

RESEARCH ARTICLE

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Assessment of the Factors Inhibiting Avitourism Growth in Arabuko Sokoke Forest in Kenya

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Abstract

Avitourism is currently one of the fastest growing sub sectors of ecotourism. In fact, it has the potential of contributing substantial income to the local economy in areas with high bird diversity. Arabuko Sokoke forest (ASF) is a promising bird life destination in Kenya with avitourism potential. However, its development and growth has not been achieved to the desired standards. This paper sought to assess factors that inhibit avitourism growth and development. Mixed research design was used where both quantitative and qualitative data were collected by use of a questionnaire and focus group discussion. The study sampled 353 respondents in four locations within Kilifi County and data was collected. The collected data was analyzed descriptively. About (26.0%) of the local community around Arabuko Sokoke forest are involved in avitourism activities thus contributing towards their livelihoods. However, major avitourism inhibitors in the study area included pollution and poor garbage and sewage disposal (69%), low support from government institutions (48%), corruption and embezzlement of local natural resources (62%) and low adoption and use of avitourism technologies (72%). Additionally, inadequacy of avitourism tools of trade, lack of avitourism policy, lack of requisite guiding trainings and disturbance of avitourism habitats were mentioned. Though Arabuko Sokoke has a potential, the development of avitourism activities and programs as well as avitourism policy to guide its growth and awareness campaign strategies should be initiated. This campaign should target and train the local community and other stakeholders on the value and importance of avitourism as an emerging high value form of tourism.

Keywords: Avitourism, Bird Diversity, Arabuko Sokoke Forest, Birds Conservation and Bird Watching Inhibitors

INTRODUCTION

Avitourism is a specialized form of nature based tourism which focuses explicitly on birding activities such as bird watching, bird walks, birding observation and bird life studies. Avitourism is one of the fastest growing sub sectors of tourism with high potentials of contributing substantial incomes to the local economy in areas with high bird diversity. It is currently a major recreational activity, engaging millions of

avitourists (Edwards et al., 2011) who are willing to pay substantial amounts of money for the possibility of seeing rare birds (Glowinski, 2008; Lee et al., 2009; Booth et al., 2011).

In fact, avitourism is currently promoted as a conservation tool that may enhance achievement of local development among the local communities (Sanderson, 2005;

Brooke, 2014). As such, it has a potential of enabling indigenous communities to generate income and derive diversity of livelihoods through their involvement and participation in avitourism programs and activities (Kiss, 2014).

According to Biggs et al. (2011) avitourism, an alternative form of tourism at the global level has increased local community disposable income besides enhancing the growth of travel to avitourism destination beyond the historical practice of localized bird watching. Avitourist are the most sensitive nature conservationist (Connell, 2009). This form of tourism is therefore one of the most sustainable nature-based tourism activities. Its programs are preferred by the most endowed members of the society as compared to those who have preferences to wildlife based tourism (Li et al., 2013).

In Kenya, tourism is widely recognized as an important sector with significant contribution to export earnings to the country's economy (Kiragu et al., 2011). According to KTB (2017), tourism contributed 294.6 billion Kenyan shillings (USD 2.9 billion) to the local economy which was 63% of the country's GDP and created more than 9.3% of the total employment in the 2015 calendar period. According to Kenya's vision 2030 strategic development plan (KTB, 2017), tourism is envisioned as an important strategic sector with strong economic influence on Kenya's local communities' general economic growth, transformation and well-being. It is for these reasons that the Kenya tourism sector has been diversified to include new and alternative forms of tourism such as avitourism which has enormous potentials to local communities in terms of employment opportunities and household incomes through their involvement and participation.

Arabuko Sokoke forest with an area of 420 km² is one of the Kenya's endemic forest which has been regarded as one of the Kenya's bird-life sanctuary (Arabuko Sokoke Forest and Management team, 2002). The forest is the largest and more complete

coastal forest type in East Africa that host over 270 bird species that account for 20% of Kenyan birds, where 24 are classified as rare and endemic species and mammals as well as butterfly species which are endemic to the forest (KWS, 2013; Jackson, 2018).

Arabuko Sokoke forest is an ideal habitat for the promotion of avitourism activities because of its' mixed forest nature that support diversity of bird-life (KWS, 2014). Arabuko Sokoke forest constitute two main conservation habitats; the dry land endemic forest habitat and the marine habitat.

The dry land habitat which is managed by Kenya Wildlife Service is composed of Cynometra; a forest thicket habitat for the Sokoke Scops owl, *Bachystagia*; a forest woodland habitat ideal for leisure walks where birds and butterflies are more visible on the open canopy, and Mixed forest habitat that is rich in bird species like East Coast Akalat and Tiny Greenbuls (Barasa et al., 2010; Kiragu et al., 2011; Kenya Forest Service, 2017).

The marine habitat and the ocean waters that end up in a mangrove forest, on the other hand, is under the management of Kenya Forest Service (KFS). The marine habitat is composed of mangrove forest, the beaches and creek. This are ideal stopover and feeding grounds for migratory bird species. Arabuko Sokoke forest as a bird watching site is categorized among other parks in Kenya where local communities' involvement and participation in birding and bird watching programs is encouraged.

METHODOLOGY

The study was conducted in Arabuko Sokoke forest within Kilifi County, Kenya using the survey research design. Locations covered during the study were Mijomboni, Dabaso, Mida Majaoni and Mkenge. These areas were chosen based on their proximity to Arabuko Sokoke forest and those whose livelihoods revolve around bird life within the forest. The respondents were therefore expected to give more representative information on avitourism inhibitors in the

study area. Questionnaires were disseminated to all the targeted three hundred and fifty three (353) respondents by use of purposive sampling technique. Since not all the respondents understood English, the researcher sought assistance from research assistants recruited from the region who translated the questions into the native Giriama language. The secondary data was also obtained from Kenya Wildlife Service (KWS), Kenya forest service (KFS), Bidii Yetu na Kazi women group, A-Rocha Kenya and Arabuko Sokoke forest Guides Associations (ASFGA).

The target population for this study was 38,759 (7399 households) (KNBS, 2019) residing in the four sub locations and the stakeholders that are actively involved in avitourism activities in Arabuko Sokoke Forest.

This study adopted Yamane (1967) formula which is used when the population under study is known, to get a sample size that is representative. The precision level is 95% and margin error is 0.05%. (Sarmah et al., 2013).

The formula is;

Table 1: Sampling frame

Sub location	Target Population	Sample Size
Mijomboni	1289	63
Dabaso	3962	193
Mida	1146	56
Majaoni		
Mkenge	1002	49
Total	7399	361

RESULTS AND DISCUSSION
Respondent Socio-Economic and Professional Demographic Profiles

A total of 353 respondents: male (54.1%) and female (45.9%) participated in the study. A

$$n = \frac{N}{1+N(e^2)}$$

n = desired sample size

N= population size 7399

e= margin of error 0.05

$$n = \frac{7399}{1+7399(0.052)} = 379.48$$

Therefore, the representative sample size at 95% confidence level with a margin error equal to 0.5 is 379. However, adjustment of the sample size was required because of stratification of the community members into sub-locations. Therefore, the following formula was used for adjustment.

$$n = \frac{n_0}{1 + \frac{(n_0-1)}{N}}$$

Substituting n = 379 into the formulae, we have:

$$\frac{1+(379- 1)}{7399} = 361$$

Therefore, the sample size appropriate for the study and analysis was 361 as outlined in the sample size frame below.

majority of the respondents (59.1%) were age below 40 years while those above 40 years were (40.8%) with mean age of 39.28±7.26 while the mean household was 6.24±1.37. Most of the respondents (60.1%) were married. While 19.1% of them were single, divorcees or widowed respondents covered 11.9% of the total respondents. Majority of the respondents had attained a secondary level of education (32.6%) while 34.6% had post-secondary level of education (figure 1).

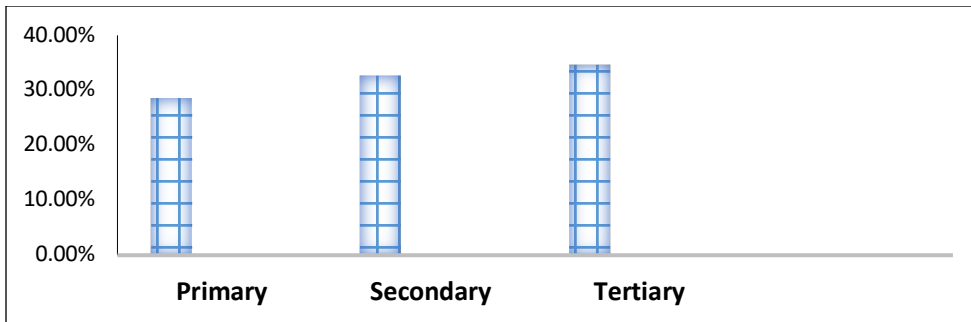


Figure 1: Education Level of Respondents in ASF.

Most of the respondents engaged in different economic and livelihood activities other than avitourism (figure 2). While a majority (46.4%) engaged in businesses, 32.7% were

in tour guiding, 12.6% in farming, 8.3% in boda boda (motor bicycle transport) business and a few (2.9%) were civil servants.

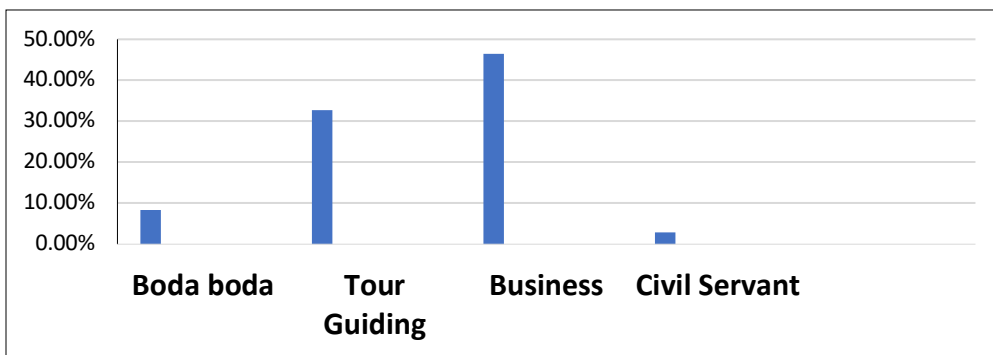


Figure 2: Economic activities of Respondents.

Avitourism Inhibitors

The study endeavored to examine the inhibitors of avitourism development and growth from the perspective of political, economic, social, technological, environmental and legislative/legal (PESTEL). This model of analysis was adopted and used in order to gain insights of the wider spectrum of inhibitors of avitourism development and growth prevailing in Arabuko Sokoke forest. The use of the PESTEL model as an analysis technique tool was highly influenced by the competing political, social and economic interests among myriad of other factors prevailing in Arabuko Sokoke forest. Therefore, the existence of avitourism inhibitors formed a critical area of inquiry for this study.

Political Factors

It was noted that localized political rhetoric had a negative impact on the destination’s development and growth. In the study, 62% of the local community held the view that political bureaucracies was one of the major inhibitors towards the realization of avitourism development and growth within Arabuko Sokoke forest. From the findings, the local community attributed bureaucracy to the existence of overlaps in the governance system prevailing within the study area. This posed a hindrance in the development and growth of avitourism in Arabuko Sokoke forest. Another 55% of the local community blamed it on political connections. They complained that political leaders in the area had negated the development and growth of avitourism. One key informant (KI) alleged;

'Many times we are not supported by the local leadership in establishing and operating tour firms. This people support foreign tour companies at the expense of developing this area. Whenever we seek for assistance, they just take us in circles not knowing which office will rightfully assist us. There is need for our leaders to come out strongly and help us' - Key informant (KI)

This finding support Kim & Jamal (2015) who in their study of avitourism development in Malawi argued that political support and good governance are ingredients for positive development and growth while in their absence greed, looting and plunder of local natural resources become the norm. Furthermore, the study observed the existence of Arabuko Sokoke forest resource plunders with political patronage.

Government Non Commitment

Governments are the major stakeholders in the development of different forms of tourism activities in any tourist destination. However, in this study 76% of the local community attributed government's non-commitment to the development of avitourism in Arabuko Sokoke forest (figure3). Kiragu et al. (2011) posited that although government's role in the development of tourism is crucial, developing specific niches and forms of tourism such as avitourism is daunting, complex and many at times take different dimensions.

Some members of the local community pointed out that though the government had a role in the conservation of Arabuko Sokoke, it was doing little to support avitourism development. Furthermore, 74% of the interviewed local community members alleged that insecurity within Arabuko Sokoke forest and the entire coastal region is a major threat to the general development and in particular to tourism (avitourism). According to (Steven et al., 2014) security and safety in the tourism destination is of paramount importance and a key concern for every tourist. Kenyan coastal region has been

experiencing insecurity threats propagated by illegal terror groupings with local political lineages, recruiting local youth to joining the terror gangs (Daily Nation 18th September, 2019). This has been and still is a major inhibitor to avitourism development and growth in Arabuko Sokoke forest.

Corruption and Embezzlement of Natural Resources

Corruption is a major issue in regard to use and allocation of natural resources in Arabuko Sokoke Forest. In this study, 84% of the local community attributed corruption to the looting and plunder of natural resources which support and sustain avitourism development in Arabuko Sokoke forest. Charcoal burning and illegal logging of Arabuko Sokoke forest resources was witnessed during the data collection for this study. Key informant (KI) were in agreement that collusion between the forest management authority and few rich and politically correct and connected members of the community were involved in the looting and plundering of the resources. This resource would otherwise support and sustain avitourism development in the study area. Another 68% of the local community reported that they were not involved in the core planning and contribution to tourism issues especially on the avitourism projects and programs.

From the political perspective the study had candid discussions with two former political leaders of the region and the study established that boosterism and overly pre-occupation on the part of local political leadership on tourist numbers and bed capacity were their concerns with no emphasis on alternative innovative forms of tourism such as avitourism. Such political thoughts may continue to be key inhibitors to the development of avitourism in the study area. Furthermore, 74% of the local community attributed poor planning or lack of it to be an obstacle to avitourism growth and even general development within the entire Kilifi County. These findings support Ikiara (2003) who argued that good resource

management and stewardship for avitourism development and posterity, planning is imperatively important towards the achievement of the intended visions.

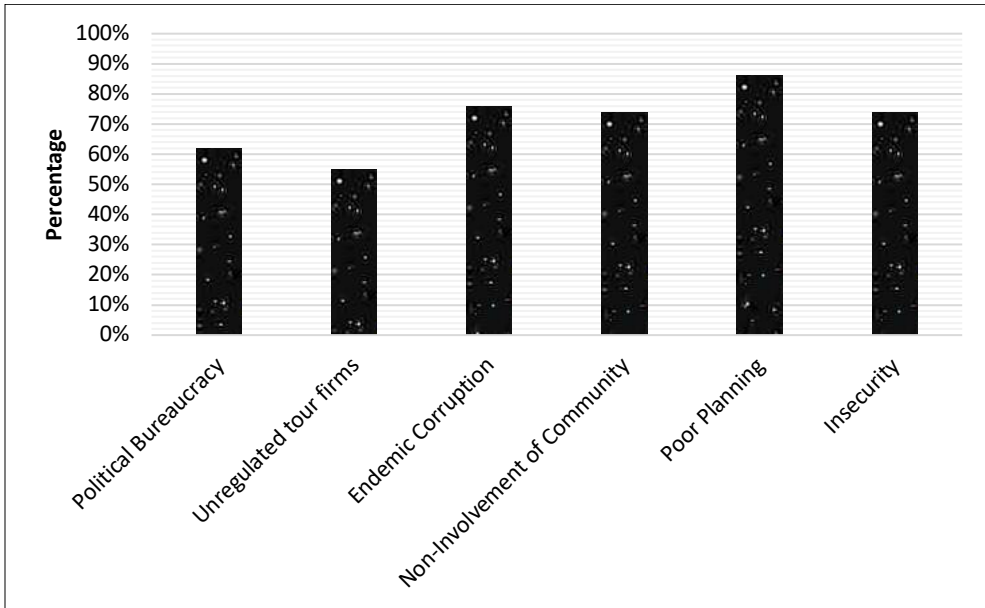


Figure 3: Political inhibitors of Avitourism in Arabuko Sokoke Forest from Field Survey in 2022.

Economic Inhibitors

An assessment of economic inhibitors of avitourism in Arabuko Sokoke forest was conducted to gain an insight on the economic inhibitors affecting avitourism. From the study, the findings revealed that marketing cost was one of the Arabuko Sokoke forest avitourism economic inhibitor. Tour guides mentioned low income earnings from the avitourism activities and hence had nothing to channel for marketing the Arabuko Sokoke forest as a preferred avitourism destination. (Balala, 2019) argued that tourism marketing is a costly undertaking where huge financial requirements are incurred in the execution of different marketing functions. Moreover, the study established that many operating entities in Arabuko Sokoke forest had no budgetary allocations to cater for avitourism marketing, including the county government of Kilifi. A number of civil societies such as A Rocha Kenya, friends of Arabuko Sokoke forest including government state departments (Kenya Wildlife Service and Kenya Forest

service) had no budgetary allocation for the promotion and marketing of avitourism within the study area (Arabuko Sokoke forest). From the community interviews, 62% of the respondents alleged that none of the operating entities within the Arabuko Sokoke forest hardly have avitourism marketing budgets in their annual planned operational activities. However, one key informant (KI) alluded that organizations in the study area hardly considered avitourism marketing cost as a necessary budgetary issue worth considering. Moreover, the findings from the focus group discussion with Bidii Yetu na Kazi women group, one discussant had this to say;

‘Budgetary allocation for avitourism marketing and promotion of Arabuko Sokoke forest is a government responsibility (KWS & KFS). What do they do with our taxes we pay.....just corruption’ - FGD 2: A member of Bidii Yetu na Kazi Women group

A majority of the members of both Arabuko Sokoke forest Guides Association (ASFGA) and those of Bidii Yetu na Kazi women group insinuated that government state departments of KWS and KFS have been allocated a lot of money for marketing the study area out of which the allocated monies are either embezzled or misused. On this view it should be understood that as human beings, community members of this study area are susceptible to some weaknesses and pitfalls in their generalization and understanding on the past corruption occurrences in their locality.

Moreover, taxation regimes the study established to be another avitourism inhibitor as, 71% of the local community interviewed alluded to high taxation imposed on the avitourism startup projects. Bidii Yetu na Kazi women group and ASFGA members mentioned high and costly business permits from the county government of Kilifi and other levies imposed by Kenya wildlife service in form of forest entry fees, camping fees, user fees and forest maintenance fees among other charges. Past studies and documented literature have shown that heavy taxation regimes significantly affect avitourism development and growth in a destination. (Conradie et al., 2016) found similar finding in Celebes Island of Indonesia. Another 77% of the local community alluded of no economic value from avitourism investments. In view of this findings, the community living adjacent to Arabuko Sokoke forest have negative perceptions and poor attitudes towards investment in avitourism ventures. The study established that a majority of the tour guides in the study area have fears of heavily putting their resources including finances in avitourism related businesses.

Furthermore, unavailability of financial incentive towards the development of avitourism projects in Arabuko Sokoke

forest was established to be an inhibitor. Fiftynine percent (59%) of the local community respondents mentioned that there existed neither motivation nor incentive in any form including financial assistance to attract the locals to venture into the avitourism related ventures. The study further established that the county government of Kilifi have no such policy incentive programs for the local people to engage themselves in avitourism businesses around ASF. Sixtytwo percent (62%) of the local community were in agreement that lack of community economic empowerment was another avitourism inhibitor (figure 4).

Empowerment from avitourism perspective is the ability of a tourist destination to complement efforts and abilities of the local community. This would enable them to have positive inclination toward the destination avitourism especially on those activities which are beneficial and contribute to the greater good and well-being of the majority of the locals. The study further observed that majority of the locals held the view that avitourism generated few empowerment opportunities to the community. Most of them were constrained by many local factors including their levels of education, the local leadership roles and support in empowering the community. Furthermore, the local community was further observed to be keen on formal opportunities associated with avitourism with no sight on the informal opportunities the niche is capable of generating as one key informant opined;

‘These avitourism projects and activities are incapable of economically empowering the community. Avitourism opportunities and incomes are irregular and unstable. Projects and programs are conceived by governments and foreign stakeholders. The local community have no role’. - Key informant

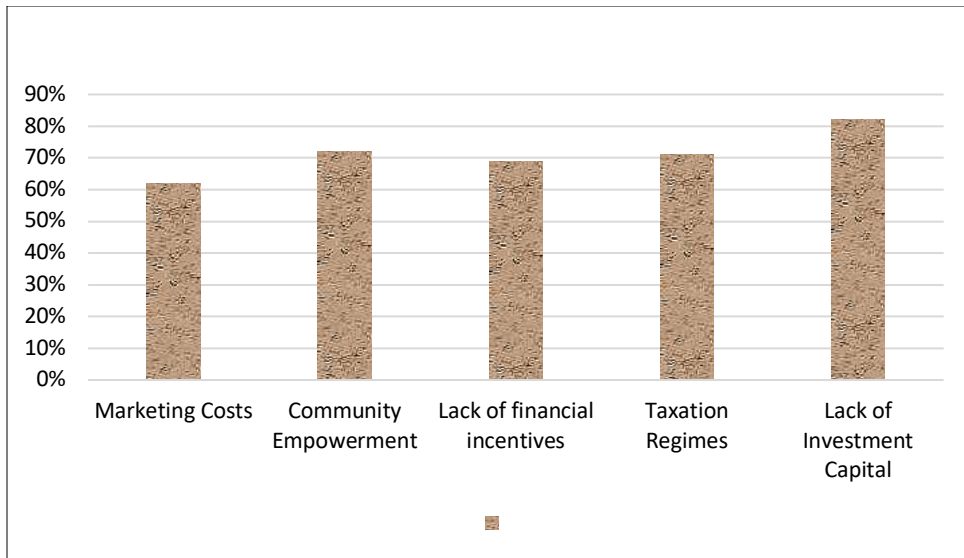


Figure 4: Economic inhibitors of Avitourism in Arabuko Sokoke Forest from field survey in 2021.

Social Inhibitors of Avitourism

The social inhibitors of avitourism development and growth in Arabuko Sokoke forest were diverse. The social factors posed to the local community respondents included perceptions and attitudes, educational standards and training, poverty, unemployment and the level of guiding skills among the forest guides. From the study, the findings revealed that 59% of the local community attributed community negative perception and poor attitudes towards avitourism as one of the inhibitors to the development and growth of avitourism within Arabuko Sokoke forest figure 4.9. In terms of education and training, it was found that 81% of the local community alluded that the levels of education and training were low and the practicing guides were not in a position to measure up to the standard demands for services required by the avitourist visiting Arabuko Sokoke forest. This study further established that manpower concerns among the avitourism practitioners

remained a challenge. The delivery of a destination quality services is a reflection of a destination quality manpower. (Kabii et al., 2017) in their study findings observed that tour guides level of education and professional skills was a requisite to customer satisfaction while (Togoch *et al.*, 2018) findings on North Rift tour guides also observed that tour guide performance attribute is pegged on the level of education and technical guiding skills in possession. Moreover, 76% of the Arabuko Sokoke forest inhabitants thought of poverty as an inhibitor to fully develop avitourism. Kilifi County has high poverty levels with the majority of the county residents including those of Arabuko Sokoke forest living in abject poverty and below household expenditures of Ksh. 200 a day. Similar findings were contained in the World Bank Group (2016) report that Kenyan coastal counties of Kilifi and Kwale, poverty was prevalent and alarming at 71.6% and the single most threat to human life (figure 5).

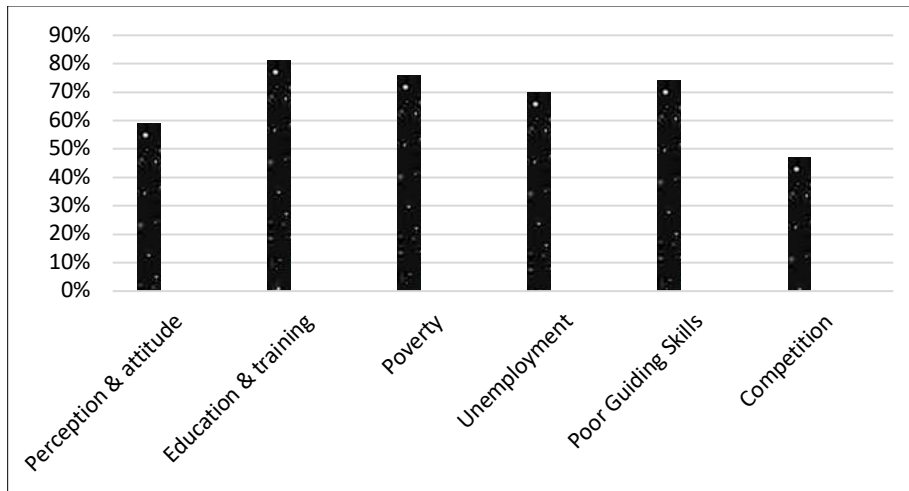


Figure 5: Social inhibitors of avitourism in Arabuko Sokoke Forest from field survey in 2021.

Technological Inhibitors of Avitourism

Technological advances in the field of avitourism and tour guiding continue to play strategic roles in the tourism industry. Technological tools continue to revolutionize guiding services and the provision of services and information to the avitourists. In this study, 74% of the local community interviewed alluded that technological knowledge and skills was an inhibitor of avitourism development while 72% alluded that the adoption and use of modern communication gadgets and devices was low and a challenge to both the practicing tour guides and members of the Bidii Yetu na Kazi women group. The study examined the technological tools, devices and gadgets used by the guides and it established that even though a majority had and used smart phones for communication and capturing data information especially photographic features, most of them were inappropriately in the know on how to use the important software tools within their smart phones. Furthermore, 74% of the guides were observed not to be in possession of the right tools of trade such as cameras & camera lens, waterproof dry suites, global positioning system (GPS) gadget, first aid kits, telescope, boot and binoculars among other essential equipment.

Marketing of Arabuko Sokoke Forest the study observed was another inhibitor of avitourism as 70% of the local community respondents alluded that the Arabuko Sokoke Forest management entities had adopted poor marketing strategies in marketing the study area as an avitourism preferred destination. A guide from the study area had this to say in relation to the marketing of Arabuko Sokoke forest. While the need for destination marketing arises from the fact that destination attraction information needs to be relayed to the external World and to the potential customers in real and timely manner (Simango, 2011; Butler, 2012; Coetzee et al., 2014), successful destination marketing requires the participation and involvement of all the major destination stakeholders where this study established to be nonexistent. The main stakeholders were notably the Kenya Wildlife Service (KWS), Kenya Forest Service (KFS), community civil society groups and the local community whom the study established to have taken a lackadaisical approach on matters avitourism marketing. Moreover, avitourism innovativeness as a new form of tourism and branding of Arabuko Sokoke Forest as an emerging avitourism destination was also established to be a distant nonexistent idea among a majority of the stakeholders. This

finding concurs with Nicolene & Van (2013) as argued by Buckley (2014) on the study finding of Bali, an Indonesian Island where they argued that destination marketing guides tourism impacts as well as optimizing and minimizing benefits to all the stakeholders.

Moreover, the study further observed that communication was the least avitourism inhibitor as 32% of the local community respondents argued that, even though most of the avitourist visiting the study area are guided in either English, German or French among other languages, a majority of the guides felt they were comfortable in those foreign languages. According to Mayaka & Akama (2017), fluency in communication in different foreign languages is essential in the delivery of destination products and services.

A further examination on the guides communication language, the study established that Arabuko Sokoke guides communication in foreign languages was excellent including in the different language accents, however of surprise was that the study established that over 60% of them do not know how to write and how they end up in this field of guiding is another area of research focus. Similarly, under communication, the study established that the physical accessibility to Arabuko Sokoke forest was fairly good as an international highway cut across the forest and telecommunication boosters for aerial communication was observed to cover the study area were noted to be fairly good (figure 6).

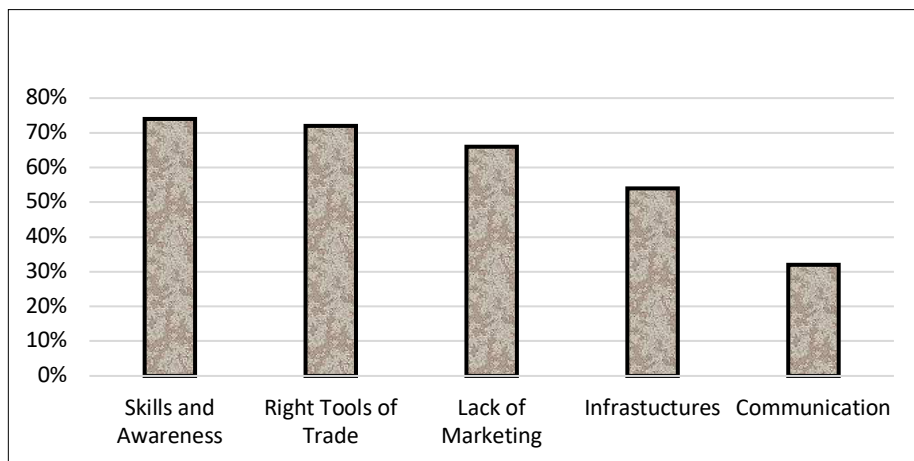


Figure 6: Technological inhibitor to Avitourism in Arabuko Sokoke Forest, from field survey in 2021.

Environmental Factors

Human anthropogenic activities have been identified as the main drivers of environmental change and consequently influence biodiversity (McIntyre, 2019). Arabuko Sokoke Forest support a significant number of resident and migrant bird life species as well as other Palearctic and wader birds which are the core principle avitourism attractions within Arabuko Sokoke Forest. A number of these environmental factors the

study noted to be inhibitors to the growth of avitourism in the study area, 77% of the local community attributed illegal logging of mangrove trees in the Mida Creek as a major impediment to the development of avitourism figure 6. The study observed that the Mida Creek ecosystem which supports mangrove kind of vegetation within the Arabuko Sokoke Forest is an important bird habitat where a number of bird life reside and nest. Furthermore, 69% of the interviewed

respondents mentioned of pollution and the disposal of waste and garbage to be a bigger environmental challenge not only to the avitourism but all to the health and survival of other biodiversity including human health as shown in figure 6. A number of organization especially those operating tourism related businesses like bandas and the small hoteliers within Mida creek beach improperly dispose waste and cabbage which

negatively impact the avitourism environment which support diversity of bird life. Fujikura (2011) opined that environmental sustainability entails adherence to the laid down policies and regulations governing littering, waste disposal and cabbage dumping where this adherence was not complied by those operating within Arabuko Sokoke Forest (figure 7).

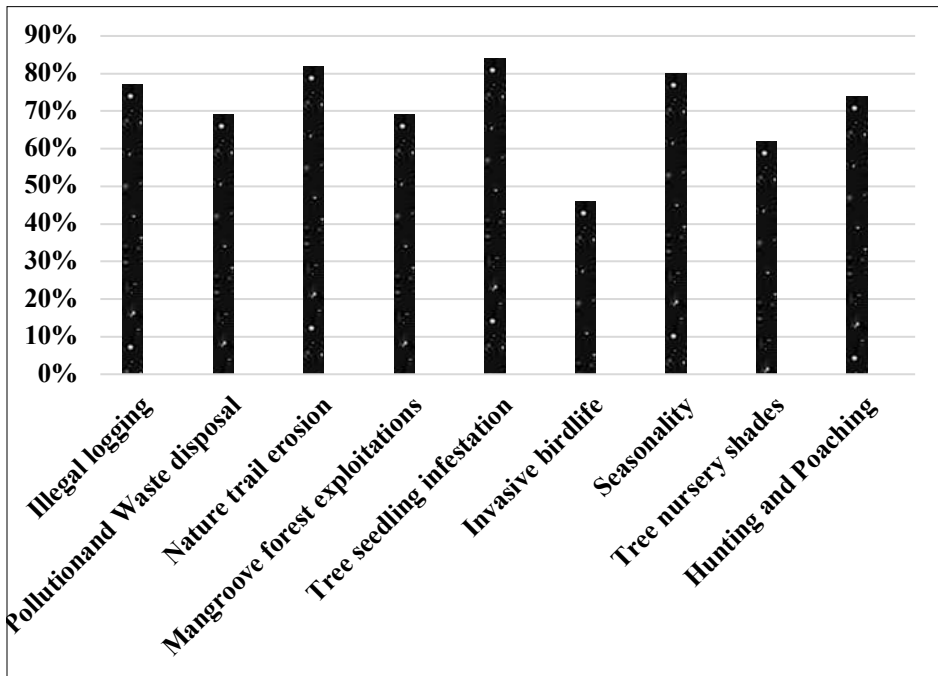


Figure 7: Environmental inhibitors of Avitourism in Arabuko Sokoke Forest from field survey in 2021.

Legislative and Legal Factors

The study attempted to explore both legislative and legal issues which the local community in their view are inhibiting the development and growth of avitourism within Arabuko Sokoke Forest. The local community respondents were asked to rate legal factors which relate to the development of avitourism in Arabuko Sokoke Forest. The study established that 82% of the local community concurred that avitourism policies were lacking and that policies are crucial in shaping and promoting avitourism development. Tourism act and the wildlife

and conservation management act were two policy documents that strive to promote conservation of wildlife resources and tourism development where the policies are silent on ecotourism and avitourism. A discussion with two opinion leaders from the community alluded that;

‘Current legal/legislative issues pose as development challenges for the Kenya’s coastal region as these policies do not factor and consider historical contextual impact on the coast general development

including avitourism development'. – Key informant.

This finding support the findings of Akama (2002) and Manyara (2009) who argued that Kenya's tourism and conservation policies have been developed extensively but little evidence of progress in addressing policy gaps, weak policy conception, formulation and inadequate implementation. The process of sectoral policy formulation such as of avitourism and their outcomes is a political process where consensus and exclusivity among the key stakeholders should be the norm. Furthermore, the study noted that a majority of the tour guides who were members of Arabuko Sokoke Forest Guides Association (ASFGA) had voiced their discontent on the process and content of some certain policies, regulations and policies being implemented by the county government of Kilifi. Sixtytwo percent (62%) of the interviewed community respondents alluded that research on avitourism within the study area was very low, however both the practicing tour guides and women group operating with the study area were in agreement that research play an important role in disseminating information on avitourism of Arabuko Sokoke Forest to

the external world were little has been done and achieved on this front.

CONCLUSION AND RECOMMEDATION

The findings of this study revealed a number of inhibitors to the growth of avitourism in Arabuko Sokoke Forest and of critical was the political rhetorics, corruption and embezzlement of Arabuko Sokoke resources to unresponsive governments in development and promotion of avitourism in the study area. Financial challenges towards marketing avitourism in the study area to inappropriate adoption and use of avitourism technological tools and equipment's were some of the other inhibitors observed in Arabuko Sokoke Forest as a potential avitourism destination. However, because of community high expectations on the contributions of the avitourism to different needs, there is need for the maintenance of positive perception call from the community, the tour guides and all the other major players in the avitourism sector in minimizing the afore stated inhibitors and also the need for capacity built of the local community to enhance their capabilities in initiating more avitourism programs and activities in the study area.

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