

ST. JOHN'S UNIVERSITY OF TANZANIA



**AN ASSESSMENT OF THE EXTENT OF INCOME CONTRIBUTION OF
BODABODA TRANSPORT BUSINESS TO YOUTH IN DODOMA
MUNICIPALITY**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE MASTER OF ARTS IN COMMUNITY
DEVELOPMENT OF ST. JOHN'S UNIVERSITY OF TANZANIA**

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CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by St. John's University of Tanzania a dissertation entitled "Extent of income contribution of bodaboda transport business to youth in Dodoma Municipality" in fulfilment of the requirements for the Master of Art in Community Development.

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Date

DECLARATION

I, Denis K. Komba, declare that this dissertation titled "*Extent of income contribution of bodaboda transport business to Youth in Dodoma Municipality*" is my own work. It has not been and will not be presented for any other course of study. I confirm that appropriate credit has been given where reference has been made to the work of others.

Signature

Date

DEDICATION

To be honest, I would like to offer my piece of work to my beloved wife Selina G. komba and my lovely children Savior D. Komba, Stanley D. Komba and Everine D. Komba with their patient and moral support during my study and completion of this work.

I also confer this piece of work to my beloved parents Sarafina K. Komba and Izack K. Challe also my Uncle and Aunt Beno R. Mapunda and Madovena K. Komba respectively for their patience, support, and encouragement; without their cooperation it would not have been possible to complete the study.

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LIST OF ABBREVIATIONS

DFID	: Department for International Development
FAO	: Food and Agriculture Organization
ICCU	: Injury Control Centre Uganda
IFAD	: International Fund for Agricultural Development
PPE	: Personal Protective Equipment
UE	: Uganda Entrepreneurs
UNESCO	: United Nations Educational, Scientific and Cultural Organization
WHO	: World Health Organization

ABSTRACT

This study was carried out in Dodoma municipality. The study aimed on assessing the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality. However specifically the study intended to: - identify the youth engaged in bodaboda transport business, determining the extent to which bodaboda transport business has benefited youth in terms of income, determining the extent to which youth's income has improved during engagement with bodaboda transport business and their situation before engaging in the business and examining the challenges faced youth who were engaging on it upon generating their income.

The study had a sample size of (N=90) youth who were engaging in riding bodaboda transport out of 944 youth in Dodoma Municipality. Survey research design was used whereby both quantitative and qualitative approaches were used. Treatment effect model was used to determine the challenges faced youth's income generation in this business and the instruments for data collection consisted of checklist for interview and questionnaire. On top of that the study found out that, variables included in the model were good predictor for reporting challenges facing youth engaged in bodaboda business transport upon generating income ($R^2=70.5\%$). In regarding to that, engaging in bodaboda transport business has benefited youth in terms of income.

The income of youth noted to increase twice after joining bodaboda transport business. Also, it has been noted that, 93.3 % of the youth use income accrued from bodaboda business to buy food, helping their relatives and paying various civil obligations in the community. Bodaboda income helps

them to pay house rent, to buy eating utensils, furniture and supporting them on medical services. Therefore, bodaboda transport business has a significant role towards promotion of youth income. Hence, the government needs to establish frequent training to youth to help them to know all road safety rules which will eventually ensure more safety, reduce accidents and bodaboda death related events to bodaboda riders, their clients and pedestrians.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This study intended to investigate the extent of income contribution of bodaboda transport business to youth taking a case of Dodoma Municipality. This chapter comprises of the background of the study problem, statement of the problem, objectives of the study and conceptual framework, research questions, as well as significance of the study.

1.2 Back ground to the study problem

All over the world, the motorcycle transport business has played a major role in employing majority of the youth particularly those found in the developing world (Mbugua, 2011). The great growth rate of motorcycle has modified quickly the whole picture and becomes more and more popular by its advantages. For example Over the past decade there has been a significant growth in the use of motorcycles as a commercial public transport mode in countries in Sub-Saharan Africa, Latin America and Asia (Kumar,2011) . While offering certain transport advantages in the form of easy manoeuvrability, ability to travel on poor roads, and demand responsiveness, commercial motorcycle service growth has also led to an increase in road accidents, traffic management problems and persistent noise (Chalky, 2010; Golden, 2012).

In Africa, youth are involved in bodaboda transports simply because they are looking for a means to obtain their daily livelihood (Tamfu, 2014). However, it has been noted that, most motorcycle business in Africa remains informal with very little or no regulations (Tamfu, 2014). For example, Kumar (2011) who carried his study in Lagos, Nigeria and found out that, there are over

200,000 commercial motorcycles, providing direct employment to over 500,000 young people. This indicates that young people are the major benefited population in the business of bodaboda transport, though there is a feeling that, they are gaining very little as their income from bodaboda business transport particularly in East Africa.

Uganda is one of the East African countries, whereby the bodaboda business transports was first originated in the Busia County of Tororo District in Eastern Uganda in the mid-1960s (Malmberg, 1994). According to Meese (2011) who argued that bodaboda operators are mostly young men who provide a bodaboda service between rural areas and rural townships in many districts of Uganda. However, Klosterboer (2013) who found that the business of bodaboda is one where a person is almost certainly assured of making some money enough to feed the family, because traffic situation is not getting any better hence, more passengers are opting to use these bikes, despite their nickname of death-on-wheels (Klosterboer, 2013). These feelings seem to increase at high rate the uses of bodaboda transport business as a means of transport in most cities in Tanzania (Chalya, 2010). Over time motorcycle (Bodaboda) transport businesses in Tanzania have been increasing and are mostly undertaken by youths. Dodoma Municipal council (2013), the department of trade and commerce stipulates that many youth in Dodoma estimated over 944 of bodaboda riders are engaging in this business and the fact that it has drawn many youth in it probably due to income realised from the business. Tanzania, on the other hand, has experienced a significant growth of commercial motorcycle transport since 2005 (Phillipo *et al.*, 2010). Bodaboda transport has become more popular, cheapest and easiest means of transportation in most cities (Chalya, 2010).

It has been reported that majority of young people have been employed due to the presences of bodaboda transport. However, bodaboda transport business has been one of the sources of injuries and death (Chalya, 2010). Along with motorcycle injuries, disability and deaths have been the main sufferers to motorcyclists and passengers (Peden, 2004; Solagrebu *et al.*, 2006). The popularity of this mode of transport in Tanzania could be due to being a quick means of transport especially for short distances in cities and towns; an efficient in mitigating traffic jam delays in the cities; the availability, reliability and affordability throughout the day and night hours as well as the ability to travel on poor roads (Golden, 2012). Various studies have been done across this phenomenal however, majority of them have just dwelt on causes and effects of bodaboda transport to the community and how it improved road transport where most of these studies were done in Dar es Salaam and Mwanza cities. Little has been explored regarding the contribution of commercial motorcycle in promoting youth's income specifically in Dodoma Municipality.

Subsequently, Dodoma region is one among the poorest regions in Tanzania, characterised by low agriculture productivity (arid land), massive unemployment, and increasing population density (Msaki *et al.*, 2012; Ndanga, 2012). Youth has no where to go because they also need their daily basic needs to meet their family livelihoods, so the demand of bodaboda transport has been a source of employment to many of the young people in this region (Kulekana, 2013). It has been noted that young bodaboda riders are not using bodaboda which belongs direct to them and thus the extent of the income contribution of bodaboda transport business to youth in Dodoma

municipality is not well established. It is because of the above reason this research was carried out in Dodoma Municipality.

1.3 Statement of the study

It has been observed that there are many bodaboda riders in Dodoma Municipality with total of 944 in number who were registered from their groups as stipulated by statistics from department of trade and commerce, in Dodoma Municipal (2013). However, many youth run to this business so as to earn their daily income. Despite of challenges facing bodaboda riders in Tanzania, it has been observed that, bulks of youth living in urban area are employed in Bodaboda transport business for earning of their livings. It has found that Dodoma region is one among the poorest regions in Tanzania, characterised by low agriculture productivity (arid land), massive unemployment, and increasing population density (Msaki et al., 2012; Ndanga, 2012). Youth has no where to go because they also need their daily basic needs to meet their family livelihoods, so the demand of bodaboda transport has been a source of employment to many of the young people in this region (Kulekana, 2013). However, it is not yet known and documented to what extent these bodaboda transport businesses have any significant impact on contribution to youth's income. For years now motorcycle (Bodaboda) transport business has drastically grown while youth through bodaboda have been able to employ themselves in Tanzania (Tigo Tanzania, 2014). However, most of bodaboda riders in Tanzania are just working for their bosses who take the biggest share of the income, and themselves are the ones exposed to risks of accidents and getting killed by robbers (Kulekana, 2013). Various studies such as Chalya et al., (2010); Odero (2009); Leshabari (2002); Naddumba (2004) and Galukande *et al.* (2009) in

Phillipo *et al*, (2010) which have been conducted in the past observed that, bodaboda transport have continued to be one of the most common causes of road traffic injuries which contribute to high public health problem and death in Africa and Tanzania in particular. However, few scholars have explored on the contribution of commercial motorcycle in promoting youth's income specifically in Dodoma Municipality.

Since the extent of income contribution of bodaboda transport business to young people in Dodoma municipality is not well documented. Therefore, it is due to the fore mentioned reasons this research was carried out.

1.4 Objectives of the study

1.4.1 General objective

The general objective of this study is to assess the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality.

1.4.2 Specific objectives

Specifically the study intended to:-

1. Identify Youth's engaging in bodaboda transport business in the study area.
2. Determine the extent to which bodaboda transport business has benefited youth in terms of income in the study area.
3. Determine the extent to which youth's income has improved during engagement with bodaboda transport business and the situation before engaging in the business.
4. Examine the challenges facing youth when engaging in bodaboda business transport upon generating income in the study area.

1.5 Research questions

1. Are there any youth who engage in bodaboda transport business?

Measurement indicators

- a) Number of bodaboda riders

2. To what extent has bodaboda transport business benefited riders in terms of income in Dodoma municipality?

Measurement indicators

- a) Owner's Income
- b) Rider's Income
- c) Capacity to invest.

3. To what extent youth's income has improved during engagement with bodaboda transport business and the situation before engaging in the business.

Measurement indicators

- a) Income before
- b) Income after
- c) Uses of this income

4. Are there any challenges to bodaboda transport business and its participants in the study area?

Measurement indicators

- a) Sex of household head
- b) Age of respondents
- c) Taking alcohol
- d) Driving and business license
- e) Carrying more than one passengers

- f) Multiple taxes
- g) To be chased by the traffic polices.
- h) Education both driving and means of communication.
- i) Injuring and death.

1.6 Significance of the study

The study is based on the premise that bodaboda transport business provides vital opportunity not only for poverty alleviation but also for sustainable development. Also the study provided significant information on the contribution of bodaboda transport business upon generating income such as empirical evidence on how youth bodaboda riders can benefit from the use of the bodaboda transport as a business. The findings from this study have provided information to the Dodoma Municipal Council policy makers on the bodaboda transport and the way it works to contribute income to youth.

1.7 Delimitation of the study

Delimitations inform the boundaries of the study (Best et al., 1993). This study strictly focused on the extent of income contribution of bodaboda transport business to youth. It was mainly geared towards bodaboda transport business in Dodoma Municipal Council. Therefore, findings of this study may not be generalisable to other populations. However, the insights gained in this study may prompt other scientific investigations on this research topic.

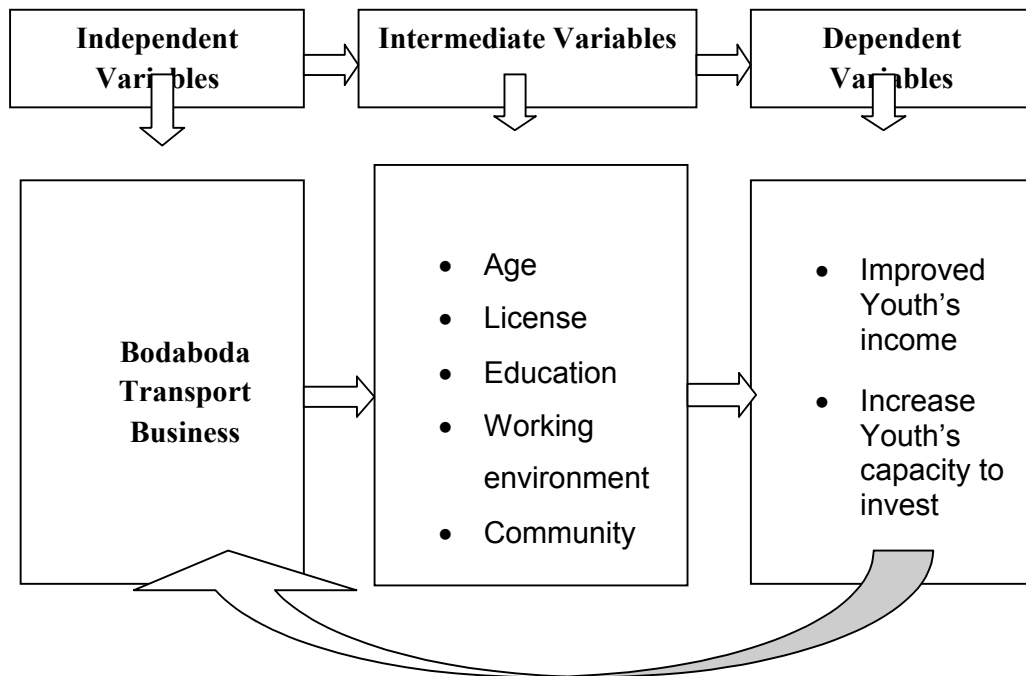
1.8 Conceptual frame work

The conceptual framework for this study consists of three variables, namely independent variable, intermediate variables and dependent variables (Mwakalalila, 2005; Mwenda, 2012). The Conceptual framework (figure1.1)

indicates the relationship between variables. These variables include independent variables, intervening variables and dependent variables.

The independent variables include motorbike transport service whereby commercial motorcycle owner drivers and owners earn income through fare collection for renting their motorbike to passengers in need of transport service. On the other hand, intervening variables include motorcycle business working environment. In this there are age, education, license, communication policies and other government agencies governing motorcycle transport business are analyzed to see the role they play in influencing commercial motorbike business performance.

FIGURE 1.1: CONCEPTUAL FRAMEWORK FOR ASSESSING THE EXTENT OF INCOME CONTRIBUTION OF BODABODA TRANSPORT BUSINESS TO YOUTH IN DODOMA MUNICIPALITY



Adapted from Mwenda (2012)

1.9 Definition of key terms

1.9.1 *Bodaboda*

Bodaboda services are known to have originated in the Busia County of Tororo District in Eastern Uganda in the mid-1960s (Malmberg, 1994). Confusingly both bicycle and motorcycle services are often known by the same name *Bodaboda*, although Machala (Western Uganda) or zabala (Mukono District) are preferred in some areas for the motorcycle services (Leyland, 1999). In this research the term bodaboda was used for motorcycle services since it is the most commonly used term. In this study bodaboda is conceptualized as the instrument which is used by the youth to carry passengers from one point to another in order to generate income for them and for their bosses. In Kenya and Uganda Bodaboda's are used to transport passengers and goods across the boundary of the two countries.

1.9.2 *Youth*

UNESCO, (2009) defined youth as a period of transition from the dependence of childhood to adulthood's independence and awareness of our interdependence as members of a community. Youth is a more fluid category than a fixed age-group. For proper understanding the definition the United Nations, for statistical purposes, defines 'youth', as those persons between the ages of 15 and 35 years, without prejudice to other definitions by Member States. For the purpose of this study youth is recognized as person aged between 15 to 45 years as operation definition.

1.9.3 *Income*

The term has been defined by different scholars depending on their origin and experiences they passed through. For example Barr (2004), defines income as the consumption and savings opportunity gained by an entity

within a specified timeframe, which is generally expressed in monetary terms. While case and fair (2007), defined the term income as the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However, case and fair (2007), also define it for households and individuals, that income is the sum of all the wages, salaries, profits, interests' payments, rents and other forms of earnings received in a given period of time. This study concurs with case and fair (2007) because they definitions consider income of households and of individuals.

1.10 Chapter summary

The introduction of the study cover the background of the problem, statement of the problem, conceptual framework, research objectives, significant of the study, research questions and definitions of key terms. Generally the extent of income contribution of bodaboda transport business to youth is not well known in Tanzania. Therefore the research objectives of this study have sought to assess the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality. The study has a paramount significance to provide information on the contributions of Bodaboda transport business income generation such as empirical evidence on how youth bodaboda riders can benefit from the use of the bodaboda transport as a business. Hence the research questions have been structured to yield good results on the extent of income contribution of bodaboda transport business to youth. Finally the definitions have been provided to guide the reader of this study on meanings of various terms which are used in this research study.

1. 11 Organization of the Study

The whole study is organized into five chapters. The first chapter entails background to the problem and the general chapter arrangement. Chapter two comprises the review of related literature. The third chapter deals with the methodology used for data collection and analysis. Chapter four covers the data analysis, presentation and discussion of the findings of the study. Lastly, the fifth chapter presents the summary, conclusions and recommendations for action and further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter reviews various arguments and findings from different authors with the aim of adding knowledge and familiarizing the researcher and other readers with information relevant to the study area. The review covers theoretical and empirical evidence.

2.2 Theoretical review

This explains the theoretical aspects associated with the extent of income contribution of bodaboda transport business to youth. The focus was to obtain a deeper understanding of the concept and its relevance to the bodaboda transport business to youth and how income obtained from riding bodaboda contributed the quality of youth's life.

2.2.1 Theory of income

Samuelson and Nordhaus (2004) describe the theory of income as the way total output, income, or wealth is distributed among individuals or among the factors of production (such as labour, land, and capital) of which all these level have creation of income. The theory was further described by Harrod (1939) who argued that the theory of income is a function of capital stock (saving). From the theory Harrod believed that saving is the sacrifice of which triggers the increase of income. Therefore income of Bodaboda riders can be viewed as total amount obtained after reducing the amount required to submit to the owner and operanazation of the bike and this case of the bodaboda.

2.2.2 Employment theory

Odekon (2007) believed that employment is concerned with the relative levels of output in an economy. These beliefs about employment theory was triggered by the severity of the Great Depression of the 1930s in the United States and Europe due to its failure to explain the persistent high levels of unemployment and the low levels of business productivity (Swartz, 2009). In relation to that Keynes in the theory of employment says the labour market is just another market where people get paid what they make and people only work if they get paid enough to make it worth. Since it seemed unlikely that society had run out of money-making jobs, it was assumed that unemployment was caused either by people not knowing where the jobs were (frictional unemployment) or insisting on being paid more than they could make voluntary unemployment (Swartz, 2009). This study has adopted this theory of employment because bodaboda transport business is viewed as the employment opportunity to the youth who earn income and making life through riding bodaboda as a transport of goods and people from one place to another.

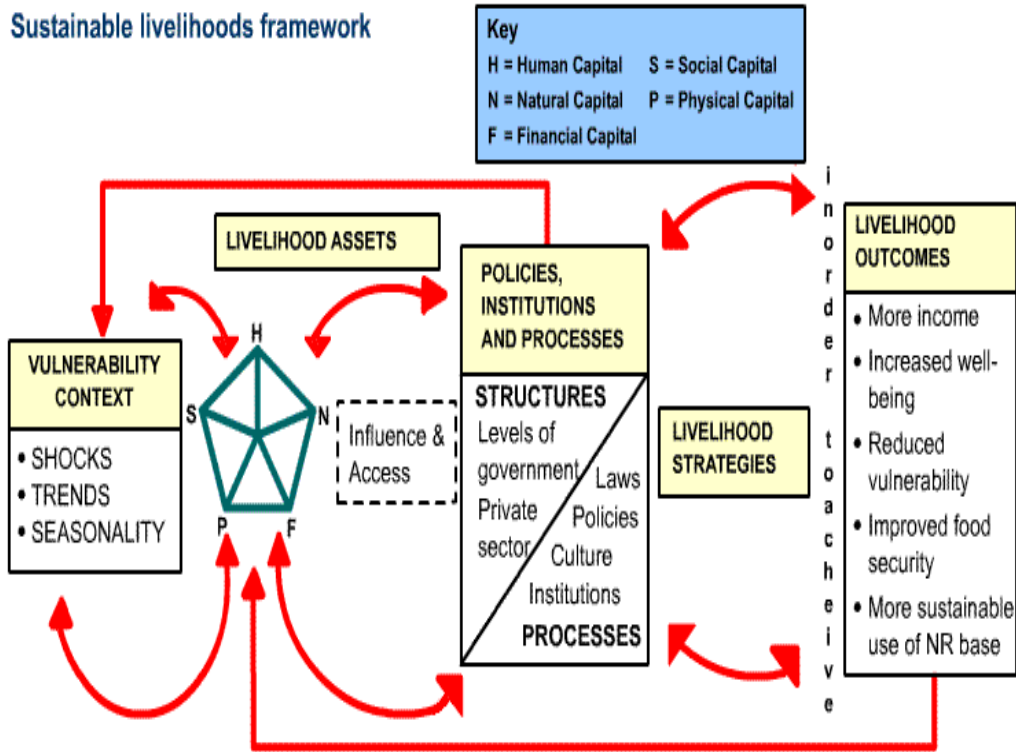
2.2.3 Bodaboda transport business and livelihood framework

2.2.3.1 Livelihoods framework

The livelihoods framework examines different elements that contribute to people's livelihood strategies. The framework comprises livelihood strategies, livelihood institutions, livelihood outcomes, and livelihood assets (DFID, 1999; IFAD, 2013). The livelihoods framework is a tool to improve our understanding of livelihoods, particularly the livelihoods of the poor. Using this framework in this study, enables to provide a link which is existing between the institutional livelihoods and its outcome to the youth's bodaboda

riders. Whereby, Bodaboda is viewed as livelihood strategies among the youth who are earning income from it.

FIGURE 2.1: SUSTAINABLE LIVELIHOOD FRAMEWORK



Source: DFID (1999)

2.2.3.2 Livelihood strategies

According to Serrat (2008) contends that, Livelihood strategies aim to achieve livelihood outcomes. The choice of livelihood strategies may involve natural resource based activities, non-natural resource based and off-farm activities, migration and remittances, retirement funds and grants, intensification versus diversification, and short-term versus long-term results, some of which may compete. In addition to that, Kollmair and Gamper, (2002) explains that, Livelihood Strategies comprise the range and combination of activities and choices that people undertake in order to achieve their livelihood goals. Therefore in this case livelihood strategy in the

present study area is the bodaboda whereby people especially youth are using bodaboda transport as the strategies of generating their income.

2.2.3.3 Livelihood Institutions

According to Serrat (2008) points out that, Livelihood institutions are body of the public and Private sectors which act as a bridge for policy and legislation, purchase and deliver services, trade, and perform all manner of other functions that affect livelihoods. Therefore, existence of bodaboda transport in the present study area indicates the availability of livelihood institutions as well as it shows that if youth are employed in bodaboda transport business provide a possibility of income generation and hence sustain their livelihood.

2.2.3.4 Livelihood outcomes

According to DFID (1999) who explained that livelihood outcomes are the achievements or outputs of livelihood strategies. But Serrat (2008) argued that the potential livelihood outcomes can include more income, increased well-being, reduced vulnerability, improved food security, more sustainable use of the natural resource base, and recovered human dignity between which there may again also be conflict. In addition to that, livelihood outcome in the study area will depend on how youth are adequately using bodaboda transport as their employment opportunity as the results this will enable to increase their income.

2.2.3.5 Livelihood assets

Livelihood assets are composed into five category as DFID (1999) argued that livelihood assets have various categories such as social capital, that comprises social resources, including informal networks, membership of formalized groups and relationships of trust that facilitate co-operation.

The natural capital includes natural resources such as land, soil, water, forests and fisheries. Physical capital has basic infrastructure, such as roads, water & sanitation, schools, and producer goods, including tools and equipment. Financial capital has financial resources including savings, credit, and income from employment, trade and remittance and human capital. Therefore, bodaboda transport is used as the asset to the youth and for that case it enables them to have income from it.

2.3 Empirical review

This section reviews various previous related studies that have been done on the extent of income contribution of bodaboda transport business to youth.

2.3.1 Youth bodaboda riders and income generation

Youth are among the most important formidable force and resource a country can have in order to boost its social economic development (Golden, 2013). In addition of being large in number, the youth are energetic, courageous and poses new ideas that can make changes to the social economic development if they are well coordinated and involved in economic activities of the country. Regardless such importance youth have been faced with many challenges one of them being unemployment problem (Msigwa & Kipesha, 2013). However, majority of the poor young people in developing countries have being engaging in Motorcycles transport business as the means of searching their livelihoods (Golden, 2013). According to the study done by Kumar (2011) argued that, the sector generates employment and income for large number of people. In Lagos for example, there are over 200,000 commercial motorcycles, providing direct employment to over 500,000 people. This results reveal relatively the same situation as that of are Golden (2013) which evidenced that, in Sub Saharan African countries between 1995 and

2007 commercial motorcycle has increased from about 5,000 to over 40,000 and 10,000 to 200,000 in Kampala-Uganda and Lagos-Nigeria respectively. This finding revolves that the growth of these sectors generates employment to youth as indicated by (Kumar, 2011 and Golden, 2013). Nevertheless, the study in Tanzania shows that in Dar es Salaam, the numbers of registered motorcycles have been noted to reach a total of 482,779 bodaboda up to 2012 year (Mubiru, 2013).

Laboke (2014) reported that in 2013, The Kampala City Council Authority registered over 300,000 bodaboda riders into their system for purposes of safety, while 39% of bodaboda users were women and the average age was 28 years old. Interviews from the same study showed that users of either type of bodaboda are drawn mainly from workers, the business community, students, and health facility patients. People in wage and salaried employment accounted for a little over 43% of users, the self-employed about 38%, with students as an important minority (18%). However, these findings are supported by Howe (1996) who found that owners of motorcycles in urban earn 100,400 Tanzanian Shs per week or US\$56 as compared to 54,200 Ugandan Shs per week or US\$30 in Kampala peri-urbans. Other areas reported to have a high use rate of commercial motorcycle include Afghanistan, India, Indonesia, Vietnam, Colombia, Haiti, Benin and Rwanda (International Road Federation, 2011). Relatively on the same point, Mutiso and Behrens (2011) estimated that some 25,000 and 19,000 people are directly and largely supported by commercial motorbike business in Kisumu and Nakuru respectively.

Therefore, analytically the above literature shows that, youth are engaging in Bodaboda transport business as the means of creating employment to generate income for their family.

2.3.2 Benefits of the bodaboda transport business to youth bodaboda riders

Laboke (2014) reported that Tugende is also a rising boda Cooperative helping the disadvantaged to buy and own their own motor bike, while working in partnership with these groups help training on procedures to be followed when they encounter an attack hence increase safety. On the other hand, the study done by Papoo (2012) reported that bodaboda are very cheap. For example people travel a distance and pay however; their use is not without hazard in the bustle of the streets. Because there is no helmet you could use, and you cannot be sure if the driver knows anything about safe driving.

Furthermore, a study done in Kenya on bodaboda shows that the motorcycle transport is a form of employment that has given opportunities to many people, both young and old (National Youth Situation Analysis Report, 2009). In addition to that Nyachieo (2013) argued that, for Kenya to achieve the millennium development goals of eradicating poverty, the young people, the government and other stakeholders must work together to ensure that this goal is attained. Hence, the use of bodaboda (motorcycle) is one way of creating employment and therefore needs to be streamlined to improve efficiency and reduce the many accidents involving motorcycles (Nyachieo, 2013).

On top of that, a study by Salira (2013) reveals that, mostly affected people are those without valid immigration documentation and insurance, for instance bodaboda operators and several Tanzanians have been arrested and even imprisoned at Taveta for lack of such documents. The lack of such documents have hindered youth people to move freely from Tanzania to Kenya using their bodaboda for business in order to facilitate them to earn more income through such a business strategy. Moreover, Tamale (2007) argued that in Uganda one of the key advantages of a well-regulated public transport industry is its indispensable role in establishing a competitive, productive and efficient city. Also Tamale (2007) reports that using bodaboda experience less traffic jam and spend more time working than those using car.

Moreover, Uganda Entrepreneurs (2013) argued that bodaboda play an important part in Uganda's transport system. They provide a link from the villages to the main roads, where the buses and Matatus run. They cost a little more than buses but, because they are a form of transport for one person, they are very flexible and take people to their exact destination. The Uganda Entrepreneurs (2013) reports that bodaboda is a good place to work from, because most of the customers changed from day to day. The bodaboda gives the bodaboda riders some independence and a regular income, while majority of bodaboda riders were able to marry, having home and sufficient saving for a deposit at the bank. Uganda Entrepreneurs (2013) found out that in the year 2000 about 44% of motorbikes Bodaboda were owned by the riders or their families. The other 56% were hired from others.

The Observer (2012) has been revealed that at least 62.5% of the budget allocated to the directorate of surgery at Mulago hospital is spent on victims

of accidents involving bodaboda (commuter motorcycles). Also a report that followed a study carried out by Makerere University College of Health Sciences and the department of Orthopaedics reported that bodaboda were involved in 41% of all motor accidents. The report says the average cost of treating a bodaboda victim with head injuries or broken limbs is Shs 700,359. This report is relatively the same to that of Mulago hospital which reports that, the hospital receives five to 20 boda boda-related accident cases every day.

2.3.3 Improvement of youth quality of life and income during engagement with motorcycles transport business

In many developing countries, motorcycles are increasingly becoming the common means of transport especially among low-income urban dwellers (urban poor) and many rural people (Dinye, 2013). Like many economic activities that are capital intensive in infrastructures, the transport sector is an important component of the economy impacting on development and the welfare of populations. When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multipliers effects such as better accessibility to markets, employment and additional investments. When transport systems are deficient in terms of capacity or reliability, they can have an economic cost such as reduced or missed opportunities (Kumar, 2011).

Nakiyimba (2012) argued that in Uganda bodaboda motorcycles are the fastest mode of transportation. They are not only swift, but also reliable in times of emergencies when vehicles get stuck in a jam or can't access certain areas; these motorcycles slither their way through with ease. While a study done in Nigeria by Beekers (2008) reports that, bodaboda transport

business are now one of the primary modes of transportation in Nigeria, and comprise a cheap and adaptable transportation system, the most popular informal one in the country by far. Even in remote villages, they arrive at regular intervals. It has become a means of transportation regularly used by the young and the old, and men and women. In line with the above Chalya *et al.*, (2010) reported that, in Tanzania bodaboda transport they are a quick means of transport especially for short distances in cities and towns, they are efficient in mitigating traffic jam delays in the cities and they are available throughout the day and night hours. This information tells us that, bodaboda transport provide an easiest way and efficient in penetrating traffic jams, hence more time will be dedicated in doing economic activities.

In addition, in Kenya it is reported that, the motorcycle transport is a form of employment that has given opportunities to many people, both young and old at a time when the world is facing a global unemployment problem. According to Nyachieo (2013) reports that in Kenya the use of bodaboda motorcycle is one way of creating employment and therefore needs to be streamlined to improve efficiency and reduce the many accidents involving motorcycles, and recommended that, this can be done by the government initiating rider specific driving schools to encourage formal training for riders and proper legislation. While a study done in Uganda by Nakiyimba (2012) reports that, with the high rate of unemployment, this fast-growing means of transport employs a bulk of youth in Uganda, about 80 per cent of young people between 20 to 30 years old are earning a living by picking up and dropping off passengers. Also Lusekelo (2014) reported that in Arusha, Tanzania the public-private partnership policy has started bearing fruits in Arusha, whereby nearly 100 youth in the northern safari capital are now self-

employed in motorcycle taxis' business popularly known as 'Tuktuk'. The new employment opportunities were created within a shortest period of time, hence the programme were meant to empower motorcycle taxis' riders in the safari capital to acquire soft loans and purchase 'brand' new motorcycles for transport business.

Moreover, the use of bodaboda reported to generate income to the youth people, for instance in Tanzania, the average amount of money which a bodaboda rider are supposed to submit to the bosses every evening after a driver's shift is over is Tsh10, 000/= which is about \$7 (Kulekana, 2013). While in Uganda reported that, about 60% of male and 38% of female users say that use of bodaboda services results in increased income. Increased ability to penetrate less accessible areas where they were able to purchase at lower costs than formerly. Also there was greater mobility of their customers as a factor that had also increased sales (Howe, 1996).

In Uganda for over 90% of men and women users bodaboda services have resulted in significant changes in lifestyle by increasing the range and number of the activities in which they engage. They have also enabled them to save time and be more punctual to make activities easier; and increase their personal performance and output. Only 7-8% perceives no change they use the services because they are more convenient (Howe, 1996).

Therefore the use of bodaboda seems to have an improvement in quality of life for the youth as observed. The observation show that bodaboda create employment, serve time, create income, and source of transport.

2.3.4 Challenges faced by the bodaboda riders in creating their income.

Many cities in Africa are using bodaboda. Despite of bodaboda being a threat toward youth lives still people are engaging in for searching their livelihoods to improve quality of their life. For instance in Uganda, bodaboda use has become the leading cause of death and injuries on most roads. It has led the national referral hospital to set up a special ward to handle victims of motorbike-related accidents (Nakiyimba, 2012).

Also a study done in Nigeria reveal that the rise in Okada or Bodaboda usage has been accompanied by increased occurrences of risky driving and accidents on Nigerian roads as a result, Okadas have come under heavy criticism resulting in legislation intended to restrict or prohibit their operation in some Nigerian cities (Beekers, 2008). In connection to the above in Mwanza, Tanzania the injuries related to motorcycles contribute significantly to the number of road traffic injuries in Mwanza city, taking out significant resources including consumables and the health worker time. On the other hand the study done by Naddumba (2004); Galukande *et al.*, (2009) reports that the negative side of motorcycle as a means of transport is the risk of injury and they constitute a major public problem in major cities in developing countries like Tanzania. This information reveals that bodaboda transport business impacted highly on the risks of injuries and death of the bodaboda riders and passengers how are the uses of bodaboda transport.

However, Nakiyimba (2012) reports that in urban areas have the highest concentration of commercial motorcycles, and the largest number of injuries. Riders often flout traffic laws, running traffic lights at city road junctions and driving on the wrong sides. Their driving is characteristically reckless, as they squeeze their way in between vehicles during traffic jams, putting the lives of

their passengers at risk (Beekers, 2008). In connection to the above, Nakiyimba (2012) argued that, in Uganda passengers are more often injured than riders, and women are more prone to motorbike accidents than men. More females are injured as bodaboda passengers than in road traffic accidents. Also some parents hire bodaboda riders to pick up and drop off their children at school in the morning, putting the lives of children at risk. Hence it is dangerous to put a child on a bodaboda and it's the worst abuse of their rights.

Moreover a study conducted in the United States in 2004 showed that while about 15.0 cars out of 100,000 ended up in fatal crashes, the rate for motorcycles was 69.3 per 100,000 (US, 2004). Also a study at the Obafemi Awolowo Teaching Hospital, Ile-Ife, Nigeria, showed that injuries to limbs occurred in 79.3% of patients who reported at the emergency department of that hospital. The same study also stated the male to female ratio of accident victims to be around 2.8:1, and identified the use of personal protective equipment (PPE) to be practically nonexistent among bodaboda riders (Beekers, 2008).

In connection to the above, Health effects, have been reported as one of the challenge. According to Nakiyimba (2012) in Uganda Health experts cautioned the bodaboda riders that they may suffer eyesight problems due to the direct wind and dust that blows into the eyes and also their reproductive organs are in danger because most of their time spent on bodaboda. Moreover incompetence on the operationasation of the bodaboda among the bodaboda riders, counting to 90 per cent of riders are incompetent. These riders did not get any formal training, and they do not comprehend road safety tips whatsoever. Nakiyimba (2012) Uganda must develop a process to

register all riders and their motorcycles, in order for law enforcement officials to follow them regularly. A study conducted by the Injury Control Centre Uganda (ICCU) at the national referral hospital shows a decline in the use of crash helmets. In 2011, 30.5 per cent of riders used helmets, while 0.8 per cent of helmet use was recorded among passengers. A previous study done by the ICCU and the World Health Organization in 2006 registered 42.6 per cent helmet use by riders and 0.26 per cent among passengers.

Lastly but not the least, Wangoda, reported that, two patients die on average every week at Mulago hospital as a result of bodaboda accidents Nakiyimba (2012). Between 10 and 20 victims of bodaboda accidents are received at Mulago hospital on a daily basis and 20 per cent of the victims are left disabled Nakiyimba (2012). The 2011 annual traffic report shows that a total of 1,762 serious accidents involving motorbikes occurred in the capital city during that year. The traffic commander of the Kampala Metropolitan Police, noted that 155 passengers perished in motorcycle-related accidents (Beekers, 2008; Nakiyimba 2012).

2.4 Research knowledge gap

Various literature have evidenced that bodaboda transport has created a numbers of employment opportunities to the majority of youth found in many developing countries including Nigeria, Ghana, Uganda, Kenya, Tanzania and some parts of Asia.

In Tanzania for years now motorcycle (bodaboda) transport business has drastically grown, however in other cities like Dar es Salaam and Mwanza such studies have been done, but in Dodoma Municipality it has not yet been documented. Despite of various challenges facing bodaboda riders in

Tanzania, the literature reveal that, bulks of youth living in urban area are employed in bodaboda transport business for earning their living which includes income and welfare. However among other issues apparently left unaddressed by previous research include to what extent these bodaboda transport business have any significant impact on contribution to youth's income. This study wants to fill that gap by assessing the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality.

2.5 Chapter summary

The review of literature covers both theoretical and empirical review. In theoretical review various concepts and definitions on contribution of bodaboda transport business to youth have been discussed; also theories of income such as the neoclassic theory of income have also been discussed, livelihoods model as well as employment theory. In empirical review various studies conducted on contribution of bodaboda transport business to youth in income generation have been discussed. Many studies have documented about the impact of bodaboda to the community and find out that bodaboda is the one of the causes of health problems, injuries and death in Africa and Tanzania in particular, however the extent of income contribution to youth is not well documented.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the overall research design, location of the study and sample of the study, sample size, sampling techniques which were used to select participants, data collection techniques that was used to collect relevant information and data analysis as well as sources of data collection techniques.

3.2 Research Design and approach

3.2.1 Research Design

This study employed survey research designs. In a survey design, information is collected from a relatively large number of cases or units of inquiry under investigation aimed at understanding the selected characteristics (variables) of the entire universe or population (Krishnaswami and Ranganatham, 2005). Specifically, the design was chosen because the study involved large number of cases or units. Also because of its flexibility in terms of simplicity in collecting many types of information from few individuals at a particular time, related to the use of various methods of data collection and analysis, ability to draw generalizations about a large population on the basis of a representative sample as well as being less expensive and time consuming (Adam & Kamuzora, 2008; Krishnaswami and Ranganatham, 2005).

3.2.2 Research approach

The study used both the quantitative and qualitative approaches. In the quantitative research study, the objective was to classify features, count them, and construct statistical models in an attempt to explain what is

observed. The major consideration on the qualitative research approach involves analysis of data, for example words from interviews and pictures or objects such as artifacts in contrast to the quantitative research that involves analysis of numerical data.

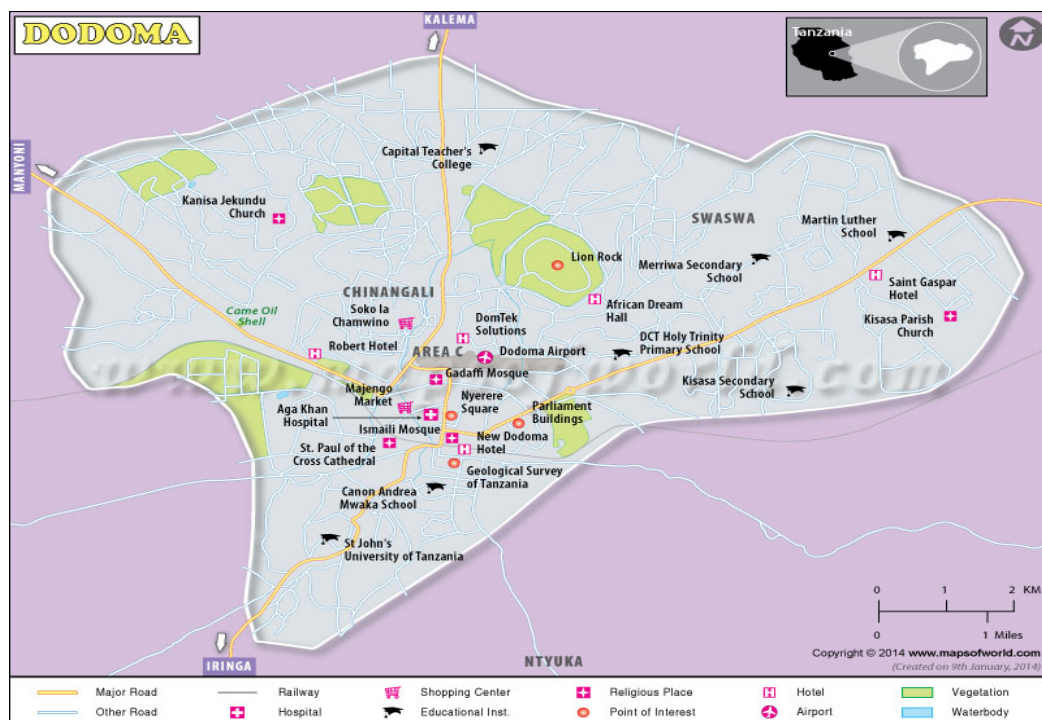
Neumann (2009) contends that one of the major advantages of quantitative techniques is its perfection when probability sampling is employed. If done correctly, probability sampling allows having a representative snapshot of the population under study. On the other hand, qualitative research approach was used to supplement the quantitative one. This is due to its capability of probe and explain those relationships and to explain contextual differences in the quality of those relationships (Lugumira, 2013). Hence, the purpose of this study was to investigate the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality, whereby both qualitative and quantitative data were used.

3.3 Location for the study

This study was conducted in Dodoma Municipality which is found within Dodoma Region. The region is located in the heartlands of Tanzania. Geographically, Dodoma municipality lies at 40° to 70° latitude south of equator and 350° to 370° longitude East of Greenwich meridian. It is bound by four regions namely Manyara in the North, Morogoro in the East, Iringa in the South and Singida in the West. Much of the region is plateaus rising gradually from 830 meters in the Bahi swamps to 2000 meters above the sea level in the city highlands, North of Kondoa. Dodoma Municipality is one of the six Districts of Dodoma Region. The other five Districts are: - Kondoa, Bahi, Chamwino, Kongwa and Mpwapwa. Dodoma urban's population is 324347 according to the of 2012 census. The town is 486 kilometres (302

miles) and 400 kilometres (277 miles) south of Arusha. It covers an area 2669 kilometres (1.01 square miles). It comprises 48.5% males while 166878 people (51.5%) are females. Majority of the population are engaging in business activities which enable them to generate their daily income and feed their family. At the same time, also youth noted to participate in doing business activities such as small businesses, others are riding Bodaboda and the like. The study have been conducted in Dodoma Municipality because is the fast growing city, that has characterized with high increases of population who are coming from various places in Tanzania to search for employment or studying (Golden, 2013). Other reason is that, the researcher is a resident of Dodoma Municipality (convenient sampling), hence little cost was involved to access the information, third, easily accessibility of bodaboda riders, and fourth, there are few studies on the contribution of bodaboda transport business particularly to youth in Dodoma municipality.

FIGURE 3.1: SHOWING MAP OF DODOMA MUNICIPALITY



3.4 Study population

The targeted population for this study was young people who are engaging in Bodaboda riding located in Dodoma Municipality. Mainly, the research focused on this category of respondents in order to satisfy the needs of the study. According Mugenda and Mugenda (2003) argued that, population refers to an entire group of individuals, events or objectives having common observable characteristics. It is the aggregates of all that conforms to a given specification. The present study focused on the youth bodaboda riders found in Dodoma municipal and intended to investigate the extent of income contribution of bodaboda transport business to youth.

3.4.1 Sampling Unit

Sampling unit is either a single member (element) or a collection of members (elements) subject to analysis (and selection) in the sample (Rwegoshora, 2006). The sampling unit in this study is young people who are bodaboda transporters at Dodoma Municipality.

3.4.2 Sampling Procedure

According to Kothari (2006), sampling is defined as the selection of some parts of aggregate of the totality based on which a judgment or inference about the aggregate or totality is made. It is a process of selecting a group of people, events, behaviour, or other elements with which to conduct a study. An important issue influencing the choice of a sampling technique is whether a sampling frame is available, that is, a list of units comprising the study population. During the study, the researcher employed both probability sampling and non-probability sampling. Probability sampling enabled a researcher to obtain the number of respondents who were the young bodaboda riders while multistage enabled to obtain wards within the

Municipal. Probability sampling was through random sampling and non-probability sampling was purposive sampling that enables a researcher to obtain other respondents like key informants.

3.4.3 Sample size for the study

Sample size refers to the number of items selected from the universe to constitute a sample (Kothari, 2000). The sample which was used under this research involved all young people who are engaging in bodaboda riding where as the reliable information/data collected were used to make conclusion on the research problem. Flexibility was considered so as to represent best judgment on the result. The sample size from youth who are engaging in Bodaboda riding was determined by using the formula developed by Yamane (1967) whereby level of precision of 10% was used. The study area comprises a total of 944 young people who are engaging in Bodaboda riding located in Dodoma Municipality. Based on these data the actual sample size was obtained as follows: -

$$n = N/1+N (e)^2.$$

Whereby;

n= Sample size ,

N= Number of members and

e= Level of precision 10 %.

$$n=944/1+944(0.1)^2$$

$$n=90$$

In addition to that there were ten key informatics who were involved in the study (Bodaboda team leaders found in each ward). So the total number of the sample was 100.

TABLE 3.1: DISTRIBUTION OF RESPONDENTS

Respondents	Number of Respondents
Majengo ward	09
Kisasa /Ipagala ward	09
Viwandani ward	09
Kikuyu South ward	09
Kikuyu North ward	09
Kizota ward	09
Mnadani ward	09
Makole ward	09
Dodoma Makulu ward	09
Kiwanja cha Ndege ward	09
Bodaboda team leaders	10
Total	100

3.5 Study procedure

The researcher first sought permission to collect data from Director of Postgraduate SJUT and then Dodoma Municipal Council. The study involved one enumerator and the researcher himself. Data collection tools were prepared in English language and translated into Swahili language. This is because Swahili is the common language used in the study area. Before collecting data required for the study, the researcher briefed enumerator on the ethical consideration to be observed during data collection and on content of data collection methods. Before collecting data required for the study, the researcher carried out a pilot study to establish the validity and reliability of the main research tools. A pilot study involved four respondents randomly selected from the study area. Those who involved in the pilot study were not participated in the main study. The data collection started by doing

interview through questionnaire, and finally documents review. The collection of data took 23 days. The respondents for the interview were obtained from their place of work. Then data was processed by editing, compelling, classifying, coding and summarizing before analysis that was done through Statistical Package for Social Sciences (SPSS).

3.6 Data type and sources

Both primary and secondary data were employed. The collection of data was done in two main sources such as primary and secondary sources during a field survey carried out between 7th and 30th March, 2015. The primary data were collected by single visit interview to targeted group using different methods of data collection. In response to this, the respondents (youth) involved in Bodaboda transport businesses were the main target population of the study. Furthermore the exercise of collecting primary data was an opportunity to the researcher to gather required information to address research objectives. Specifically, the information related to characteristics of respondents, the beneficiaries, of bodaboda transport businesses in terms of income, the extent youth's income has improved during engagement with bodaboda transport business, as well as the challenges to bodaboda transport business and its participants. For the purpose of this study primary data were those data which are collected afresh and for the first time, and thus happen to be original in character (Kothari, 2004). Secondary data were obtained from different sources such as Trade office documents and reports relevant to the bodaboda transport found in the Dodoma Municipal Council. The major purpose of secondary data was to complement.

3.6.1 Data collection techniques

Any research must be accompanied by a collection of data (Best and Khan, 1992; Nkpa, 1997; Kothari, 2002). This study used interview, questionnaires as well as a documentary review and analysis of collected data.

3.6.1.1 Interview

In order to assess the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality, an interview was employed to collect information from youth who are the bodaboda riders which was a discussion between researcher and bodaboda rider (Golden, 2013). The interview was administered to the bodaboda riders as per appendices 1, where it shows the samples of structured questionnaire that asked for collecting primary data through face to face conversation (Olsen & George, 2004). Data were gathered from interviews which were conducted during a survey done between 7th and 30th March, 2015. Specifically, the information collected in interviews were related to characteristics of respondents, youth as beneficiaries of bodaboda transport businesses in terms of income, the extent youth income has improved during engagement with bodaboda transport business, as well as the challenges related to bodaboda transport business and its participants. Basing on the above, this allowed the researcher to interact with the respondents to a better understanding of their response and it was useful when the researcher wanted more deep information about a person's attributes, knowledge and attitudes (Senter et al 2010).

3.6.1.2 Key informatics checklist

The study used checklist for key informatics (appendices 11). This method allowed a researcher to distribute questionnaire with a list of questions to the

bodaboda team leaders to the specified location. Data was gathered from questionnaires administered during a survey held between 7th and 30th March, 2015. The information which was gathered here included the number of bodaboda in the specified location, the extent of growth of bodaboda transport as well as the extent of its contribution to the youth.

3.6.1.3 Documentary review

There are various documents related to the contribution of bodaboda transport business to youth in Dodoma Municipality. These documents rely on information that already exists such as dissertations, books, official statistics, journals, news papers, proceedings, diary (Gall *et al*, 2003). The information that was obtained helped to refine introduction, literature review as well as methodology section of the study.

3.7 Methods for ensuring validity and reliability of research instruments

Good research design provides credible research outcomes. So it is important to select a good research design from the beginning because it ensures validity and reliability of the study. In this study validity and reliability were observed as described below.

3.7.1 Validity

Validity refers to the quality of information gathering instruments or procedures which measure what is supposed to be measured (Cohen *et al*, 2001; and Ezzy, 2002). First and foremost, in the present study measurement to validity was taken in many ways;

- a) A pilot was undertaken, in order to have valid descriptions, the questionnaire was pre tested to validate questions.

- b) Use of in-depth interviews as one of the methods for data collection, this method allowed the respondents to talk freely hence provide the required information as per questions.
- c) In analyzing the data, both survey and in depth interview data were equally considered so as to be able to come up with alternative explanations that were necessary.
- d) Lastly but not the least, the collection of baseline information through structured questionnaires enabled the researcher to organize the data in simple statistics that eventually facilitated the analysis.

3.7.2 Reliability

Reliability refers to the degree of internal consistency of a measuring instrument (Nkpa, 1997; Bryman, 1999). In other words it refers to whether the data accruing from the instrument is consistent, reasonable over time and across researchers (Miles and Huberman, 1994). The present study utilized three data collection methods and instruments which are interviews, questionnaires as well as documentary review. The use of more than one method is referred to as triangulation for maintaining and ensures reliability of the data which were collected to accomplish the study. Triangulation refers to the use of multiple data collection methods, data sources, analysis or theories to increase soundness of one's research finding (Gall *et al*, 2005). Apart from that, in depth interviews were administered and give opportunity for the respondent to fully answer each question.

3.8 Data Processing, Analysis and Presentation

3.8.1 Data processing

The collected data was edited, compiled, classified, coded and summarized manually in order to eliminate errors that could be incorporated during data collection. The purpose is to simplify the analysis of the work. Moreover, in order to draw conclusion data collected from the primary source using the structured questionnaire were summarized, edited and coded before entering them into a computer for analysis.

3.8.2 Data analysis

The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data groups (Kothari, 2004). According to Senter *et al.* (2010), the most frequently used calculations for analyzing quantitative data from program evaluations are averages, weighted averages, percentages, and frequency distributions. In most instances these are adequate to yield the results however Statistical Package for Social Sciences (SPSS) allows high level statistical analysis.

Qualitative information, particularly those related to feelings and opinions of youth were recorded through interviews. Other techniques used include critical analysis of documents sources and analysis was done systematically by summarizing the contents.

Quantitative analysis was done by using Statistical Package for Social Sciences (SPSS) software version 16. Quantitative data were generated using frequency, descriptive and multi response statistics in SPSS. Hence percentages which are easy to calculate were used because they allow showing relationship and making comparisons. Furthermore, cross tabulation

and Chi-square were employed to measure the percentage of respondents, who were able to invest due to income obtained from bodaboda, and also Spearman's rho correlation were employed between total amount of income per week before and after engaging in bodaboda transport business. Lastly, treatment effect models were used to determine challenges to Bodaboda transport business and its participants.

3.8.2.1 Model of data analysis

The treatment effect models were used to determine challenges to bodaboda transport business upon obtaining youth's income and its participants. This model takes a kind of logistics multiple regressions. The usual modeling or Bayesian approach with ignorable treatment assignment starts with a constant treatment effect; for example, $Y_i = \beta_0 + \beta_1 T_i + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + e_i$ Where T_i is the treatment variable. (If we let Y_i be the random response variable in this study, then we assume that Y_i takes on the values 0 or 1, where 0 denote the nonoccurrence of the event in question and 1 denote the occurrence). . If X_1, \dots, X_n are characteristics to be related to the conditional probability of event (i.e., $Y=1$ given the values of X_1, \dots, X_n is as follows:

$$P(Y) = \frac{1}{1 + \exp(-(\alpha - \sum \beta_i x_i))}$$

To linearize the right hand side we applied a logit transformation by taking logarithm of both sides, therefore we had:

$$\text{Logit } P(Y) = \alpha - \sum \beta_i x_i$$

According to Neyman (1923) allowed the possibility for varying effects. Hence this model was useful for this kind of a situation where we want to

determine challenges to Bodaboda transport business and its participants.

The model took the form of:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + E_i$$

Where:

Y = any challenges in obtaining youth income from the bodaboda transport

(1=YES or 0=NO)

β_0 = a constant term

β_1 - β_8 = coefficient or parameter for the independent variable

X_1 = Sex of household head (1=male, 0 =Otherwise)

X_2 = age of respondents (in Years)

X_3 = taking alcohol

X_4 = Driving and business license

X_5 = Carrying more than one passengers

X_6 = multiple taxes

X_7 = to be chased by the traffic polices

X_8 = Education both driving and means of communication.

X_9 = Injuring and death

e = error term (random disturbance error)

3.9 Data presentation

The analyzed data or the obtained research findings and results from the analysis were presented into charts, tables and graphs as well as logical statements. These were used to present data for different studied variables.

The methods are chosen because they are simple to apply and easy to understand.

3.10 Ethical considerations

Ethical clearance was observed by obtaining an informed consent of the participants and maintenance of respondent confidentiality (Kumar, 1999). Every research work needs to be done with particular attention to ethical issues (Cohen *et al*, 2001 and Keya *et al*, 1989). Following this, attention was paid to rules and regulation during process of preparations and conducting the research in the field (Mlaki, 2011). The present research adhered to the research ethics by keeping and treating all responses from the participants with high confidentiality where also anonymous numbers was assigned to all individuals and institutions so as to ensure confidentiality and avoid person harms to respondents.

3.10.1 Informed consent

The intention of the study was explained prior the whole business to help them have an informed free decision to participate or decline the study. After being informed of the facts this would likely influence their decisions (Cohen *et al*, 2001). Furthermore, Cohen *et al*, (2001) argue that an informed consent makes the research provide fair explanations of the objectives and purpose of the study to the participants of the study. Participants were provided with full information of the purpose of the study and the permission was asked from them. This allowed them to be free in answering.

3.10.2 The right to remain anonymous

A participant remains anonymous when the researcher or any other person who reads the work cannot identify the participant or the subject named in the information given. The questionnaire did not identify names. Cohen *et al* (2001) contend that anonymity may be enhanced if a code number links names or other identifiers to the information.

3.11 Limitation of the study

This section indicates challenges anticipated or faced by the researcher.

Among of the issues that were emerged as limitation include;-

- (i). Poor respondent attitude: some of the respondents thought that the researcher was making a study so as to be paid by the organization, so they also wanted to be paid some money. The researcher explained them very well that the research is for academic purposes.
- (ii). Many of the respondents were busy most of their time spend looking for customer. The researcher explained them that they should feel free to provide information but in case a customer appears meanwhile the interview continues then he/she can go to attend that customer and return back later to finish the interview.
- (iii). Time and financial limitations that influenced the scope of the study

3.12 Chapter summary

The research methodology covered the research design, the study site, the study population, the study procedure, the methods of data collection, the method of ensuring validity and reliability, the data analysis method and plan, and the ethical consideration. Generally, the study was conducted in Dodoma Municipality whereby survey research design was used. Both qualitative and quantitative data were collected from youth bodaboda riders were selected randomly. Data collection methods involved interview that was guided by questionnaire and documents review. The methods to ensure validity and reliability of data were observed. Hence data analysis method was planned well to give good results. The ethical issues in relation to the study were considered and finally limitations based on this study were also observed.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Overview

This chapter presents the data as collected from the field by the researcher, owing to the objectives of the study. However studies has been conducted such as; Galukande et al.(2009);Leshabari(2002); Naddumba (2004) and Odero(2009).Observed that bodaboda transport have continued to be one of the most common causes of road traffic injuries which contribute to high public health problem and death in Africa and Tanzania in particular. However, most empirical work does not provide sufficient information on the extent of income contribution of bodaboda transport business to youth. Therefore, the researcher has presented in this chapter the information obtained from the trend of the youth who were engaging in bodaboda transport business in the study area; the extent of bodaboda transport business and it benefits to the riders in terms of income in Dodoma Municipality. However, the extent of youth's income has improved after engagement in bodaboda transport business and analysis of the situation before engaging in the business; as well the challenges facing bodaboda transport business and its participants. The findings are presented in line with research questions.

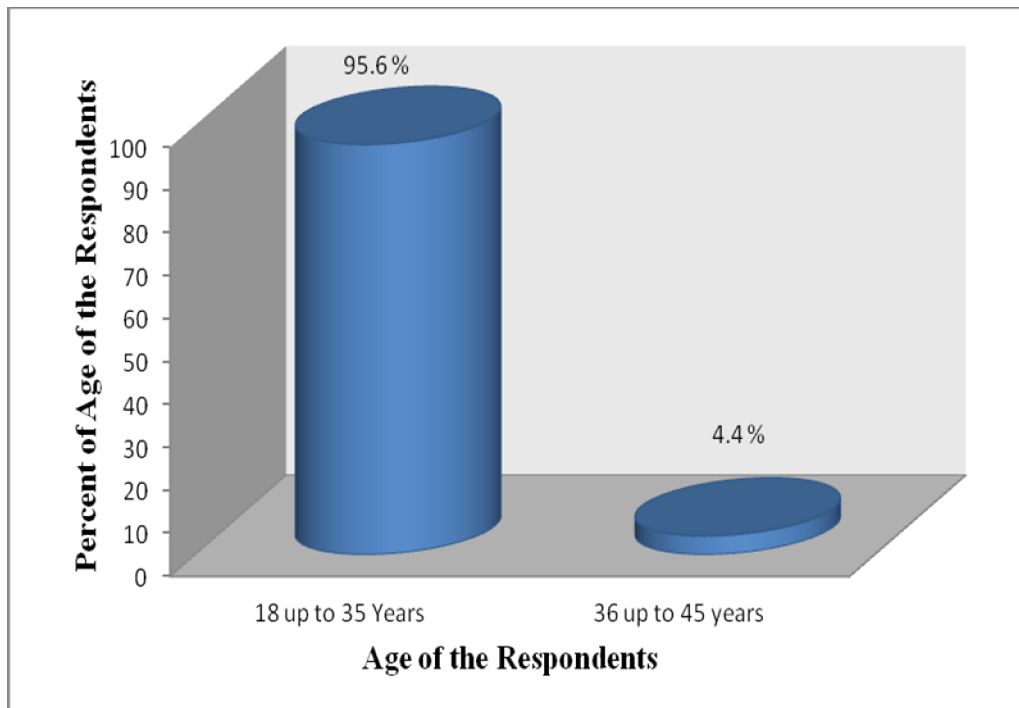
4.2 Study sample characteristics

The analysis of the general characteristics of the respondents in the study included age, sex, education level, marital status, and economic activity of the bodaboda rider as well as household size.

4.2.1 Age distribution of the respondents

As presented in the figure 4.1, shows that, Most of the samples respondents were aged between (18 - 37 years) which are very active age cover 95.6%, adults who are at active age (38 - 43 years) accounts for 4.4% of all of the respondents. The implication is that commercial motorbike business employs both youth and adults hence are benefiting more by earning income from Bodaboda. Similar to these findings is the study done by Golden (2013) who found that, 3 (4%), 19 (33%) and 34 (61%) were children, youth and adults own commercial motorbikes which shows that they were employed in this informal sub-sector.

FIGURE 4.1: SHOWS AGE DISTRIBUTION OF THE RESPONDENTS



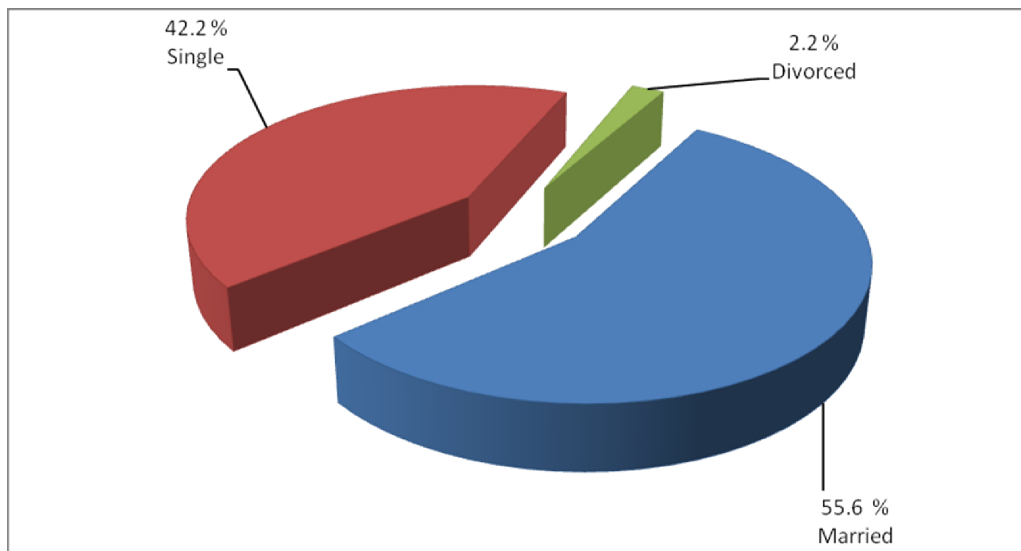
4.2.2 Sex of the respondents

The findings reveal that, all the respondents were male which account about 100 % where female account for 0 % of the studied population. This implies that, majority who are engaging in bodaboda transport business in Dodoma Municipal Majority are men compared to female who seem to be not participating in this activity hence more income earned by men. According to (FAO, 2003) gender has a lager impact on the planning and implementing farm activities.

4.2.3 Marital status of respondents

As presented in figure 4.2, Marital Status shows that 55.6% were married, and 42.2% were single and only 2.2% divorced. This shows that majority of respondents interviewed were married (55.6%). The finding suggests that bodaboda transport business is a potential sub sector that employs both married and unmarried individuals. According to Golden (2013) found that some of the respondents who own bodaboda were 64 % who were married while 22% were single.

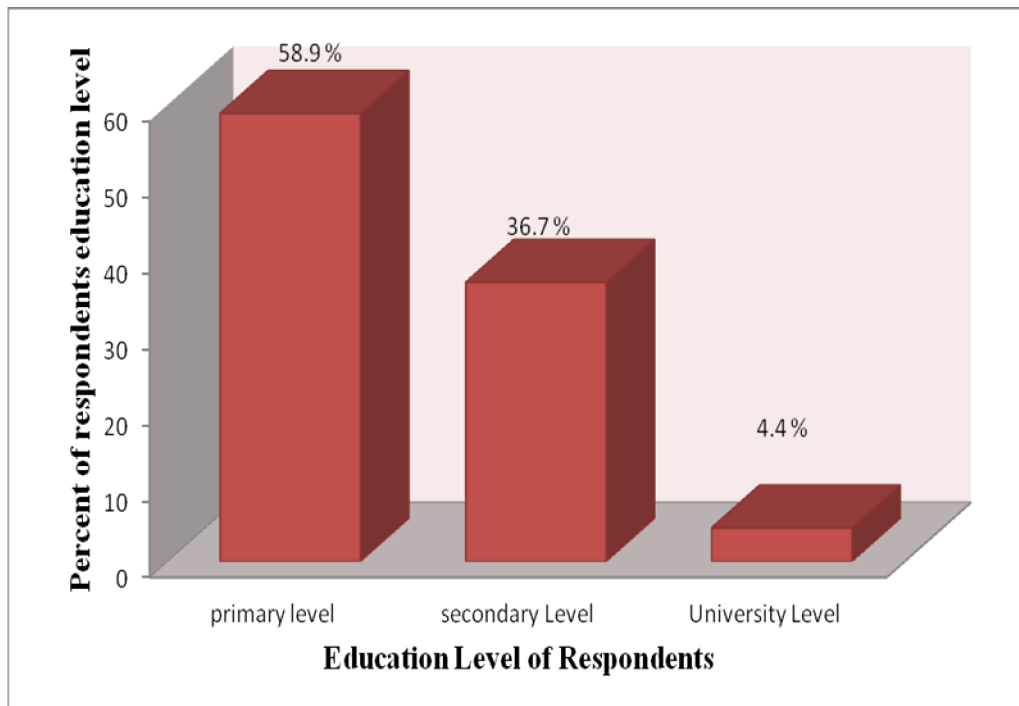
FIGURE 4.2: MARITAL STATUS OF THE RESPONDENTS



4.2.4 Education level of the respondents

The role of education on enhancing growth and sustainability of commercial motorbikes business is considered as a major component. The Figure 4.3 shows that, 58.9% of the respondents had primary education, 36.7% secondary education, and 4.4% had attended university level. These results support the findings reported by Ochieng and Egessa (2003), in both Mwea and Busia in Kenya where, the majority of bodaboda operators were primary school dropouts. The implication drawn from these findings is that commercial motorbike business plays an important role to overcome unemployment to people with a level of education that other employment sectors cannot accommodate them.

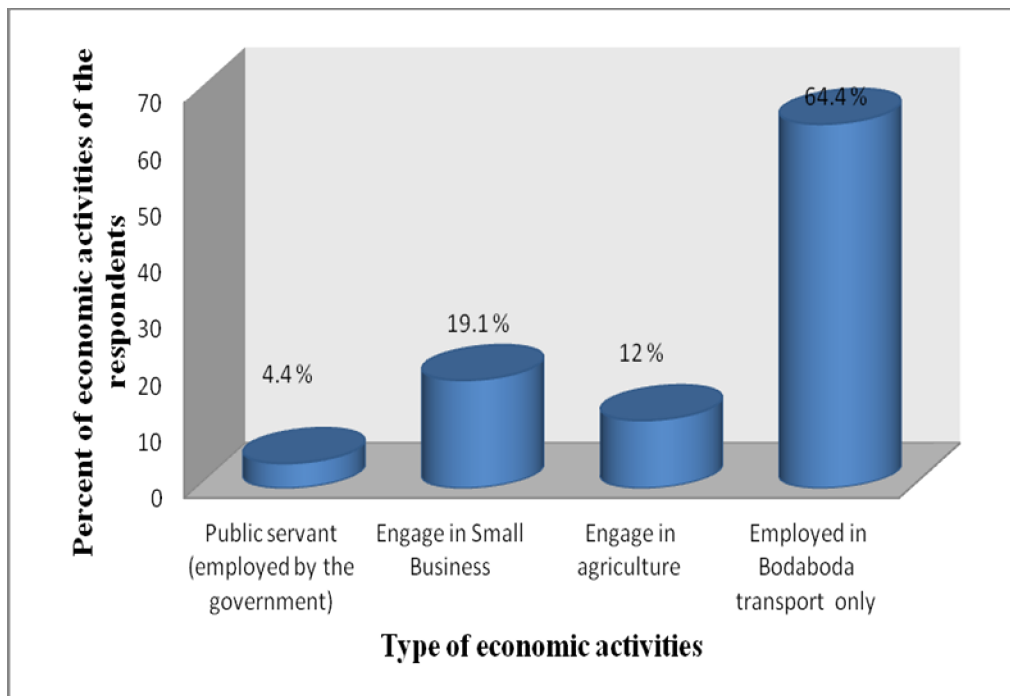
FIGURE 4.3: EDUCATION LEVEL OF THE RESPONDENTS



4.2.5 Other economic activities apart from bodaboda riding

As presented in figure 4.4, it shows that 64.4% of the respondents are engaging only in bodaboda transport business apart from being employed from the bodaboda transport business 19.1% are engaging in small business activities, 12% in agriculture activities while 4.4% are employed in the government sectors. The findings show that many of the youth are those who involve in bodaboda transport business with multiple sources of income generation activities. Nevertheless it implies that most of the respondents apart from other income sources they depend on bodaboda transport businesses.

FIGURE 4.4: ECONOMIC ACTIVITIES OF THE RESPONDENTS

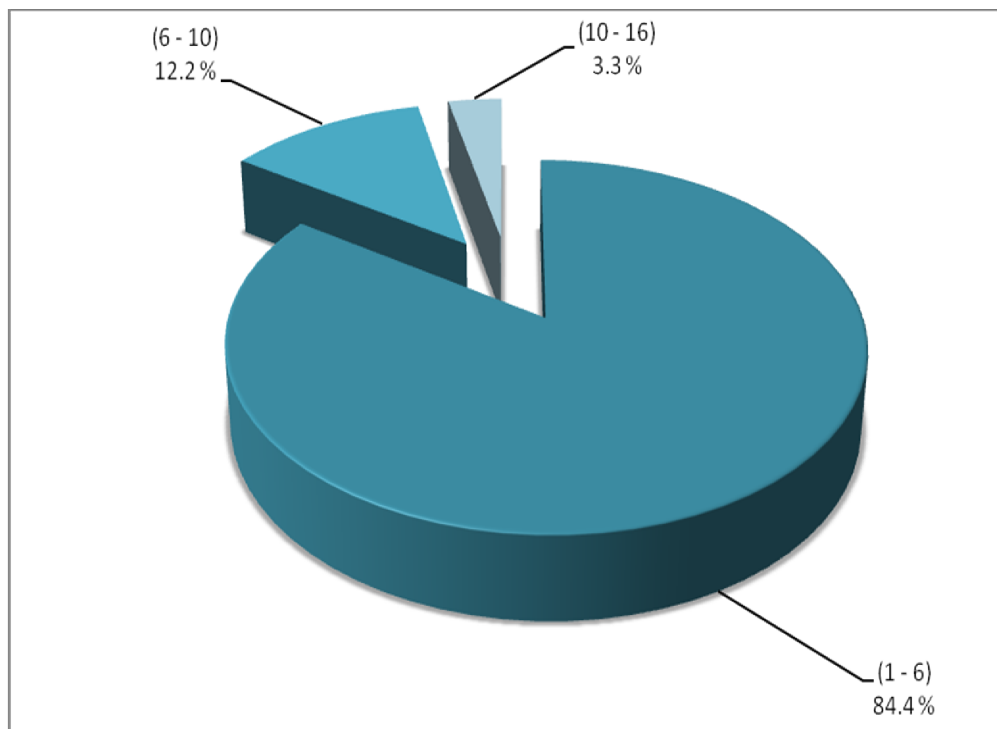


4.2.6 Household size of respondents

For the purpose of this study, the term “household size” has been used to refer the number of persons who usually reside in the household and share household expenses (Kamuzora, 2001). Information in figure 4.5 shows that

84.4% of respondents' household size in the study population ranged from one up to six members followed by six up to ten members this account for 12.2% and 10 up to 16 members which account for 3.3%. The average household size of surveyed population was 4 persons per household whereby minimum household size was 1 member and maximum household size was 15 members. The existence of members ranging up to 16 in one households suggests a possibility of extended family practiced among bodaboda riders. This shows that this sub sector play a vital role in providing financial support to cater some basic needs on every member of households as revealed from the finds. The same situation is shown by Golden (2013) where bodaboda riders support large household members.

FIGURE 4.5: RESPONDENT'S HOUSEHOLD SIZE



4.3 Youth welfare measured by housing bunting materials

4.3.1 Household roofs

Respondents were subjected to a question such as what type is of household roof. This question was posed in order to find out the sort of household roofs. Table 4.1 shows that, 100% houses in the study area are roofed with iron sheet. Therefore the finding shows that most of the bodaboda riders have roofed with iron sheet which are sustainable, and thus indicates an improvement in wellbeing of the community. This implies that bodaboda transports have enabled them to have iron roofed houses. The same situation is supported by Uganda Entrepreneurs (2013) stipulated that bodaboda transport business gives riders some independence and a regular income, while Majority of bodaboda riders were able to marry, having home and sufficient saving for a deposit, at the ban.

TABLE 4.1: HOUSING CHARACTERISTICS

Household Roofed With	Frequency	Percent
Iron sheet	90	100.0
Total	90	100.0
House Floored with		
Cement	82	91.1
None	8	8.9
Total	90	100
Household Walled with		
Cement brick	73	81.1
Un burnt brick	17	18.9

4.2.2 House floors

It was noted that 91.1% of the respondent own cement floored houses and only 8.9% of the respondent their house are not yet floored (Table 4.1) above shows. Therefore the findings show that majority of the youth who engage in bodaboda transport business possess floored houses. This implies that, Bodaboda transport business has enabled them to generate enough income which enabled them to own quality houses. This is in line with Serrat (2008) argued that, the potential livelihood outcomes can include more income, increased well-being, reduced vulnerability, improved food security, more sustainable use of the natural resource base, and recovered human dignity, between which there may again also be conflict.

4.3.3 Household walls

As presented in Table 4.1 above, it was noted that 81.1% of the respondents, their house walled with cement blocks, while 18.9% of the respondents, their houses walled with unbunt brick, the current findings indicate that most of the youth in Dodoma Municipality their house walled with cement bricks, as unbunt bricks are locally made and less expensive as compared to burnt/cement bricks, this also connects that poverty is less persisting in the study area.

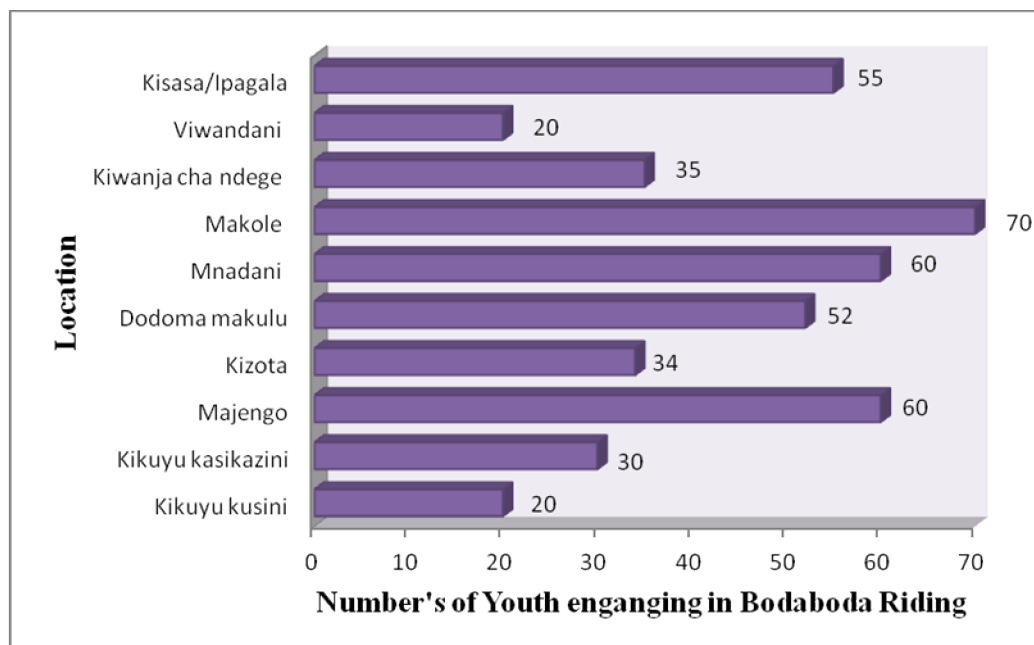
4.3 Youth engaged in bodaboda transport business in selected wards in Dodoma Municipality.

4.3.1 Identified number of bodaboda in the study area

As presented in the figure 4.6, the findings show that, at Makole ward the number of bodaboda which have already been registered is about 70. Followed by 60 bodaboda at Majengo ward as well as Mnadani ward, 55 bodaboda at Kisasa ward, 52 at Dodoma Makulu, while 35 Bodaboda are

found at Kiwanja cha Ndege, 34 at Kizota, 30 at North Kikuyu, and also 20 at Viwandani ward the same as South Kikuyu. The present finding from the study area indicates the number of bodaboda which have been registered to the bodaboda income generating groups such as Kijiwe cha Posta, Mnadani and the like. However some of the Bodaboda have not been registered into those groups. With this picture it implies that many people who are engaging in bodaboda transport business including youth. These findings are in line with the study done by Mubiru (2013) which argues that in Dar es Salaam, the numbers of registered motorcycles are 482,779 up to year 2012. With this picture the industry seem to be profitable and relatively easy to enter. To operate legally, boda riders need a driver's licence, third-party insurance, motor Vehicle license (PSV). But in reality, many drivers enter the market without the required documentation.

FIGURE 4.6: IDENTIFIED YOUTH ENGAGING IN BODABODA TRANSPORT BUSINESS



4.3.2 Growing of bodaboda transport business in the study area.

The finding shows that 80% of the key informants reported growth of the Bodaboda transport business particularly to those wards which are found in town centre like Makole and Majengo. While the reasons for such growth might be due to the increase of population and presence of higher learning institutions such as University of Dodoma, CBE, IRDP, and St. Johns University of Tanzania, while another reason might be the growth of trade and other economic activities. On the other hand 20% reported to have slower growth in bodaboda transport in their area such as North Kikuyu as well as South Kikuyu. Some of the reasons reported here is that, these areas are less populated. This finding is similar to Golden (2013) who evidenced that 84% of the community members perceived high growth (both in number and geographical coverage) of commercial motorcycle transport services in the in Dodoma municipal, Tanzania.

4.3.3 Benefits obtained from bodaboda transport business in the study area.

As presented in Table 4.2 , among of the benefits that have been mentioned by the key informants in the study area include creation of employment to youths (50%),and source of income to many youths (30%) as well as provision of easy transport to the community (20%). With this picture not only bodaboda transport has created employment to youths but also has facilitated easy transport to the community. As these findings are similar to Uganda Entrepreneurs (2013) which argues that, Bodaboda play an important part in Uganda's transport system because they provide a link from the villages to the main roads, where the buses and Matatus run. And also they cost a little more than buses but, because they are a form of transport

for one person, they are very flexible and take people to their exact destination. While Golden (2013) argues that majority of the poor young people in Dodoma Municipality have been engaging in motorcycles transport business as the means of searching their livelihoods while generates employment for large number of people. From these findings it is revealed that the commercial motorbike provides good potential livelihood strategy that the government ought to observe and create good environment for this emerging business to perform.

TABLE 4.2: BENEFITS OF BODABODA TRANSPORT BUSINESS IN THE STUDY AREA.

Benefits of Bodaboda transport business	Responses	
	Frequency	Percent
Created employment to youths	5	50.0
Source of income to many youths	3	30.0
Facilitated easy transportation to the community	2	20.0
Total	10	100.0

4.4 The extent bodaboda transport business has benefited riders in terms of income in Dodoma Municipality.

Income in this commercial motorbike sub-sector was obtained through exchange of commercial motorbike transport service for money. According to Barr (2004) defines income as the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. In this study examine the extent bodaboda transport business has benefited riders in terms of income in Dodoma

Municipality through examining on how much Bodaboda riders receive from the business, how much the owner of the Bodaboda receive and lastly from the income the bodaboda rider receive and able to invest.

4.4.1 Rider's income

As shown in Table 4.3, shows that 18.9% of youth benefits by receiving income less than 30,000 Tanzania shilling per week from engaging in bodaboda transport business 77.7% of youths benefits by receiving income 30,001- 60,000 shillings from engaging in bodaboda transport business, and only 3.3% receive income more than 60,001 shillings from engaging in bodaboda transport business in the study area. From these findings it is revealed that the commercial motorbike business is profitable to people and may be one of identified and reliable government revenue sources.

Similar to these finding are found in Kenya by National Youth Situation Analysis Report (2009) on bodaboda which shows that, the motorcycle transport is a form of employment that has given opportunities to many people, both young and old to generate income. To cement on that, in Uganda, a bodaboda rider reported to earn about 5,000 -15,000 Ugandan shillings per day (Uganda Entrepreneurs, 2013).

TABLE 4.3: RIDER'S INCOME

Category of weekly income for the rider's of the Bodaboda	Frequency	Percent
<30,000	17	18.9
30,001 - 60,000	70	77.7
>60,001	3	3.3
Total	90	100.0

4.4.2 Owner income

Findings in Table 4.4, show that 2.2% of youths said that the owner of bodaboda receive less than 30,000 Tanzania shilling per week, followed by 16.7% of youth reported 30,001-60,000 shillings, 72.2% of youths reported 60,001- 100,000 shillings, and only 8.9% of the youth reported more than 100,001 shillings the owner receive. This implies that, bodaboda transport business had contributed in obtaining and improving increases in income for the owner of bodaboda in the study area. These findings are not surprising hence are similar to the study done by Howe (1996) which found that owners of motorcycles in urban areas earn 100,400 Tanzanian Shs per week or US\$56 as compared to 54,200 Ugandan Shs per week or US\$30 in Kampala peri-urbans. From these finding it reveals that, not only commercial motorbike business is profitable to youth riders but also to owners of the bodaboda hence provide reliable revenue sources to many bodaboda owners.

TABLE 4.4: OWNER INCOME

Category of Rider income in Bodaboda transport Business	Frequency	Percent
<30,000	2	2.2
30,001 - 60,000	15	16.7
60,001- 100,000	65	72.2
>100,001	8	8.9
Total	90	100.0

4.4.3 Correlation between total weekly owner income and rider's income in Bodaboda transport business.

As is presented in table 4.5, it was noted that using Spearman's rho correlation coefficient between total weekly income owners of bodaboda is 1.000 while that of total weekly owner income and total weekly income of Bodaboda riders is 0.602 which is significant at $p \geq 0.01$ level (2-tailed). This indicates that there is perfect linear relationship of the sample values, but one in which the value of total weekly income of bodaboda riders increases, as total weekly income of owner of the bodaboda increases. The finding shows that if youth receive little income from riding bodaboda also they will take little income to the owner; hence Bodaboda transport business has enabled them to generate income. To support this Bodaboda transport here is viewed as livelihood institute whereby Serrat (2008) points out that, livelihood Institutions are structures of the public and private sector organizations that are set to implement policy and legislation; purchase and deliver services, trade, and perform all manner of other functions that affect livelihoods. From the above findings it implies that, both Bodaboda riders and the owner of bodaboda have a great chance to earn more income in Bodaboda hence is the fast and easiest means of transport for many people who opt to use it.

TABLE 4.5: CORRELATION BETWEEN TOTAL WEEKLY OWNER INCOME AND RIDER'S INCOME IN BODABODA TRANSPORT BUSINESS.

Correlations		Owners income	Income of the Bodaboda riders
Spearman's rho	Correlation Coefficient	1.000	.602**
	Sig. (2-tailed)	.	.000
	N	90	90
	Correlation Coefficient	.602**	1.000
Income of the Bodaboda riders	Sig. (2-tailed)	.000	.
	N	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

4.4.4 Capacity to invest

Majority of youth are able to invest through engaging in bodaboda transport business. The percentage of youth who were able to open up new business venture was 80%, while those who did not afford were 20% (Table 4.6). However, this difference was statistically significant ($\chi^2 = 35.139$, $P = 0.019$). This implies that majority of youth engaging in riding bodaboda are able to establish new business as achievement. This is according to DFID (1999) who explains that, livelihood outcomes are the achievements or outputs of livelihood strategies.

TABLE 4.6: PERCENTAGE OF RESPONDENTS WHO WERE ABLE TO INVEST DUE TO INCOME OBTAINED FROM BODABODA.

Investment opportunity	Useful of income obtained			
	YES	NO	Chi-square value	Sig.
Able to open up new business venture	80 % (72)	20 % (18)	35.139	0.019
Able to buy own Bodaboda	72.2 % (65)	27.7 % (25)	64.589	0.008
Able to build own house	10 % (9)	90 % (81)	20.247	0.443
Able to buy own land	51.1 % (46)	48.8 % (44)	0.04	0.841
Able to take children to school	23.3 % (21)	76.6 % (69)	27.622	0.119

In addition, 72.2% of the youth were able to invest by buying their own bodaboda, while only 27.7% of youth were unable (Table 4.6). This difference is statistically significant ($X^2= 64.589$, $P=0. 0008$). With these kinds of results it seems that bodaboda transport business has capacitated majority of the youth to possess their own motorcycles.

However, 10% of the youth were able to build their own house while 90% were unable, this difference was statistically insignificant ($X^2= 20.247$, $P=0.443$). These findings implies that, bodaboda transport business have little contribution on capacitating youth to build their own house because majority still live in renting houses and many other family responsibility to take care (Table 4.6). according to Uganda Entrepreneurs (2013) reported that bodaboda gives the bodaboda riders some independence and a regular

income, while majority of bodaboda riders were able to marry, having home and sufficient saving for a deposit, at the bank.

In line with the above, 51.2 % of youth who were engaging in riding bodaboda were able to buy their own land, while 48.8% of them were not (Table 4.6) at p value of 0.841. It implies that there is no difference in their ability to buy land and the hypothesis that the bodaboda riders were able to buy their own land is rejected. With this picture Serrat (2008) argued that the potential livelihood outcomes can include more income, increased well-being, reduced vulnerability, improved food security, more sustainable use of the natural resource base, and recovered human dignity, between which there may again also be conflict.

Lastly but not the least, 23.3% of youth are able to invest to their children by taking them to school, while 76.6 are not. This different was statistically insignificant ($X^2= 27.622$, $P=0.119$). This implies that children are able to be taken to school due to income realized from bodaboda transport business.

4.5 The extent youth income has improved during engagement with Bodaboda transport business in the study area.

Youth are among the most important formidable force and resource a country can have in order to boost its social economic development. To examine extent to which bodaboda transport business has contributed to the improvement of youth income before and after engaging in the business was used. Apart from that, also the ways they use the income obtained from the bodaboda transport business was examined.

4.5.1 Income before and income after joining the bodaboda transport business in the study area

Table 4.7, shows that 56.7% of youth had income less than 30,000 Tanzania shilling before joining bodaboda transport business, 32.2% had income 30,000 - 60,000 shillings before joining bodaboda transport business and 11.1% had income more than 60,001 shillings before joining bodaboda transport business in the study area. While findings in Table 4.9, show that 2.2% of youths had income less than 30,000 Tanzania shilling after joining bodaboda transport business, 33.3% had income 30,000-60,000 shillings after joining bodaboda transport business, 53.3% of youths had income 60,000- 100,000 shillings after joining bodaboda transport business and 11.2% had income more than 100,000 shillings after joining bodaboda transport business. This implies that, bodaboda transport business contributes much in improving increases in income twice after joining in riding bodaboda in the study area. In line with this, it has been noted that, the use of bodaboda transport had significance increase of income generation among youth who are bodaboda riders, for instance in Tanzania, the average amount of money which a bodaboda rider are supposed to submit to the bosses every evening after a driver's shift is over is Tsh10, 000/= which is about \$7 (Kulekana, 2013). From these findings it is revealed that the commercial motorbike business is good potential livelihood strategy that the government have to observe and create good environment for this emerging business to perform. Hence is profitable not only to people and but also to the government as sources revenue as well as to the owners of these bodaboda transport.

TABLE 4.7: INCOME BEFORE ENGAGING IN BODABODA TRANSPORT BUSINESS.

Category of income before engaging in Bodaboda transport Business	Frequency	Percent
<30,000	51	56.7
30,001 - 60,000	29	32.2
>60,001	10	11.1
Total	90	100.0

TABLE 4.8: INCOME AFTER ENGAGING IN BODABODA TRANSPORT BUSINESS.

Category of income after engaging in Bodaboda transport Business	Frequency	Percent
<30,000	2	2.2
30,001 - 60,000	30	33.3
60,001- 100,000	48	53.3
>100,001	10	11.2
Total	90	100.0

4.5.2 Uses of the income obtain from bodaboda

It is important to understand that, how majority of the youths uses the income they obtain from riding bodaboda. According to the visited youth who are engaging in bodaboda transport business in Dodoma municipal, the findings indicates that, 93.3% of the youth reported to use income from bodaboda for buying food, followed by 88.8% of the youth who use their income to help relatives and paying various civil obligations in the community, 85.6% are using their income to pay rent, 77.7% are using income to buy house utensils and furniture's, while 44.4% reported to use their income for medical services health (Table, 4.9). These finding implies that, bodaboda transport business has helped many young people to fulfil their responsibility paying rent, paying health and medicine and the like. To support that, Uganda Entrepreneurs

(2013) found out that, bodaboda riders were able to marry, having home and sufficient saving for a deposit, at the bank. From the above the implication of these findings is that commercial motorbike is one of the means of transport service which is responding to the increasing demand of community members in all aspects of quantity, quality, and business diversification which the communities need. In the same case, creating good environment for growth and better performance of this business will not only strengthen the economies of middle income people but also other business sectors consequently improving people's livelihoods.

TABLE 4.9: MULTIPLE RESPONSE ON THE USES OF THE INCOME OBTAIN FROM BODABODA

Uses of the income	Responses	
	Frequencies	Percent
Paying house rent	77	85.6
buying food	84	93.3
Buying clothes	60	66.6
buying house utensils and furniture's	70	77.7
Helping relatives and paying various civil obligations	80	88.8
health and medicine	40	44.4

4.6 The challenges faced youth engaging in bodaboda business transport upon generating income in the study area.

As presented in Table 4.10, treatment effect models are used to determine challenges to Bodaboda transport business and its participants. This model takes a kind of logistics multiple regressions. Based on Tables for model summary and variables in equation (Table 4.10) it can be said that variables included in the model were good predictor for reporting challenges faced youth engaging in bodaboda business transport upon generating income in

the study area (Nagelkerke $r^2=0.705$ or 70.5 %). In regard to that, out of a number of predictors hypothesized as challenges faced youth who engaging in bodaboda business transport upon generating income in the study area, only age of respondents, To obtain license as well as carrying more than one passenger were found negatively influencing the challenges faced youth who engaging in bodaboda business transport upon generating income, however their coefficients are not statistically significant ($P>0.05$). Furthermore the results showed that, Alcoholic, High Taxes, to be chased by the Traffic polices, Education on how to ride Bodaboda, as well as Injuring were found positively influenced the challenges faced youth who engaging in bodaboda business transport upon generating income, whereby their coefficients are not statistically significant except for high taxes.

TABLE 4.10: THE CHALLENGES FACED YOUTH ENGAGING IN BODABODA BUSINESS TRANSPORT UPON GENERATING INCOME IN THE STUDY AREA.

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
Alcoholic	.872	.908	.923	1	.337	2.392	.404	14.166
High Taxes	2.669	.858	9.682	1	.002	14.424	2.685	77.478
To be chased by the Traffic polices	.805	1.014	.631	1	.427	2.237	.307	16.309
Education on how to ride Bodaboda	.667	.935	.509	1	.475	1.948	.312	12.171
To obtain license	-.430	1.067	.163	1	.687	.650	.080	5.259
Carrying more than one passenger	-.240	1.099	.048	1	.827	.787	.091	6.779
Age	-.135	.092	2.150	1	.143	.874	.729	1.047
Injuring	.129	1.256	.010	1	.918	1.137	.097	13.345
Constant	-21.520	17707.911	.000	1	.999	.000		
Nagelkerke Square	R 0.705							

Taking alcohol during time when riding a bodaboda was associated with increasing likelihood for reducing chances for youth to create income in bodaboda business transport in the study area by greater than one (OR=2.3, 95% C.I 0.404 – 14.166). This implies that, some of the youths are taking alcohol when riding Bodaboda which increases high chances of getting injuring than those not taking hence increases likelihood for reporting

challenges faced youth engaging in bodaboda business transport upon generating income in the study area.

Paying tax is compulsory. However, increases of paying high taxes was associated with increasing odds for reporting challenges faced youth engaging in bodaboda business transport upon generating income (OR=14.424, 95% C.I 2.685-77.471). With these results it implies that, high taxes policy increases the likelihood for youth to evade taxes in the study area significantly, hence reported as challenge faced youth engaging in bodaboda business transport upon generating income.

It have been noted that, increases of Traffic polices chasing a Bodaboda rider, was associated with increasing in likelihood of reporting challenges faced Youth engaging in bodaboda business transport upon generating income (OR=2.2, 95% C.I 0.307- 16.309). This implies that, the more traffic polices chasing young Bodaboda riders the higher the riskier is associated with bodaboda riders to get injure however majority seems to violet laws. To support that, Beekers (2008) argued that, riders often flout traffic laws, running traffic lights at city road junctions and driving on the wrong side while their driving is characteristically reckless, as they squeeze their way in between vehicles during traffic jams, putting the lives of their passengers at risk.

In addition, to obtain Education on how to ride bodaboda by the youth showed positive influence on the challenges faced Youth engaging in bodaboda business transport upon generating income, by a multiplicative factor of 0.667, while its coefficient is not statistically significant at the ($P=0.475$) see in (Table 4.10). This implies that majority of the youth seems to be

willing to obtain skills of driving bodaboda from driving school by 66.7% as the marginal increase but are unable. These findings are alike to Nakiyimba (2012) who contended that, incompetence's on the operationasation of the bodaboda among the bodaboda riders, counting to 90 per cent of riders in Uganda.

Furthermore the analysis also found that to obtain license in order to be able to drive bodaboda had a negative influence on the challenges faced youth engaging in bodaboda business transport upon generating income, by a multiplicative factor of -0.430. However its coefficient is statistically insignificant at ($P=0.687$) see in (Table 4.10). This is based on the fact that laws do not allow driving without a license hence limited in supply leads youth to operate their bodaboda with no confidences and fear by 43 % as the marginal decrease.

Moreover, carrying more than one passenger by the bodaboda riders was associated with decreasing likelihood of reporting challenges faced youth engaging in bodaboda business transport upon generating income insignificantly (OR=0.787, 95% C.I 0.091-6.779). This is due to the fact that carrying more than one passenger is just a will and not a force, hence is not a challenge to a youth who is bodaboda rider. However, it may be challenge once they get an accident.

As presented in Table 4.10, Age group was one of the significant variable where ($\beta=-0.135$) which was associated with decreasing likelihood of reporting challenges faced Youth engaging in bodaboda business transport upon generating income insignificantly. These findings imply that marginal increase of respondent's age tends to affect negatively and increases high

chances of the challenges facing youth engaging in bodaboda business transport.

Lastly, results indicate that, injuring caused by bodaboda transport business were associated with increasing likelihood of reporting challenges faced Youth engaging in bodaboda business transport insignificantly (OR=0.918, 95% C.I 0.097- 13.345). This finding implying that, the risk of injuring caused by bodaboda transport business has been threatened to many bodaboda riders. This result is similar to the study done by (Galukande *et al.* 2009 and Naddumba 2004) in Tanzania who concluded that the negative side of motorcycle as a means of transport is the risk of injury and they constitute a major public health problem.

4.7 Chapter summary

The study comes up with three key findings which appeared to show significance between independent variables and dependent variable. In objective one the findings show that the number of Bodaboda is increasing in the income generating group found in the study area. In addition majority of youth have seen to benefit through bodaboda transport business, because 80% of them were able to invest in new business ventures significantly. On top of that, basing on the income before and after engaging in bodaboda transport, the youth's income observed to increases twice after engaging. However, despite the achievement of the bodaboda transport business some of the challenges observe was to be chased by traffic polices, education on how to ride bodaboda, as well as the use of alcohol by the bodaboda riders during the time of work that do provoke a lot of accidents.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter summarizes main findings of the study and draws major conclusions based on the main findings of the study. The chapter also provides recommendations for action and for further research.

5.2 Summary of the Study

This study sought to assess the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality. Specifically, to identify youth engaging in bodaboda transport business, to determine the extent to which bodaboda transport business has benefited youth's in terms of income before and after engaging in it in the study area and to examine the challenges faced youth engaging in bodaboda business transport upon generating income in the study area. In achieving research objectives, the study had four research questions. The study employed largely quantitative and qualitative research approaches under survey research design. Purposive and simple random sampling techniques were employed to obtain participants of the study. Purposive sampling technique was employed to get key informants. Further, simple random sampling was employed to select participants of the study. Participants of the study were randomly selected from youth who are engaging in bodaboda transport business in Dodoma Municipality. A total number of 90 youth who were bodaboda riders including ten key informants participated in the study. Data were collected through interview checklist, informal observation and documentary reviews. Data were first, analyzed quantitatively using the Statistical Package for the Social Sciences (SPSS) 16.0. Frequencies and percentages were used to assess

the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality. Second, other data were qualitatively analyzed where by content analysis was employed.

5.3 Summary of major findings of the study

In identifying youth's engaging in bodaboda transport business, the study revealed that, that the number of bodaboda is growing and majority of youth are engaging in the bodaboda transport business, whereby at Makole ward there were 70 registered bodaboda riders. Followed by 60 bodaboda at Majengo Ward as well as Mnadani ward, 55 bodaboda at Kisasa/lpagala ward, 52 at Dodoma Makulu, while 35 bodaboda are found at Kiwanja cha Ndege, 34 at Kizota, 30 at North Kikuyu, and also 20 at Viwandani ward the same as South Kikuyu. While, the reasons for such growth reported was due to the increases of population, because of the presence of higher learning institutions such as University of Dodoma, CBE, IRDP, and St. Johns University of Tanzania, while another reason might be the grow of trade and other economic activities. With that respect it has benefited majority of the youth in terms of employment and income.

Also in determining the extent to which bodaboda transport business has benefited youth's in terms of income before and after engaging in it in the study area. The study finding reveals that, 77.7% of youths benefits by receiving income 30,001 - 60,000 Tanzanian shillings per week from engaging in bodaboda transport business, while 72.2% of youths reported to hand over to the owner of the bodaboda amount of 60,001- 100,000 Tanzanian shillings per week. In addition, Correlation between total weekly owner income and rider's income in bodaboda transport business showed a perfect liner relationship hence bodaboda transport business has been

amplifier for youth to generate their income. Furthermore majority of youth were noted to be able to invest on open up new business venture significant at ($X^2= 35.139$, $P=0.019$); by buying their own Bodaboda ($X^2= 64.589$, $P=0.008$); building their own house ($X^2= 20.247$, $P=0.443$) as well as to buy their own land($X^2= 38.983$, $P=0.007$). Moreover, the income of the youth had improved and increased twice after join bodaboda transport business.

Moreover, in examining the challenges faced youth engaging in bodaboda business transport upon generating income in the study area, the study found out that, variables included in the model were good predictor for reporting challenges faced youth engaging in bodaboda business transport upon generating income (Nagelkerke $r^2=0.705$). In regard to that, out of a number of predictors hypothesized, only age of respondents, to obtain license as well as Carrying more than one passenger were found negatively influencing the challenges faced youth who engaging in bodaboda business transport upon generating income, however their coefficients are not statistically significant ($P>0.05$). Furthermore the results showed that, alcoholic, high taxes, to be chased by the traffic polices, education on how to ride bodaboda, as well as injuring were found positively influenced the challenges faced youth who engaging in bodaboda business transport upon generating income, whereby their coefficients are not statistically significant except for high taxes.

5.4 Conclusion

This study sought to assess the extent of income contribution of bodaboda transport business to youth in Dodoma Municipality. The findings reveal that, bodaboda transport business had contributed in improving increases of youths income found in the study area, while majority of youth who are engaging in bodaboda were noted to be able to invest by opening up new

business venture, others were able to buy their own bodaboda, some were capable of building their own house as well as to buy their own land. On top of that, youth's income was observed to improve and increase their income twice after join bodaboda transport business (from Tshs 30,000 to 60,000).

However, the above reveals that bodaboda transport business has improved the well being of the community especially youth and poverty is less persisting in the study area as bodaboda has enabled them to generate enough income to fulfil the fore mentioned needs to the majority .Further since bodaboda transport business has seen to be profitable to people, it may be a source of Government revenue only if it will be well formalized and created good environment.

Also, it has been noted that, 93.3% of the youth said are using income to buying food, followed by 88.8% using their income to help relatives and paying various civil obligations in the community, 85.6% using their income to pay rent, 77.7% are using income to buy house utensils and furniture's, while 44.4% reported to use their income in paying health and medicine.

This implies that bodaboda transport business has enabled young people to fulfil their responsibilities of paying various civil obligations like rent, health services and food but it has little contribution on capacitating youth to build their own houses because majority still live in renting houses hence Government and other stakeholders should create good environment should for them at least to access soft loans.

Despite the benefits of the bodaboda business transport towards improving youth incomes in Dodoma municipality. The findings reveal that, there were challenges faced youths engaging in bodaboda business transport upon

generating income at Nagelkerke $r^2=0.705$ or 70.5%. whereby among hypothesized challenges were age of respondents, to obtain license as well as carrying more than one passenger which were found negatively influencing the challenges faced youth who engaging in bodaboda business transport upon generating income, while the use of alcohol, high taxes, to be chased by the traffic polices, education on how to ride bodaboda, as well as injuring were found positively influenced the challenges faced youth who engaging in bodaboda transport business upon generating income.

The above conclusion signifies that some youth's accident and injuries has been caused by taking alcohol and engaging to the bodaboda transport business, so youth are supposed to stop taking it because it real reduces their ability to generate income and hence accident and death. High taxes policy increases the likely hood for youth to evade it; hence the authority should impose friendly taxes. Furthermore youth need frequent education training relating on rules and regulations which govern the uses of roads this in turn will reduces accidents and death hence more income. Finally the more traffic polices chasing young bodaboda riders the higher the riskier is associated, despite majority of them seems to violet laws; the police should seek the alternative way of dealing with them.

Lastly, bodaboda transport business is the vital tool in improving youth's incomes and employment creation in the country as well as Dodoma municipality.

5.5 Contribution to knowledge

Several researches such as Chalya et al. 2010); Galukande *et al.* (2009); Leshabari (2002); Naddumba (2004); Odero (2009); and in Phillippo *et al.*, (2010) have been conducted in the past and observed that, bodaboda transport have continued to be one of the most common causes of road traffic injuries which contribute to high public health problem and death in Africa and Tanzania in particular. However, most empirical work does not provide sufficient information on the extent of income contribution of bodaboda transport business to youth and the following are contributions of this study;

- a. The present study aimed to make contributions on how bodaboda transport business provides important opportunity not only for poverty alleviation but also for healthier and sustainable development
- b. On top of that, the present study intends to make contributions on how youths Bodaboda riders can benefit from the use of the bodaboda transport as a business.
- c. Furthermore, the present study intends to make contributions on the challenges facing youth who engaging in bodaboda transport business upon generating income.
- d. Moreover, the present study adds on the existing literatures which are helpful to the academicians by getting more references in future when carrying out research on similar or related topics.
- e. In addition, the study is available to provide useful information to development planners, policy makers, and the community so as to provide useful frame work for bodaboda transport business.

- f. Lastly the present research involves variety of theories on the income contribution of Bodaboda transport business to youth which are properly elaborated to fit the study.

5.6 Recommendations

The following recommendations are put forward in order to continue achieve contribution of bodaboda transport business to youth in terms of income in Dodoma Municipality, they include the following;

Since the increase in population, expansion of town centre and business also increase in higher learning institutions has lead into increase in number of bodaboda which has registered and majority of youth has engaged on it as the industry seems to be profitable. Therefore, this sector is the vital tool towards promotion of youth's employment and income. Hence youth should respect it like other jobs while government ought to embrace it in his plans.

Bodaboda transport business has seen to be profitable to both owners and riders. However, this may be one of the identified and reliable sources of revenue to the government and for many bodaboda riders as well. Hence government and other stakeholders have to formalize it well.

It has been noted that the use of bodaboda transport business had significance increase in of income generation among youth who are bodaboda riders in Dodoma and Tanzania at large. Therefore, the commercial motorbike is a good potential livelihood strategy that government has to observe and create good environment for this emerging business.

When youth engage in bodaboda transport business so as to generate income it has found that they face different challenges to meet their target. However the government needs to establish:-

- a) Frequency education training to youth's relating on the rules and regulations which are governing the uses of roads. This will enable the reduction of accidents and deaths hence youth will generate more income.
- b) Youth need to realize that, bodaboda transport business is just like other forms of employment, so youth's are suppose to respect it and to stop taking alcohol because that real reduces their ability of generating their income hence more accidents and deaths will continue to occur.
- c) Traffic police are also recommended to stop chasing youth's who are Bodaboda riders because that habit increases rate of accidents occurrence, instead are supposed to take plate number of those motorcycle and give them warning or any other punishments which they deserve.

5.5 Further Research

Therefore, the following areas are recommended for further research;

- a) Area that has not been investigated is what are the pushing and pulling factors for youth to engage in the bodaboda transport business despite of the threats of this economic activity is holding. This is because it has been observed that the number of bodaboda and riders according to the key informants is increasing tremendously in the study area. But also this tally with Chalya (2010).Who observed that many youth run to this business, despite the challenges facing the riders in Tanzania bulk of youth living in urban areas are engaging on it. So what are the exact pulling factors are not well documented yet.
- b) The other recommended area of research base on what is their perception regarding formalization of bodaboda transport business,

because it will enable them to have sustainable income. Despite of bodaboda transport business to provide direct employment in the study area, but almost all of them aren't work in formal way, so a person may be terminated at any time. However this is not new to other areas as it has been noted that majority of motorcycle business in Africa remain informal with very little or no regulations Tamfu (2014). Hence there is a need of conducting it.

- c) To what extent bodaboda transport business is becoming riskier to youth. Various studies have been done across this but majority of them have just dwelt on the causes and effects of bodaboda transport to the community, but to what extent do these bodaboda transport business is risk to young man is not well documented including in the study area.

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APPENDICES

Appendix A: QUESTIONNAIRE FOR BODABODA RIDER

Profile for Youth's Bodaboda Rider

1. Sex of the respondent Male () Female ()
2. Marital status of respondent
Married (), Single (), Widow (), widower (), Divorced () .
3. Age of respondent.....
4. Education level of respondent. Primary level (), secondary level (),
Tertiary college (), and University () .
5. Occupation apart from Bodaboda transport business
6. Household size.....
7. Are you the owner of the house that you're living? 1. YES () 2.No ()
8. If the answer No.7 above is NO, do you live in contract? 1.YES ()2. NO ()
9. Housing characteristics

A.	Household Roofed With	Tick
	Iron sheet	
	Mud	
B.	House Floored with	
	Cement	
	None	
C.	Household Walled with	
	Un burnt brick/mud	
	Cement brick	
	burnt brick	

10. What is the amount of income did you obtain in shillings per week **before** engaging in bodaboda business?

5,000-15,000 (), 16,000-25,000 (), 26,000-35,000 () 36,000 and above ()

11. What is the amount of income do you obtain in shillings per week **after** engaging in bodaboda business?

12. a). Does this motorcycle (Bodaboda) belongs to you? 1. YES () 2.NO ()

b).If the answer above is No 12.a) is **NO**. What is the amount of income in shillings do you send to the owner per week?

13. Income estimation per week.

Na.	Description Of Maximum And Minimum Income Per Week	Amount(Tshs)
A.	What is the maximum Income that you get from Bodaboda Transport Business per week?	
B.	What is the minimum Income that you get from Bodaboda Transport Business per week?	
C.	What is the highest amount that you are surrendering to the owner per week?	
D.	What is the least/lowest amount that you are surrendering to the owner per week?	

14. Which are development expenditures were unaffordable and affordable to you before and after engaging in Bodaboda business? Respectively.

Household's Expenditure	Unaffordable Expenditure Before Engaging In Bodaboda Business	Affordable Expenditure After Engaging In Bodaboda Business
Paying house rent		
Buying new plot for building		
Constructing house		
Expenditure on Education		
Expenditure on Health Medical		
Opening new project/business		
Expenditure on Civil obligation		
Supporting parents/relatives		
Others specify.....		

15. Examine the challenges faced by bodaboda youth in their process of getting income in the study area.

STATEMENT	Is it a challenge to you	
	YES	NO
Distances		
Injures		
Driving and business license		
Education both driving and means of communication.		
Number of Deaths Witnessed		
Caring more than one passenger		
Others mention		

16. What is your opinions, comments and observation to the Government and other stakeholders dealing with youth's engaging in Bodaboda Transport Business?

a).....

b).....

Appendix B: CHECKLIST FOR KEY INFORMATICS

Number of bodaboda in your area

Place	Number of bodaboda
Kikuyu kusini	
Kikuyu kaskazini	
Majengo	
Kizota	
Dodoma Makulu	
Mnadani	
Makole	
Kiwanja cha Ndege	
Viwandani	
Kisasa/lpagala	

Does the number of Bodaboda growing in your area?

Does it beneficial to you in your area?

Appendix C: ETHICAL CERTIFICATE



ST JOHN'S UNIVERSITY OF TANZANIA
DIRECTORATE OF RESEARCH AND CONSULTANCY
INTERNAL REVIEW COMMITTEE

RESEARCH CLEARANCE CERTIFICATE

FOR MASTER'S AND DOCTORAL STUDENTS

Date of Review: 13th January, 2015

Project title: **Contribution of Motorcycle Transport (Bodaboda) Business
in Promoting Youth Income in Dodoma Municipality.**

Researcher: **DENIS KASPAR KOMBA**

Supervisor: **Dr. B.D. SEBYIGA**

Faculty / Institute / School: **THE INSTITUTE OF DEVELOPMENTY
STUDIES**

Degree being studied for: **MA IN COMMUNITY DEVELOPMENT**

This is to certify that the research proposal herein detailed has been
examined and approved by the Internal Review Committee of St
John's University of Tanzania

Handwritten signature of Dr. Angela Savage in blue ink.

Dr. Angela Savage

Director, DRCPGS

Handwritten signature of Prof. C. Rubagumya in blue ink.

Prof. C. Rubagumya

DVCA

Appendix D: LETTER OF INTRODUCTION

ST JOHN'S UNIVERSITY OF TANZANIA

Directorate of Research, Consultancy and
Postgraduate Studies

Tel: +255 26-2390044
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Website: www.sjut.ac.tz



PO Box 47
DODOMA
Tanzania

22.01.2015

TO WHOM IT MAY CONCERN

Graduate Student's Research Clearance

This letter serves to introduce Mr. **DENIS KASPAR KOMBA** (Registration Number M2013/5008), who is a bona fide student of St John's University of Tanzania in the Institute of Development Studies.

He is currently in the research stage of her Masters studies and is required to collect data.

He approved research topic is:

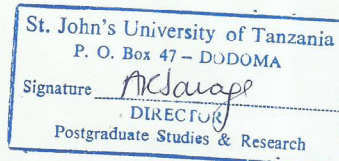
Contribution of Motorcycle Transport (Bodaboda) Business in Promoting Youth Income in Dodoma Municipality

I request that you grant this student all possible assistance to facilitate the completion of his research study.

Should you need further clarification please contact my office.

I wish to thank you for your kind assistance for this student.

Yours sincerely



Dr Angela Savage
Director of Research, Consultancy and Postgraduate Studies
Email asavage@sjut.ac.tz