Not only Adventurous but also Leisure: Re-defining Tourism in Tanzanian Mount Kilimanjaro National Park

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ABSTRACT

The highest mountainous tourism destinations in the world receive few numbers of tourists both domestic and international. Mount Kilimanjaro, the highest mountain in Africa is not exceptional. This is because mountains are famous as adventure destinations due to the associated risks during trekking the summit. Consequently, only risk-taker tourists trek mountains. The objective of this study is to profile attractions in Mount Kilimanjaro's altitudinal gradients to attract adventurous, acrophobic (fear of heights), and leisure tourists using a mixed-method approach. The results revealed that each altitudinal gradient harbours unique attractions. At an altitude of 1800 - 2800masl, leisure, and acrophobic tourists experience endemic forest flowers like 'touch-me-not' or impatiens'and viola, and diverse wildlife species. Between 2800 and 4000 masl, floristic tourists enjoy giant groundsels, such as senecio and lobelia and the Shiraplateau. At 4000 -5000masl, where semi-adventurous hope to experience nothing, the study found attractive rocks with unique shapes like a cathedral, turtle, mushrooms, and captivating striped Zebra-like rocks. Finally, above 5000masl, the adventurer tourists experience dazzling stars at night, the snow in the tropics, and the summit. The study concludes that the diversification of attractions is likely to draw a variety of tourists, thus, boosting the overall number of tourists. Therefore, in order to increase revenue generated from tourism, tourism planners should market mountains as not only adventurous but also leisure destinations.

Keywords: Kilimanjaro National Park, Tanzania, Adventure tourism, Tourist attractions, Leisure tourism.

INTRODUCTION

Indisputably, Tanzania's global appeal as a tourism destination is rooted in the breathtaking scenery of Mount Kilimanjaro landscape, the highest mountain in Africa. Millions of foreign and domestic tourists could be drawn to Mount Kilimanjaro. Nevertheless, according to Croughs *et al.*,(2022), this alluring mountain draws between 45,000 and 60,000 international tourists annually. Despite what the government and tourism stakeholders state, the number of tourists is remarkably below the actual capacity and does not reflect the mountain's magnificence.Research on the identification of tourist attractions is crucial for the growth of the tourism industry, particularly in high mountains, and especially for the development of new tourism products as well as the management of existing attractions (Zygmunt, 2014). The need to diversify tourist attractions is critical because mountains are home to roughly half of the world's biodiversity "hot spots" and offer exceptional global natural beauty (Rössler, 2022; Sharma *et al.*,2019). Nevertheless, in contrast to non-mountainous tourist destinations, the highest mountains in the world have not received a comparable number of tourists. About 14% of the almost 1.2 million tourists to Nepal trekked Mount Everest (the highest mountain in the world), in 2019, prior to the COVID-19 pandemic (Niebauer & Burtscher, 2021).

Approximately, 4% (or 60,000) of the roughly 1.5 million tourists to Tanzania in the same year climbed Mount Kilimanjaro, the tallest free-standing mountain in the world (Croughs *et al.,* 2022). Despite high mountains having exceptional planetary beauty, they attract few tourists. Low visitation suggests that mountains' key attractions are either not fully identified or high mountains are portrayed as hazardous destinations. Consequently, the highest mountains are believed to be reserved solely for tourists who are inclined to undertake risks, notably adventurers and mountaineers. This erroneous assumption has deterred risk-averse tourists from exploring the mountains, perhaps explaining the low number of global visits. Indeed, mountainous tourism destinations can present certain risks to tourists (Pröbstl-Haider, *et. al*., 2016). Nevertheless, tourists need to be informed that they can still experience leisure. Risks in mountains can vary depending on the altitude and other various factors, including health and the level of acclimatization (Pasha & Newman, 2010). While risks are almost negligible at lower altitudes, they become much more significant at higher altitudes due to complex topography, weather, and low oxygen. The perceived risks play a major role in a tourist's safety, thus influencing the decision of whether to trek or not (Taher*et al*., 2015; Pröbstl-Haider*et al*., 2016). High-volume high-velocity landslides (rockfalls,

rockslides, debris flows, avalanches), blizzards, reduced oxygen, extreme cold, unpredictable weather, altitude sickness, and heavy rains are among the risks that mountaineering perceive or endure. The mainstream media compounds the problem by emphasizing the number of fatalities brought on by landslides or low oxygen levels rather than the pleasant experiences tourists had along the altitudinal gradient (Gatterer*et al*., 2019; Rosser *et al*., 2021; Sharma *et al*., 2022). In fact, every tourist destination presents some potential risk, although not as frequently reported as mountaineering. Tourists can also be killed by lions while participating in wildlife tourism (Hehir *et al*., 2022; Weiler *et al.*, 2021) or drown in the water while participating in boat rafting or snorkelling (Samat *et al*., 2020). Since not all tourists must hike to the summit, risks do not exist along the entire gradient of altitude. The objective of this study is was to profile attractions in Mount Kilimanjaro National Park to attract diversified tourists. Specifically, this study (i) identified attractions, (ii) categorized attractions along the altitudinal gradients from the Park's entrance gates to the summit following the standardized altitudinal zones (1800 – 2800, 2800 – 4000, 4000 – 5000, 5000 – 5895masl, and (iii) re-defined tourism for diversified tourists.

The study was timely and informative as the highest mountainous tourism destinations in the world were prone to degradation and finances from tourism to conserve the fragile mountainous ecosystem have been limited. Thus, the methodology, results, and recommendations from the Mount Kilimanjaro case study are likely to provide insights into how to profile attractions to promote mountain tourism destinations not only for mountaineering but also for sightseeing and leisure tourists, and in turn, increase tourism earnings. The study is also pertinent to the Tanzania National Park Authority as Mount Kilimanjaro National Park is currently in the process of reviewing its General Management Plan (2016-2026). Kilimanjaro National Park (KINAPA) is situated 330km South of the Equator. Its proximity to the Equator makes trekking challenging considering the unpredictable weather and the influence of El Niño and La Niña climate circle. KINAPA (1668km^2) conserves the highest mountain in Africa, yet merely receives about 4% of all foreign tourists to Tanzania (Croughs *et al.*, 2022; Kilungu *et al*., 2019). Considering the prominence of the mountain around the world, the number of international tourists leaves a lot to be desired. The Mountain can be accessed by public transport and trekked up on foot thus, no need for costly 4W drives, yet limited domestic tourism exists compared to Serengeti National Park. The

Park has five trekking routes and several attractions owing to diverse weather conditions and ecosystems along the altitudinal gradient ranging from the montane forest ecosystems (1800 - 2800masl), heath/moorland (2800 - 4000masl), alpine desert (4000 - 5000masl), to the arctic (5000 – 5895masl). Lastly, studies on KINAPA are well saturated, however, empirical evidence of attractions along its altitudinal gradients is inadequate to inform tourism planners and stakeholders in general (I. Kikoti, personal communication, March 15, 2023). Dr. Kikoti has been a park ecologist for almost 20 years.

Materials and Methods

Case Study

This study focuses on the Kilimanjaro National Park (KINAPA) where Mount Kilimanjaro: the highest mountain in Africa is conserved. Mount Kilimanjaro is listed as among the 'Seven Summits' of the tallest mountains across the seven continents (Figure 1)The Park is found in Tanzania between $2^{0}45'$ – $3^{0}25'$ and $37^{0}00'$ $37^{0}43'$E.

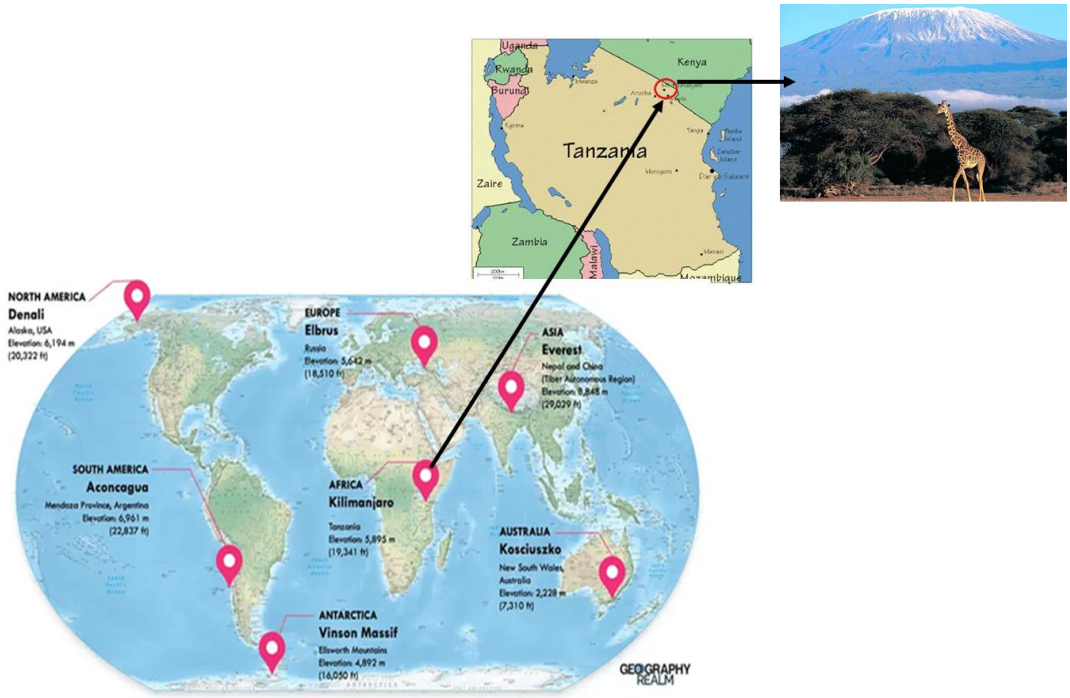

Figure 1: Mount Kilimanjaro as among the tallest Mountains in the seven Continents –

Source: Geography Realm

Data Collection

Three methods of data collection were used to thoroughly identify and categorise tourist attractions along Mount Kilimanjaro's altitudinal gradients. These include observation, augmented by the researcher's knowledge of and experience with the park, interviews with park wardens, and a literature review. Participant observation, which entailed the researcher hiking the Mountain as a tourist was also employed. The observational data collection technique was employed to respond to the research question based solely on what the researcher observes in order to gain an impression of what tourists regard to be attractive in the first place. The precise tourist attractions were noted during the observation, by either observing tourists taking pictures of an attraction or spending extensive time at specific spots.

The researcher was able to precisely take notes and photos of what tourists consider as attractive. The researcher's tourism expertise and experience with the park served to identify tourist attractions unfamiliar to tourists, particularly those located off-trail, where tourists rarely venture because Tanzania promotes High-Value Tourism, making off-road trekking absolutely illegal. The attractions documented in the literature were validated through interviews with park ecologists and tourism wardens. The list of attractions that the park had already identified but had not been thoroughly documented was also enhanced by the interview. The literature reviews involved compiling information that was available online or in academic articles. The research analysed three studies (Kilungu*et al.,* 2019; Minja, 2014 & Foley *et al.,* 2014) since there is a scarcity of information detailing Mount Kilimanjaro's attractions in scholarly journals. Online platforms, such as; Flickr and Trip Advisor are among the popular sites where tourists voluntarily post their travel locations and experiences. These platforms have been instrumental to tourism research (Spalding *et al.,* 2023; Teles*et al.,* 2022). Most attractions, including flowers and wildlife, are presented without names and geolocations on Flickr and TripAdvisor. By consulting the literature, the park ecologist, and the tourism officer, flowers and wildlife were identified and assigned either scientific or common names. All of the listed attractions were georeferenced in accordance with their appropriate altitudinal gradients.

Results

Tables 1 and 2 demonstrate that Mount Kilimanjaro had a variety of attractions besides the widely recognised snow and Kibo Summit and that each altitude gradient has its own special attractions and potential tourists. The results further revealed that from the entrance gates or at lower altitudes between 1800 and 2800masl, leisure and other risk-averse tourists or acrophobic can enjoy endemic flowers, such as touch-me-not or *Impatiens kilimanjari* and *Viola eminii*, the evergreen montane forest close to the equator, numerous waterfalls, and diverse wildlife and bird species. Further, between an altitude of 2800 and 4000, in the heathland vegetation, floristic tourists may delight in the everlasting flowers species of the genus Helychrusm, other rare and endemic flowers, giant groundsels, and the Shira Plateau -the flattest area on Mount Kilimanjaro.

Mount Kilimanjaro is endowed with endemic flowers, unique to the mountain and not found on any other mountain across the globe. These include, among others, *Stoebekilimandscharica, Hebenstretiadentata, Kniphofiathomsonii, Proteakilimandscharica, Dendroseneciokilimanjari.* Even though the risk of Altitude Mountain Sickness increases with increasing altitude (Luks et al., 2017, Burtscher et al., 2023) higher altitude attractions are numerous. The results suggest that mountaineering or semi-adventurous tourists can have a memorable experience in the alpine desert (between 4000 and 5000masl) before reaching the Kibo summit. In this cold desert, the assessment discovered novel uniquely shaped rocks, including those that resembled a cathedral, club mushrooms, turtles, zebra stripes, and subsurface waterfalls (complete with waterfall sound). At the summit (~5000-5895masl), purely-adventure tourists can have an everlasting memorable experience on Africa's highest point (5895masl), touch ice sheets in the tropics, climb rock pinnacles on the Mawenzi peak, and stargaze on dazzling bright stars at night and experience spectacular sunrise and sunset.

Table 1: Key Attractions on Mount Kilimanjaro Along the Altitudinal Gradients and Potential Tourists

Altitudinal gradient	Land cover	Type of Attractions	Potential tourists
1800 -2800	Montane Forest Vegetation	• The evergreen montane forest • Endemic forest flowers (*Impatiens kilimanjari* and *Viola eminii*), • Other attractive flowers • Diverse wildlife species (elephants, zebra, black and white colobus monkeys, • Diverse bird species (hartlaub turaco, sunbirds, Ruppell's robin chat, silvery-cheeked hornbills, and speckled mousebirds • Waterfalls, • Ritual sites (kifunika), • The Maundi Crater	Leisure, floristic & acrophobic
2800-4000	Heath/moorland Vegetation	• Heath flowers (everlasting flowers, • Giant groundsels (i.e. senecioand lobelia), • Shira Plateau (a collapsed peak), • Underground waterfall • migratory wildlife such as buffaloes, elephants, elands	Floristic and Mountaineering
4000-5000	Alpine/cold desert (sand and Rocky land)	• Attractive rocks with unique shapes like a cathedral, turtles, mushrooms, and zebra stripes • Bright stars at night, sunrise, and sunset	Adventure tourists and Mountaineering
5000-5895	Arctic/snowy	• Kibo Summit (the highest point in Africa) • Ice sheets	Purely-Adventure tourists

		• The crater and crater ream • Brilliant sky filled with stars at night and sunrise for stargazing • Temperate weather in the tropics, and • Mawenzi, the second-highest summit in Africa and its rock pinnacle for technical climbing	

Table 2: Pictorial Representation of the Diverse Attractions along KINAPA's Altitudinal Gradients

Altitude zone	Attractions			
Montane forest (1800-2800masl)	 The evergreen forest	 **Touch-me-not (***Impatiens kilimanjari)*	 *Viola (Viola eminii)*	 Waterfall
	 Giraffe	 Elephant	 Black and White colobus Monkey	 Zebra

	 Turacos	 Malachite sunbird	 African Pitta	 Cuckoos
Heath Vegetation (2800-4000m asl)	Endemic flowers and plants			
	 *Stoebekilimandscharica*	 *Hebenstretiadentata*	 *Kniphofiathomsonii*	 *Everlasting flowers (Helichrysumsps)*
	 *Proteakilimandscharica*	 *Erica arborea*	 *Helichrysumnewii*	 *Dendroseneciokilimanjari*

	 *Lobelia deckenii*			
Alpine desert (4000-5000m asl)	 Cathedral-like rock	 Turtle-like rock	 Mushroom-like rock	 Zebra stripes rocks
Summit (5000–5895m asl)	 The Kibo Summit	 The ice sheets in the tropics	 Rock Pinnacles on Mawenzi Peak	 Sunrise at Kibo summit

Discussion

Primarily, the identification and visual interactive presentation of tourist attractions is important to the development of mountainous tourism destinations. This is because mountainous destinations usually receive few tourists due to limited information on diverse attractions other than their summits. In addition, identifying endemic plants and animals that tourists cannot see in other destinations is imperative to the tourism research agenda, particularly for attracting tourists to unique destinations in the world. The push-pull theory argues that tourist attractions are the key pull factors motivating tourists to destinations. This implies that without developed attractions, nature-based tourism and its destinations would not exist (Yale, 2004 & Kilungu, 2019).Therefore, the present study is in line with Pizam, (2010) who argues that the identification of attractions is likely to attract diversified tourists to a destination and create memorable tourism experiences that are the central facet of tourism development. As such, mountainous tourist destinations must strive to deliver memorable tourism experiences to their diversified tourists (Bigne *et al.,* 2020; Kostopoulos *et al.,* 2021).

One of the most effective ways to attract more tourists and create a memorable tourist experience in the mountains is to profile the tourist attractions along their altitudinal gradients. This is especially important now that Tanzania is attempting to boost the number of foreign tourists from 1.5 million to 5 million by 2030. In spite of being home to the highest mountain in Africa and the only free-standing mountain in the world, Kilimanjaro National Park only receives 4% of the total number of tourists to Tanzania. This study offers scientists and tourism stakeholders an innovative approach to identifying attractions. The highest mountainous tourism destinations in the world offer more than merely climbing to the top. To catalogue the attractions in all mountains along altitudinal gradients, research is essential. On Mount Kilimanjaro, for example, in addition to the stunning vistas a tourist can see while trekking in different climactic zones to the summit, the identified brilliant star in the sky at night, the glaciers, and a multitude of unique plants, wildlife, and bird species, and rocks of magnificent shapes (cathedral, mushroom, turtle) could be promoted to enhance the experience and, in turn, diversify tourists and tourism in general.The marketing and promotion of tourism rely heavily on this information. Attributable to a dearth of information, few adventurer tourists opt to climb the highest mountains in the

globe, while a great number of potential leisure, acrophobic, and florist tourists, who are generally risk-averse, are led to believe that climbing mountains is horrific (Miller & Mair, 2021). This study aimed at bringing clarity to this misconception, with the intent of boosting mountaineering tourism. In fact, the risk linked with the mountain's altitude diminishes at lower altitudes (<2500masl) (Shen *et al*., 2020). Thus, leisure, acrophobic, and florist tourists can enjoy a variety of attractions. According to Shen *et al*., (2020), acute mountain sickness (AMS) is the mildest form of illness that occurs when unacclimatized persons ascend high altitudes. Altitude sickness is a major source of unsuccessful summiting (Miller & Mair, 2020). However, researchers contend that trekkers start to experience altitude sickness above 2500masl (Croughs *et al*., 2022; Shen *et al*., 2020). Karinen *et al*.,(2008) argue that trekkers start to experience the first symptoms of altitude sickness at an elevation of about 2700m.

At altitudes above 3700, some trekkers, depending on their health conditions and level of acclimatization may potentially suffer fatal forms of altitude sickness, namely High-Altitude Pulmonary Oedema and High-Altitude Cerebral Oedema. However, this should not be the case for most risk-averse tourists. At lower altitudes (1800-2800m asl), where the risk is nearly negligible, the current study identified a multitude of attractions including wildlife, waterfall, birds, endemic flowers, and the sense of the evergreen forest close to the equator. This novel assessment implies that leisure tourists who simply wish to experience the thrill of life on Africa's highest mountain are likely to be drawn to an equally fascinating experience. Traveling for leisure comprises discovering new places, taking part in leisure pursuits, and resting and unwinding without encountering extreme risks (Jin *et al*., 2019). Due to outstanding world reputations, the highest mountainous tourism destinations are expected to attract millions of tourists each year. As a result, several adventurists are motivated to summit the highest peaks in the world to set an example of maximum human endurance (West, 2004). In this lifetime accomplishment, numerous high-altitude tourism destinations worldwide, such as Mount Everest in Asia, Mount Kilimanjaro in Africa, Mount Aconcagua in South America, Mount Denalli in North America, Mount Elbrus in Europe, and Vinson Massif in Antarctica should receive significant attention from the scientific arena. Research, particularly focusing to identify attractions would be an effort to diversify tourism activities to draw a variety of tourists. It is

important to note that diversified attractions would attract more diversified tourists to these mountains, as each tourist type wants to experience new attractions and to have everlasting experiences, like that of visiting the highest mountains in the world.

Conclusion

The assessment of tourist attractions along Mount Kilimanjaro's altitudinal gradients revealed that the highest mountainous tourism destinations in the world have a variety of attractions beyond their summits. Therefore, mountains ought to be promoted for a variety of tourists rather than just the adventurous. Few (45,000 to 60,000) tourists ascend Mount Kilimanjaro annually via an array of routes. Given the mountain's exceptional significance to the globe and the nation, the Tanzania National Park Authority (TANAPA), and other tourism stakeholders maintain that the number of tourists is low. The study proved essential since it demonstrates that there are more tourist activities to accomplish on Mount Kilimanjaro than just reaching the summit.

The results showed that in addition to the stunning vistas a tourist can see while trekking in different climactic zones to the summit, the dazzling stars in the night sky, the glaciers, a variety of endemic plants, animals, and bird species, unique rocks with magnificent shapes (cathedral, mushroom, turtle), could be promoted to redefine tourism on Mount Kilimanjaro and enhance tourists' experiences. This would in turn broaden the range of tourists. As research in the medical sciences has demonstrated that the risk of mountain altitude sickness is low at lower altitudes (<2500) and for individuals who have not acclimated, the results in this study urge tourism managers to promote mountains for leisure, floristic, and other sightseeing purposes. According to the current study, there are numerous tourist attractions in lower altitudes (1800–2800masl). The varied attractions found along the altitudinal gradients lead to the conclusion that Mount Kilimanjaro is appealing to both leisure, acrophobic and adventurous tourists. The study recommends similar studies to other mountains to attract more tourists and in turn, boost revenue generated from tourism.

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