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The Open University of Tanzania
Kawawa Road,
P. O. Box 23409
Dar es Salaam,
TANZANIA

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FOREWORD

Dear Authors and Esteemed Readers
It is with deep satisfaction that I write this Foreword to the Proceedings of the 2nd International Conference on the Future of Tourism (ICFT) held in Arusha, Tanzania, April 16 - 17, 2019.

ICFT continues a tradition of bringing together researchers, academics and professionals from all over the world, experts in tourism and hospitality. The conference particularly encouraged the interaction of research students and developing academics with the more established academic community in an informal setting to present and to discuss new and current work. Their contributions helped to make the Conference as outstanding as it has been. The papers contributed the most recent scientific knowledge known in the field of Sustainability of Tourism; Domestic Tourism and SMEs Development; Tourism and Economic Development; Culture and Tourism; Innovation in Tourism; Customer Care in Tourism; Methods of Measuring Tourism; and National Tourism Policy.

In addition to the contributed papers, two invited keynote presentations were given: by Mr. Richald Rugimbana, the Executive Secretary of Tourism Confederation of Tanzania who spoke about the Issues for future tourism development with special focus of Tanzania; and Prof. Zororo Muranda, Pro-Vice Chancellor, Chinhoyi University of Technology in Zimbabwe who gave presentation on the Future of tourism: Tourism of the future.

The Conference was preceded by a tailor made training in e-Tourism and Management of World Heritage sites. The facilitators of training were: Prof. George Oreku, a professor of ICT from the Open University of Tanzania and Mr. Erick Kajiru, an expert of Management of UNESCO World Sites from the UNESCO Commission in Tanzania.

These Proceedings will furnish the scientists of the world with an excellent reference book. I trust also that this will be an impetus to stimulate further study and research in all these areas.

We thank all authors and participants for their contributions.

Ladislaus F. Batinoluho, PhD
Conference Coordinator
Department of Tourism and Hospitality Management
P. O. Box 23049, Dar es Salaam, Tanzania
Tel: +255 767 636606
Email: tourism@out.ac.tz
Website: https://icft.out.ac.tz
POTENTIALS OF FORESTS ON NATURE BASED TOURISM IN TANZANIA: A CASE OF RAU FOREST RESERVE, MOSHI URBAN DISTRICT, KILIMANJARO REGION

Emmanuel Patroba Mhache The
Open University of Tanzania
emmanuel.mhache@out.ac.tz

Abstract
The role of forest in nature based tourism is very important. Tanzania has a large area of forest potential for Nature Based Tourism (NBT). This study explores the potentials of Rauford Forest Reserve (RFR) on NBT in Tanzania. The paper was designed to discern the potential of forests on NBT in Rauford Forest Reserve in Moshi District. The specific objectives of this study were two, to determine the potential of forest on NBT and to examine challenges facing forests as one of the avenue for NBT development. This study adopted a case study design and qualitative research approach. The sample of 20 people was identified for this study. In-depth interviews, focus group discussions and direct observations were used for data collection. Intensive literature review was done to get familiarity with the study. The study provides insights of the contribution of forests to diversify NBT in Tanzania.

Keywords: Diversification; Nature based tourism; Rauford Forest Reserve; Tourism;

Introduction
The role of forest in nature tourism is very important (FAO, 2018; Pueyo-Ros, 2018). Tourism in forest or rural areas plays a crucial role to the local communities residing close to it (Nsukwini and Bob, 2016). Forest tourism is a source of employment for local people, it generate revenues and enhance the quality of life of people (Pueyo-Ros, 2018). Forest land is central to tourism development in different countries (FAO, 2018) including Tanzania. In some areas or countries, forests are converted to construction of tourist facilities while other forests are protected or conserved and used for tourism. Wildlife is another important resources provided by forest ecosystems around the world (FAO, 2018). Recreation has always been and continues to be a very important element of forests. However, tourism and recreation are non-timber products of forests (Suleiman et al., 2017).

According to Jenkins and Schaap (2018), forest is one of the important natural resources in the earth. Forests cover 31% of the world’s land surface, just over 4 billion hectares (one hectare = 2.47 acres) (FAO, 2018). This size is down from the pre-industrial area of 5.9 billion hectares (FAO 2018). The size of forest has been decreasing every year due to extraction and over-exploitation. However,
functions of forests vary from one continent to the other. Forests wherever they are; cycles nutrients, regulates climate, stabilizes soils, treats waste, sequestrates carbon, clean air and are the source of water (catchment area) and is a home of different animal, plants and micro-organisms (Agbobidi and Eshegbey, 2008). Forests also offer opportunities for recreation and tourism. Some of the activities performed in the forests are not compatible to the forests such as lumbering, logging, grazing and others; they have negative effects on forests. At regional levels, forests vary in term of size, coverage and functions. Tropics are areas with big forests providing both direct and indirect benefits. Direct benefits of forests comprised fuel-wood, timber and poles while indirect benefits of forests include shade, regulate climate and sequestrate carbon. Tropical forests such as Congo forest have very big trees which attracts tourists and rainfalls. Activities executed in different forests such as lumbering and logging has attracted tourists viewing these activities, doing films and taking photographs.

As in other developing countries, Tanzania’s forests and woodlands play a very crucial role in the survival of human beings (Luoga et al., 2005; Linuma and Tang’are, 2018). Tanzania has a large area of forest providing building materials, food, fodder, medicinal herbs, and fuel-wood (Mhache, 2012; FAO, 2018). According to Lawman & Sinu (2017), forests sustain different peoples’ cultural, spiritual and religious values among others. However, these contributions are no longer sustainable due to population increase, high rate of exploitation and depletion of forests in Tanzania. The way benefits of forests are accrued is not sustainable, not compatible to it. The review of literature showed that, forests offers different products which are compatible to it, which does not degrade the environment. Forests, woodlands and trees provide what is termed as amenity services. These services attract people to visit forests and enjoy them. A proportion of the visits to forests can be classified as ‘tourism’ visits. Understanding the influence that forests and forestry practices have on tourism visits and associated expenditures is important. Thus, this study is designed to discern the potentials of forests on nature based tourism, a case of Rau Forest Reserve in Moshi District, Tanzania. The objective of this study is to explore the potential of forest on Nature Based Tourism; to examine the contribution of forests on NBT and to determine challenges facing forests as one of the avenue for the development of Nature Based Tourism.

**Methodology**

**The study areas**

This study was conducted in Rau Forest Reserve situated in Moshi Urban District in Kilimanjaro Region. Rau Forest Reserve is one of the urban forest in Tanzania located 3km South East of Moshi Town between Latitude 3° 23´ S and Longitude 37° 22´ E. Rau Forest Reserve was established by the Government of Tanzania in 1957. This forest covers an area of 570 hectares. Its boundaries are; to the north is bordered by Msaranga village; to the southern part is bordered by
Kaloleni village, Mabogini village and rice farms. To its East it border with Mwananguluwe tributary which is natural boundary; western part is bordered by Mjimpya and Njoro villages.

Data collection and analysis
Secondary data were collected from the reports, published and unpublished documents. Primary data was collected using interviews and direct observation in the villages situated close to the Rau Forest Reserve. Tourists and Tanzania Forest Services (TFS) staffs were interviewed. In this study 20 people were interviewed. Direct observation was done where different photos were taken. Content analysis was used to analyze the data collected and presented in boxes and narratives. This study adopted case study research design and opt for qualitative research approach.

Research Findings
Potential of forests on the Nature Based Tourism in Tanzania
Forest is an important natural resource in Tanzania (Luoga et al., 2005 in Mhache, 2012; Gross-Camp, 2017). Forest supports livelihoods of people in different angles. It offers both direct benefits and indirect services. Indirectly, forests regulate climate, sequestrate carbon and attract rainfalls. Forests whether reserve, protected or planted could be used for studies and for research. It is a source of building materials, fuel-wood, food, fodder, source of medicinal herbs and is a home of wildlife (FAO, 2018). Despite all these benefits, the potential of forests to tourism and recreation is missing. This section tried to establish the potential of forests on tourism development (Box 1).

Box 1: Potential of forests on tourism
“Among the potential of forests is its support to tourism development. House cannot be built on the air; this is the same to tourism that, forest is the base of tourism without which tourism in Tanzania is in danger”. Said one of the Forest Officer interviewed in Rau Forest Reserve. Forests have organisms (plants and animals) and features (water bodies, water-falls and others) which attracts tourists”, said chairman of Msaranga Ward.

Source: Field survey, 2018

Forests offer good environment and scenery (the natural feature of a landscape) for tourism development (Box 1). Most of forests are used for providing timber, fuel-wood and medicinal herbs. Forests are also sources of water, habitats of wild animals, attract rainfalls and regulates climate, to list some. All these benefits of forest support tourism and livelihoods of the people. Marketing through advertisement and promotion of forests can attract many people from different part of world to visit Tanzania and enjoy scenery of natural and planted forests. The Village Chairman of Mabogini Village had this to say,
“Natural environment is what attracts tourists from all over the world to visit or tour Tanzania. People travel long distances to Tanzania for watching birds, animals and their habitats i.e. forests. For the Rau Forest Reserve, people traveled long distances to view/watch animals, plants and natural sources of water (springs) in the forest.”.

Although it is not acknowledged, forest is the base of tourism development. Forests offer habitats for wild animals, plants and micro-organisms. Forest is where wild animals live; it is the home of animals and it is the breeding grounds of several animals. In promoting tourism in most cases, forests are not mentioned or cited. “When promoting tourism we need also to consider habitats of animals and landscape supports their life i.e. forests, water bodies and others”, said tour guide met in the Rau Forest Reserve. All in all, forest is the main stay of tourism without which, tourism is in danger. Forest offers areas for building tourist facilities such as houses, tents, camps and area for camping (Box 2). Thus, forests supports and can tourism in many ways.

**Box 2: Importance of forests to tourism**

*The importance of forests to tourism cannot be ignored. Forests offer habitats for wild animals and offer spaces for building tourism facilities such as roads, houses, tents, camps and others. All in all, forests are important natural resources for the development of tourism in any nation.*

**Source:** Field survey, 2018

Tanzania is among the country with many and big forests such as Amani Forest, Jozani Forest Reserve Rau Forest Reserve, Ngezi Forest Reserve, Uluguru Mountain Forest, Pugu-Kazimzumbwi Forests and others (Box 3). These forests and its natural features such as water bodies, water sources, trees of different sizes and species, landscape and others, are among the core features of the country’s attraction for tourists.

**Box 3: Forests, a tourism attraction**

*Tanzania is blessed for big forests. Some of the forests in Tanzania are Amani Forest Reserve, Jozani Forest Reserve, Rau Forest Reserve, Pugu-Kazimzumbwi Forests and others. These forests and its natural features such as water sources, animals, big and tall trees, plant species and landscapes are among the core features of the tourism attraction. If these features are properly marketed can boost tourism industry in the country.*

**Source:** Field survey, 2018

Ecotourism involves responsible travelling to natural areas, with the purpose of educating the traveler without exerting environmental and cultural impact which may compromise traditional tourism. Forests and their wildlife are among the primary settings for ecotourism activities; promoting forest preservation and
investing in ecotourism would be the way to attract more tourists to ecotourism. The tourist met in Moshi urban had this to say,

“I prefer ecotourism because it is positive to the environment, it consider nature and does not include destruction of the nature”.

Among African countries where forest tourism benefits from governmental support is Tanzania since the Ministry of Natural Resources and Tourism introduced the Tanzania Forest Services (TFS) among whose purposes is to support sustainable utilization of forest resources. Sustainability of forest would be achieved through rational use of forests and allowing only activities which are compatible to forests such as tourism, bee-keeping, research and others (Box 4).

Box 4: Inter-dependence of forest and tourism

| Forest and tourism are like twins, thus forests must be used sustainably for the benefits of the present and future generation. Only activities which are compatible to forests must be encouraged, among the compatible activities with forests include tourism, bee-keeping, research, leisure (picnic) and recreation. |

Source: Field survey, 2018

Nevertheless, at present, the benefits of ecotourism seem to outweigh the risks, specifically with regards to forest tourism, which has turned into a successful way of promoting forest conservation. One of the ways to further increase the positive influence of ecotourism is to ensure the involvement of local population into ecotourism services, which may be achieved through training and education. In addition, income from forest tourism should be used in order to promote sustainable forestry management. The Open University of Tanzania, Geography Field Practical students visited Rau Forest Reserve for tour and learning in 2018 (Box 5).

Box 5: Tourism cum studies

| May last year 2018 Geography Field Practical students from the Open University of Tanzania had a study tour to Rau Forest Reserve. The visit had two objectives, the first objective was to study different species, animals and landscape of the forest and second objective was touring the forest. The forest had features which attract tourists such as milk-water, big and huge tree than any other tree in Africa and Rau River crossing the forest. Rau Forest Reserve offers a good area for studies, research and enjoyment. |

Source: Field survey, 2018
The contribution of forests to Nature Based Tourism
Like in any other developing countries, Tanzania’s forests and woodlands play a very important role in the survival of human beings (Luoga et al., 2005) and tourism. Under current practices, the contributions of forests to tourism and human beings are not sustainable because forests are experiencing high rate of depletion. Despite the challenges encountered by forests, Rau Forest Reserve has different species and features which supports tourism. Observations made and interview made with the Rau Forest Reserve officials identified special sites, features, animals and plant species which attract tourists. *Melicia excelsa* (huge tree in the forest), milk spring water, River Rau and large freshwater springs are some of the things which attract tourist in the Rau Forest Reserve.

*Melicia excelsa* is a huge, biggest and tallest tree in the Rau Forest Reserve. *Melicia excelsa* (Plate 1) is the 50m tall tree considered to be the largest in Africa and found at the centre of the Rau Forest Reserve. The uniqueness of this tree becomes attractive icon to many tourists from different countries and some rituals are performed under it such as initiation, worshipping and other traditional rituals. The area is also used as a briefing place for students, researchers, tourist and other visitors to the forest. Plate 2 present students who visited the forest for studies, it was a study tour. Research and studies is allowed in the forest as a way of enhancing benefits of the Rau Forest Reserve.

Plate1: *Melicia excelsa*, a 50m tall tree found in the Rau Forest Reserve
It was further found that, several people organize a picnic in the forest. Picnic needs a cool place where people can sit, meet and do whatever they want including meetings, birthday party, wedding and others. Picnic is an occasion when a packed meal is eaten outdoors, especially during an outing to the countryside. In Rau Forest Reserve picnic is done anywhere but in most cases is done close to Melicia excelsa, a large and tallest tree in the forest (Plate 1).

![Plate 2: Geography Field Practical students visited Rau Forest Reserve in 2018. At the back is the Melicia excelsa, a huge tree in Africa.](image)

Another unique feature in the Rau Forest Reserve is milk spring water (Plate 3). To the south of the forest there is a pond whose its water is milk-like colored which is one of the attraction site in the forest. According to the Rau Forest Reserve officials, milk-like colored water is believed to have its source from Mountain Kilimanjaro. People are interested to visit this area watching the water and taking photos.
Plate 3: Milk spring water found in the Rau River Forest.

River Rau is another feature found in the Rau Forest Reserve (Plate 4). The forest i.e. Rau Forest Reserve is named after this river which crosses the forest from North to the centre part of the forest. Plate 4 presents part of the Rau River. The water from the Rau River is used for paddy irrigation and for domestic activities. The Rau Forest Reserve is crossed by three rivers which are Rau River, Mamba River and Mana-nguruwe River. These rivers provide water for irrigation to the people living around these rivers.

Plate 4: River Rau, a river crossing the forest
Rau Forest Reserve is blessed with large freshwater springs. The forest has six large freshwater springs which are Mtomamba, Chem-chem ya Njoro, Chem-chem ya Bustani, Chem-chem ya Mamioni and Mwananguruwe. Water is collected in a reservoir at the east end of the reserve and used to irrigate about 250,000 ha of dry lowland area south of Rau Forest Reserve. The origin of these rich springs is on the slopes of Mt. Kilimanjaro. Water arrives underground through loose volcanic debris.

**Species and features supporting nature tourism**

The information collected using interviews and observation identified number of species and features suitable for tourism activities in the study area. The Rau Forest Reserve is composed of both natural species (Plate 5) and planted species. Some of the tree species found in the Rau Forest Reserve are Tabana Montana trees, Rouvovia catra trees, Trichelia Emetika Trees, Noutonia or Mkuti trees, Stately trees, Sederea Oduarata trees, Albizia tree (Mruka), Blideria maigrantha trees, Mahogany trees, Ficus trees, Tectona trees, Mango trees, Melicia excelsa trees, Stigma trees, Palm trees, Lemon trees, Guava trees, Eucalyptus trees, Makaranga trees, Syzygium trees and others. The forest has an exceptional or unique tree which could not be found anywhere in East Africa except in Rau Forest Reserve like *Oxystigma msoo* tree and *Lovoa swynmertonii*. These tree species is the only tree found in East Africa. Among the planted trees in Rau Forest Reserve including Tectona grandis trees (Mbudnuki tree) and Cyprus trees. Apart from plant species, different animals are found in the Rau Forest Reserve. The forest has different kinds of snakes such as Black mamba, Cobra, Green mamba, Swila and Python. Other animals found in the forest are Blue monkey, Colobus monkey, variety of butterflies, bees, antelopes, beetles and variety of birds.

![Plate 5: Natural plant species in the Rau Forest Reserve](image)

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Activities legally allowed in the Rau Forest Reserve
The study explored number of activities allowed in the Rau Forest Reserve. The first activity allowed in the forest is bee-keeping (Plate 6). Bee-keeping is compatible with the forest; it does not degrade the environment. At national level, Tanzania Forest Services provide rooms for other institutes like Forest Industry Training Institutes (FITI) to site hives in the forest reserve. At regional level TFS collaborates well with Moshi Municipal by supporting the beekeeping groups that site their hives within the reserve. The old man interviewed in the study area had this to say,

“Bee-keeping is one of the best economic activities in the forest. Bees help in pollination of plants. To prove this he further said, during the flowering of coffee you will see a lot of bees around”.

Rau Forest Reserve staff interviewed said this,

“Bee-keeping is allowed in the forest because it is compatible with the forest. It involves only hanging the beehives in the trees and leaves them there for sometimes before harvesting. Bees can be harvested twice a year”.

Plate 6: Bee hives used for bee-keeping is hanging on the tree

Nature walk is another activity allowed in the Rau Forest Reserve. Nature walk involves walking in the forest, watching natural plants, watching animals, watching birds and environment at large. Nature walk gives rooms for taking photos of plants, animals, birds and environment. Research and studies are compatible to environments. Research involves a way to enhance the benefits of forest. Research is a process of searching a new knowledge. Students are
allowed to conduct research for their studies in Rau Forest Reserve. Students have developed their thesis with focus to this forest. Other people have published papers with bearing to Rau Forest Reserve. TAFORI is allowed to conduct research in Rau Forest Reserve.

Figure 7: Tourism attractions and activities allowed in the Rau Forest Reserve

Photographing and films is among the activities allowed in the Rau Forest Reserve (Plate 7). Photographing is the process of taking picture of plants, animals, environments and other activities in the forest like beehives and water bodies. Films comprise the activity of making moves or films for the issues of interest in the forest. The tour guide interviewed in the forest had this to say, “Nearly all tourists visiting the forest do photographs and taking films in the
“forest”. After their visit they go with the photos and films to their country of origin and show them to their relatives and friends. By doing so, they are doing marketing of Rau Forest Reserve and Tanzania at large.

**Challenges facing Rau Forest Reserve as tourism destination**

Rau Forest Reserve is found at the centre of the Moshi Township which results to many challenges. Villagers living near or around the forest are not allowed to go inside the forest and harvest anything neither trees nor grasses without a permission of the Rau Forest Reserve authority. Rau Forest Reserve is located close to Moshi Town and is surrounded by different villages. These people are exerting problem to the forest. The first challenge facing Rau Forest Reserve is illegal hunting. People, who are not innocent, hunt animals found in the forest illegally. Animals hunted from the forest among others include monkeys, dik-dik and birds. The second challenge facing the forest is illegal tree cutting in the forest for different uses. Trees are cut for building houses, making timber and for firewood. These activities contributed to deforestation and loss of biodiversity. Another challenge facing the Rau Forest Reserve is accessing forest for fodder and grasses for feeding animals. This activity leads to biodiversity loss and species extinction.

Introduction of invasive species in the forest is also a challenge to the forest. The past illegal harvesting allowed much of the invasive species to grow and develop more than the indigenous species in some areas of the forest. There are very little management or control measures taken to increase the number of native species and reduce the spread of invasive plant species in the forest. The invasive species found in Rau Forest Reserve include *Lantana camara*, *Senna spectabilis* and *Codorata*. Other challenges facing Rau Forest Reserve is constant threat of human activities such as encroachment of forest for cultivation, forest fires, grazing and illegal tree cutting leading to losses of the vegetation cover and biodiversity as well as deterioration of the water catchment values.

There are different management challenges facing Rau forest reserve. Rau forest reserve is found at the centre of the Moshi Township which results on many challenges including encroachment for firewood collection, fodder for animals, poles for building purposes and firewood for bricks making. Scarcity of land to communities surrounding the forest reserve result to less participation on tree planting activities and cause pressure on forest produce needs. Another challenge facing the forest is inadequate capacity to manage the forest reserve in terms of funds, equipment and qualified personnel.

**Discussion of the Findings**

Conventionally, ecotourism products are developed based on the existing cultural and natural attractions. The study discovered that ecotourism is
practiced in Rau Forest Reserve. Eco-tourism is also termed as sustainable tourism. As an eco-tourist, you decide to travel in a way that shows respect to nature and does not contribute to its degradation. Additionally, ecotourism is a part of environmental conservation, and understanding what the needs of the people are, who are local to the area so that you can help to improve their quality of life. In most cases ecotourism aimed to improve livelihood of the local people. It also involves learning more about the history of other cities and preserving the historical landmarks. One of the main goals of ecotourism is to increase the awareness tourists have about the social conditions surrounding a travel destination. Ecotourism aims to expose tourists to the realities of social and economic climates in an area. Rau Forest Reserve have the potential to be developed and marketed as ecotourism destinations because this forest is endowed with many attributes of tourism attractions, including beautiful scenery, fresh-flowing rivers as well as diverse flora and fauna. The study identified number of tourism attractions found in the Rau Forest Reserve. Among the tourism attractions are *Melicia excelsa*, milk spring water, black and white colobus monkeys, blue monkeys, fresh water, and endemic and unique tree species. Tourism should be part of a broader development plans and emphasis should be given to sustainable forest tourism (Bori-Sanzi and Niskanen, 2002).

Forest supports tourism in different ways. It is the habitat of flora and fauna. Tourists, local and foreigners travel from one place to another visiting another country for leisure and enjoyment. Forest is potential in tourism as it offers different features for people to enjoy like wild animals, wild plants, water sources, landscape, birds, snakes and others. There are different categories of tourists. Some are interested in nature, just watching the natural environments and its components including fauna and flora. Other tourist prefers photographing and films in the forest. The specific challenge facing this forest reserve is constant threat by human activities such as encroachment for cultivation, forest fires, grazing and illegal tree cutting leading to losses of the vegetation cover and Biodiversity as well as deterioration of the water catchment values.

**Conclusion and Recommendations**
The study concludes by emphasizing the inter-dependence between forests and tourism. Wild fauna and flora are found in the forest, all these attract local and international tourists. The existing national forest policy of Tanzania has placed great emphasis on sustainable tourism as well as on ecotourism. The study recommended that, a similar study, with a much wider scope in terms of sample size and coverage should be conducted. The sample should be as much as possible a true representative of the population. Therefore, the possibilities that ecotourism provides in terms of forest preservation and local economy need to be looked into, especially considering the extent to which some indigenous
communities depending on forests for their livelihood. In addition, ecotourism brings more income to local population than commercial conventional tourism that relies mainly on mass hotel chains and large tourist companies.

References

