

# The Threats of Land Resources Management Due to Increasing Rapid Population Growth in Zanzibar

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**Abstract:** *This paper talks about the threats of land Resources management due to the problem of rapid increase of population growth in Zanzibar Island. Actual there are many threats that are investigated and proved by this study. The land environmental degradation, cutting down the forest for formation of charcoal as their income sources as well as drilling the minerals includes sand and stone are the ones of the threats of land resources management due to the highly increasing of population growth in Zanzibar Island especially, to the urban and sub urban in the coastal zones in both Unguja and Pemba Island. Apart from that, the study, had also proved that, the Government had establish the strict laws for those who involving in the environmental degradation and also had select the special areas for farming with the providing the proper education to the communities concerning on how to use the Land Resources in a proper and legal manner.*

**Keywords,** Threats, Land resources, Management, Rapid population growth and Zanzibar.

## 1. INTRODUCTION

This study aimed to investigate the threats of land resources management due to increasing rapid population growth in Zanzibar. This study is focused in Zanzibar Island especially in both urban and sub urban. Many threats of land resources are proved and critical analyzed in the data presentation and analysis. For examples, the negatives impacts of rapid population growth which are more affect the land resources management.

## 2. LITERATURE REVIEW

### 2.0 Introduction

This chapter contains a review of related literature which investigates the threats of land resources development due to the rapid population growth in Zanzibar. The literature review is very essentials because it provide to the researcher an insight into what has been done in the study area, also lead researcher to know different kind of additional data needed for his/her study this help to avoid the duplication of farther study.

### 2.1 Zanzibar land use situation

There is special attention to indigenious peoples especially to the shifting cultivations, also the government had been improve the study for an appropriate land registration system, father more it had been establish the evaluation of the land distribution program, apart from that, it established the agricultural credit institutions as well as there are improvement of rural extension services, finally it established the grant for non-residential development. So that, it is became more effective and strongly use during the 1980s the Zanzibar land policies is more focused and targeting to the land farm protection development. The implementations of The Land use policy targeting land protection in Zanzibar it seemed highly strong since 2000s, the pilot areas experience has shown that the key factors in the success of land registration lie in gaining the public's

trust and co-operation as well as in sustaining the technology and practice utilized. The public information was recognized to be the most important component of the work done, which has to start from the staff itself and continue towards the public (Mika, T (1998).

These paper guided by the theories of population, which is strongly and clearly justified the population characteristics in relation to their demand of resources utilization in a particular region.

### 2.2 Population Theories towards Natural Resources

#### 2.2.1 Classical Economics theory

Classical economists Theory, like their neoclassical colleagues, are concerned with whether an economy, under the pressure of high population growth, can provide an increasing or steady standard of living given that the natural resource base is finite. However, classical economists argue that sustainable output cannot keep up with rapid population growth. This theory is based on the work of Thomas Robert Malthus (1914). He argued that population grows at a geometric rate, while the food supply increases in a linear progression. As population increases, it will at some point outstrip the food supply resulting in falling living standards. Malthus assumed diminishing returns to increased labor for a fixed area of land. Natural scientists approach the population-environment question similarly. They also emphasize the fixity of the Earth's resources and limits to the capacity of the Earth to provide for its inhabitants. Natural scientists argue that each individual has a negative impact on the environment by using up fixed resources. If the population exceeds the carrying capacity of the Earth, then death rates will increase to bring the population down to a sustainable level (Ehrlich and Hotdren, 1987). It is believed that, the land degradation or environmental degradation is taking place due to the increasing and growing of population pressure on fixed the available resources to create their social demand like standard of living. The land degradation or

environmental degradation in general, is the basic symptoms of increasing population pressure in the geographical area like Zanzibar Island.

**2.3 The growing of land use and urban settlement in Zanzibar**

According to Mohammed, (2016) strongly, argued that, “Zanzibar is an archipelago of Islands within the United Republic of Tanzania. However these islands have a semi-autonomous authority with its own Government, the President and Legislative Assembly independent of the United Republic. The Islands consist of two main islands which include Unguja and Pemba with 53 small islets. They have limited land resource for human settlement as well as socio-economic activities. On one hand, land demand for different uses (including for investment, agriculture, livestock keeping and settlements) has been increasing over the years while on the hand, the high rate of urbanization which is the result of higher rapid population increase (at about 4.2 percent per annum) increases the land scarcity. Besides, most of the urban land is unplanned, un-surveyed and untitled that resulting into difficulties in land management”. In both Unguja and Pemba Island there are highly rapid population growth in day today about the 4.2 percentage per annual, which resulted into urbanization process, out of three largest urban in Zanzibar which are stone town for Unguja and Chakechake and Mkoani for Pemba. There is some semi urban which are raised in a recent years in both two Island, these are, Nungwi, Matemwe, kiwengwa and Mkokotoni in Northern part of Unguja and Kizimkazi, Jambiani, Michanvi Chwaka and Pongwe in the Southern part of Unguja Island. Apart from that, there is also semi urban in Pemba Island this include, wete and Micheweni. Both of that there are highly number of rapid population growth. Geographically, the higher Increasing of rapid population growth is direct proportional to the higher increasing of social demands, examples shelters, cultivations, over utilization of resources like land, forest and other. So that, urban and semi urban in Zanzibar there is urbanization inflations which has been cause the more utilization of land resources for their demand of shelter.

**3. METHODOLOGY**

**3.0 Introduction**

This section presents the different methods which are used when the research is conducted. It covered the research design, research approach and data analysis procedures.

Research design is the conceptual structure in which researcher used to conduct these study. It constitutes the blueprint for the collection, measurements and analysis of study (Kothari, 2004). A cross- section research design were employed as a guiding instrument of this study because data was collected from respondents only once at a given period of time. These study were used the documentary reviews, primary and secondary data.

**3.1 RESEARCH PROCEDURE**

The study were used the phenomenological design to investigate the rapid population growth to the threats of land resources development in Zanzibar, that is because phenomenological design dealing with the study experience from the respondent of the study, which provide the depth understanding of phenomenon as experience by several participants of the study (Haki Elimu (2008).

According to Hoshberg, J.(1984). Phenomenological analysis does not aim to explain or discover causes instead its goal is to clarify the meanings of phenomena from lived experiences. Phenomenological methods are particularly effective at bringing to the fore the experiences and perceptions of individuals from their own perspectives. Thus, phenomenological practice within a human science perspective can result in valuable knowledge about individuals’ experiences (Kwame, K. (2009).

**4. DATA ANALYSIS AND PRESENTATION**

**4.1 General Characteristics of the Respondents**

This section give out the general characteristics of the respondents was involved in investigating of the threats of land resources management due to the increasing of population growth in Zanzibar Island. These characteristics were sex, age group and marital status, level of education as well as occupation of the respondents. The discussion of each characteristic is presented below.

**Table 1.0 Sex of the respondents**

S/N	Sex	Frequency	Percentage
1	Male	45	69.2
2	Female	20	30.8
<b>Total</b>		<b>65</b>	<b>100</b>

Source: field Survey, 2019

**4.2 Sex of the respondents**

The table 1.0 show that, a relatively large portion of the respondents were males who are accounted for more than half of the total in the field, that respondents are evidenced by 45 (69.2%) were males and only 20 equal to percent (30.8%) were females. This result means that, males are the ones who play a big role in the uses of the land resources like for finding out a new shelters example houses and slums due to the urbanization process taking place in Zanzibar Island. Also it seemed that, that males are the backbone of their families by finding out foods and others.

**Table 1.1 Age of the respondents**

S/N	Age	Frequency	Percentage
1	18-30	20	30.8
2	31-45	30	46.2

3	+45	15	23
<b>Total</b>		<b>65</b>	<b>100</b>

Source: Field survey, 2019

Table 1.1 clearly indicate that, the majority of the respondents ages were between 31 to 45 years who are about 30 which is equal to 46.2%, followed by the age group between 18 to 30 years was 20 equal to 30.8%. The age group of 45 and above was about 15 equal to 23% as it shown on the table 1.1. These findings clearly suggested that the age group between 31 to 45 play an active part in the over utilization of land resources due to the increasing number of rapid population growth in Zanzibar Island.

**4.3 Respondents Educational Level**

Within the societies issue of education is the most important tool for the development of the human activities, the skill, knowledge and understanding is the very important aspect for the liberalization from the poverty. The study is focused on the dedicational level of the respondent in relation to the investigation of the threats of land resources management due to the rapid increase of population growth in Zanzibar.

**Table 1.2 Respondents Educational Level**

N/S	Educational Level of the respondent	Frequency	Percentage
1	Primary education	14	21.5
2	Secondary education	24	36.9
3	Diploma	17	26.2
4	Above Diploma	10	15.4
<b>Total</b>		<b>65</b>	<b>100</b>

Source: Field Survey, 2019

The table 1.2 shows that 14 equal to (21.5%) of the respondents had primary education, 24 equal to (36.9%) had secondary education, while 17 which is equal to (26.2%) had diploma education and only 10 equal to (15.4%) out of the respondents were above diploma level. The results shown that, the majority of the respondents in the study area had only secondary and diploma level of education respectively. This indicates that those who are most involved in threats of land resources due to the increasing of rapid population growth have only primary and secondary education levels of education, also the analysis of the result proved that, there are un employment problems and poor of income sources, instead the youths use the land resources as their income sources by taking the sand and sold out as a building

materials. Education is one factors which strengthening the societies to skill full about the land environmental problem in Zanzibar Island particularly, the ability of residents to speak and conserve the land resources and encouraging other in proper manner of the land use and also education is good tools of finding out others way of income sources rather than improper land use. In this case, the threats of land resources management due to the increasing of rapid population growth are high due to the respondents having limited educational level. To overcome that problem, the government should be provide the education to the societies especial for the youths and frequently encourage in relation to advice to avoid with over and improper utilization of land resources.

**Table 1.3 Understanding the importance of land resources**

N/S	Understanding importance of land resources	Frequency	Percentage
1	Yes	62	95.9
2	No	3	4.1
<b>Total</b>		<b>65</b>	<b>100</b>

Source: Field Survey, 2019

**4.4 Understanding the importance of land resources in Zanzibar**

The respondents were asked whether they understood the importance of Land resources or not. The 62 of the respondent equal to (95.9%) said yes that they are understood the importance of Land resources for the farming, establishment of new shelter like house and slums, and bring economy themselves by giving out the minerals like stones and sands. While only 3 about (4.1%) of the respondents said No they did not understand the importance of Land resources just they seemed it and heritage from their grand farther and sisters and also nothing bring it to the Government. For those who are understand the importance of land resources, when asked to elaborate further they said that just it give the employment opportunities to them for minerals and sand as a raw materials sources by sold out it and for cultivation only. So that, the result from data analysis proved that, majority of the societies they are not aware the importance of land resources in Zanzibar Island thus why they are not also understand the importance of land resources conservation. The land degradation is taking place especially to the coastal area in Zanzibar. For the government should be making sure that, the societies became strongly educated and know about the importance of land resources for their lives.

**4.6 The Impacts of rapid population growth**

**Table 1.4 Impacts of rapid population growth**

N/S	Impact of rapid population growth	Frequency	Percentage
1	Yes	56	80
2	No	9	20
<b>Total</b>		<b>65</b>	<b>100</b>

Source: field Survey, 2019

Table 1.4 clearly shown that, 80% of the total respondents supported that there is huge impact of rapid population growth in a Zanzibar community; this also implies that some respondents realize that, there is low impact about 9 which is equal to (20%).

Those who responded that rapid population growth had an impact on the land resources management were further asked to elaborate about the impact. The majority of the

respondents had said the mostly of the negative impacts that rapid population growth had on the land resources. They expressed like that, they drilling the land so as to get the minerals like sand and stones as a building materials, they established their shelter in the farming area, they destroyed the land as a result caused the land degradation, they cutting down the tress, slums are many and others. Also raised un planed urbanization especially to the coastal area like Nungwi, Matemwe, Jambiani, Kiwengwa for Unguja Island and Micheweni, Wete, for Pember Island. But most of the respondent they said that, there is very few positive impact, that include only increasing of cheap labor who are very essential for National building.

**Plate 1.0 land environmental degradation in Zanzibar Island**



Source from the field 2019

Plate 1.1 Cutting down the tress



Sources from the field 2019

According to the above plates, that is the reality negative impacts of rapid population growth in Zanzibar Island. That is the threats of land resources management. Due to the rapid population growth in the study area, the communities became homeless and jobless, so that they drilling the land to get minerals include sand and stones sold out as a their sauces of income and also in other side they cutting down the forest for establishing a shelter such as slum and burn the tress purposively so as to get charcoal in order to certified their basic need. So that the land resources become empty, when the rain seasons it take place the soil erosion as result the Land became affected through rain water due to increasing the human activities like bad methods of farming like mono culture and overgrazing, at the end the land loose

it natural quality fertility as a result the production become poor.

According to the data analysis report Zanzibar Island seemed to have the problem of improper drilling the mineral like sand due to the rapid population increase, the societies cutting down the tress and drilling the sand mineral, as a their income sources, so that the land became exhorted. Effect of that action, the land lose its natural land fertility especially during the rain season, when the rain water come, it will very easy to remove the land productivities, as a result, agricultural production is poor. As it understood that, Zanzibar Island has the very limited land resources, so it important to maintain by controlling the human activities.

#### 4.7 Effective measures taken by the Government to maintain land resources

Respondents were asked to state in what ways they thought that the Government done in the maintaining the Land resources in Zanzibar. The respondents were asked to express some of the mechanisms used by the Government to develop land resources and the results were as follows. The respondent express that, there are many activities done by Government to make sure that, land resources become conserved. It providing education skills in the communities, some respondent said that the Government had point out the specially areas for farming activities, also some are said that, the Government had improved the strict laws for those who will involved in the Land degradation like drilling the sand and minerals activities but some little respondents are claimed that, there is no effective mechanism which are taken by the Government to maintain the land resources but that respondents who claimed that are very few.

#### 5. CONCLUSION

By considering on the findings which are presented above, the study concluded that, threats (problems) of land resources management due to the rapid increasing the population growth in Zanzibar Island, are caused by the Government itself, this is because the issue of urbanization process is unplanned by the government itself. This is the geographical phenomena's which need to plan be example to arrange and strongly supervision by the Government master plan at the futures. It is the fact that, many Zanzibar sub urban does not planed, so that, when the rapid population growth taking palace, the land resources will become threats because the human activities will be increase like use the land for new shelter, forming and so on.

Similarly, the unemployment problem is higher, in such a way that, the peoples they had no sources of income, as a result they decided to employ themselves through the uses of Natural resources example land resources and forest resources at all. So that in order to control all exist aspects proved by the study, the Government itself should be firstly, establish the institution which will be responsible providing the effective education on the effect environmental degradation to the societies which will make awareness in the societies, to establishment the strict laws which will guide and supervise the all human activities on the uses of Natural resources example land resources for drilling the minerals like sand in Zanzibar Island.

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