

Land Use Change in The Process of Tourism Industry Development in Zanzibar. Case Study of Unguja Island

The corresponding author: **LI Jing**, Associate, Professor, Head of Department of Land Resources Management, Huazhong University of Sciences and Technology (HUST) email address: jl_sz@163.com, lijing.99@hust.edu.cn

The main author: **Muhamad Hamdu Haji**, Huazhong University of Sciences and Technology (HUST), Email address: kibindo14@yahoo.com

Abstract, this article, examined how the land use change in the process of Tourism development in Zanzibar Island and its effects. The article had reviewed the deferent researched papers, journals and articles as secondary sources of data. It had selected Unguja Island as case study especially in the coastal zones which are well affected by Tourism industry in Zanzibar Island, this include, Nungwi, Kiwengwa, Matemwe and Jambiani, Kizimkazi, Pongwe, bwejuu and Uroa, for Unguja Island. The article it also had proved the different challenges which hinder the developments of agriculture industry in Zanzibar Island. Also the article recommends the deferent alternatives mechanism for addressing the challenges and effects of Land use plan.

Keywords, Land use change, Tourism industry, Development, Zanzibar

1. PART I

Introduction

(1) Claimed that, “with an estimated population density of about 380 persons per square kilometer, Zanzibar stands out as one of the most densely populated agricultural islands in the world. The land use plan in Zanzibar Island is focused in the Agricultural production that is before the establishment of the Tourism industry, it creates a large number of employment opportunities compared with other sectors of the economy”. The sector accounts for about 45 % of GDP, 30 % of Government revenues, 60 % of the labor force employed and 75 % of export earnings of the islands (2).

In Zanzibar the land fertile and productive are obtained in the western part of the Island and corals it covered about approximately 60% for Unguja Island and only 17% in Pemba Island and mostly in the eastern part of both Island (Zanzibar) and southern part of Unguja Island. The forest conservation covered about 8% percent of the total area of the land. Therefore, both of that land fertile areas are now days its land use has been changed into Tourism activities as a land spices farm.

Zanzibar tourism, began in the late of 1980's, and is therefore still a new industry, struggling to improve economic standards, with 87,511 tourists which is an increase of 43 percent, the sector contributed in US\$ 4,471,000 foreign earnings in 2002 (3). Tourism is expected to grow in 21st century as it becomes more accessible to a larger cross section of the global population. This will result in commensurate economic opportunities for developed and emerging destinations around the world. It will also create major challenges, not only in attracting and serving increased tourism demand, but also in mitigating the numerous potential negative externalities that will emerge as a result of tourism's rapid growth. Successful destinations will strike a balance in developing their tourism industries by engaging tourism stakeholders, monitoring international trends, ensuring that the benefits of tourism outweigh any potential negative impacts and pledging a more equitable distribution of tourism revenue. Although it is not possible to envisage all issues affecting tourism, it is essential to recognize important trends that already have and will have considerable influence on tourism demand. (4)

This article extremely, examined the how the land uses change in the process of Tourism development in Zanzibar Island. And also it recommended many alternatives way for improving and overcoming the effects which hinder up the development of land use especially agricultural industry in Zanzibar Island.

2. PART II

Related Literature Reviews

The land use change, actually and mainly caused by the human activities is the major factor and contributor. In the area of study, the land changes are characterized by a numbers of factors. This includes, the invasion of land farming areas by Tourism industry, changing by the Government polices on the sector of the economic investment dimension, climatic change also is the another factor of land use change for the many years. But Zanzibar Island had much affected on the land use changes by interfered by the

Tourism industry, there are many land farming hectors was used for farming activities before but now has been changed it way, now day it is only used for spices farm and used mainly for Tourism activities and not for production as it before.

Land use change

(5) Strongly argued that, Land is extremely used to meet a multiplicity and variety of human needs and to serve numerous, diverse purposes. When the users of land decide to employ its resources towards different purposes, land use change occurs producing both desirable and undesirable impacts. The analysis of land use change is essentially the analysis of the relationship between people and land. Why, when, how, and where does land use change happen? And what are the impacts of land use change? To provide answers to these closely interrelated questions, theories have been advanced and models have been built in the last 200 years. This contribution attempted to provide a panorama of theoretical and modeling approaches to the study of land use change as well as to examine broadly how well they reflect the drivers, processes and implications of this change.

(6) Land use classification systems are tied usually to particular spatial scales but they reflect also functionally-defined scales such as the scale of agricultural or industrial organization. At the world level, the FAO distinguishes four or five major land use types. At the level of nations, the number of land use types increases to around ten. At this level, other scales enter the classification system to differentiate further the land use typology – agricultural land is further subdivided according to the type of product (annual, perennial), pastures are distinguished according to ownership status into public or private, etc. At the level of a parcel of land, land use classification becomes very detailed capturing local environmental, socio-cultural, demographic, economic and other details. In general, at lower levels of the spatial scale, land use types are defined along additional scales which reflect modes of economic, social, and institutional organization. The analysis of land use change is essentially performed at the level of detail of the land use classification system adopted which, in its turn, reflects a certain combination of scales. It is, thus, important to examine the extent of agreement between the intended level of analysis and the actual level at which the analysis is eventually performed to provide consistent interpretations of the results obtained. The first step in any study of land use change concerns the measurement and assessment of land use change involved. This is influenced significantly again by the level of scale at which the measurement is conducted – spatial and temporal scale primarily but also social, economic, institutional and cultural scale. For short time intervals at the level of the globe, no land use change may be discernible while at the level of a field measurable change may be recorded. Longer time intervals reveal significant changes in the uses of land. (7)

Causes of Land use change

FAO defines land as “a delineable area of Earth’s terrestrial surface, encompassing all attributes of the biosphere immediately above or below this surface, including those of the near-surface climate, the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes, and swamps), the near-surface sedimentary layers and associated ground water reserve, the plant and animal populations, the human settlement pattern and physical results of past and present human activity (terracing, water storage or drainage structures, roads, buildings, etc.)”

Land holds a central position in human existence and development. Since their appearance on earth, humans have used land and its resources to meet their material, social, cultural, and spiritual needs. They have used land for the provision of food, clothing, shelter, and heat; for producing a large variety of goods and services for their own use or market exchange; for moving around and transporting goods; for recreation and leisure; for aesthetic pleasure; for attaining social status and prestige; for spiritual satisfaction.

In this process, they have modified and are modifying land in various ways and intensities. Natural forests and grasslands are converted into agricultural and grazing areas for crop and livestock production, to urban and industrial land, and to infrastructure (roads, dams, etc.). Wetlands are drained and converted into agricultural, residential, recreational and industrial uses. Land is mined to obtain ores, minerals, and stones. Cropland undergoes intensification, intensification, marginalization, abandonment, or conversion to urban and recreational (tourist) uses. Abandoned land may be reforested or it may be degraded further. Settlements may experience urbanization, suburbanization, or de-urbanization. Residential areas can be converted into commercial areas and vice versa, high-income neighborhoods may turn into slums, and so on. Land degradation is an extreme form of land-cover change that results from uses of land that overexploit its resources.

Worldwide the issue of Land use changes seemed to be very sold problem and caused by the deferent biological and geographical factors. For example, climatic changes, high rate of population growth, high rate of deforestation, overgrazing, bad methods of agriculture like shifting cultivation, loses of micro and micro biological organisms (bio diversity) which are very important for soil fertility as well as the changing of the national policy of the particular state like from the Agricultural investments into Tourism investments.

Land-use change is influenced by a variety of biophysical and societal factors operating on several spatial and temporal levels, and acting in intricate webs of place- and time-specific relationships. At the level of the individual land unit, relevant biophysical factors include local climate and weather, topography, bedrock and soil type, surface water, and groundwater. The choice of land use and decisions to change it are influenced by the size of the household, age, gender, education, employment, attitudes, values, and personal traits of household members, site-specific conditions accessibility, regional land-use structure as well as by transportation cost, profits, parcel size, competition, costs of production, product prices, public and private financial support, land management practices, land tenure, and At higher spatial levels, pivotal biophysical influences on land use and land cover change include regional climate, landform, geology, soils, hydrology, vegetation, and fauna. Societal factors relating to population structure and dynamics, income and affluence, technology, socio-economic organization, culture, institutions, and political systems shape demand for land, land-use patterns and their change. Future land-use and cover change will depend, on the one hand, on the dynamic relationships among these factors and the resulting land-use patterns, from the individual to higher spatial levels and, on the other, on national and international direct and indirect policies instituted to mitigate the adverse environmental and socio-economic impacts of land-use and land cover change. (8)

The misconception that follows is that most tropical deforestation occurs by the “push” of population growth and poverty to invade, slash, and burn the forest along the roads (9).

Urbanization as land cover, in the form of built-up or paved-over areas, occupies less than 2% of the earth’s land surface (10). Changes in the area of urban land per se, therefore, do not appear to be central to land-cover change. This claim appears to support a misconception that urbanization can be ignored in land change studies (11). In reality, urbanization affects land change elsewhere through the transformation of urban-rural linkages. For example, urban inhabitants within the Baltic Sea drainage depend on forest, agriculture, wetland, lake and marine systems that constitute an area about 1000 times larger than that of the urban area proper (12). Given that urban life-styles tend to raise consumption expectations and that 60% of the world’s population will be urban by 2025 (13), the rural–urban linkage or the urban “ecological footprint” is critical to land change assessments (14)

High rates of deforestation within a country are most commonly linked to population growth and poverty, shifting cultivation in large tracts of forests (15). In contrast, “weak” nation states in Central Africa depend heavily on natural resources, including timber, to generate foreign revenue. De facto regulations of this industry are weak, owing to inadequate law enforcement and corruption, increasing the forest area logged and the related environmental impacts. Migrants follow logging roads, clearing land for food and commercial crops. The amount of land that cultivators clear and the length of their fallows, which determine patterns of regrowth, are tied to such socio-economic triggers as devaluation of the national currency, changes in market prices of agricultural commodities, contract farming, and social conflicts (16), cited in cited in (17).

(18) Strongly argued that. The ‘carrying capacity’ is believed to derive from agro-ecological potential and to be relatively constant. The intrinsic variability of rangeland ecology, however, makes it difficult to distinguish directional change (such as loss of biodiversity or soil degradation) from readily reversible fluctuations, such that interpretations of “degradation” and “desertification” must be viewed cautiously (19). Rangelands in arid or semi-arid tropical and subtropical zones are increasingly seen as non-equilibrium ecosystems. Modification in the biological productivity of these rangelands at the annual to decadal time scales is mainly governed by biophysical drivers.

State policies throughout sub-Saharan Africa are framed under the assumption that pastoralists overstock rangelands, leading to degradation. The resulting management strategies aim to control, modify, and even obliterate traditional patterns of pastoralism, including the development of watering points or long-term exclusion of grazing (20). Two common pathways follow. Weakened indigenous pastoral systems undermine local economies and resource institutions or precipitate urban migration with rural remittances, either of which may lead to land alienation and conversion. (21).

Impacts of land use change

Land is one of three major factors of production in economics development and an essential input for housing and food production. Thus, land use is the backbone of agricultural economies and it provides substantial economic and social benefits. Land use change is necessary and essential for economic development and social progress. There are various impacts of Land use changes, this includes:-

Social economic impact

Land use change, however, does not come without costs. Conversion of farmland and forests to urban development reduces the amount of lands available for food and timber production. Soil erosion, salinization, desertification, and other soil degradations associated with intensive agriculture and deforestation reduce the quality of land resources and future agricultural productivity (22). Urbanization presents many challenges for farmers on the urban fringe. Conflicts with nonfarm neighbors and vandalism, such as destruction of crops and damage to farm equipment, are major concerns of farmers at the urban fringe (23). Neighboring farmers often cooperate in production activities, including equipment sharing, land renting, custom work, and irrigation system development. These benefits will disappear when neighboring farms are converted to development. Farmers may no longer be able to benefit from information sharing and formal and informal business relationships among neighboring farms.

In response to the increasing urbanization, many local governments have imposed strict land use control. Some of the efforts have been quite successful in slowing down development. (24) Found that local land use regulations reduced land development by 10% in the five western states between 1982 and 1997, with the largest percent reduction occurring in Washington (13.0%), followed by Oregon (12.6%), California (9.5%), Idaho (4.7%), and Nevada (2.8%).

Environmental impact

Land use change is arguably the most pervasive socioeconomic force driving changes and degradation of ecosystems. Deforestation, urban development, agriculture, and other human activities have substantially altered the Earth's landscape. Such disturbance of the land affects important ecosystem processes and services, which can have wide-ranging and long-term consequences.

Farmland provides open space and valuable habitat for many wildlife species. However, intensive agriculture has potentially severe ecosystem consequences. For example, it has long been recognized that agricultural land use and practices can cause water pollution and the effect is influenced by government policies. Runoff from agricultural lands is a leading source of water pollution both in inland and coastal waters. Conversions of wetlands to crop production and irrigation diversions have brought many wildlife species to the verge of extinction.

Urban development has been linked to many environmental problems, including air pollution, water pollution, and loss of wildlife habitat. Urban runoff often contains nutrients, sediment and toxic contaminants, and can cause not only water pollution but also large variation in stream flow and temperatures.

Policy impacts

Land use provides many economic and social benefits, but often comes at a substantial cost to the environment. Although most economic costs are figured into land use decisions, most environmental externalities are not. These environmental "externalities" cause a divergence between private and social costs for some land uses, leading to an inefficient land allocation. For example, developers may not bear all the environmental and infrastructural costs generated by their projects. Farmland produces both agricultural commodities and open space. Although farmers are paid for the commodities they produce, they may not be compensated for the open space they provide. Thus, market prices of farmlands may be below their social values. Such "market failures" provide a justification for private conservation efforts and public land use planning and regulation. Private trusts and nonprofit organizations play an important role in land conservation. For example, the American Farmland Trust claims that it has helped to protect more than one million acres of America's best farm and ranch land. The Nature Conservancy has protected more than 117 million acres of ecologically important lands. However, some have questioned whether private conservation efforts crowd out or complement public efforts for land conservation.

Land Tenure Systems

(25) States, Land tenure may be defined as the terms and conditions on which land is held, used and transacted. Land tenure refers to the rights of individuals or groups over arable, grazing and residential land, how such rights acquired, what they consist of, how they operate in the holding, transfer and people in their dealings in land inheritance of land (26).

UN-Habitat report (27) defines land tenure systems to in cooperate the way individual and groups holds and or own land, or the set of relationships legally or customarily defined amongst people with respect to land. Tenure reflects relationships between people and land directly, and between individuals and groups of Land tenure primarily viewed as a social relation involving a complex set of rules that affects the way that land owned and used. While some users may have access to the entire bundle of rights' with full use and transfer rights, other users limited in their use of land resources (28).

(29), security of tenure describes an agreement between an individual and group to land and residential property, which governed and regulated by a legal and administrative framework including both customary and statutory systems.

In addition, (30) argues that security of tenure derives from the fact that the right of access to and use of the land and property underwritten by a known set of rules, and that this right is justiciable. The tenure affected in a variety of ways, depending on constitutional and legal framework, social norms, and cultural values and, to some extent, individual preference.

Moreover, a person or household can be said to have secure tenure when they are protected from involuntary removal from their land or residence by the State, except in exceptional circumstances, and then only by means of a known and agreed legal procedure, which must itself be objective, equally applicable, contestable and independent (31).

Land Use Planning and Development

Land use planning is an important component in land management without it, land management and national development becomes in danger. Literature has demonstrated that refers to the process by which a society, through its institutions, decides where, within its territory, different socioeconomic activities such as agriculture including farming and livestock, housing, industry, recreation, and commerce should take place signifies Land use planning (32).

Mather (1986) defines Land use planning as the human action indicating land use by stating that it is formed by choice made by the individual land user operating within broad environmental limitations and government influence Land use policy is the framework to manage and control land use and natural resources, including the detailed examination of land tenure and land laws (33).

In Zanzibar case, the National Land Use Plan guides land use plans. The plan was prepared in 1995, as the only land use policy covering both Unguja and Pemba. The main implementing agencies of the land use plan are the local authorities. Land use planning in Zanzibar is facing several problems including limited financial and skilled human resources, rapid urbanization and socio-economic development, an inappropriate legal set-up and the lack of resources for monitoring land use development. In steady, it guides proper land use planning in the isle (34).

Land value and Markets

(36) Notes that Land markets perform four important functions namely; bringing buyers and sellers together to facilitate transactions, set prices for land, allocate land by setting prices, and land prices play an important role in ensuring that land is efficiently used. Land markets exist when and wherever it is possible to exchange rights in land for agreed amounts of money or services rendered. The ability and capacity of banks and other financial institutions to lend money underpinned by an efficient land market, which in turn requires an efficient land administration system. The efficiency of the land market varies across the world together with its openness to public scrutiny and support for the concepts of sustainable development (37)

Land tenure and land administration systems are means where government systems use to regulate land markets (38). Key elements in any land tenure system include the extent to which land bought or sold; whether someone can use it as collateral and if so who then takes over a property if any loans on the land not repaid. In addition, who has rights of access to or passage through the land; the rules governing inheritance; and the extent of additional use rights and obligations (39).

Land administration systems enable security of tenure guaranteed and this achieved in a number of ways, the details of which are beyond the scope of this paper. Weaknesses in any land administration system affect the level of trust that is an essential component of a land market. As (40) argued, the impact of such weaknesses can have extensive consequences.

In Zanzibar case, a land market is growing fast because of increasing population. Recently, social and economic activities are increasing tremendously. As a result, people demand more land for agriculture, animal husbandry and investment. Demand for land has then led to land price speculation and high prices of land. Since it difficult to ref rain people from selling their land, Land policies then are imperative for regulating land markets.

Zanzibar agriculture Land and Tourism Development

In Zanzibar Island, agriculture and Tourism are the two main elements which are considered in the socio-economic development process which providing and generating the revenues for the country and cause the multiple effect in the country. Both

contributing the growth of Growth domestic products (GDP) by providing the employment opportunities and generating the rural income.

Agricultural land

According to Baha'i, 1996, Agriculture is the production of food and goods through farming and has played key roles in the development of human civilization. At present, in developed nations agricultural production has increased, food purchasing power has risen, and diets have improved over time. The same is not true in developing countries such as Nepal where the majority of the population live in rural areas, mainly surviving by subsistence agriculture.

In developing country like Zanzibar Island, the agricultural production is a mainstream and pivotal point of the economy, and it makes an important and special priority is to ensure the sustainable agriculture and rural development for overall sustainable development in order to reduce poverty. The main objectives of sustainable agricultural development is to ensure a steady increase in agricultural productivity, enhance food production and security of food supply, develop rural economy, and increase rural people's incomes in order to change rural lives condition in the country as well as backward conditions in rural areas. The large number of the Zanzibar population depend land for agriculture, it provide and create the 45% employment of Zanzibar population (15).

Tourism development

Tourism has been recognized as one of the most promising alternative livelihood options by creating local income and employment opportunities for poor people and Countrywide in general (22). Being labor intensive, having relatively high multiplier effects and requiring relatively low levels of capital investment, tourism can generate tangible benefits in areas where traditional livelihoods are under stress (34). According to Sharma (29), however, tourism has both potential benefits and drawbacks. The first and foremost potential benefit is expansion of income and employment opportunities, particularly in areas where such opportunities remain limited. Second, tourism, by increasing foreign exchange earnings can be used to support the development process in the host country. Finally, tourism is seen as a means of infrastructure building and economic transformation of often remote, inaccessible and historically marginalized areas, such mountain areas, and rural communities. Negative effects include environmental degradation (e.g., improper waste management, pollution and over use, social inequities (e.g., limited participation of communities in the planning process) and loss of cultural identity (22).

Thus if tourism is not carefully managed the negative effects can override the benefits. For developing countries, such as Zanzibar Island, tourism has become a suitable and relatively inexpensive development strategy because tourism has the potential to influence and change the use of natural like land and cultural resources in the country. As such it has become an important policy tool for community and regional development. Moreover, the sustainability of tourism has enabled it to become not only an important economic factor but also a social agent that affects the natural and socio-cultural environment in various ways (e.g., sustainable use of natural resources and improved quality of life of the local people living in communities adjacent to tourism areas).

The effects of Tourism industry on land use

(11). for decades tourism industry growth has been a major contributor to increased economic activity throughout the U.S. and the world. It has created jobs in both large and small communities and is a major industry in many places. It is the dominant economic activity in some communities. Yet, the impacts of tourism to a community are not widely understood even where tourism is growing dramatically and should be of the greatest interest or concern.

Most people think about tourism in terms of economic impacts, jobs, and taxes. However, the range of impacts from tourism is broad and often influences areas beyond those commonly associated with tourism. Leaders as well as residents who understand the potential impacts of tourism can integrate this industry into their community in the most positive way. (11)

A goal of developing the tourism industry in a community is maximizing selected positive impacts while minimizing potential negative impacts. First, it is essential to identify the possible impacts. To u r i s m researchers have identified a large number of impacts. (40).

Land degradation, is an important land resources include minerals, fossil fuels, fertile soil, forests, wetland and wildlife. Increased construction of tourism and recreational facilities has increased pressure on these resources and on scenic landscapes. Direct

impact on natural resources, both renewable and non-renewable, in the provision of tourist facilities can be caused by the use of land for accommodation and other infrastructure provision, and the use of building materials.

Forests often suffer negative impacts of tourism in the form of deforestation caused by fuel wood collection and land clearing. For example, one trekking tourist in Nepal and area already suffering the effects of deforestation can use four to five kilograms of wood a day (36), cited in (22).

(40).Construction activities and infrastructure development. The development of tourism facilities such as accommodation, water supplies, restaurants and recreation facilities can involve sand mining, beach and sand erosion, soil erosion and extensive paving. In addition, road and airport construction can lead to land degradation and loss of wildlife habitats and deterioration of scenery.

Deforestation and intensified or unsustainable use of land: Construction of ski resort accommodation and facilities frequently requires clearing forested land. Coastal wetlands are often drained and filled due to lack of more suitable sites for construction of tourism facilities and infrastructure. These activities can cause severe disturbance and erosion of the local ecosystem, even destruction in the long term.

(41) Strongly argued that, “Negative impacts from tourism occur when the level of visitor use is greater than the environment's ability to cope with this use within acceptable limits of change. Uncontrolled conventional tourism poses potential threats to many natural areas around the world. It can put enormous pressure on an area and lead to impacts such as soil erosion, increased pollution, discharges into the sea, natural habitat loss, increased pressure on endangered species and heightened vulnerability to forest fires. It often puts a strain on water resources, and it can force local populations to compete for the use of critical resources”.

Government, Tourism development and Land protection

The Tourism development can working together with Government very closely and dramatically in the development of land protection. Direct financial contributions Tourism can contribute directly to the conservation of sensitive areas and habitat. Revenue from park entrance fees and similar sources can be allocated specifically to pay for the protection and management of land protection and environmentally sensitive areas in general. Special fees for park operations or conservation activities can be collected from tourists or tour operators. Contributions to government revenues some governments collect money in more far-reaching and indirect ways that are not linked to specific parks or conservation areas. User fees, income taxes, taxes on sales or rental of recreation equipment, and license fees for activities such as hunting and fishing can provide governments with the funds needed to manage natural resources like land protection and other resources. Such funds can be used for overall conservation programs and activities, such as park ranger salaries and park maintenance (42). Cited in (35)

Tourism Environmental, Land Management Planning and Improvement

Sound environmental management of tourism facilities and especially hotels can increase benefits to natural areas. But this requires careful planning for controlled development, based on analysis of the environmental resources of the area. Planning helps to make choices between conflicting uses or to find ways to make them compatible by planning early for tourism development, damaging and expensive mistakes can be prevented, avoiding the gradual deterioration of environmental assets significant to tourism. (23)

Cleaner production techniques can be important tools for planning and operating tourism facilities in a way that minimizes their environmental impacts. For example, green building (using energy-efficient and non-polluting construction materials, sewage systems and energy sources) is an increasingly important way for the tourism industry to decrease its impact on the environment. And because waste treatment and disposal are often major, long-term environmental problems in the tourism industry, pollution prevention and waste minimization techniques are especially important for the tourism industry (12) cited in (14).

Protection and Conservation

Significantly Tourism industries contribute in the land environmental protection and preservation in relation with the restoration of biological diversity and promote the sustainable utilization of land resources. (30) Strongly argued that, “Because of their attractiveness, pristine sites and natural areas like land and other natural resources like forest are identified as valuable and the need to keep the attraction alive can lead to creation of national parks and wildlife parks. In Hawaii, new laws and regulations have been enacted to preserve the Hawaiian rainforest and to protect native species. The coral reefs around the islands and the marine life that depend on them for survival are also protected. Hawaii now has become an international center for research on

ecological systems and the promotion and preservation of the islands' tourism industry was the main motivation for these actions".

Effective Measures on the future land use

Regulatory measures help offset negative impacts; for instance, controls on the number of tourist activities and movement of visitors within protected areas can limit impacts on the ecosystem and help maintain the integrity and vitality of the site. Such limits can also reduce the negative impacts on resources.

Limits should be established after an in-depth analysis of the maximum sustainable visitor capacity. This strategy is being used in the Galapagos Islands, where the number of ships allowed to cruise in this remote archipelago is limited, and only designated islands can be visited; ensuring visitors have little impact on the sensitive environment and animal habitats (34)

Zanzibar Land use change

(33) Cited in Development bank of South Africa article, a recent review of integrated planning in many African states it indicates that land use management strategies (LUMS) are a big challenge for local government. Not only this, many municipalities do not have functional LUMS in place at all. Where they exist, they are seldom influenced by the local Spatial Development Framework, one of the key competencies of local government. This inadequate land use planning environment has consequences for socio-economic and environmental decisions. Holiday homes, particularly large lifestyle estates are a case in point. But for Zanzibar Government, totally had been changed since the immediately established by Tourism industry. Before and after the Zanzibar Revolution, the land was used only for agricultural production and Zanzibar Island became very famous in the world market for selling their crops like cloves, coconut and others.

(33) Strongly argued that "In the early of 1964 after the Zanzibar Revolution (independency) had been taken various measures to stabilize the economic welfare in Zanzibar and seriously announced, the first Land Reform on 8th March 1964. According to that reform all land was to be public property. The Reform demanded that an individual could only own what he or she developed on the farming planting with the crops plantation purposively to protect the land, but the Land itself could not be owned. The declaration was followed by the seriously National notation of abundant Land left behind by those who had fled the Revolution. The National Land was re-distributed to the majority of Landless peoples but purposely for farming".

But soon in the early of 1990s after established by the Tourism industry as a main Government economic investments sector the Agricultural production declined and became the second large economic sources, Tourism industry had colonized the hundreds hectares for establishment Tourism zones, especially in the coastal areas, where by the large hotels were built, not only that, but also the land farm also had been converted into Tourism activities as a spices farm. So that the land use total changed from the Agricultural production into Tourism activities.

Zanzibar Tourism condition

Tourist industry in Zanzibar has experienced a steady and rapid growth rate. In fact, tourist arrivals have more than tripled in fourteen years, from 41,433 in 1994 to 143,265 in 2007 (42). As a result the tourism sector has witnessed an encouraging trend particularly with regard to the mushrooming of first-class hotels. Zanzibar is the world's most famous spicy island. It is in Zanzibar that the African culture blended with other cultures, mainly Persian, Arabic, and Indian and so on to form the Swahili culture. Famous explorers such as Dr. Livingstone, Speke, Burton, Krapt and Rebman launched their exploration to the interior of the African continent from this point. Today the romance, the splendor and legends of the past are still vibrantly alive. These include the traditional sailing dhows, carved wooden doors, chests, and the scent of the clove and the smile of the hospitable residents. All these are great attractions to many tourists who visit the Zanzibar Island. Kiwengwa village in the north-eastern part of the island was specifically studied in Zanzibar. (42)

Tourists to Zanzibar come mainly from Europe (over 60% of overseas visitors) with Italy and France being, by far, the largest sources. The United States and Canada are also important origins, as most safari companies marketing in North America offer Zanzibar in their itineraries. West Germany, Switzerland, United Kingdom, Italy and France dominate coastal tourism in Kenya; in Zanzibar Italy, Spain, France, United Kingdom and Scandinavia are the main markets. In addition, residents of Kenya are a very important source of visitors, ranking third in total bed-nights occupied on the Kenya Coast in response to special rates applied to Kenya residents and heavy low season reductions in hotel rates. Similarly, expatriate residents of Dar es Salaam and other parts of Tanzania are a significant source of visitors to Zanzibar, especially during low and "shoulder" seasons such as late March and Easter (35).

The Government of Zanzibar in collaboration with The Commission has launched a new project to promote Zanzibar's long history when they announced the formation of a Heritage Foundation Center in the old Stone Town, itself a UNESCO World Heritage site.

One of the main focus areas will be the days when Zanzibar was a major slave trading center before slavery was abolished, but also the history of architecture and art, crafts and trade in spices and fabrics which makes the old Stone Town so unique, thwarting multiple attempts to create high rise buildings in the center of the old town in the name of "development. (42)

Zanzibar Tourism and Spices Land Farm

Zanzibar Tourism industry had approached since the early of 1985s and strengthened in the early of 1990s, where by the many coastal land farming had interfered by the Tourism activities and the communities had ignored and withdraw from the Agricultural production and only involved in the Tourism activates, so that, Agricultural, production declined. The town is famous for its spice land farm which was the Agricultural land before, this include, Jozani land farm now it's known as Jozani forest reserve, Kizimbani land spices farm, Ngezi forest reserve and other. But all land spices farm were used for agricultural production but today has been changed it aims and converted into Tourist spices farm. So that, the land use has been changed Tourists visit the various coconut and spice plantations in the island. Zanzibar is known for its variety of spices that are used to prepare food, cosmetics and medicines. Some of the fruits available include; banana, coconut, lime, jackfruit and breadfruit. The spices available include; cloves, nutmeg, black pepper, vanilla and coriander, these commodities were exported into the world market. (33)

Jozani Tourist forest Farm land reserve which is currently used for Tourist activities instead for agricultural production is located in the central east region of Zanzibar Island. It consisting of a large mangrove swamp, the forest is home to the rare Red Colobus Monkey. The forest is also home to varieties species of bird about 40 and 50 species of butterfly. The Kidlike root site is a great place to view the endangered Pemba flying fox. (33)

Zanzibar land use contribution to the National economy

Before the Tourism industry, the land was more used for agriculture sector which contributed an average of 25 percent of the total GDP within eight years period from the different years, this were in 1985 to 1995. This contribution to the GDP is attributed by its dominance in foreign exchange earnings which currently accounts to over 70 percent. However, the country depends on limited agricultural commodities as primary export items confined to cloves and seaweed. Other potential export commodities include spices, marine products and fruits which have so far registered insignificant export proportion.

Agriculture is also by far the most important source of employment in the aisles. On average, 70 percent of the population depends directly or indirectly in the agriculture sector for their livelihood (34). This implies that the sector has high potential for tackling socio-economic challenges including high levels of income poverty and food insecurity as well as interfered by Tourism industry. Given the importance of the sector as a source of livelihood for the large majority of the population, and a base for foreign exchange earnings; the sector deserve adequate public and private sector investment for attaining and maintaining the anticipated high growth rate. This remains a critical challenge for agricultural transformation in Zanzibar. (12), now day the land use in Zanzibar Island totally has been changed into the Tourism investment by creating a big hotels and spices land farm, especially to the coastal areas.

3. PART III

Methodology

3.1 Introduction

This section presents the method which is used in this study. The study used qualitative method, in which the content analysis is used during the discussion, whereby the secondary data from the books, articles and journals reviewed and totally considered in this study.

3.2 Research Procedure

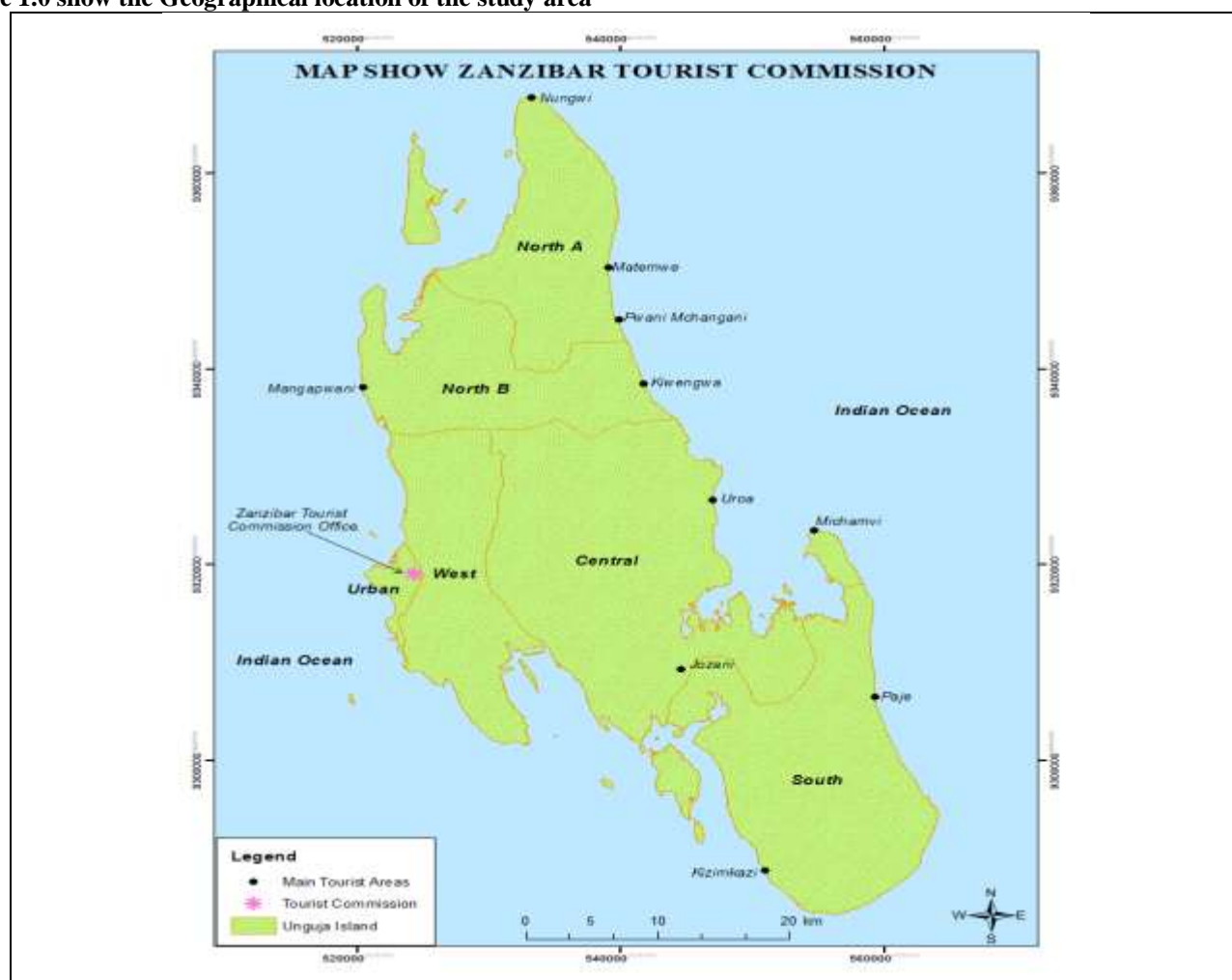
The study were used the phenomenological design to investigate how the land use change in the process of tourism industry that is why phenomenological design dealing with the study experience from the respondents and others studies from the study area, which provide the depth understanding of phenomenon as experience by several participants of the study (40).

(42), strongly proved that, Phenomenological analysis does not aim to explain or discover causes instead it's clarify the meanings of phenomena from lived experiences. Phenomenological methods are particularly effective at bringing 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 (5).

3.3 Geographical location of the study area

Zanzibar is understood as the archipelago situated in the shallow waters of the Indian Ocean, just 37 km east of Mainland Tanzania across the Zanzibar Channel, and consists of the major islands of **Unguja** and **Pemba**. Unguja is located approximately at latitude 6° south of the Equator and longitude 39° east of the Greenwich Meridian. (30)

Plate 1.0 show the Geographical location of the study area



Source, Research done 2015

4. Zanzibar land use planning development

The land use development has been under the land use policy and planning, which gives the critical information about the demographic figures, like population, human settlements as well as communalities resources and provides the planning which recommended for land use in relation to forest resources, agriculture, tourism, and other coastal resources management and identified areas for forest developments. The National land use planning (NLUP) provides a spatial framework for public as well

as private sector investment programmes and serves as a basis for environmental protection. It covers significant sectors of the economy and contains a number of supplementary plans such as the settlements structure plan, Tourism zoning plan and coastal zone management plan. (20). According to that explanation above, the national land use plan (NLUP) did not consider the agricultural land as it before as the investment framework, so it is the fact that, the land farm now day has been converted and affected much into the Tourism industrial development which are used only for land farm spices Tour. The impacts here is that, the agricultural production became failure and declined since the establishment of Tourism industry in Zanzibar Island.

5. Zanzibar Tourism industry and land use problem

Zanzibar Tourism industry is known as the sources of environmental problems of Land alienation, losses of farming Lands, sources of pollution and over exploitation of natural resources like trees and forest for building new hotels, losses of historical sites and rapid increasing of hotels especially in coastal areas. (22), Strongly argued that, The Vision 2020 is ambitious to eradicate poverty by 2020 in a method which will improve the quality of life, economically viable, environmentally sustainable, sustainable health services, just to mention a few. This due to exist the planning of improving the economy of the country, by the improving the economic sources sectors like agricultural land production as well as Tourism industry. So that, According to the fact above of rapid increasing of Tourism hotel today the area for farming in Zanzibar Island is very limited, the uses of land for farming seemed too outdated and only the land used for Tourism activates mainly in the coastal zones.

Plate 1.1 Rapid increases Tourism hotels



Source field survey 2019

6. Zanzibar Land use spices farm production for Tourism site.

(35) “To many outsiders, the image of Zanzibar is of an exotic and beautiful island, famed for its role in sea based trade and the production of spices. The perception is in contrast to a reality of poverty and decline. Zanzibar, mainly Pemba Island, was once the world's leading clove producer, but annual clove sales have plummeted by 80 percent since the 1970s. Despite the continued positive external perception of the island, Zanzibar is a poor country: GDP per capita was around \$660 in 2012. The pilot launch of the branded spice products targets tourists visiting the island. The island is highly fertile, and offers potential to increase production of high quality spices”.

As it understood that, since before and after Zanzibar revolution, Zanzibar is the spices Island, there are export activities trade since 1925 and its became very famous worldwide for spices production, for example in the world market and around the middle east countries in relation to European countries. There thousand tones of spices from Zanzibar, and thus why many colonial rules were lightered between them for colonizing Zanzibar Island, like British, Arabs from Oman as well as Portuguese that action happened since two hundred years ago.

But now day all most all respondents were claimed that, the land spices farm has been converted into Tourism activities as a site for Tours for foreigners instead for spices production, this land spices farm includes, Kizimbani spices farm, Jozani forest spices farm, Ngezi forest spices farm and others area in Zanzibar Island. Before the Tourism industry approached in Island that spices farms were very common for spices production like cloves and exported into the world market. But today it aims total has been changed into Tourism industry, thus why the agricultural economic production declined and only depend into Tourism industry for improving the economy of the Country.

Plate 1.2 Zanzibar land spices Farm changed into Tourism activities



Sources, field survey

7. Zanzibar Tourism industry took the land use space.

(22) “The tourism industry in Zanzibar is known to be faced with environmental problems of land alienation, loss of farming lands, sea pollution and over-exploitation of marine resources, loss of historical sites and a rapid increase of hotels mainly in the coastal areas. The Zanzibar Vision 2020 on the other hand aims to achieve sustainable economic growth averaging 9-10% by the year 2020.¹⁶ this is estimated to be implemented by diversifying the economy with the tourism industry which will provide employment opportunities of around 50% compared to 20% in agriculture and 30% in all other sectors. The Vision 2020 is ambitious to eradicate poverty by 2020 in a method which will improve the quality of life, economically viable, environmentally sustainable, sustainable health services, just to mention a few.” In Zanzibar Island, Tourism investment has covered almost 34%

of the land use areas, all of that land use were used for Agricultural production be for the Tourism industry established, especially in the coastal zones near to the beach. And therefore the only 29% land area are used for agricultural production, and the only the remaining land use about 37% are used for habitat and other social as well as administrative activates respectively. So that, it is the fact that, in Zanzibar Island the land use now has been total changed and more covered by Tourism industry.

According to the fact above Tourism industry had been seriously interfered the development of land use especially Agricultural land production which now days provides the only 20% out of the 100% employment opportunities to the communities, many Zanzibar population had been withdraw from Agricultural activities and depended into Tourism industry. So now the Zanzibar Agricultural economic production is declined. During the 1970s the land use was only for the economic production in Zanzibar Islands is agricultural sector with livestock; it was about 75% of the total National economy was from the Agricultural land production.

8. Zanzibar Land use challenges

Historically, in Zanzibar the land use was mainly used for agricultural production is continued to be very crucial pillar for supporting the livelihood to a large area in the communities. It is responsible for making sure the availability of food security by giving crops and livestock production in order to fulfill the Zanzibar residing population. In other side the agriculture is a primary source of employment about 43% percent of the population and was contributes about more than quarter of the Government economy. The Zanzibar Islands has very great fertile land for agricultural production. Taking into comparative advantages for good land fertile soil and seasonal rainfall to support the crop production and the natural pasture for feeding the livestock, it also contain good marine macro flora and fauna species and deferent forest resources such as Jozani forest and Ngezi forest resources which is provides the opportunity of demand of the communities for feeding fruits for domestic and export market of farm production. Actual fruits and spices in the regional and international levels.

Plate 1.2 shows the spices goads used for Tourism activities



Sources, field survey 2019

9. Challenges

Like many other regional states of the sub-Sahara Africa, agriculture sector in Zanzibar is invariably devastated by a number of challenges, mainly associated with continuous application of Tourism investment, now day the spices fruits farm land has been only used for Tourism attraction unlike 25 years ago, limited investment opportunities, and a slow pace towards commercializing agricultural production. Agricultural development is also defied by a poor marketing infrastructure and perpetuated by unpredictable impacts of climate changes (Zanzibar agricultural transformation initiative –final draft, (25).

Apart from that, above challenges but there is others. It seemed to very big challenges, this includes, the changing of National investment policy. In 1992, the Zanzibar national investment policy has been total changed from the Agricultural industry investment policy to Tourism industry investment policy. And from that Agricultural production consequently some of the land use has been converted into Tourism spices farm. That is caused Agricultural industry to decline, so that, the Tourism industry has invades the Agricultural industry in Zanzibar Island and the land use is used for build up too many Tourism hotels.

4. PART IV

10. Conclusion

The study is concluding to the recommendation that, as we have understood that, Land use main stream for the economic production for every state around the world. If the land use plan will be good is the higher strong economic production in the particular states, therefore for the Zanzibar Government, it should remind that, they have the limited land use in that Island it need strong long plan for the better land use investments, not only to focusing more into the single sector of investment like Tourism industry and ignore others sector like Agricultural production and livestock keeping. It better for Zanzibar Island to establish the multiple or triple land use investments in order to improve their economy

The Tourism activities seemed to interfered the land use and agricultural land production in general, so in order to overcome this problem, the central Government should be select special area which will be used for those spices farms for Tourism activities' and the origin land farms should be remained for other agricultural activities as it earlier.

Also, the experiences from the other data sources documents reviewed had claimed the problems of land environmental problem which are caused by the unneeded material from the Tourism hotel are placed under the ground which is very harmful for living organism; yield to lose the natural quality of the land as a result the economic production is declined. So for in addressing it, the Government through the authorized institution should be suggest the alternatives ways to the Tourism hotel managers with very seriously conditions and strict laws to control such kind of problem.

Apart from that, in order to improve the agricultural industry, the effective education is needed within the communities and good advisement to the farmers, just to advice them to avoid with the single thinking but to have multiple thinking and idea, example, to think more another sources of self employment like farming and livestock and to avoid with bad thinking about Tourism and others.

5. PART V

11. References

- [1] Ali, M. H., & Sulaiman, M. S. (2015). The Making and Contents of Zanzibar National Land Use Plan : A brief account on a donor funded project, 1–16.
- [2] ARGYRIS, J. H.; FAUST, G.; HAASE, M. (1994): Die Erforschung des Chaos. Eine Einführung für Naturwissenschaftler und Ingenieure. Vieweg Verlag, Braunschweig. BRIGGS J.; PEAT, F. D. (1990): Die Entdeckung des Chaos. Eine Reise durch die Chaostheorie. Carl Hanser Verlag, München; Vienna.
- [3] ATLAS (1993). Philip's Atlas of the World. George Philip Limited. Reed Consumer Books Limited. London.
- [4] Ayany, Samuel G. (1970) A History of Zanzibar; A Study in Constitutional Development. East African Literature Bureau. Nairobi - Dar Es Salaam - Kampala.
- [5] Africa Development Bank (2007). "Land Policies for Growth and Poverty Reduction - A ADB Policy Research Report." Oxford University Press.

- [6] Ameyibor et al (2003) Informal Settlements Development on Zanzibar; A Study on the An unpublished paper; Zanzibar
- [7] AU, (2009) A Framework to Strengthen Land Rights, Enhance,, Enhance Productivity and Secure Livelihoods”. Addis Ababa, Ethiopia.COLE (1993) National Land Use Plan; Appraisal: Analysis of Potentials and Issues (NLUP_S.02); Zanzibar.
- [8] Boggs et al (1993) Boggs, Jim, Törhönen, Mika and Ali, Hussein Mohammad. The Irrigation Rice Zone in Unguja Zanzibar. Unpublished work report, ZILEM-project, Zanzibar
- [9] Benavides, D. (2001). “Is the socio-economic sustainability of International Tourism assured under hyper-competitive conditions?” www.sommets-tourisme.org.
- [10] Bird, R. M. (1992). ‘Taxing Tourism in Developing Countries’, *World Development*, Vol. 20, No. 8, pp. 1145-1158
- [11] Cunningham Bissell W, (, 2010) Urban design, chaos and colonial power in Zanzibar, Bloomington, Indiana University Press
- [12] Denscombe, M. (2007). *The Good Research: Guide for Small scale Research Project*. Third Edition, Open University press.
- [13] Dieke, P. U. C. (1993). ‘Tourism in The Gambia: Some Issues in Development Policy’, *World Development*, Vol. 21, No. 2, pp.277-89
- [14] Fontana, A. F., J. H. . (2005). The interview: From neutral stance to political involvement. In N.
- [15] Gee, C. Y. (eds.) (1997). *International Tourism: A Global Perspective*, Washington, D.C.:WTO
- [16] Gössling S, (2001) The consequences of tourism for sustainable water use on a tropical island: Zanzibar, Tanzania,
- [17] Gössling, S., (2003(, “The Political Ecology of Tourism in Zanzibar” in Gössling, S. (ed.), *Tourism and Development in Tropical Islands: Political Ecology Perspectives*, Cheltenham, UK: Edward Elgar.
- [18] Hall M.C. (2001), “Trends in Ocean And Coastal Tourism: The End of The Last Frontier?”, *Ocean & Coastal Management*, 44, pp. 601-618.
- [19] Honey, M., (1999), *Ecotourism and Sustainable Development: Who Owns Paradise?* Washington, D.C.: Island Press. http://www.icao.int/icao/en/jr/5601_up.htm.
- [20] International Civil Aviation Organization (ICAO) (2001), “CAEP recommends further measures for reducing aircraft noise, engine exhaust emissions”, ICAO Update, January/February.
- [21] K. Denzin & Y. S. Lincoln (Eds), *The SAGE handbook of qualitative research*. Thousand Oaks, CA: Sage.
- [22] Khatib, A.H. (2000): Ecotourism in Zanzibar, Tanzania. In: Dieke, P. U. C. (Ed.): *The Political Economy of Tourism Development in Africa*.
- [23] Kothari, C.R (2000), *Research methodology, methods and techniques*, 2nd Ed, Prakarashan: New Delhi, India.
- [24] Kothari, C.R (2002), *Research methodology, methods and techniques*, Prakarashan: New Delhi, India.
- [25] Kothari, C.R (2004), *Research methodology, methods and techniques*, Prakarashan: New Delhi, India.
- [26] Kothari, C.R (2009), *Research methodology, methods and techniques*, Prakarashan: New Delhi, India.
- [27] Kulindwa and Mashindano (1999) “Macro Economic Reforms and Sustainable Development in Southern Africa Tanzania Tourism Case Study”, Dar es Salaam: Economic Research Bureau (August).
- [28] L. Dwyer, P. Forsyth, R. Spurr and T. Van Ho (2007). *Tourism’s Economic Contribution Vs Economic Impact Assessment: Differing Roles for Satellite Accounts and Economic Modeling*. University Press, uk.
- [29] Luhanho, P. L.(2001): *Tourism Development Trends in Tanzania*. In: *Tourism in the Least Developed Countries*. Benavides D. D. and E Perez-Ducy (Eds).
- [30] Maslow, A.M (1987), *Motivation and Personality*(3rd ed) New York: Collins Publisher.
- [31] Mathieson, A. and Wall, (1982) *Tourism: economic, Physical and Social impacts* London: Longman
- [32] M. Abdalla and S. Othman,(1996) “The Role of Tourism in National Development,” Paper Presented at Tourism Seminar on 30 April 1996, North Region, Unguja.

- [33] M. Akunaay,(2003). “Community Based Tourism in Tanzania, Potentials and Perils in Practice,” 2nd Peace through Tourism Conference, Dar es Salaam, 7-12 December 2003.
- [34] M. Makame and E. Boon,(2008) “Sustainable Tourism and Benefit-Sharing in Zanzibar: The Case of Kiwengwa-Pongwe Forest Reserve,” Journal of Human Ecology, Vol. 24, No. 2, pp. 93-109.
- [35] Mongula, S. (1994): Development Theory and Changing Trends in Sub-Saharan African Economies 1960-89. in: Himmelstrand et al (Eds.): African Perspectives on Development – Controversies, Dilemmas and Openings, James Curry London pg. 84 – 95.
- [36] O’Grady, R. (1982), Tourism in the Third World: Christian Reflections, Geneva: World Council of Churches.
- [37] Rwegoshora, H (2006) A Guide to Social Science Research, Dar es salaam, Mkuki na Nyota publisher.
- [38] Shah, K., and Gupta, V. (2000). “Tourism, the poor and other stakeholders: Asian Experience” London: ODI Fair Trade in Tourism paper.
- [39] Sinclair, M. T. (1998). ‘Tourism and Economic Development: A Survey’, The Journal of Development Studies, Vol. 34, No. 5, (June).
- [40] UNEP (1997), Environmental Good Practice in Hotels, Case Studies (jointly with IHRA)
- [41] UNEP (1999), Coastal Tourism in the Wider Caribbean Region Impacts and Best Management Practices.
- [42] United Nation World Tourism Organization (2010), UNWTO News, Issue 1/2010