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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 Orekut, a professor of ICT from the Open University of Tanzania and Mr. Érick 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.

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EXAMINING THE JOURNEY TRAVELLED BY NGORONGORO CONSERVATION AREA FOR 60 YEARS: A CONSERVATION PERSPECTIVE FOR DECISION MAKERS

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Abstract
This paper examines Ngorongoro Conservation Area (NCA) since its establishment in 1959 to 2019. Methodology employed in this study was desk review of the literature on NCA. The review of the literature review focused on published information on NCA within 60 years of its existence. Findings show that the components of the multiple land use model for NCA have failed to co-exist. In the 60 years of NCA’s existence, human population has increased from 8,000 in 1959 to 93,136 in 2017. Cattle and small stocks increased from 161,034 and 100,689 small stocks in 1959 to 238,826 cattle and 570,633 small stocks in 2017 (NBS, 2017). The increase in human and livestock population coupled with the increase in human activities in the property jeopardize the conservation and tourism activities. The reveals that NCA’s fate remains in the hands of the decision makers. The study suggests that; firstly the indigenous residents should give up their pastoral and other ways of life and move out to save the NCA. Secondly the decision makers must choose, either to lose NCA or pursue community development. The study recommends abolishing the multiple land use model by relocating all indigenous people outside of the NCA in order to save the property.

Key Words: Multiple Land use Model, indigenous residents, and tourism development

Background of Ngorongoro Conservation Area

Historical Background
The history of Ngorongoro Conservation Area (NCA) dates back to 1928, when it was gazetted as a game reserve. In 1940 the Reserve was merged with Serengeti Game Reserve and upgraded by the Game Ordinance to become Serengeti National Park. However, for almost a decade the Park remained a “park on paper” (i.e., without effective enforcement of the laws and regulations governing the national parks), a delay which was caused by the World War II from 1939 – 1945 (Shivji, G. I and Kapinga, W. B, 1998).

In addressing this challenge, the British Administration excised the eastern part of the Park to form the current NCA - a multiple land use category of protected area which allowed wildlife conservation to be pursued along with pastoralism. The excision of NCA from Serengeti National Park resulted to formation of two management authorities, Tanzania National parks (TANAPA) and Ngorongoro
Conservation Area Authority (NCAA). The authorities were governed by the Tanzania National Parks Ordinance (Cap. 412) and Ngorongoro Conservation Area Ordinance (Cap. 413) of 1959, respectively. The TANAPA Ordinance prohibited human settlements within the national parks while the Ngorongoro Conservation Area Ordinance sought to meet three objectives - conservation of natural resources, promoting the interests of indigenous residents and fostering tourism development. Following the establishment of the two authorities, about 4,000 people from Serengeti were moved to the NCA and were guaranteed that their interests will be safeguarded. Following reorganization of the laws by the Parliament, the NCA Act is now cited as Cap. 284 [R.E. 2002].

When it was established in 1959, the population of native residents in NCA was about 8,000. In 2013, the population grew to 87,851, an increase of over ten times. This population growth goes hand in hand with increasing pressure on natural resources through increased livestock population and improvement of economic activities and settlements inside the area.

**Location and size**
The Ngorongoro Conservation Area (NCA), located at longitude 35° 30'E and latitude 3° 15'S, is a part of the Great Serengeti-Mara Ecosystem (GSME), which is a cross border conservation area in East Africa. The NCA covers 8292 Km2 out of 25,000 km2 of the GSME. Other protected areas in the GSME are Serengeti National Park (14,763 km2), Maswa (2,200 km2), Kijereshi (300 km2), Ikorongo (563 km2) and Grumeti (416 km2) Game Reserves (GRs); Loliondo Game Controlled Area (4,000 km2) and Ikona Wildlife Management Area (WMA, 242 km2). The Kenyan part of the ecosystem is the Maasai Mara National Reserve covering some 1,510 km2.

**Biodiversity, Geology and Archaeological significance**
Ngorongoro Conservation Area (NCA) has global importance for biodiversity conservation. It is the home to a population of some 25,000 resident large animals, mostly ungulates, alongside the highest density of mammalian predators in Africa including the densest known population of lion. The NCA harbours a range of endangered species, such as the Black Rhino, Wild hunting dog and Golden Cat and over 500 species of birds. It also supports one of the largest animal migrations on earth, including over one million wildebeest, 260,000 zebras and about 450,000 Thompson and 350,000 Grant gazelles during the wet season (Campbell and Borner, 1995).

The high diversity of wildlife species in NCA is a function of variations in climate, landforms and altitude and, consequently, several overlapping ecosystems and distinct habitats, with short grass plains, highland catchment forests, savanna woodlands, montane long grass plains and high open moorlands. The Northern Highland Forest Reserve in NCA is the major source of water for the Karatu district and the ground water forest of the Lake Manyara
National Park. It also provides a critical habitat of elephants, rhinos and leopards of the NCA and its surrounding areas.

The NCA is home to the world's largest unbroken caldera, Ngorongoro Crater. The Crater is 600m deep and 260 Km2 in size. It offers the diversity of East African scenery and wildlife in a confined space. Besides this Crater, the area has other spectacular craters including Olmoti (3.7 km2) and Empakai (8 km2). The Empakai crater harbours a good number of flamingos, especially during the months of May and June. The third highest peak (3,648 metres above the sea level) in Tanzania, the Lolmalasin, is also found in NCA. The craters are part of the eastern Rift Valley, whose volcanism dates back to the late Mesozoic / early Tertiary periods and is famous for its geology. The property also includes Laetoli and Olduvai Gorge, which contain an important palaeontological record related to human evolution.

Inside the NCA also lies the spectacular ash dunes of Shifting Sands formed from volcanic ash, which are technically referred to as barkan. These dunes are formed when there is ample dust on the ground and a unidirectional wind to create the moving effect. The volcanic ash collects around a rock, and continually gathers until it forms what appears to be a small sand dune. In the case of these Shifting Sands, they tend to move around 10-18 metres a year depending of the strength and direction of the wind. The ‘Nasera’ is an exceptional stone standing an estimated height of 100 metres above the ground. The Nasera rock is perhaps the tallest and biggest stone in Tanzania. This stone provides a spectacular view for visitors in NCA.

NCA has been subject to extensive archaeological research for over 80 years and has yielded a long sequence of evidence of human evolution and human-environment dynamics, collectively extending over a span of almost four million years to the early modern era. This evidence includes fossilized footprints at Laetoli, associated with the development of human bipedalism, a sequence of diverse, evolving hominin species within Olduvai Gorge, which range from Australopiths such as Zinjanthropus boisei to the Homo lineage that includes Homo habilis, Homo erectus and Homo sapiens; an early form of Homo sapiens at Lake Ndutu; and, in the Ngorongoro crater, remains that document the development of stone technology and the transition to the use of iron. The overall landscape of the area is seen to have the potential to reveal much more evidence concerning the rise of anatomically modern humans, modern behavior and human ecology.

**Ethnography**
Maasai are the best known of the ethnic groups in Ngorongoro, and today they make up 98% of the resident population. The remaining 2% are Datoga, in addition to very few Hadzabe families who live on the very edge of Ngorongoro by Lake Eyasi. Maasai and their livestock wandered into this area around two
centuries ago. They pushed off the Datoga (also known as Barabaig or Mang’atti) who remain as a minority in the east and south of the Ngorongoro Conservation Area. Maasai and Datoga are traditional pastoralists, living almost solely on their livestock, which they revere above anything else. Traditionally, these pastoralists were nomadic, moving with their livestock in a continuous search for grass and water. They have since become more settled as they are now obliged to attend school or require regular services of health clinics. Additionally, these peoples have less available space as their populations increase within the limited landscape of NCA. The Hadzabe have remained purely traditional hunter-gatherers surviving from only handmade bow, feeding on roots and fruits and dressing in animal hides, living in remote homes in the caves and trying to stay away from other people.

**Conservation status**
The Ngorongoro Conservation Area is a multiple land use category of protected area where conservation of wildlife is pursued alongside human development. Essentially, the NCAA has three legal mandates namely, to integrate the conservation of natural and cultural resources, safeguard the interests of resident pastoralists and promote tourism.

The NCA was inscribed in the World Heritage List under natural criteria in 1979. In 2010, the World Heritage Committee of UNESCO re-inscribed the NCA as a mixed property on the list of World Heritage Sites (WHS). NCA’s inscription in the World Heritage List was based on its outstanding universal value and criteria set by the Committee for selection of the sites. NCA had met five out of the ten criteria: Criterion (iv) - to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history; Criterion (vii) - to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; Criterion (viii) - to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features; Criterion (ix) - to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; Criterion (x) - to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

In 1981, NCA was also recognized internationally as a part of the Serengeti-Ngorongoro Biosphere Reserve, under UNESCO's Man and the Biosphere Program (MAB). In 2013, the NCA was voted one of the seven natural wonders of Africa. It was nominated to be the Ngorongoro Lengai UNESCO Global Geopark in April, 2018.
Multiple land use model challenges
The Multiple Land Use model has rendered NCA vulnerable to constant stresses from numerous factors prompting a debate on whether the model can still be a viable conservation option. Several changes have emerged in the 60 years of the model causing some management challenges of the area as a conservation area. These changes include human population growth and their spatial distribution over the landscape, change in the social structure as well as lifestyles of the indigenous people and neighbouring communities, transformation of land use patterns and levels both within and outside the NCA, increase in tourist numbers and associated facilities, spatial and temporal use of the area by livestock and wild animals, vegetation change alterations, climate change particular unpredictable rainfall regimes as well as change in hydrology and drainage patterns.

NCA, as a mixed Natural and Cultural World Heritage Site, is disrupted by multifaceted factors. Several World Heritage Committee decisions have called for an assessment of the multiple-use model of the area to address issues of sustainable livelihoods, natural and cultural resources conservation and tourism promotion with limits of acceptable use as well as its administration and governance of the area. The NCAA Board of Directors has also at different instances ordered the Management to re-evaluate the NCA’s multi-purpose land use model and propose the more contented set-up that will sustain natural and cultural heritage of the area and promote tourism for human development (NCAA, 2018). Ultimately, there is need for making decision.

Review of the Literature
Part two presents the literature which was reviewed in course of this study. The study involved the theoretical and empirical literature. The section also presents a theoretical framework which was adopted in the study.

Theoretical Review
The study on the call for action against the journey travelled by NCA for 60 years was guided by the Egg of Sustainability Model, which was developed by International Union for Conservation of Nature (IUCN) in 1994 (Prescott and Allen, 1995). The model shows the relationship between people and ecosystem as one circle inside another, like the egg yolk. This implies that humans live in an ecosystem, and that ultimately one is entirely dependent on each other. The egg becomes safe if both the inner thick albumen (white) and yolk are good. Conversely, a society is stable and sustainable only if both humans and the ecosystem are fine.

Social and economic development can only take place if the ecosystem offers the necessary resources: raw materials, space for new production sites and jobs, constitutional qualities (recreation, health etc.). The ecosystem is therefore, regarded as a super coordinated system to the other dimensions of the triangle or
prism models: social, economic, and institutional. The latter can only prosper if they adapt themselves to the limits of environmental acceptable use. Thus, according to this model, sustainable development is realized when human well-being and ecosystem well-being are achieved (Figure 3). Deterioration in the well-being of both or one of the two components (ecosystem and/or society) will lead to sustainable or unsustainable development as illustrated in the Figure 4.

**Figure 3: How ecosystem and people are interdependent for sustainability**
Source: Gujit and Moiseev, 2001

**Figure 4: Egg of sustainability model**
Source: Author, 2019
The egg of sustainability model can be used to explain the reality of the multiple land use model in the NCA. In 1959 when the model was adopted, the assumption was that the model would lead to sustainability where humans and ecosystem would co-exist harmoniously.

**Current Status of NCA**

The trends and existing conditions of the NCA suggest that the model disregarded some important variables. Some of these variables are human, livestock, wildlife, economic factors, land uses and human behavior. Initially, the humans and livestock populations were relatively low than today and, therefore, impact on ecological system was minimal. Furthermore, their activities and life styles including housing were compatible with conservation needs of the area. Today the human population has grown, by almost 12 times, and the life style has changed thus leading to stresses over the ecological system. The nature and characteristics of the indigenous people in terms of their conservation relationship with wildlife has significantly changed. The preconceived co-existence between human-livestock-conservation has failed.

Population growth causes deterioration of the ecological system as a result of over utilization of ecosystem services and resources such as forage, firewood, water and pasture land. Furthermore, the culture and life style of the indigenous residents, which were considered to be compatible with conservation objective of the area, have changed over time. Indigenous residents pastoralists are now building modern houses (Figure 5 and 6).

![Image](image_url)

**Figure 5. Human activities at Oloirobi village in the NCA**

Source: Author, 2019

Worse enough, the residents are engaging in poaching to obtain wild meat and collude with other poachers from outside NCA unlike in the past. There have been reported cases where resident indigenous collaborated with poachers to kill
rhinoceros, elephants and other endangered wildlife species (NCAA, 2018). Whereas insufficient and poor quality ecosystem services caused by ecosystem deterioration, increase poverty among the local communities, drought and disease incidences are the major causes of livestock mortality. For instance, in 2017 more than 77,000 livestock died in the NCA due to drought, inadequate pasture and diseases among other factors (Fyumagwa et al., 2018). The situation in NCA indicates that both human and ecological conditions are deteriorating and, therefore, undermining the society well-being and sustainability of the area. The indicators of deteriorating human well-being in the area include relatively high above the national standards and also compared to the intensity in other districts in Arusha region (Table 1). In the NCA; poverty is 70%, illiteracy rate 64.5%, hunger (total dependence on handouts), and diseases levels among others. Poor ecological condition of the NCA is defined by range degradation, declined populations of some wildlife species and reduced quality of forage due to increase of invasive alien and pioneer species. Deterioration of ecological system translates into inadequate resources for society and therefore leads to competition for available scarce resources such as water and forage. This has consequently generated human-wildlife conflicts, including repeatedly reported cases of spotted hyenas attaching and killing both people and livestock, unlike in the past (NCAA, 2018).

Methodology
This study is based on a literature review. The literature used included published articles, journals, books, reports, newspapers, and magazines. Also, the study used Google scholar search engine with the keywords to access various information on the topic. Critical examination of the Ngorongoro Conservation Area (NCA) since its establishment in 1959 to 2019 was carried out through in depth analysis of the components of the model. Content analysis was employed to assess the content and concept of model in relation to conservation, community development and tourism. This technique is a common data analysis method in the social sciences (Berg, 2009). The scholar further identifies that this method involves a careful, detailed, systematic assessment and interpretation of a particular body of material with the intention of identifying patterns, themes, biases and meanings. Additionally, the technique identifies the meaning of the text and therefore maintains a qualitative textual approach (Silverman, 2006; Elo and Kyngäs, 2007). The reasons for this method is that it is analytically flexible and offers a replicable methodology if done correctly (Duriau, Reger and Pfarrer, 2007). Elo and Kyngäs (2007) observed that this method can be employed as inductive or deductive research approach and that different levels of analysis can be performed using qualitative or quantitative approaches through longitudinal research designs. In tourism research, a several studies have adopted this technique. The analysis was conducted to contextualize interpretations of the reviewed literature to produce valid, reliable, dependable and trustworthy findings.
Key Findings and Discussion
This part presents the key findings of the study, by focusing on the components of the Multiple Land Use Model for the NCA. The components of the model are community development, biodiversity and cultural heritage conservation and tourism development.

Increased human population
According to National Bureau of Statistics (2017), the population of indigenous resident is 93,136. If the number of people will continue to increase unabated, the population is expected double and reach about 200,000 by 2032. This means that the well-being of the people in the area will worsen further and fail to sustain their existence as established by the national and global standards of human welfare. In the face where conservation of natural and cultural resources as well as tourism promotion seem to fairly succeed while condition of resident pastoralists’ deteriorates, demonstrates that the multiple land use model that has existed for 60 years can no longer be upheld without making adjustments in its current status. Otherwise, individuals or groups without goodwill to the NCA will take advantage of the deteriorating state of resident pastoralists’ wellbeing to obtain unfair sympathy as well as financial and political gains.

Increased Livestock Population
In 1960, pastoralists had 161,034 cattle and 100,689 small stocks, which was equivalent to Tropical Livestock Unit (TLU) of 171,103 translating to approximately 16.0 TLUs per person. Regardless of equivalency factor for livestock category to TLU, equating single cattle to one TLU and 10 small stocks to one cattle, the TLUs in the NCA has progressively decreased to 3.2 in 2017. However in order to sustain the food base, at least 8.0 TLU per person is required, which is not the case for NCA (Fyumagwa et al.; 2018).

Biodiversity and cultural heritage conservation
NCA is the UNESCO World Heritage Site, Man and Biosphere Reserve, one of the 7th Natural Wonder of Africa and Ngorongoro Lengai UNESCO Global Geopark. In addition, the number of black rhino (Diceros bicornis michaeli), one important keystone species of the NCA has swelled from about 12 individuals in the 1980s when the NCA was put on a danger list of UNESCO to about 59 in 2018 (NCAA, 2018). This implies that the NCA has continued to maintain the international standards of conservation and management of biodiversity, cultural heritage and geological landscape.

Community development
The relationship between resident pastoralists in the area and the NCAA has been at all times low due to deteriorating human’s socio-economic conditions, which is partially attributed to food insecurity, water scarcity, income poverty,
problem animals, poor state of health and education services as well as inadequate involvement in the management of the NCA. Despite the main source of livelihoods for the people of the NCA being livestock production, the livestock units per person has over years declined terrifically. Recent reports indicate that in 2017/2018 approximately 77,000 cattle died mainly due to drought (Fyumagwa et al., 2018). Among other reasons, resident pastoralists in the area associate it with inadequate grazing land due to restrictions imposed by the Authority to graze in Ngorongoro, Empakaai and Olmoti craters for salt licks as well as the Northern Highland Forest Reserve (NHFR), insufficient veterinary services, livestock predation, deteriorating rangelands that involves invasion of both alien and natural plant species.

Land Issues and Villagilization
NCA’s area has been encroached leading to reduced size. The area has been reduced from 8,292 Km2 in 1959 to 8,100 Km2 in 2006 (Ardhi University College, 2006). Conversely, all the 25 villages in NCA have not been surveyed and no village description boundaries. Out of the 25 villages, 16 villages have registration numbers and geographical boundaries, while 9 villages are not registered.

Figure 6. Misigiyo Village in the NCA
Source: Author, 2019

Tourism Activities and Revenue
During the 2017/2018 financial year, NCA was a protected area that earned TZS 127 billion more revenue per unit area than any other protected area in East Africa. Also, NCA provided the Government with TZS 22.37 billion as dividends which made it to be number one on the list of protected areas in Tanzania for providing dividends to the government. NCA’s revenue generated from Tourism activities enables to finance its operations and pay all relevant
taxes to the Government, implying that the Property has largely succeeded in optimizing tourism benefits through unlocking the social and economic potential of the area.

Figure 7 shows the number of visitors, both residents and foreigners to the NCA between 1968 and 2017. Generally, whereas non-resident visitors increased from 1968 to 1977 when the number dropped following the collapse of the East Africa Community (EAC), obliging the closure of the Tanzania-Kenyan border, domestic visitors maintained more or less the same number over the same period of time. Since 1984 when the border was re-opened non-resident visitors increased progressively up to 2017. Whereas resident tourist increased gradually until 2013, they have decreased consistently for the past four years up to 2017. The causes of increase up to 2013 were perhaps the results of intensive domestic tourism campaign by the Authority, increase in the proportion of middle-class income in the country and cultural transformation of the Tanzanian society towards loving the natural environment. However, the decline in the number of domestic visitors since 2013 could be attributed by the construction of a tarmac road from Arusha to the Lake Victoria Regions through Singida, whereby many travelers between the two locations currently prefer to use that road avoiding the Ngorongoro-Serengeti road, which is gravel road and difficult to pass during wet season, fee payment at both the NCA and Serengeti National Parks (SENAPA) entrance gates and sometimes by some unfavourable restrictions for using the route such as prohibition on passing through the two protected areas between 6.00 in the evening and 6.00 in the morning.

![Figure 7. Trends in Visitors to NCA between 1968 and 2017](image)

Source: NCAA, 2018

A survey that was conducted in 2008 revealed that five topmost attractions, which prompted foreign tourists to visit the NCA prior to arranging for the travel, were variety and wildlife abundance that accounted for 30.0% of all the respondents (n=2,907), the Ngorongoro Crater (19.0%), the landscape and scenery (9.0%), presence of black rhino (8.0%) and 7.0% mentioned the annual wildlife migration (Runyoro, 2009). Although it is often asserted that if human-wildlife co-existence was to be abandoned, NCA will attract relatively few
visitors than how it is today, during the same study, human-wildlife co-existence and the area being known to be the origin of humankind were ranked the sixth as reasons for the arranging the visitation, each accounting for 6.0% of all the respondents (Runyoro, 2009). However, on one hand, after concluding their visit in the NCA, the five things they enjoyed most were, the wildlife abundance, which accounted for 44.0% of all the respondents (n=2,907), the Ngorongoro Crater (14.0%), landscape and scenery (11.0%), wildlife-human coexistence (5.0%) and wildlife migration (5.0%). On the other hand, when they were asked to list things they disliked after their visits, majority of mentioned poor road condition, which accounted for 49.0% of all the responses, tourists and vehicle congestion particularly in the Ngorongoro Crater (20.0%), poor tourist facilities in campsites (12.0%), sub-standard accommodation facilities and services (6.0%) and poor reception and customer care emerged the fifth on the list accounting for all the responses Runyoro, 2009). The NCAA Corporate Plan mentioned five things tourist dislike after visiting the NCA in the following order: livestock in NCA; human settlements in NCA; delays at the main gates; road conditions and dust; and poor interpretation services (CSP, 2017). Whereas attractions, which tourists recognized prior to visiting the NCA and those, which they liked after their visit, were all natural, those, which they disliked were all administrative, and therefore need to be strategically and immediately addressed if the Authority wishes to mitigate the problem of the declining trends of non-resident tourists.

Increasing congestion of vehicles in the Crater implies that, number of visitors entering the NCA have continued to increase. Table 1 shows the number of visitors entered the NCA from 2006 -2017.

Table 1. Number of Visitors to the NCA from 2006 -2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Visitors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non- Resident</td>
<td>Resident</td>
</tr>
<tr>
<td>2006</td>
<td>253,001</td>
<td>106,258</td>
</tr>
<tr>
<td>2007</td>
<td>292,307</td>
<td>169,743</td>
</tr>
<tr>
<td>2008</td>
<td>256,233</td>
<td>221,216</td>
</tr>
<tr>
<td>2009</td>
<td>240,411</td>
<td>201,555</td>
</tr>
<tr>
<td>2010</td>
<td>281,513</td>
<td>242,133</td>
</tr>
<tr>
<td>2011</td>
<td>307,086</td>
<td>281,520</td>
</tr>
<tr>
<td>2012</td>
<td>333,601</td>
<td>255,213</td>
</tr>
<tr>
<td>2013</td>
<td>350,970</td>
<td>296,763</td>
</tr>
<tr>
<td>2014</td>
<td>332,993</td>
<td>278,774</td>
</tr>
<tr>
<td>2015</td>
<td>288,404</td>
<td>279,579</td>
</tr>
<tr>
<td>2016</td>
<td>343,598</td>
<td>257,850</td>
</tr>
<tr>
<td>2017</td>
<td>396,102</td>
<td>240,952</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,676,219</td>
<td>2,831,556</td>
</tr>
</tbody>
</table>

Source: NCAA, 2018
On revenue from tourism, during the 2017/2018 financial year, NCA was a protected area that earned TZS 127 billion more revenue per unit area than any other protected area in East Africa. Also, NCA provided the Government with TZS 22.37 billion as dividends which made it to be number one on the list of protected areas in Tanzania for providing dividends to the government. NCA’s revenue generated from Tourism activities enables to finance its operations and pay all relevant taxes to the Government, implying that the Property has largely succeeded in optimizing tourism benefits through unlocking the social and economic potential of the area.

Summary
Ngorongoro Conservation Area is of great importance at the community, district, regional, national, African and global level. In tourism, the NCA is Tanzania’s icon in terms of visitation and revenue generation. In the 2017/2018 financial year, NCA was the only single protected area in the country which generated TZS 127bn and contributed TZS 22.36bn dividends to the government. In East Africa, NCA was the only protected which generated more revenue per unit area than any other protected area in the region in 2017/2018. At the African level, NCA is one of 7th Natural Wonders of Africa. Internationally, NCA is the UNESCO Man and Biosphere reserve, UNESCO World Heritage site and Ngorongoro Lengai UNESCO Global Geopark.

Despite the NCA’s immense national and global importance there are several threats which jeopardize its survival if they remain unresolved. Currently, NCA’s population has increased more than 900% since 1959. In 1959, when the population was 8,000 people, in area of 104 ha within NCA there was one person. In 2017 (58 years later), in each 9 ha there is a person. In 2075 (58 years to come), in each 0.8 ha of NCA there shall be a person, leave alone the human development activities. Conversely, in 1960 pastoralists had 161,034 cattle and 100,689 small stocks, which was equivalent to Tropical Livestock Unit (TLU) of 171,103 translating to approximately 16.0 TLUs per person. In 2017, the TLUs in the NCA has progressively decreased to 3.2 in 2017, while according to national standards, a person requires at least 8.0 TLU in order to sustain the food base, which is not the case for NCA (Fyumagwa et al.; 2018).

On the other hand, NCA is the only protected area in Tanzania, where people are provided food (maize grain) for free or at subsidized price, children have scholarships at levels of education, health services are provided for free and livestock receive free veterinary services. It is the only division in Tanzania, which has full local government leadership of the nine (9) unregistered villages and sixteen (16) villages which have registration by numbers without village boundaries and village lands. Politically, NCA with 25 villages, 11 wards and with over 20,000 voters forms a strong base for Ngorongoro Constituency. Both the ruling party and opposition parties consider NCA as political asset. Also,
NCA is the only place in Tanzania, where few households make a village and a village is a ward. Further, NCA is the only area in the country where people are not allowed to grow crops and cannot own land which is a matter of the existing NCA Act. On the other hand, NCA has a number of activists, especially NGOs which intend not inform policy makers but creating hatred between the Government and its people.

Implications
Conflicts of protected area and human development in NCA have reached a point where any strategic investment in human development has corresponding negative consequences for protected area conservation and management, and vice versa. Also there are indications of waning relationships between the people of NCA and the Authority resulting from weakening human conditions of the people of the NCA due to water shortages, income poverty, problem animals, food insecurity, poor health, poor shelters, livestock depredation and poor education. The main source of livelihoods for the people of the NCA is livestock.

Conclusion and Recommendation
On the basis of the information gathered during this study, the study concludes that the Outstanding Universal Value of the Property is increasingly threatened by the impact of resident human populations and unsustainable land use practices linked to subsistence agriculture and tourism. The study therefore considers that if these issues are not addressed urgently and if the current degradation patterns are not stopped, the Outstanding Universal Value of the property will be jeopardized. The study recommends abolishing the multiple land use model by relocating all indigenous people outside of the NCA in order to save the property.

References
Ngorongoro Conservation Area Authority, Ngorongoro Crater, Tanzania.
Ngorongoro Conservation Area Authority. Arusha, Tanzania
Area. 10.1007/s10745-006-9031-3.
Well-Being. University of Chicago Press. Chicago-USA
Runyoro, A. V. (2006). Analysis of alternative livelihood strategies for the pastoralists of
Sokoine University of Agriculture, Morogoro, Tanzania.
Area. 34(6):809-828
IIED/HAKIARDHI, U.K. and Tanzania