore recommended that the government and TANROADS should have long term plan for road construction policy, employ skilled and experienced contract in project management, to have proper design in road project execution, to have adequate communication between parties, to use good quality and enough materials and correct equipment, use of proper organizational structures.

Meanwhile, the research conducted by Narh, (2016) on other hand, investigates the delays in execution of public sectors construction in Ghana. The author used survey research design. Questionnaires were used as instruments for data collection. The findings of the study revealed that some critical contributors to road construction project delay in Ghana during the project execution phase are clients' low cash flow to complete the project, contractors' financial constraints on the project, and improper planning of the project life cycle especially during the bidding phase. Site restriction, weather effects and changes in governmental regulations were found to be the least contributors to projects delays.

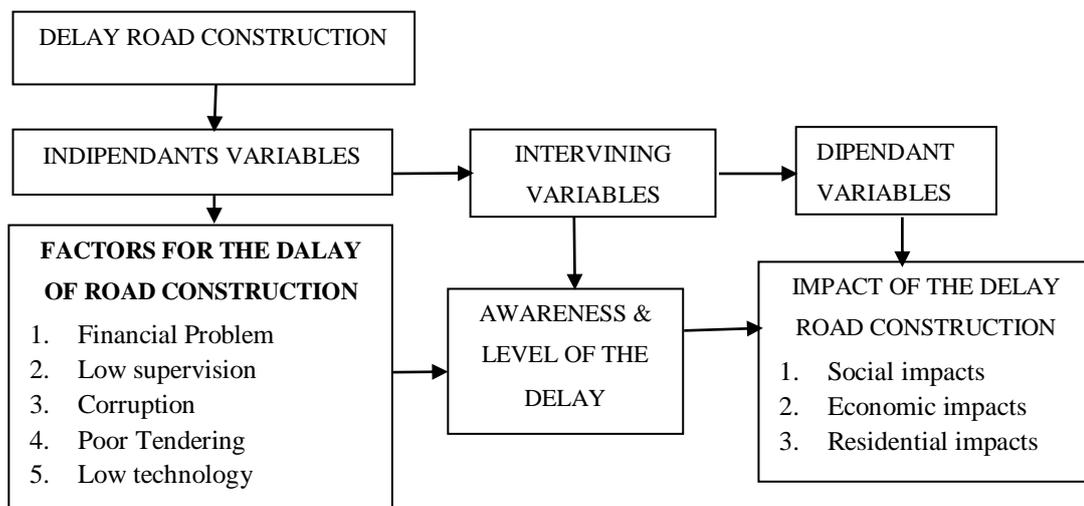
Furthermore, Kumi, (2016) on his study on effect of payment delays on the successful implementation on of road construction project in Ghana. This study aimed to identify the effects of payment delays on the successful implementation of road construction projects in Ghana Highway Authority. The study adopted the quantitative method, which sprung from the use of the positivists approach to knowledge with which a number of clients and consultants were selected purposively and contractors were also selected simple randomly for the survey. Results indicated that the main factor causing payment delays on road construction projects is delay in certification.

Lastly but not list Alex, (2016) focused this study on the management of delays that pertains to construction projects in Bia West District. Questionnaires and personal interview techniques were also used to collect data. Results from the study divulge that the actual sources of delays in project delivery are; Inadequate financial resources of clients, delays in honouring payment for work done, underestimation of project

duration, poor communication between contracting parties, complexity, difficulties in accessing bank credit (client); change orders during construction and others.

## 2.5 The Model

As depicted in the figure below, there is a link between three main variables, which are independent variables, dependent variables and intermediate variable. In this model, the function of independent variables may influence the achievement of dependent variables. The independent variables in this model are the factors for the delay road construction. These factors may result to the impacts of the delay road construction. In this model there are intermediate variables such as the awareness of the delay and the level of the delay. The factors are financial problems, low supervision, corruption, poor tendering and low technology. While the impacts of the delay road construction are: the social impacts, economic impacts and residential impacts. Thus the factors result to the delay road construction may lead to several impacts. This as indicated in Figure 2.1.



**Figure 2.1: Conceptual Framework**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Overview**

This section describes the methods that employed in the study. Essentially it is focusing in discussing the research design; study area selection and population, scope of the study, sampling procedures and sample size, data collection and analysis techniques, and validity and reliability were employed in the study.

#### **3.2 Research Paradigm**

A paradigm is a philosophy deeply entrenched in one's personal experiences, culture and history (Creswell & Plano Clark, 2011). It comprises a certain set of assumptions about reality (ontology) that is translated into hypotheses, knowledge about that reality (epistemology) and the specific way of knowing about that reality (methodology) (Guba, 1990).

Both ontology and epistemology affect the choice of research methods (Bisman, 2010; Creswell & Plano Clark, 2011). Two polar paradigms often cited are interpretive and positivist. An interpretive or idealistic stance is characterized by an exploratory study with the purpose of interviewing stakeholders in understanding the truths or realities of the researched subject (Burrell & Morgan, 1979), for example, investigating the informal processes of ACs (Turley & Zaman, 2007).

As the research method is qualitative, data gathered are descriptive and explanatory with context given to words used in the interview data. Whereas in a positivist stance,

the researcher will predict and explain the changes observed, for example, determining whether compliance to internal auditing practices affects the internal control system of a company (Fadzil et al., 2005). The research method then, is quantitative and measurable from questionnaire data. This study takes a functionalist and interpretive approach (Dunn, 2010; Modell, 2009; Schultz & Hatch, 1996).

Based on the functionalist approach, the organisational structure of road construction processes are acceptable to the norms of the society, comprising the business community, the engineering profession and the legislators in construction works. However, a pure functionalist approach could not explain situations outside the norms (Dunn, 2010). As such, the interpretive approach is also used.

### **3.3 Research Design**

This study employed a case study design so as to obtain comprehensive data and in-depth information. Adam and Kamuzola, (2008) argue that “the case study aims to understand the case in-depth, and its natural setting, recognizing its complexity and its context”. Therefore, a case study used to get in-depth information on the impact of delaying of road construction project to the society. A case study design has been adopted because; it is a fairly exhaustive method, which enables a researcher to study deeply, and thoroughly different aspects of the phenomenon and it is flexible in respect to data collection methods (Kothari, 2009).

### **3.4 Study Area**

The study was conducted in Urban West Zanzibar. The selection of this study area was based on the fact that, there was scarce information concerning the impact of

delaying of road construction project to the society. Thus this study helps to add more information about the issue under study.

The study was conducted in Zanzibar, through the Ministry of water, construction, and Infrastructure, Road construction Agency and individual people lived in Urban West in Zanzibar, where these areas are necessary to get targeted population under this study. Also, these areas were selected because they are main institutions dealing with road constructions and the society affected in Zanzibar; therefore the study got reliable data from the sample drawn in these study areas.

### 3.5 Study Population

Ame and Baradyana (2005), define population as a collection of individual interest or the totality of items under consideration. It is a group of individuals, objects or items from which the sample is taken (Kombo and Tromp, 2006). The study population involved officials from the Ministry of Water, Construction, and Infrastructure, Road Construction Agency, the local residents in the area of road construction and individual people living in the road construction areas within the Urban West in Zanzibar as shown in the Tables 3.1.

**Table 3.1: Category of Respondents, Total Population, Sample Size and Sampling Techniques**

Category of respondents	Total population	Sample selected	Sampling Techniques
Officials from the Ministry of Construction	10	10	Purposive Sampling
Officials from road construction Agency	40	20	Purposive Sampling
Local Community	11,283	30	Convenience Sampling
Total	11,333	60	

Source: Field survey (2018)

### **3.6 Sampling Procedures**

The sample is selected using non-probable sampling procedures. Non-random sampling procedures purposive and convenience sampling were used (Kothari, 2008).

#### **3.6.1 Purposive Sampling**

Purposive Sampling is a non-probability sampling technique whereby the researcher selects participants on the strength of their experience of the phenomenon under study (Fenny *et al*, 2001). The choice of the sample elements depends exclusively on the discretion of the researcher/investigator (Milanzi 2009). Purposive sampling was used in this study since it suited both quantitative and qualitative methodology (Kombo and Tromp 2006). The purposive sampling involved the officials from the ministry of water and construction and officials from road construction agency as depicted in the Table 3.1. This is due to the fact that they were officially authorized and responsible for the administration and management of the related issues in the areas. The use of this method/technique helped a researcher in accessing availability of the required information's from the respective organizations in the community. The method was also employed to ensure the selected sample is covered with people of different categories with gender consideration.

#### **3.6.2 Convenience Sampling**

In conducting the survey, convenience sampling was used to select local community around the construction area in Urban West Region of Unguja as indicated in the Table 3.1. Abrams, L. (2010) define convenience sampling method is set of techniques in which respondents are selected by convenience due to their proximity, availability, accessibility or other way that researcher decides. It is a fast and easy

method to use however results seldom are representative of the population Meyer and Wilson (2009). This method/technique was employed among others, to ensure all important respondents in the study area are visited and have equal chance to be selected, participated and responded to the need of the study.

### **3.7 Methods of Data Collection**

Data collection is any process of preparing and collecting data to obtain information to keep on record, to make decisions about important issues, or to pass information on to others Weller, (1988). The study was used both primary and secondary data collection techniques to collect data from the respondents and other sources.

#### **3.7.1 Questionnaire**

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Gillham, 2008).

Pre-designed questionnaire was used to obtain data concerning the impact of delaying of road construction project to the society. These questionnaires was comprised both open and close- ended questions. Open ended questions allowed free responses. Close-ended questions allowed more efficiency in terms of providing standard answers, which will be easily coded and analyzed (Adama, 2010). A questionnaire was used to collect information on the factors contributing to the delaying in government road construction project and the social, economic and residential impacts of delaying in government roads construction project in Zanzibar. It answer on the factors, impacts and the measures to reduce the delay in road construction in the study area.

### **3.7.2 Interviews**

Interview is a research method for data collection that involves a collection of data through verbal interaction between the interviewee and the interviewer (Patton, 2007). It enables participants to discuss their interpretation of the world in which they live and express how they regard the situation from their own views and it is associated with very high response rate (Ibid). Interview method was used when respondent are willing to participate and to give information concerned with research problem.

In examine the extent of the impact of delaying of road construction project; the interview method was used. The interview focused to key informants from various institutions and local leaders. The respondents were selected deliberately in order to answer the ways to reduce the delaying in government road construction project and the social, economic and residential impacts of delaying in government roads construction project in Zanzibar.

### **3.7.3 Focus Group Discussion**

The focus group is referred as the panel of people discussing a particular issue (Cooper et al., 2006). The purpose of using this methods, is to obtain in depth information on concepts, perceptions and ideas of local people (Kruageret al. 2004), also to enable those respondents who might be unable to read and right, can participate in giving information and it provides access to a larger body of knowledge from a group of people. The method also used to compliments, supplement, and verify data collected by other methods.

The focus group discussion was comprised ten people. The number of people for focus group discussion obtained through convenience sampling in order to allow

everyone who has an opportunity to participate; also the method is suitable enough to provide comprehensive information's for this study.

Through focus group discussion, used to allow the respondents to identify the resistant reasons and various impacts related to issue under study. Therefore various ideas from participants under discussion, was recorded by the researcher by noting down the key important points analyzing, were analysed through content analysis.

#### **3.7.4 Documentary Review**

Documentary review was used to collect secondary data which involved the use of published researches, reports, journals, magazines, books and documentary sources reflecting the nature of the problem in order to understand better about road construction projects. The review of literature in this study was based on secondary data, mostly from books, journals and periodicals. The secondary data for this study was collected from the office of Ministry of Water, Construction and Infrastructure through documentary review of previous research done on the same study; reports, and assessment of the available data from all departments. This method used to support the collected data from the field as well as literature in background of the problem, literature review and methodology parts.

#### **3.8 Data Analysis, Interpretation and Presentation**

Data analysis refers to examining what has been collected in a survey or experiment and making deductions and inferences (Kombo and Tromp 2006). Content analyses was use to analyze the data. Content analysis as a research method is a systematic and objective means of describing and quantifying phenomena (Krippendorff 1980,

Downe-Wamboldt 1992, Sandelowski 1995). There are no simple guidelines for data analysis using content analyzes: each inquiry is distinctive, and the results depend on the skills, insights, analytic abilities and style of the investigator (Hoskins & Mariano 2004). One challenge of content analysis is the fact that it is very flexible and there is no simple, 'right' way of doing it. Researchers must judge what variations are most appropriate for their particular problems (Weber 1990).

Data interpretation refers to the task of drawing inferences from the collected facts (Kothari 2009). Data interpretation were carried out by doing the inference of the expected results and relating the expected result with the results of other research together with theories and hypothesis. Mean while the data were presented by using tables, graphs and charts.

### **3.9 Credibility of the Study**

Often called internal validity, refers to the believability and trustworthiness of the findings. This depends more on the richness of the data gathered than on the quantity of data. The participants of the study are the only ones that decide if the results actually reflect the phenomena being studied and therefore, it is important that participants feel the findings are credible and accurate. Triangulation is a commonly used method for verifying accuracy that involves cross-checking information from multiple perspectives. The link in Resources Links on the left describes different types of triangulation methods.

### **3.10 Transferability of the Study**

Often called external validity, refers to the degree that the findings of the research can be transferred to other contexts by the readers. This means that the results are

generalizable and can be applied to other similar settings, populations, situations and so forth. Researchers should thoroughly describe the context of the research to assist the reader in being able to generalize the findings and apply them appropriately.

### **3.11 Dependability of the Study**

Otherwise known as reliability, refers to the consistency with which the results could be repeated and result in similar findings. The dependability of the findings also lends legitimacy to the research method. Because the nature of qualitative research often results in an ever changing research setting and changing contexts, it is important that researcher document all aspects of any changes or unexpected occurrences to further explain the findings. This is also important for other researchers who may want to replicate the study.

### **3.12 Conformability of the Study**

A measure of the objectivity used in evaluating the results, describes how well the research findings are supported by the actual data collected when examined by other researchers. Researchers bring their own unique perspectives to the research process and data interpretation can be somewhat subjective in qualitative research. If findings are corroborated or confirmed by others who examine the data, then no inappropriate biases impacted the data analysis.

### **3.13 Reliability and Validity of Data**

#### **3.13.1 Validity of Data**

Validity refers to the extent to which concept one wishes to measure is actually measured by particular scale or index. That is, the extent to which an account accurately represents the social phenomena to which it refers (Kombo and Tromp

2006). Internal Validity in this research was achieved through proper identification of research problem, building a theoretical perspective on the various motivation programs, as well as using secondary information.

External Validity achieved through proper identification of the research problem, following the scientific research process, and the use of different research methods. Constructs validity was concerned with the validity of relationships between theoretical constructs variables operationalization and conclusion to be drawn (Kothari, 2008). In order to achieve it, the scientific research process adopted from designing the research problem, and undertaking the research process.

### **3.13.2 Reliability**

Reliability refers to the consistency with which repeated measures produce the same result across time and across observers. Reliability denotes to how consistent a research producer or instrument. Reliability concerns with the question of whether the results of a study are repeatable. So, Reliability implies stability or dependability of an instrument or procedure in order to obtain information (Bryman, 2008). Again proper study have to regards to reliability, consistency, stability and predictability (synonyms for reliability), whether the result is replicable.

Therefore the stability and equivalence aspect of reliability of this research study was achieved or increased by carefully replicating the research methods. This can be conducted by pre-testing of different data collection methods such as focus group discussion, questionnaire and interview, as well as conducting pilot study in the field before the actual study.

### **3.14 Ethical Issues**

Research ethics involved the application of fundamentals ethical principles to variety of issues in conducting scientific research. Among the ethical issues regarded in this research was voluntary participation of respondents, which does not require people to be coerced.

Apart from that, the appointment was made with all respondents and the interviews were conducted as per every interviewee's convenient time. But before conducting interview, the informed consent was taken. It is argued by Creswell (2003) that during research the researcher is compelled to develop an informed consent form for participants to sign before they engage in the research. This form acknowledges that the participants' rights have been protected during data collection. The informed consent form is found in (*Appendix I*).

## **CHAPTER FOUR**

### **DATA PRESENTATION AND DISCUSSION**

#### **4.1 Overview**

In the preceding chapter, the methodological aspect of the study has been presented. This chapter puts forward data presentation and findings of the study. It commences with the profile of the respondents, followed by the presentation, analyses and discussion of the first objective, second objective and third objective of the study.

#### **4.2 Profile of Respondents**

This study involved sixty (60) respondents from the study area. Most of the respondents were the local communities, officials from the ministry of construction and the officials from the urgency of road construction (UUB). The local communities were interviewed by chance while they pass on the roads, the officials from the ministry of construction were interviewed in their offices and the officials from the urgency of road construction (UUB) were asked in their offices. The profile of the respondents that covers their age, gender, education and employment is put down below as follows:

##### **4.2.1 Respondents' Composition by Age**

Age of the respondents ranged from twenty to over fifty years. Grouping the respondents based on their age at the interval of ten years, four groups were obtained. The number of respondents whose age ranged between 20 to 29 years was 8 (13.3%), while that of respondents whose age ranged between 30 to 39 years was 32 (53.3%). 18 responses (30%) were aged between 40 to 49 years and those that were over fifty

years were 2 respondents which is equal to (6.2%). This distribution is as presented in the Table 4.1.

**Table 4.1: Distribution of Respondents by Age**

<b>Age Group</b>	<b>Frequency</b>	<b>Percent</b>
20-29	8	13.3
30-39	32	53.3
40-49	18	30
50 and Above	2	3.33
<b>Total</b>	<b>60</b>	<b>100</b>

Source: Field Survey, 2018

#### **4.2.2 Respondents' Composition by Gender**

Male respondents who were 40 (67%) outnumbered female respondents who were only 20 (33%). This is due to the reason that most of the female populations were not found in the study area, compared to the male population who were mainly at the study area. Table 4.2 demonstrates the data.

**Table 4.2: Distribution of Respondents by Gender**

<b>Gender</b>	<b>Responses</b>	<b>Frequency (%)</b>
Female	20	33
Male	40	67
<b>Total</b>	<b>60</b>	<b>100</b>

Source: Field Survey, 2018

#### **4.2.3 Respondents' Composition by Education**

Education of respondents, range from certificates education to colleges and universities. Out of 60 respondents, eighteen (18) respondents (30%) had university

and college education. While twenty five (25) respondents out of the total respondents (41%) had diploma education and ten (10) respondents out of the total respondents (16.6%) had certificate education. The remains respondents, seven (7) respondents (11.6%) had not indicate their education level. The results are as shown in the Table 4.3.

**Table 4.3: Distribution of Respondents by Education**

<b>Education</b>	<b>Responses</b>	<b>Frequency (%)</b>
University & collage	18	30
Diploma	25	41.7
Certificate	10	16.6
Not indicate	7	11.7
<b>Total</b>	<b>60</b>	<b>100</b>

Source: Field Survey, 2018

#### **4.2.4 Respondents' Composition by Employment**

The respondents' carders comprised of 41 employed people (70%) out of the total respondents were wage employed. Out of that 50 % were (civil servants) and 20% were employed in private institutions. The remains 18 respondents (30%) were self employed. This composition is presented in Table the 4.4.

**Table 4.4: Distribution of Respondents by Employment**

	<b>Wage-Employed</b>		<b>Self-employed</b>
	<b>Government Employee</b>	<b>Private Employee</b>	
Number	30	12	18
Frequency (%)	50	20	30
<b>Total Number</b>	<b>42</b>		<b>18</b>
<b>Total Frequency (%)</b>	<b>70</b>		<b>30</b>

Source: Field Survey, 2018

In summary, respondents' age ranged from twenty to over fifty years, where the majority of respondents aged between 30 to 39. These form 53.3 percent. While there were only 3.33% of respondents who were 50 years and above. In addition, there were more male respondents compared to female respondents. The male respondents formed 67 percent while the female respondents formed only 33 percent. Furthermore, most respondents had diploma education, it account about 41.7 percent; while those with university education were eighteen respondents (30 percent).

Also the respondents were employed, private employed and self-employed individuals, most of whom being the heads of households or their spouses. The wage employed individuals formed 70 percent of the respondents while the self-employed respondents were 30 percent.

#### **4.4 Factors Contributes to Delay Road Construction**

The first objective of this study was to identify the factors for the delay of the road construction project in Zanzibar. To be able to identify the factors, three areas had to be identified namely the awareness of the delay road construction, level of delaying road construction projects and causes of the delaying road construction. The section responds to the question that what are the factors for the delay of road construction project in Zanzibar?

##### **4.4.1 Awareness of the Delay of Road Construction Project**

The study findings indicate that large proportion of respondents, thirty one (31) out of the total respondents which are equal to over fifty percent (51%) agreed that they are highly aware on the delay in road construction project in the study area. While 30%

out of the total respondents condemned that they have low awareness on the delay on the road construction in the study area. The rest of respondent's, eleven (11) respondents which are equal to 18.3% out of the total respondents claimed that they have no awareness on the delay of road construction in the study area. The Table 4.5 indicates the data.

**Table 4.5: Awareness of the Delay of Road Construction Project**

<b>Awareness</b>	<b>High</b>	<b>Low</b>	<b>No Awareness</b>	<b>Total</b>
Officials from the Ministry	5	3	2	10
Officials from UUB	12	5	3	20
Local Community	14	10	6	30
<b>Total</b>	<b>31</b>	<b>18</b>	<b>11</b>	<b>60</b>
<b>Percentage (%)</b>	<b>51.7</b>	<b>30</b>	<b>18.3</b>	<b>100</b>

Source: Field Survey, 2018

#### **4.4.2 Level of the Delay of Road Construction**

The results indicate that twenty eight (28) respondents which area equal to 57.1% out of the total respondents who attempted on this question agreed that there is high level of delay of road construction in the study area. Whereas thirteen (13) respondents which are equal to 26.5% out of the total responses explained that there is medium level of delay road construction in the study area. The remain respondents, 16.4% out of the total respondents depicted that there is low level of delay in road construction in the study area. The data are as presented in the Table 4.6.

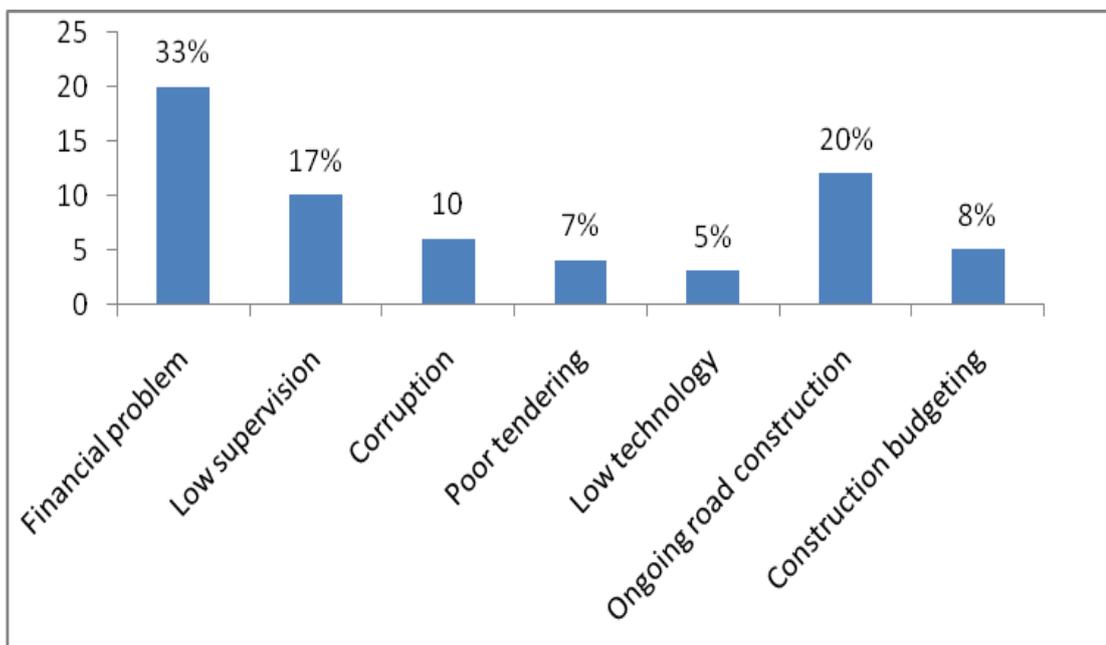
**Table 4.6: Level of the Delay of Road Construction**

<b>Level of Delay</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Total</b>
Officials from the Ministry	4	2	2	8
Officials from UUB	8	5	4	17
Local Community	16	6	2	24
<b>Total</b>	<b>28</b>	<b>13</b>	<b>8</b>	<b>49</b>
<b>Percentage (%)</b>	<b>57.1</b>	<b>26.5</b>	<b>16.4</b>	<b>100</b>

Source: Field Survey, 2018

#### 4.4.3 Causes of the Delay Road Construction

The study findings show that, a total of about 20 respondents which is equal to 33% indicated that, financial problem as main reason for the government failure in dealing with road construction project in Zanzibar, 10 respondents which is equal to 17% indicated that, low government supervision on road construction project, 6 respondents which is equal to 10% indicated that corruption, 4 respondents which is equal to 7% indicated poor tendering to construction company, and 3 respondents which is equal to 5% indicated low technology as main reason for the government failure in dealing with road construction project. The finding implies that the people of Zanzibar are aware on the challenges facing government in road construction projects, that the government of Zanzibar is required to take more efforts to solve these challenges in order to complete the project on time. The Figure 4.1 illustrates more findings.



**Figure 4.1: Causes of the Delay Road Construction**

Source: Field Data (2018)

#### 4.4.4 Discussion of the Findings

Generally the findings indicate that large proportion of respondents, thirty one (31) out of the total respondents which are equal to over fifty percent (51%) agreed that they are highly aware on the delay in road construction project in the study area. This statement is supplemented by one of the local people that:

*“.....the delay in road construction is not miracle or new things in our locality, everybody knows the stoppage and deteriorating of the road construction. Our roads are in poor condition and are not passable.....”*

On the issue of the level of delay, results indicate that twenty eight (28) respondents which area equal to 57.1% out of the total respondents who attempted on this question agreed that there is high level of delay of road construction in the study area. This means that there is high level of road construction delay in the study area. As one UUB official explained:

*“..... in fact the issue of road construction delay is very high, many roads remain un-finished, only gravel is there. We just begin constructing and stopped in the middle of the work.”*

Meanwhile, on the issue of the causes or factors for project delay, the study generally indicate that there are multiple factors or causes which causes the road construction delay in the study area. These include financial problem, low supervision, corruption and poor budgeting. This is supported by Alex (2016) that; Inadequate financial resources of clients, delays in honouring payment for work done, underestimation of

project duration, poor communication between contracting parties, complexity, difficulties in accessing bank credit (client); change orders during construction and others are the major causes of the delay of road construction projects. On other hand Mohammed (2015) depicted that fluctuation of prices of construction materials, shortage of materials, inaccurate time estimation, and errors during construction are the factors for road construction delay. While Simon (2017) in his study puts that political factors and environmental conditions are the major causes of the delay in road construction project.

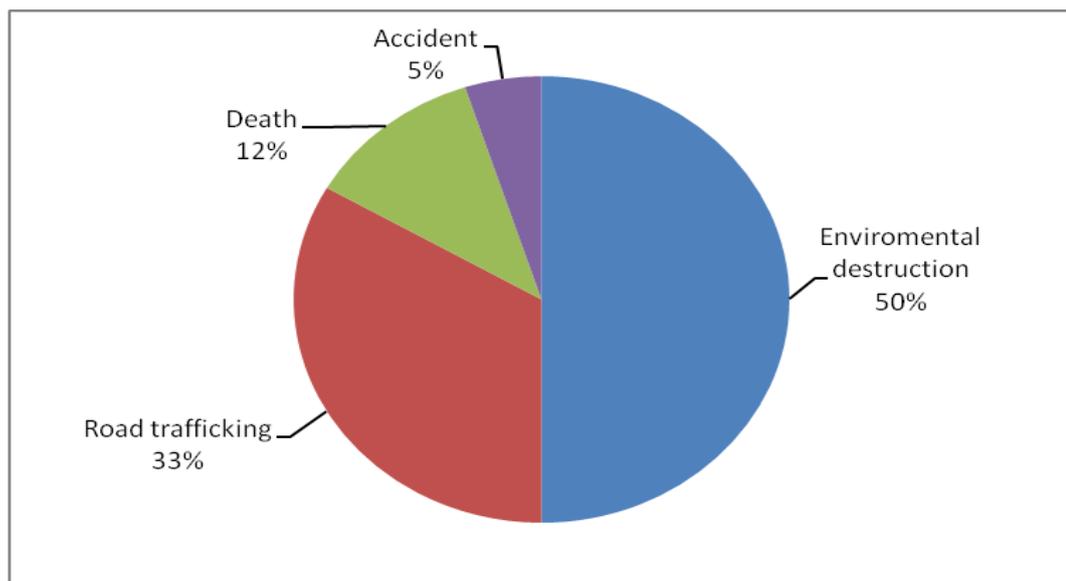
#### **4.5 Impact of the Delay Road Construction**

The second objective of this study was to assess the impact of delaying road construction projects in Zanzibar. To be able to indicate that three areas have to be addressed namely social impact, economic impact and residential impact. This section responds to the question that what are the impacts of delaying road construction project in Zanzibar?

##### **4.5.1 Social Impact of Delaying Road Construction**

The study results depicted that, a total of about 30 respondents which is equal to 50% indicated that, environmental destruction problem as main social impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of dust form the digging the soil, spread of wastage water, and un filled halls, about 20 respondents which is equal to 33% indicated that, road trafficking problem as another social impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred from the existence of narrow road which do not

allow people to pass without trafficking also the presence of rough road caused by road halls during the construction, about 7 respondents which is equal to 12% indicated that, death problem as a social impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of dust form the digging the soil, spread of wastage water, and un filled halls which caused many accidents, and about 3 respondents which is equal to 3% indicated that, accidents problem as among social impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of rough road from un filled halls during the construction. Therefore there is a need for the government to take more consideration on the road construction project in order to reduce these effects and to make peoples life safety. Figure 4.2 illustrates more findings.



**Figure 4.2: Social Impact of Delaying Road Construction**

Source: Field data (2017)

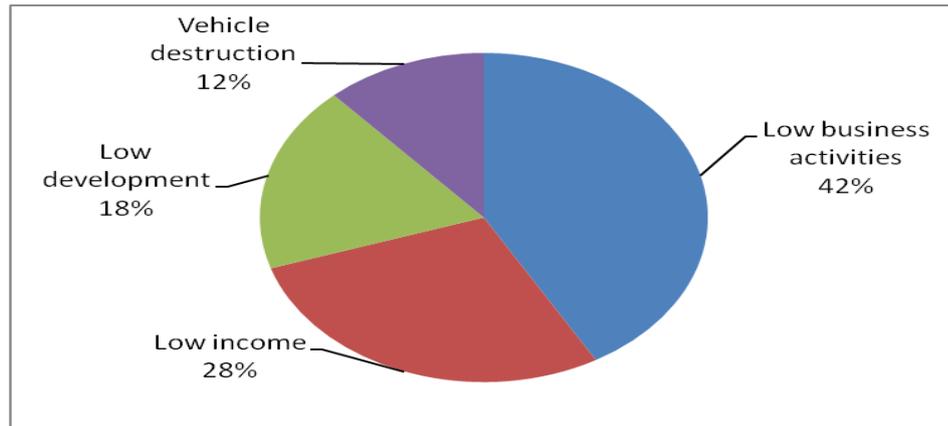
#### **4.5.2 Economic Impact of Delaying Road Construction**

About 25 respondents which is equal to 42% indicated that, low business activities as main economic impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the destruction of business firm and shortage of customers form the poor transport and dust, about 17 respondents which is equal to 28% indicated that, low income as another economic impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred from the destruction of business firm and shortage of customers during the road construction, about 11 respondents which is equal to 18% indicated that, poor development as a economic impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of poor business, low income and road trafficking during the road construction, and 7 respondents which is equal to 12% indicated that, vehicle destruction is among economic impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of rough road from un filled halls and existence of dust during the construction. Figure 4.3 illustrates more findings.

#### **4.5.3 Residential Impact of the Delaying Road Construction**

The study result conveyed that, 40 respondents which is equal to 67% indicated that, disease as main residential impact caused from the delaying of road construction project in Urban West Zanzibar, the respondents indicated that this problem occurred due to the existence of dust form the road extraction, and spread of wastage water,

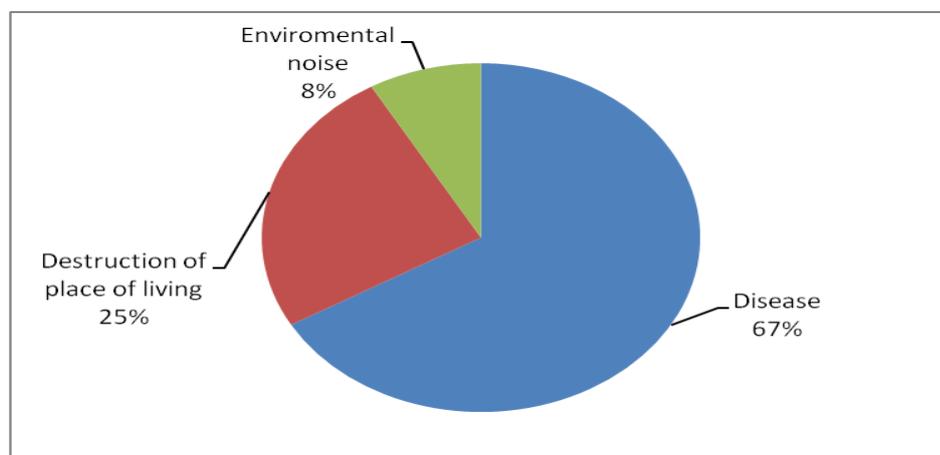
about 15 respondents which is equal to 25% indicated the destruction of place of living, the respondents indicated this problem occurred from the existence of road trafficking and drilling of halls during the during the road construction.



**Figure 4.3: Economic Impact of Delaying Road Construction**

Source: Field data (2017)

And 5 respondents which are equal to 8% indicated the environmental noise problem this problem occurred from the existence of road trafficking, presence of big vehicles used for construction and drilling of halls during the construction. Figure 4.4 illustrate the data.



**Figure 4.4: Residential Impact of the Delaying Road Construction**

Source: Field data (2018)

#### 4.5.4 Discussion of the Findings

Generally the findings indicate that environmental impact is the major social impact associated to the road construction project in the study area. However there are other impacts such as road traffic, death and accidents. As one among the local people depicted:

*“.....there are several social impacts of the road construction project delay on our locality, lat say for example pollution, accidents, health problems to mention a few of them.”*

This statement is supported by John, (2013) health and environmental impact that these prolonged projects had on them. During the execution of the projects, the dust from the construction site engulfs the community and motorists who play that route worsen it by leaving a dusty trail behind. Furthermore Ferguson (2012) explained the environment surrounding us affects many aspects of our lives. Construction can be the cause of effluence detrimental to the environment and social aspects of life. Pollution encompasses air, water, land, dust, and vibration disturbances. This is confirmed in a thesis by Kamat (2011) which studies the affect of dust generation on a traditional open-cut utility project. Dust, being a form of air pollution, can contribute to asthma, allergies and other respiratory problems (Kamat 2011). These problems are harmful to all those near a construction project.

Meanwhile, on the side of economic impacts, the results generally portrayed that business deterioration, poor production; low income and vehicle destruction are the economic impacts of the delay in road construction project in study area. The findings agreed with the statement that when construction projects are delayed, they leave the

road worse off than it was previously. This makes it hard for vehicles to use the road and it affects their economic livelihood as commercial vehicles do not want to provide services to the community or those who are willing to, do so at a high price (John, 2013). Furguson (2012) add that traffic disruption is one of the major socio-economic costs that impact the community near and around a construction project, especially road construction. People commute everywhere; whether it is to work or the grocery store, the public is always on the road and, naturally, construction will disturb this daily practice of driving. Construction detours and lane closures cause congestion and delays that can lead to accidents, extra time in the car and frustration.

Extra time in the car causes additional wear and tear on a vehicle, increased fuel consumption, and a feeling of wasted time that can transfer to the workplace, affecting productivity. Detours which direct traffic to secondary roads can cause accelerated deterioration of these roads due to increased volume and load (Fuguson, 2012).

#### **4.6 Measures to Address the Delay Road Construction**

In this third objective first the study was to assess the measure(s) taken to reduce the delay in government road construction project. To be able to depict that three areas have to be considered. These are good financial management, proper planning and knowledge and education. This section responds to the question what are the possible measures to reduce the problem of delay road construction project in Zanzibar?

##### **4.6.1 Good Financial Management in Construction Project**

The findings indicate that large proportion of respondents' thirty two (32) respondents which is equal to 53.3% out of the total respondents agreed that proper payment is the possible measure to reduce the delay in road construction in the study area. While

twenty five (25) respondents which are equal to 41.7% out of the total respondents explained that timely payment is the measure to reduce road construction delay in the study area. The remain respondents, only three (3) respondents which are equal to 5% out of the total respondents did not answered on this question. Table 4.7 depicted the data.

**Table 4.7: Good Financial Management in Construction Project**

<b>Financial Management</b>	<b>Proper Payment</b>	<b>Timely Payment</b>	<b>Not Answered</b>	<b>Total</b>
Official from the Ministry	4	6	Nil	10
Officials from UUB	12	8	Nil	20
Local Community	16	11	3	30
<b>Total</b>	32	25	3	60
<b>Percentage (%)</b>	53.3	41.7	5	100

Source: Field data (2018)

#### **4.6.2 Proper Planning in Construction Project**

The study results indicate that large percentage of respondent's twenty eight (28) respondents which are equal to 46.7% out of the total respondents puts that proper action plan is the possible measure to reduce the problem of the delay in road construction in the study area.

Meanwhile twenty two (22) respondents which are equal to 36.6% out of the total respondents conveyed that proper procurement plan is the possible measure to reduce the problem of the delay of road construction in the study area. The remains respondents ten (10) respondents which are equal to 16.7% out of the total respondents did not attempted on this question. The data are as shown in the Table 4.8.

**Table 4.8: Proper Planning in Construction Project**

<b>Proper Planning</b>	<b>Action Plan</b>	<b>Procurement Plan</b>	<b>Not Answered</b>	<b>Total</b>
Official from the Ministry	6	3	1	10
Officials from UUB	9	8	3	20
Local Community	13	11	6	30
<b>Total</b>	28	22	10	60
<b>Percentage (%)</b>	46.7	36.6	16.7	100

Source: Field data (2018)

#### 4.6.3 Knowledge and Skills in Construction Project

The data indicate that over fifty percent of respondents 51.7% out of the total respondents described that construction and project management knowledge and skills is the measure to reduce the delay in road construction in the study area. However twenty four (24) respondents which are equal to 40% out of the total responses portrayed that communication skill is the possible measure to reduce the delay in road construction in the study area. The rest of respondent's five (5) respondents which are equal to 8.3% out of the total respondents did not answer on this question. Table 4.9 indicate the data.

**Table 4.9: Knowledge and Skills in Construction Project**

<b>Knowledge &amp; Skills</b>	<b>Construction and Project Management</b>	<b>Communication Skills</b>	<b>Not Answered</b>	<b>Total</b>
Official from the Ministry	7	3	Nil	10
Officials from UUB	9	10	1	20
Local Community	15	11	4	30
<b>Total</b>	<b>31</b>	<b>24</b>	<b>5</b>	<b>60</b>
<b>Percentage (%)</b>	51.7	40	8.3	100

Source: Field data (2018)

#### 4.6.4 Discussion of the Findings

In generally the data indicate that good financial management is the possible measures to reduce the problem of road constriction delay in the study area. One UUB official depicted:

*“.. to reduce the problem of road construction delay, we need proper financial management with proper financial schedules and timely payment.”*

This is supported by Kumi, (2016) that to prevent delay in road construction projects, the employer must ensure there is an adequate financial resource available before the start of the project and if the funding is not available then there is no need to commence the project, but the project commencement should be delayed until funds become available.

The author adds that proper payment schedules are to be agreed by all the stakeholders before the commencement of the project. Proper communication channels or skills are to be implemented by the stakeholders to aid smooth flow of information and realistic duration and cost must be set for the project (Kumi, 2016).

Moreover based on the findings, proper planning is another possible measure to reduce the delay in road construction in the study area. As Alex, (2016) lamented that initial proper planning and controlling is essential to the client in order to have proper action plan, procurement plan, and budget plan prepared before commencement of project. Consultants must plan very well to ensure that contract processes are duly followed, thus approval of drawings, documentation and other things to reduce

variation during construction. They should monitor their assigned work very well by insisting that corrections are done at the appropriate time to reduce or avoid rework.

Above all, the findings indicate that knowledge and skills play great role to reduce the problem of road construction delay in the study area. This is supplemented by Alex, (2016) that adequate knowledge of project management, principles, tools and techniques is required to reduce the delays.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Overview

The research set out to assess the impact on delaying road construction projects to the society in Zanzibar. To accomplish this, particular emphasis was on three specific objectives. In the course of those objectives the researcher aimed to have awareness through the respondents. To begin with, to identify the factors that contributes to the delay in government road construction project in Zanzibar, the ideas was to assess the people perceptions on understanding about delaying in road construction project, the effectiveness of government in dealing with road construction project, and the factor(s) causing delaying road construction in Zanzibar. Then, assessment on the social, economic and residential impact of delaying in government roads construction project in Zanzibar, the ideas was to assess the most common social or economic impact(s) from delaying government roads construction project, government is responsible on the impact(s) and opinion on the impact(s) from delaying government projects. Finally, to suggest the way to reduce the delay in government road construction project in Zanzibar, the ideas was the government is taking measure(s) to reduce the delay in government road construction project, cooperation between government and other stakeholders, and measures taken by the government to reduce

This chapter summarises major findings of the study and presents the conclusion based on the findings from the study, these are discussed according to research objectives. Recommendations to remedy the existing situation are given; policy implications and areas for further studies are also proposed.

## **5.2 Summary of the Study**

The study focused on assessment of the impact on delaying governmental road construction projects to the society in Zanzibar.

Thus, through the specific objectives of this study which were:

- (i) To identify the factor(s) contribute to the delay in government road construction project in Zanzibar.
- (ii) To assess the social, economic and residential impact of delays in government roads construction project in Zanzibar.
- (iii) To suggest the way to reduce the delay in government road construction project in Zanzibar.

### **5.2.1 The Factors Contribute to the Delay in Government Road Construction Project in Zanzibar**

In the first objective the study focused on assessing the factors contribute to the delay in government road construction project in Zanzibar, the findings revealed that majority of respondents 33% indicated that, financial problem as main reason for the delaying of road construction project.

### **5.2.2 The Assessment on the Social, Economic And Residential Impact on Delaying of Government Roads Construction project in Zanzibar**

In the second objective of the study, findings revealed that fifty percent (50%) out of the total respondents indicated that, environmental destruction problem as main social impact caused from the delaying of road construction project in Urban West Zanzibar, 42% indicated that, low business activities as main economic impact caused from the

delaying of road construction project in Urban West Zanzibar and 67% indicated that, disease as main residential impact caused from the delaying of road construction project in Urban West Zanzibar. Therefore the government has to take much effort to reduce these social, economic and residential impacts during road construction projects in Zanzibar.

### **5.2.3 The Way to Reduce the Delay in Government Road Construction Project in Zanzibar**

The third objective was focused on way to reduce the delay in government road construction project in Zanzibar; the study findings revealed that, good financial management, proper planning and knowledge and skills are the possible measures to reduce the problem of delay road construction project in Zanzibar.

## **5.3 Conclusions**

Presented findings and summary from the current study provide enough evidence to establish the conclusion on the assessment of the impact on delaying governmental road construction projects to the society in Zanzibar as follow:

### **5.3.1 The Factors Contribute to the Delay in Government Road Construction Project in Zanzibar**

The study was aimed to assess the factors contribute to the delay in government road construction project in Zanzibar, the finding revealed that, most of the respondents indicated that financial problem, low project supervision, corruption and low construction project as the main factors contribute to the delay in government road construction project in Zanzibar.

### **5.3.2 The Assessment on the Social, Economic and Residential Impact on Delaying of Government Roads Construction Project in Zanzibar**

The study revealed that, the high number of respondents identified environmental destruction, disease, poor business activities and destruction of vehicle as the main social economic and residential impact from the road construction projects in Zanzibar. The communities along road projects corridor, turn to suffer health hazards such as inhaling polluted dusty air, drying-up and pollution of their sources of drinking water. Artificial ponds created by road sides in towns and villages due to road construction activities, provides breeding grounds for mosquitoes, thus resulting in malaria. These health problems in the long run do have economic implications for the country. It may cost the government almost the same amount, if not more, to complete these projects. That the government has to work hard to solve these impacts in order to make people life so safety.

Also, government policy on road construction seems not allowing high interactions with other stakeholders to take much part on the governmental project, financial controlling, high government ownership of the project, and project covering decisions, the differences in organizational goals, and low level of project implementation standard resulted low relationship between government and stakeholders to work with government in road construction projects.

### **5.3.3 The Way to Reduce the Delay in Government Road Construction Project in Zanzibar**

The last was focused on the way to reduce the delay in government road construction project in Zanzibar. The study revealed that, strengthening the budget on road

construction, fighting against corruption, strengthening cooperation with external financial institution, strengthening expertise in road construction, and promoting construction technology, as the methods to be taken to control the delay in government road construction project in Zanzibar.

#### **5.4 Recommendations**

According to the finding, researcher recommends the followings so as to diminish the delay on road construction project in Zanzibar. Government should work together with other private departments dealing with the road construction project in Zanzibar in order to provide the basic stands on the road construction project so as to overcome the challenges facing the society on the delay on road construction project in Zanzibar such as the environmental destruction, place of living, disease, and unnecessary accidents.

The nongovernmental organisations should make sure that they formulate the dynamic goals, which will allow them to participate full on government efforts of improving road construction project in Zanzibar. Even if, there are several strategies taken by government focusing on promoting the road construction project, but there is need of preparing strategies and programs which will bring together with the nongovernmental organisations and other stakeholders on promoting the road construction project in Zanzibar.

Lastly, the policies should be integrated and realistic, there is high need on integrating nongovernmental organisations and individual stakeholders of the road construction project on formulating, implementing and evaluation of the road construction project

progresses in Zanzibar, this will bring together all the road construction project stakeholders and create sense of total participation and recognition on the duty of improving the road construction project and not be seen as mere duty of the government.

### **5.5 Suggestion for Further Study**

The study covers the impact of delaying the road construction project in Zanzibar, from this study it is recommended that, there is a need for further study. Amongst the areas for further study are:

- (i) Assessment of the contribution of foreign direct investment on construction project in Zanzibar
- (ii) Financing and cash flow problems in construction industry in Zanzibar
- (iii) Effects of politicians on delay road construction in Zanzibar

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## **APPENDICES**

### **Appendix I: Participation Consent**

You are request to consent for your participation into a study that aims at assessing the impact of delaying road construction project in Zanzibar with respect to stakeholders' views. The reason for asking you to participate is the fact that you are among the stakeholders and thus a potential respondent in this study.

The study will involve questionnaires, interviews and focused group discussion. The interviews were involved some local peoples, UUB officials and Ministry of construction officials.

The focused group discussion and questionnaires involved UUB officials. The decision to participate is important and therefore you are requested to respond honestly to a few questions on your knowledge, experience and opinion.

#### **Confidentiality**

The information gathered were treated with confidentiality such that only the researcher will access the given information in their raw form. In any way, the given information will not be linked to your individual name during report writing.

#### **Benefits**

There is no direct benefit for your participation in this study. However, your information will contribute to better understanding of the impact of delaying road construction in Zanzibar.

**Participation**

Participation into the study is voluntary. You have the right to decline to participate or to withdraw from the study at any point of the interview without saying the reason for your withdrawal. Your decisions whether to participate or not will not in any way jeopardize your higher education studies or your employment status. If you agree to participate into the study, please, give your signature hereunder.

Signature of the respondent ..... Date .....

Signature of the interviewer ..... Date .....

**Questionnaire for the Impact in Delaying Road Construction Project to Society  
(Case Study: Road Construction in Unban West - Unguja)**

Dear Sir/Madam

I am writing a report and collecting data on the “**The Impact in Delaying of Government Construction Project to Society**”: A case study of road construction project in Urban West Zanzibar. You have been identified as one of the most important person in facilitating this report. Please be free to express anything you know on the subject matter.

Since only a relative number of people are being surveyed, your response is very important. Any information given in this questionnaire will be strictly confidential and it will only be used for academic purpose and not otherwise.

Thank you in advance for your time and effort.

Sincerely,

.....

**Researcher**

**Appendix II: Questionnaire for Citizens who are Living at Urban West Region  
in Zanzibar**

Date of introduction ...../...../2017 Form No.

**Section A: General Information**

1. Name: ..... (Not necessary)

2. Gender: Male = 1  Female = 2

3. Education: select the highest educational level. (Fill the correct number in the box)

Primary = 1  Secondary = 2  Advance = 3  Certificate = 4

Diploma = 5  Bachelor = 6  Masters = 7  Doctorate = 5  Others = 6

4. Street: .....

5. Age: (Fill the correct number in the box)

Below 30 years = 1  Between 31 and 40 years = 2

Between 41 and 50 years = 3  Above 51 years = 4

**SECTION B**

**To identify the factors that contributes to the delay in government road construction project in Zanzibar.**

6. Awareness of Delay road construction (tick appropriate level of awareness)

Awareness of Delay road construction	
Highly Aware	
Low Aware	
No Aware	

8. Level of delay road construction (tick appropriate level of delay)

Level of delay road construction	
High Level	
Mediam Level	
Low Level	

9. Causes of Delay Road Construction (tick appropriate cause)

Causes of Delay Road Construction	
Financial Problem	
Low Supervcision	
Corruption	
Poor Tendency	
Low Technology	
Ongoing road construction	
Construction budgeting	

10. What is your opinion(s) about road construction project in Zanzibar?

.....

.....

.....

.....

**SECTION C**

**To assess the social, economic and residential impact of delaying in government roads construction project in Zanzibar.**

12(a). Do you think there is impact(s) from delaying government roads construction project in Urban West? (Put the right nuberr in the box)

Yes =1, No = 2

13. Social impact (tick appropriate social impact)

Social impacts	
Environmental Destruction	
Road Traffic	
Death	
Accident	

14. Economic Impact (tick appropriate economic impact)

Economic Impacts	
Lower business activities	
Lower income	
Low Development	
Vehicle destruction	

15. Residential Impact (tick appropriate residential impact)

Residential Impacts	
Diseases	
Destruction of place of living	
Environmental noise	

16).What is your opinion on the impact(s) from delaying government roads construction project in Zanzibar.

.....  
 .....

**SECTION D**

**To suggest the way to reduce the delay in government road construction project in Zanzibar.**

17. Do you think the government is taking measure(s) to reduce the delay in government road construction project? (Put the right number in the box)

Yes = 1, No = 2.

18. Good financial management in Construction project (tick appropriate measure)

Good financial management in Construction project	
Proper payment	
Timely payment	

19. Proper planning in construction project (tick appropriate measure)

Proper planning in construction project	
Action plan	
Procurement plan	

20. Knowledge and skill in construction project (tick appropriate measure)

Knowledge and skill in construction project	
Construction and project management	
Communication skills	

21) What is your opinion in measures taken by the government to reduce the delay in government road construction project?

.....

.....

.....

.....

**Appendix III: Interview Guide Questions**

1. Do you think the government is effective in dealing with road construction project in Zanzibar
2. The factor(s) causing delaying road construction in Zanzibar is visible (can be seen). Name them.
3. What are the factors do you think contribute to the delaying road construction project in Zanzibar.
4. What are the most common social or economic impact(s) from delaying government roads construction project?
5. Do you think government is responsible on the impact(s) from delaying government roads construction project Zanzibar?
6. Do you think the government is taking measure(s) to reduce the delay in government road construction project?
7. What is your opinion in relation to delaying in road construction project in Urban West Zanzibar?

**Thanks You for Your Cooperation**