

# Perceptions, challenges and opportunities of community-managed ecotourism initiatives: A case study of Gazi Women Mangrove boardwalk project

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## Introduction

This survey sought to understand the challenges and perceptions of the community towards the ongoing ecotourism project in Gazi Bay. Specifically, we shall establish any existing socio-economic and gender barriers in order to influence a positive and receptive environment towards (enhance attitude) future projects for optimize conservation and community benefits. Similarly, the survey identifies and highlights key opportunities that can be incorporated with ecotourism, mangrove conservation and community development in the study area. Key findings and recommendations from this study will form a basis for future discussion on how best to strengthen participatory forest management in light of the existing socio-economic barriers in most coastal communities.

## Study sample

The sample size for this study included 102 households systematic randomly selected, 5 Key Informants and two Focus Group Discussions as shown in **table 1** below.

**Table 1:** Number of respondents for the survey

Target/Sample Type	Number of respondents
1. Households	102
2. Key Informants	5
3. Focus Group Discussions (FGD)	2

All the households in this study were sampled from Gazi Bay village, which is the focal area for the implementation of the Rufford, funded project on promoting ecotourism. Key informants were drawn from personnel working with Kenya Marine and Fisheries Research institute (KMFRI), World Wide Fund for Nature (WWF-Kwale office), Gazi Beach Management Unit (BMU), Tour operators and Kwale County tourism department. The Focus Group Discussions targeted two main groups who interact with mangroves on a daily basis which included fishermen through Gazi BMU and locals drawn from Gazi Women Boardwalk Group, which is the direct beneficiary of this Rufford, funded project.

The main challenge experienced during the study was mainly linked to limited financial resources that could have led to an extended geographical scope of the study to nearby villages whose livelihoods directly depend on healthy mangroves. Poor reception in some parts of the village is largely due to inequalities and lack of an all-inclusive participation in on-going conservation projects.

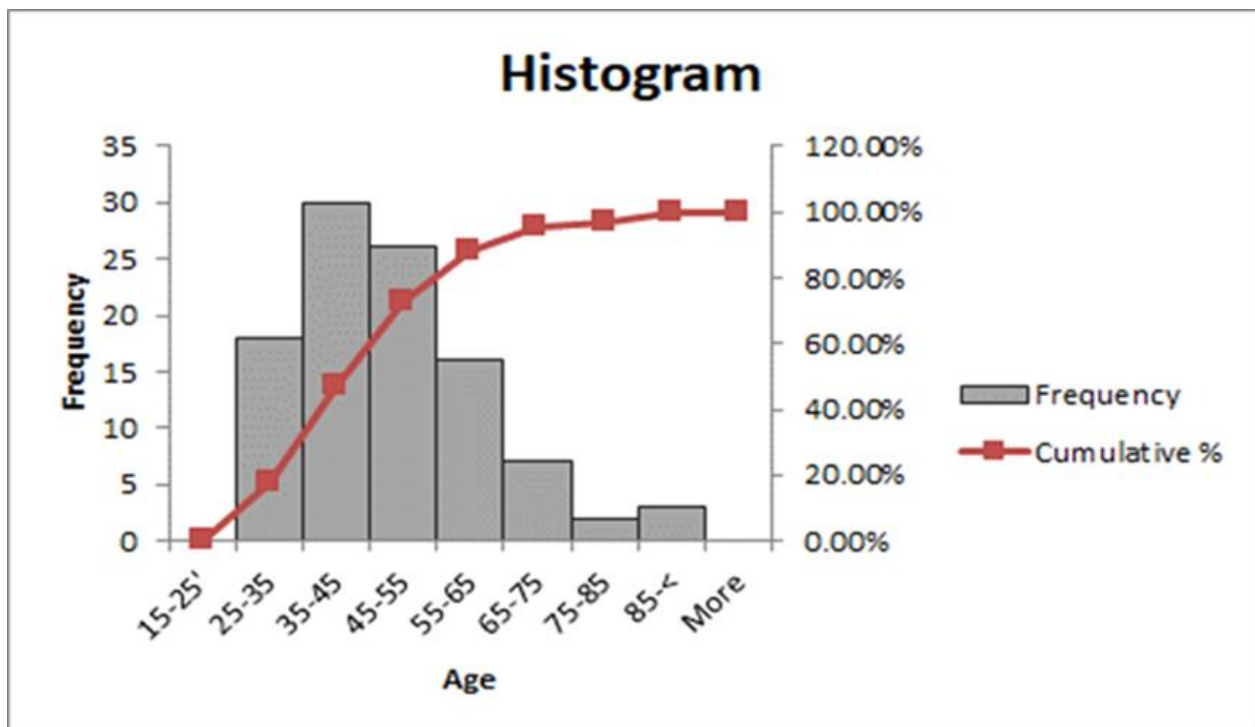
## Socio-demographic characteristics

### Gender, Ethnicity and Age

Gender, ethnicity and age were assessed during the survey to help better understand the composition and structure of the population in Gazi Bay and its subsequent implication on ecotourism and mangrove conservation. Most of the interviewees during the household survey were female (78.4%). This was expected given that Gazi is a rural fishing village where men are actively involved in fishing activities and rarely at home during the day. It was easy to access women in households as most of them are housewives, taking care of children and in-charge of house chores most parts of the day. As a result, women in Gazi are perceived to be more readily available than men to successfully implement ecotourism activities which not only requires a strong dedication but also time commitment to achieve significant positive impacts.

Gazi village is ethnically diverse as evidenced from various studies (xxx et al.). Analysis of results indicated that the majority of the inhabitants in Gazi village are Digo (70.6%) of the Mijikenda tribe, followed by Pemba people (16.7%) native to Tanzania. The Pemas are predominantly fishermen conducting their activities in the shores of Kenya and other countries in the Western Indian Ocean (WIO) region including Gazi viilage which they have migrated and settled in (Wanyonyi et al., McClanahan et al.) Also, other ethnic groups captured during the survey are Gunya (6.9%), Fundi (2%), Duruma (1%), Bajun (1%), Arabs (1%) and Luo (1%). The ethnic diversity and co-existence in Gazi Bay, demonstrates/confirms that ecotourism initiatives can thrive in the area by taking advantage of the hospitable nature and willingness of the locals to share their cultures and traditions to outsiders/non-locals.

Most (72.6%) of those who were interviewed in the household survey were below 55 years of age (**See Figure 1**).

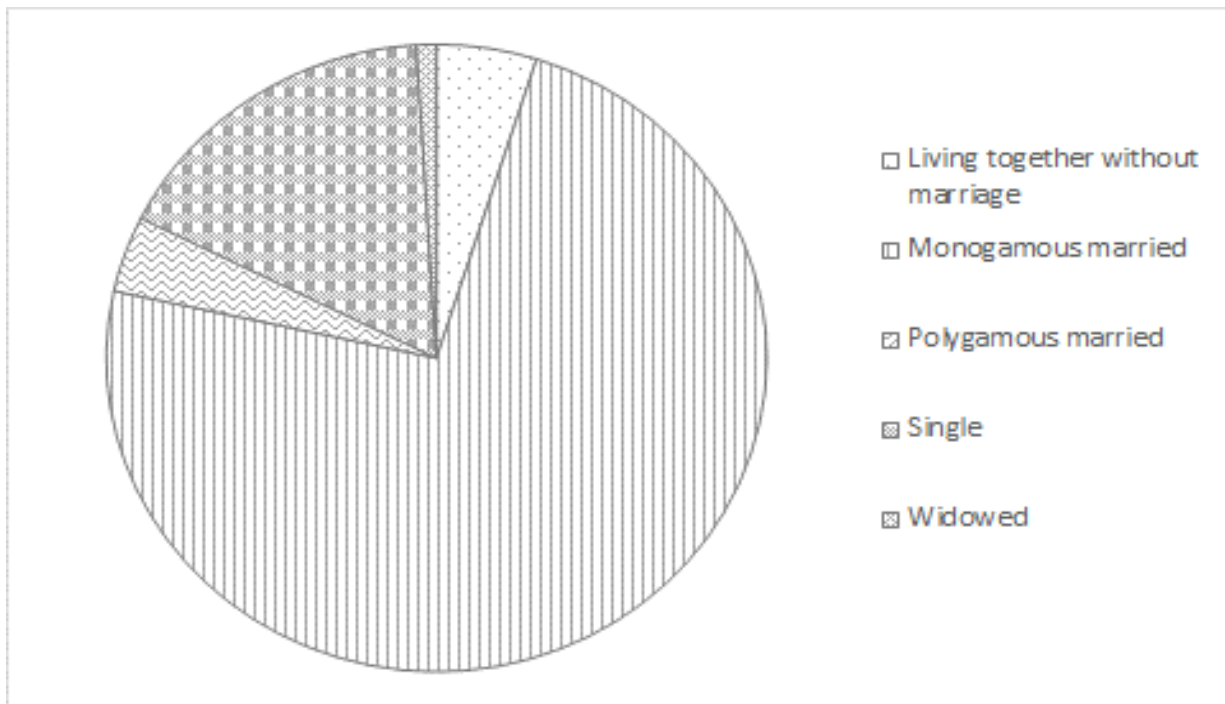


**Figure 1:** Age-class distribution of respondents in Gazi

This shows that majority of the people living in Gazi Bay are within the economically productive age of between 18 – 55 years. Any interventions regarding establishment and promotion of ecotourism activities in Gazi Bay should therefore target this age set. The mean age for the respondents was 39 years ( $\pm 14$ ), with a modal and median age of 30 and 38 years respectively. The age range was 62 years, with the youngest person being 18 years of age and the oldest 80 years of age. Ecotourism activities are diverse and can be explored to fit the age structure shown in Fig.1. The old people in Gazi Bay are mainly associated with basketry and weaving while young people are usually engaged in more active activities such as swimming, diving, dancing which can potentially be tapped into ecotourism sector.

**Household Characteristics**

From the study, results indicate that majority (82.3%) of the respondents were married; 73.5% were in a monogamous marriage, 4.9% were living together without any legal documentation (come we stay) and 3.9% were in a polygamous marriage. The remaining 16.7% and 1% were either single or widowed respectively (See Figure 2).

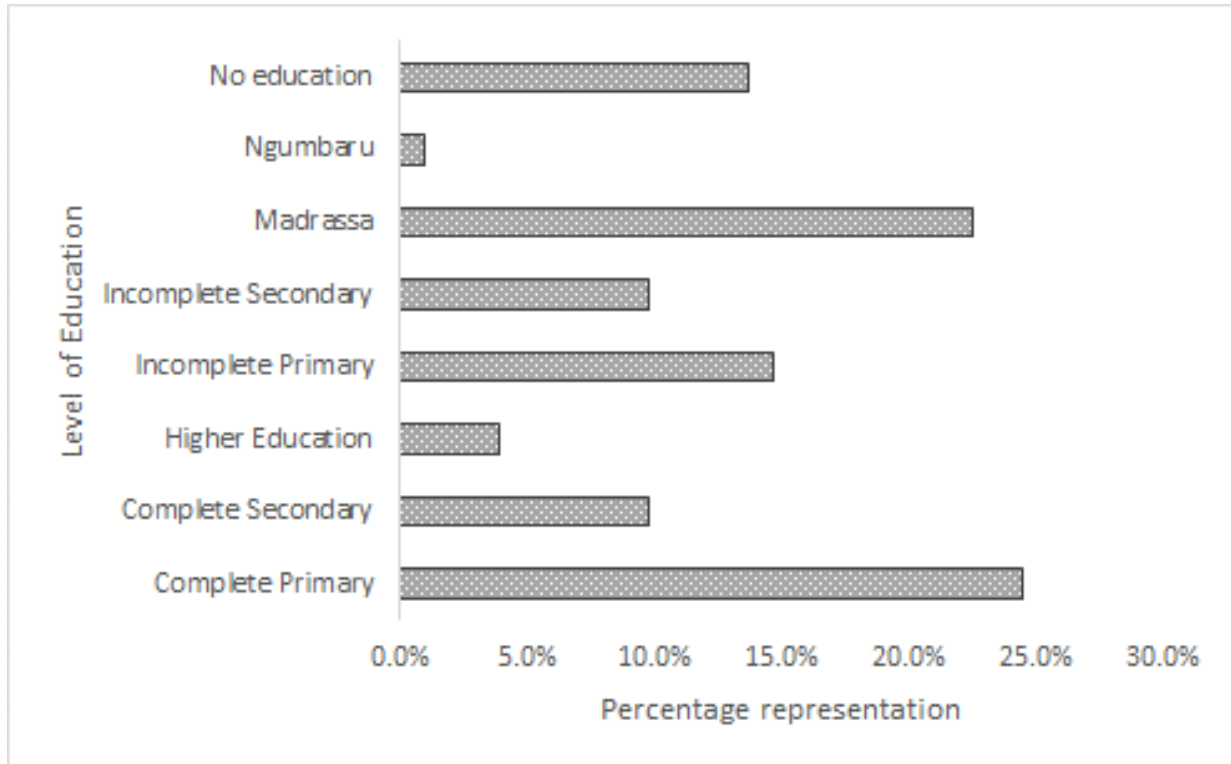


**Figure 2:** Marital status of respondents

Results demonstrate that, most people in Gazi area have a higher respect, consideration for marriage as an Africa custom and that is why majority of the respondents were married and there were no cases of divorce from the respondents. When asked who the household head was, 55.9% of the respondents’ stated that they were not the household heads from which 51% were women. This demonstrates that majority of the household heads were of male gender providing leadership and basic needs requirement for the household. On average, a household had 7 persons, with a range of 1 to 13 persons per household. In a household, an average 3 persons were above 18 years of age with a household having the most number of persons above 18 years having 8 persons and the one with the least having 1 person. When looking at the number of children per household, on average, a household had 4 children below the age of 18 years; the household with most number of children had 10 children while the one with the least had 1 child. Averagely, the number of school-going children was at least 3 per household, with the household with the most number of children having 9 persons going to school. The study show that, Gazi population had a lot of women and children illustrating high dependency levels on the main breadwinner. To help reduce the financial burden, initiatives to promote ecotourism in Gazi need to target women to increase their livelihood options.

### ***Education level and Livelihood options***

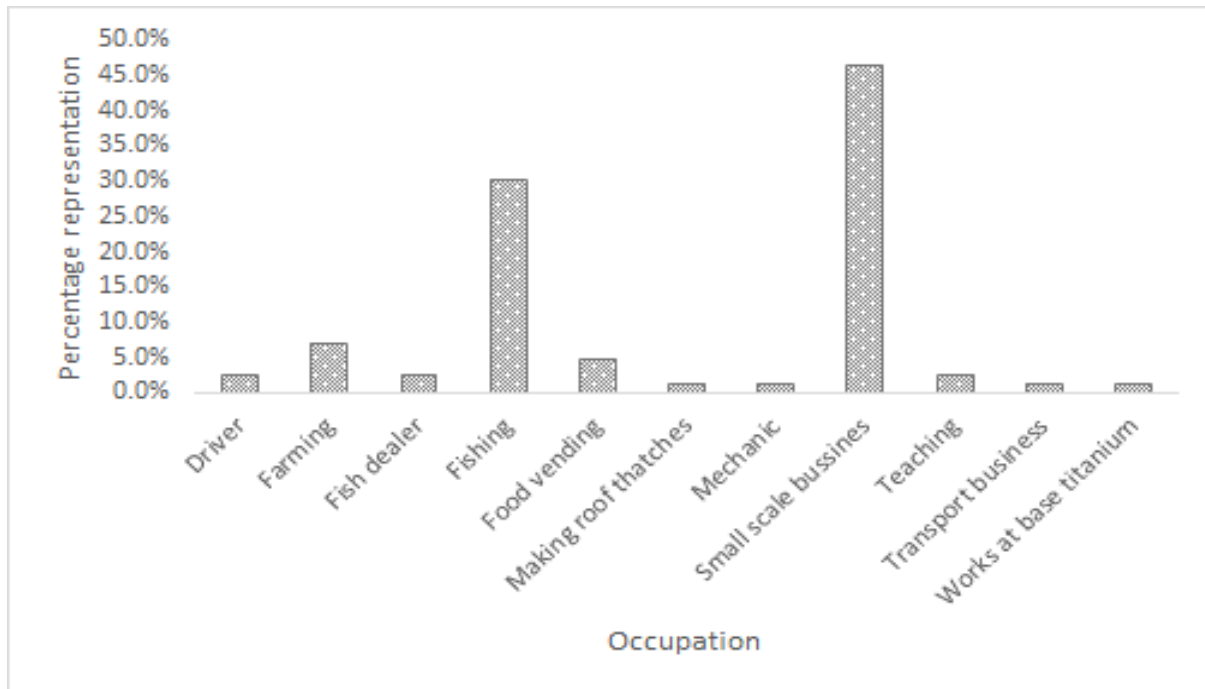
The study illustrated high levels of illiteracy with only 3.9% of respondents having attained tertiary education and 9.8% having completed secondary school (See Figure 3). Many respondents though showed to have some level of education with most (39.2%) having been to primary school, 22.5% having gone to madrassa (Islamic education), 9.8% having gone to secondary school but did not complete and 1% having attended adult education (ngumbaru). There are those who also never went to school (13.7%).



**Figure 3:** Level of Education among respondents in Gazi

Low literacy levels as demonstrated in the study portray education is not highly regarded as a means that can help the community move out of poverty. Most rural coastal communities in Kenya prefer when their children assist them to obtain daily subsistence especially during crop farming, harvesting and favorable fishing seasons. When the female population is targeted in ecotourism activities and empowered to be able to earn, their contribution towards family subsistence will greatly reduce the number of children going out of school to support family hence an educated population in future. Education normally positively correlated to income earnings from employment and with an educated population in future, Gazi village has an opportunity to alleviate poverty in the area.

The main occupation in Gazi was small-scale business (46.5%), followed by fishing (30.2%) (See figure 4). Other occupations identified during the survey were farming, food vending, teaching, driving, fish dealing, mechanic, transportation, and employment at Base Titanium Ltd and in construction. When asked for alternative source of income, sale of firewood and fishing were the only activities identified.



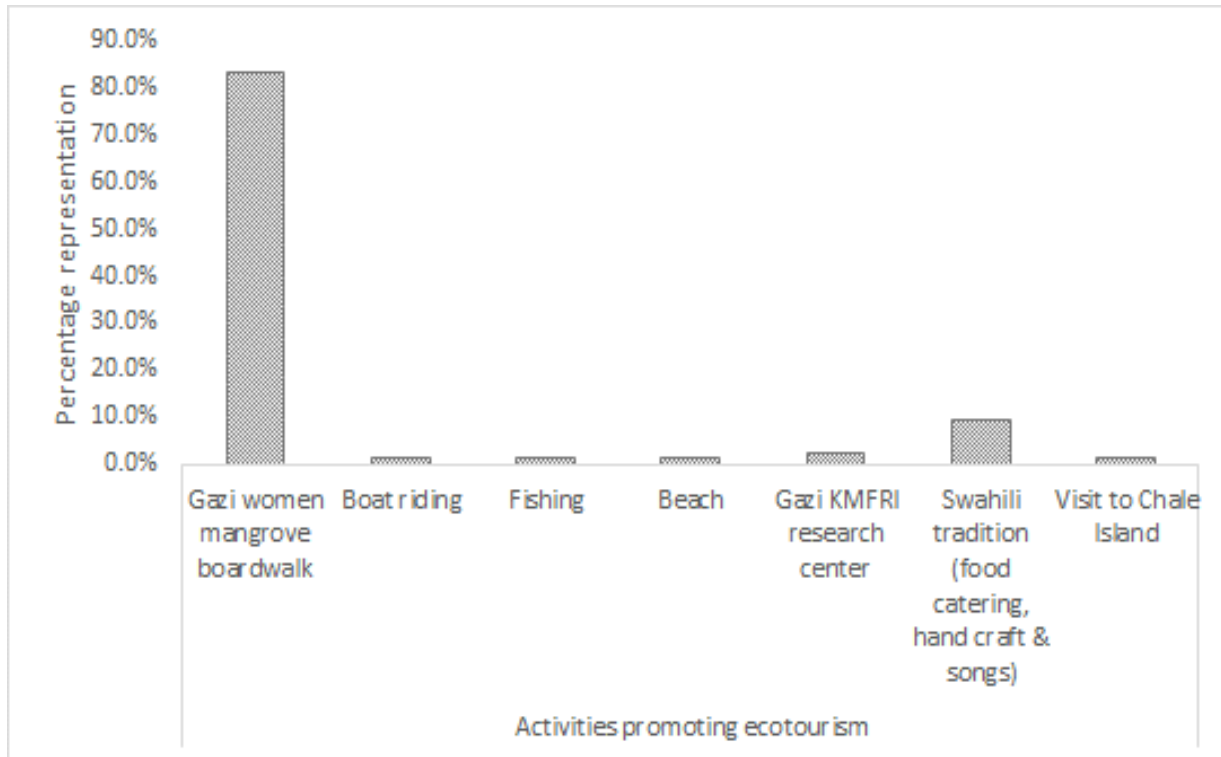
**Figure 4:** Different Occupations of respondents in Gazi

Results demonstrate strong livelihood diversity in Gazi, with residents depending on different ways to earn a living. As captured in the survey, there are no people earning from ecotourism in Gazi yet there are ecotourism activities in the area. This calls for investment and better marketing of ecotourism activities in Gazi to enable locals to be able to earn from them.

## Perception on ecotourism

### Knowledge on ecotourism

Majority (81.4%) of the respondents acknowledged having knowledge of ecotourism activities in Gazi. For the purpose of this study, ecotourism was defined as responsible travel to natural areas that conserves the environment to promote local well being and for educational purposes. When asked to identify initiatives in Gazi that promoted ecotourism in the area, majority of the respondents identified Gazi Women Mangrove Boardwalk as the main tourist attraction in the area (See Figure 5). Other activities identified to promote ecotourism in Gazi included research activities at KMFRI Gazi station, Swahili culture and traditions, fishing activities, boat riding and visit to the sandy beaches.



**Figure 5:** Initiatives promoting ecotourism activities in Gazi

The Gazi Women Mangrove Boardwalk is a community based conservation group, where locals especially women in Gazi, were funded in previous projects through Kenya Marine and Fisheries Research Institute (KMFRI) and partners to establish a nature boardwalk. The boardwalk provides a 300m long relaxing walk through calm and pristine mangrove forest, with resting points for a beautiful view of mangroves, birds, primates, crabs and other attractions. In addition to the boardwalk that attract many visitors in Gazi, the village has a rich tradition that is distinct and unique and many people come to Gazi to interact and learn from their culture. Visitors come to enjoy Swahili tradition including a suite of delicious Swahili cuisine, folk songs, handicrafts, traditional fishing activities, boat cruises and a soothing walk on the white sandy beach. Gazi village also harbours a government-run research center (Gazi KMFRI research center), which has immensely contributed to the development of various mangrove conservation and community development projects including the current ecotourism initiative. The center acts a host to both local and international students and scientists who use the Gazi Bay mangrove forest as a field laboratory and learning facility with an aim to promote sustainable utilization of mangrove and improved community wellbeing.

When respondents were asked if they were involved in ecotourism, majority (80.4%) said that they were not involved. The remaining few mentioned about being members of Gazi Women Mangrove Boardwalk group, while others said to work as tour guides and cooks. From the results, it is evident that majority of people in Gazi were aware of ecotourism activities in the area yet they were not involved in these activities. When the respondents were asked if they were willing to be involved in ecotourism activities, 69.5% agreed. When the respondents were asked if there are other family members involved who are involved in ecotourism activities, only 27.6% agreed and they said either they were members of Gazi Women Mangrove Boardwalk, sold handcrafts and fish to visitors or they were tour guide. The results indicate incidences of lack of interest from the community in the involvement with ecotourism activities mainly attributed to the lack of positive changes in the living standards of the members who have been involved from the onset of the project.

### ***Contribution of Ecotourism in development in Gazi***

When asked how ecotourism activities in the area have influenced respondents' lives, majority (72%) stated to have not benefited from ecotourism at all. The few respondents who said to have benefited cited income earnings, knowledge empowerment on conservation, and sponsorship as benefits witnessed. Interestingly, when asked about the benefit of ecotourism to the community, majority (62.8%) admitted that ecotourism has had a positive impact on the community. Some of the benefits mentioned included: the boost of the business and employment opportunities in the community, revenue obtained from ecotourism activities used to pay teachers in local schools and madrasa, renovate schools and mangrove boardwalk. The money has also been used to tap water for the community, drill boreholes, buy school equipment, and sponsor schoolchildren.

To be more specific on level of contribution ecotourism has made in Gazi, respondents were assessed on how ecotourism has contributed towards access to education, access to better health, increase in small enterprise opportunities, access to credit, expansion of employment opportunities, environmental conservation, sale of local goods and services and training on entrepreneurial skills as **tabulated** below.

**Table 2: Ecotourism contribution in Gazi**

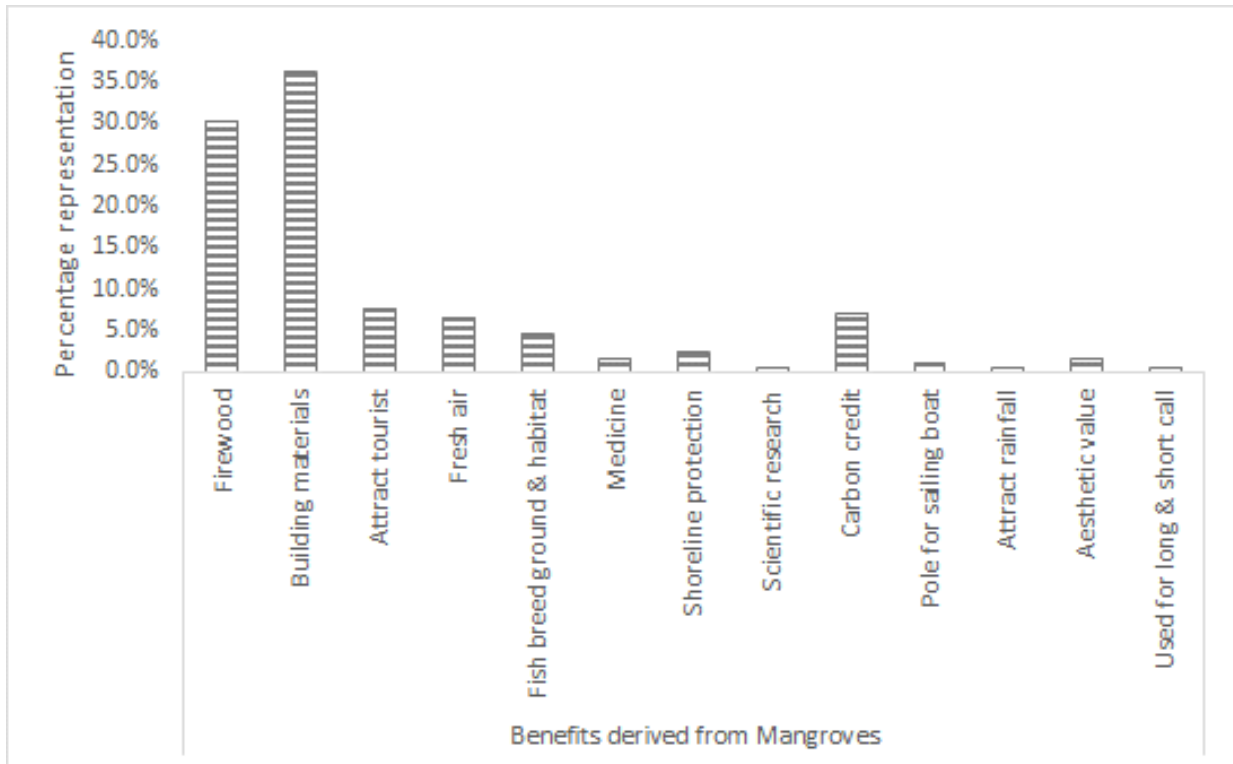
<b>Ecotourism contribution towards:</b>	<b>Level of Agreement</b>	
	<b>Yes</b>	<b>No</b>
Access to education	59.8%	40.2%
Access to health facilities	85.3%	14.7%
Increased small enterprise opportunities	77.5%	22.5%
Access to credit	95%	5%
Expansion of employment opportunities	69.6%	30.4%
Environmental conservation	54.9%	45.1%
Sale of goods and services locally	87.3%	12.7%
Training on entrepreneurial skills	88.2%	11.8%

From table 2, majority of respondents agreed that ecotourism has a significant contribution in the area. Respondents agreed that ecotourism had eased locals' access to education as earnings obtained from ecotourism activities have been used to pay teachers and sponsor children in school. The money was used for transport to take those who were ill to hospital. Respondents also noted that more business activities have opened up in Gazi area due to increased number of visitors, which has contributed positively to easy access to credit facilities by businesspersons. Many people in the community are now getting direct and indirect employment because of increased tourism activities in Gazi village, employment also come from environmental conservation where locals are paid when they assist in mangrove planting. Visitors, who come in the village, buy the local handcrafts improving the economy in the area. Majority of respondents (88.2%) agreed that community members involved in ecotourism activities through Gazi Women Mangrove Boardwalk were taken through trainings to better their conservation efforts and better market Gazi as a tourism destination.

### ***Contribution of mangroves to ecotourism***

86.9% of respondents gave responses on benefits they derived from mangroves. Two major uses of mangroves as identified by respondents were provision of building materials (36.3%) and source of fuelwood (30.3%) a shown in **Figure 6**. The least important uses of the mangrove forest as identified were scientific research (0.5%) and use of the forest as a place to make a call of nature (0.5%). Other benefits of mangroves as identified during the survey included attraction of tourists, recreational use,

they act as a breed grounds and habitat for fish and other faunal communities and also capture and store carbon thus mitigating global warming. Mangroves were also found to be useful in treating stomach ailments, shoreline protection and mangrove poles used for boat sailing.



**Figure 6:** Benefits derived from mangroves

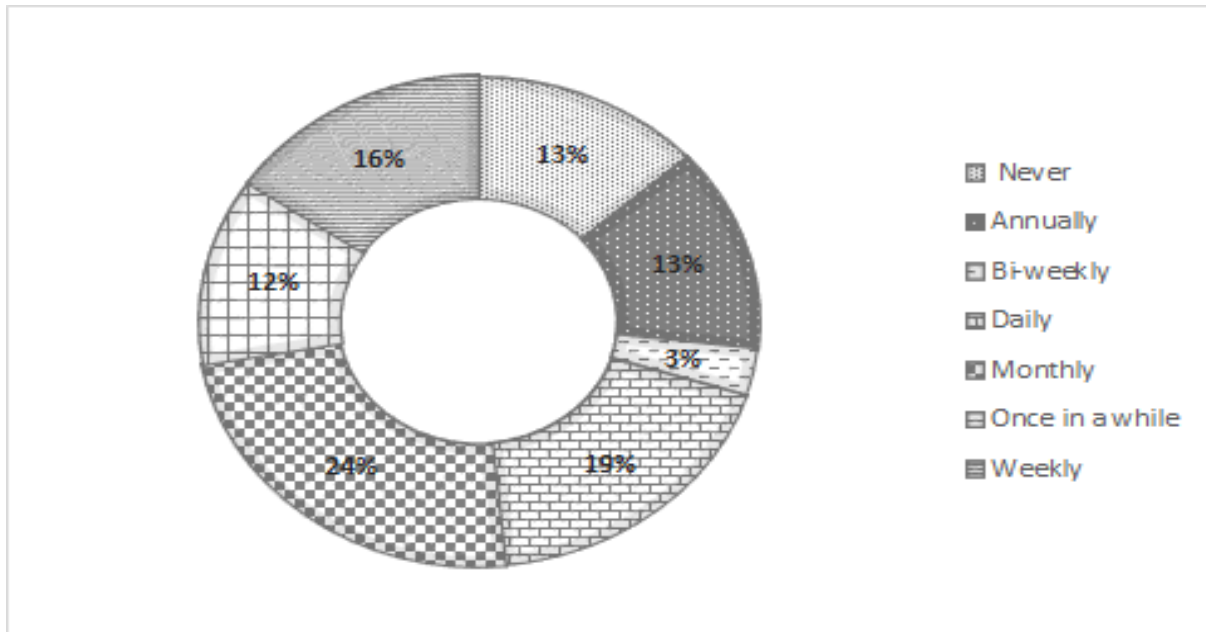
Building material was identified as the main benefit from mangrove because, in Gazi village, mangrove poles are preferred for construction purposes, as they believe the tree is pest resistant. Mangrove was also preferred as a source of fuel as it produced long lasting flame and because it was the most nearby forest from the community. More people also identified mangroves as a tourist attraction because of the boardwalk constructed by Gazi women group which most visitors come to Gazi to visit as they learn about mangroves. Sale of carbon credit in Gazi is a well-known venture under Mikoko Pamoja initiative, where the community is involved in mangrove conservation and they earn from their conservation efforts by selling carbon credits in the international market.

When specifically asked if they considered mangrove as a tourist attraction, 95.1% of respondents agreed to this statement. When told to explain, the respondents noted that, the Gazi boardwalk was constructed because of the presence of mangroves in the area. Visitors both locally and internationally visit Gazi village to visit the boardwalk and learn more on mangroves and the rich biodiversity it possess.

**Effects of ecotourism on mangrove**

From the survey, 82.4% of respondents agreed that they visited the mangrove forest. When asked about the frequency of visits, majority (23.7%) noted that they visited the mangroves on a monthly basis, followed by those who visited daily (18.6%) then weekly (15.5%) (See Figure 7). Interestingly, 13.4% of respondents noted to have never visited the mangroves.





**Figure 7:** Frequency of mangrove visits

Results generally show fewer visits to mangrove forest by respondents and this is because of the conservation efforts made in Gazi through Mikoko Pamoja and Gazi Women Mangrove Boardwalk. The two initiatives benefit the community by generating income and the community participates in mangrove conservation through planting of mangroves and offer of security through surveillances and monitoring mangrove forest to prevent destruction.

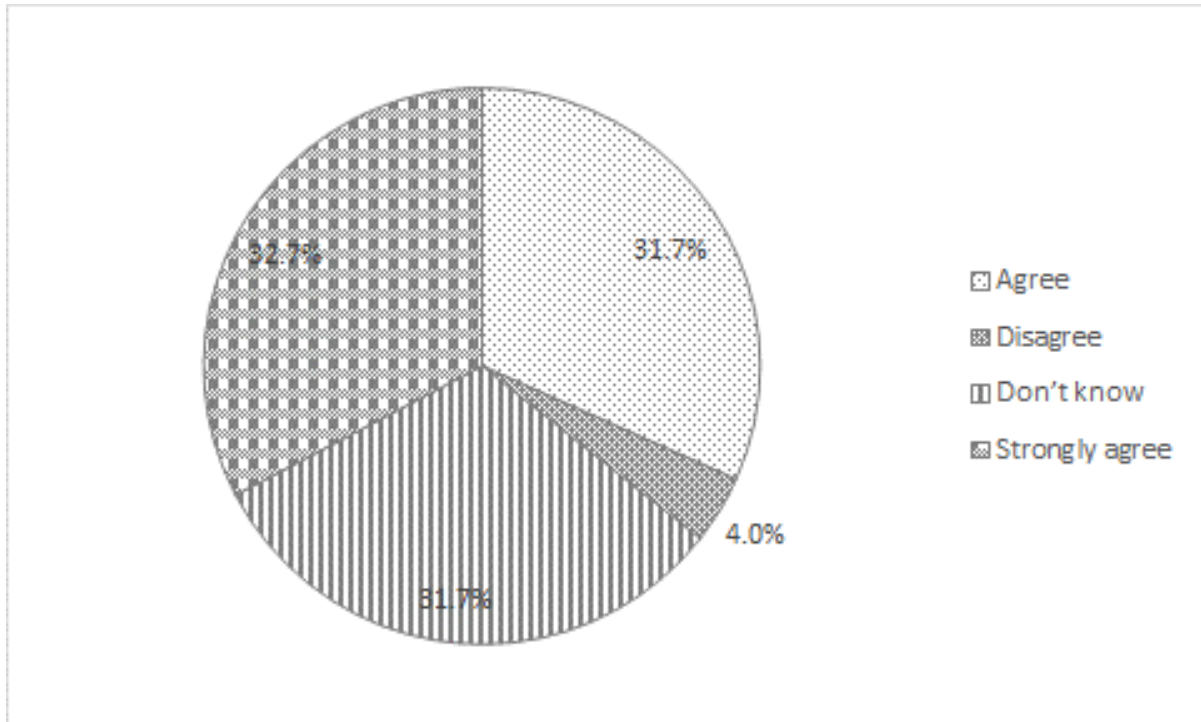
The areas in the mangrove most identified to have frequent visits were Gazi Women Mangrove Boardwalk, Mangrove forest and the beach (See Figure 8).



**Figure 8:** Most frequently visited areas within the mangroves

Most respondents reported to visit Gazi Women Boardwalk because the place is a tourist attraction site and it receives locally, regionally, nationally and internationally visitors. Those who reported to visit mangrove forest were mostly women, who went there to collect firewood and participate in tree planting activities. Men mostly reported to go through the mangrove as they access the landing site, a place where a lot of fish businesses take place.

The respondents had different levels of agreement on whether ecotourism activities had impact on mangrove conservation. Majority (64.4%) agreed that ecotourism activities affected the mangrove while 31.7% did not know and 4% disagreed (see Figure 9).

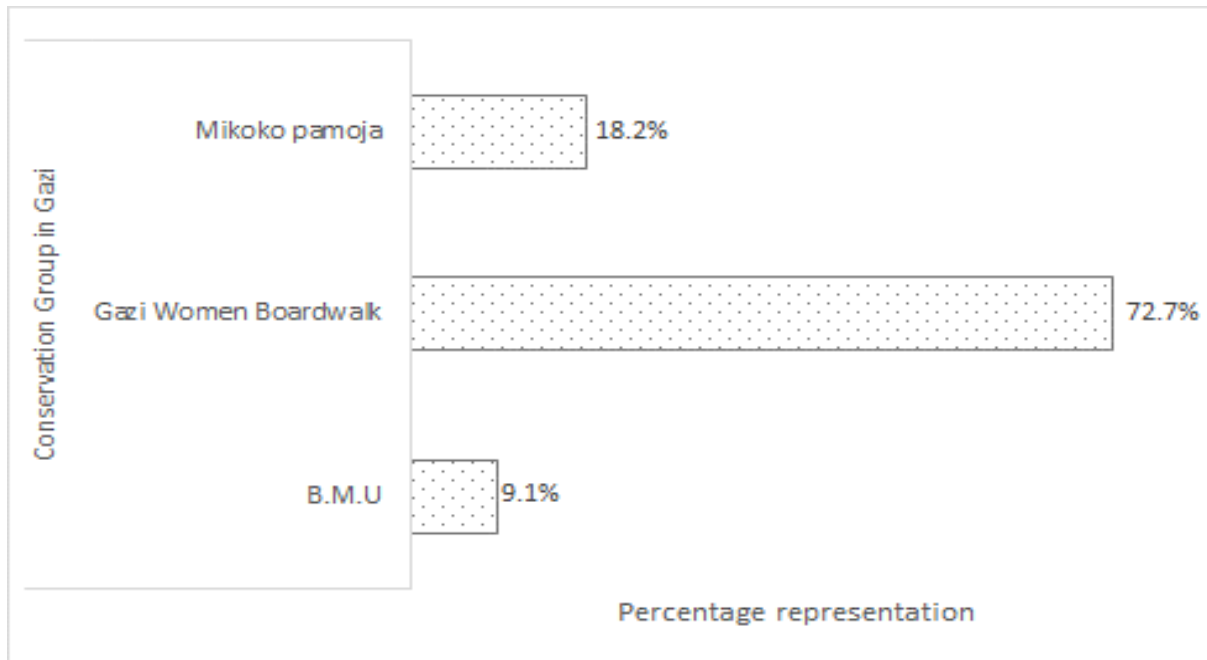


**Figure 9:** Respondents level of agreement on ecotourism impact on mangroves

As stated earlier, ecotourism is responsible travel to natural areas that conserves the environment. Those who agreed that ecotourism had an influence on the mangrove brought forth the idea that, since ecotourism activities in Gazi were highly dependent on presence of mangroves; the community participated in conserving the mangrove to limit destruction. The efforts that have been made by the community to conserve the mangroves through ecotourism include making of mangroves nursery, planting of mangrove in degraded areas, planting of mangroves in new areas where there was no mangrove before, educating the community on importance of conserving mangrove forest, and offer security to mangrove forest through surveillance and monitoring.

**Ecotourism in Gazi Bay**

Majority (65.7%) of the respondents were not in agreement that the community controlled ecotourism project in Gazi. They also did not agree (70.6%) that the money generated from the project remains in the community. Furthermore, only 12.7% of the respondents agreed to belong to a conservation group in Gazi. The identified conservation groups were, Gazi Women Boardwalk, Mikoko Pamoja and Beach Management Unit (BMU) (see Figure 10).



**Figure 10:** Conservation groups in Gazi

From those who responded, majority identified themselves to be members of Gazi Women Boardwalk. This is so because the study mainly focused on ecotourism activities in the village with Gazi Women Boardwalk being the main conservation group in Gazi that mostly conducts ecotourism activities. This can be affirmed with the fact that 78.4% of respondents said to visit the boardwalk. Frequency of visits varied from daily, weekly, bi-weekly, monthly, annually, occasionally and never with most respondents reporting to visit annually (20%) and Occasionally (20%). Reasons cited for visiting the boardwalk include recreational purposes, acting as tour guides to visitors, renovation of the boardwalk, offer security and participate in tree planting activities.

Respondents mentioned challenges that needed to be tackled for ecotourism to flourish in Gazi. The main challenges facing ecotourism in Gazi as identified by respondents were poor condition and maintenance of the boardwalk (22.4%), poor management and marketing skills of ecotourism activities (17.2%) and few tourists' visits (13.8%). Other challenges identified include inadequate mangrove rehabilitation initiatives, inadequate accommodation facilities for visitors coming to Gazi, theft and vandalism of the boardwalk, lack of transparency in the conservation group, inadequate sandy beaches in Gazi area, poor knowledge on ecotourism by locals, language barrier, moral decadency and discrimination. This RSG project is designed to address some of these challenges with an aim to not only boost the number of tourists and subsequent revenues but also strengthen the capacity of Gazi Women Boardwalk to manage the project.

Poor condition of the boardwalk was identified as the main challenge facing ecotourism in Gazi. In addition, respondents recommended areas they saw needed to renovate for the boardwalk to be of high face value. Some of the areas recommended for improvement are clearing of bushes adjacent to the entrance of the boardwalk, expanding and extending the boardwalk, lifting the boardwalk higher up to remove contact with salty oceanic water, repairing damaged areas on the boardwalk, extend the resting area on the boardwalk, expand the resting area on the boardwalk and establishment of a functional restaurant at the boardwalk.

When asked about other opportunities that can be tapped to promote ecotourism ventures in Gazi, the respondents were keen to identify areas of interest and came up with the following:

- A museum to be put up to show case historical occurrences that have occurred in Gazi to preserve their historical unique cultures.
- Hotels and cottages also to be put up for accommodation purposes.
- The historical site, Jumba la Mbaruk that is in Gazi to be included when promoting ecotourism ventures.
- And the handcrafts made by locals to be included when marketing ecotourism in Gazi.

#### **Opportunities to promote ecotourism in Gazi**

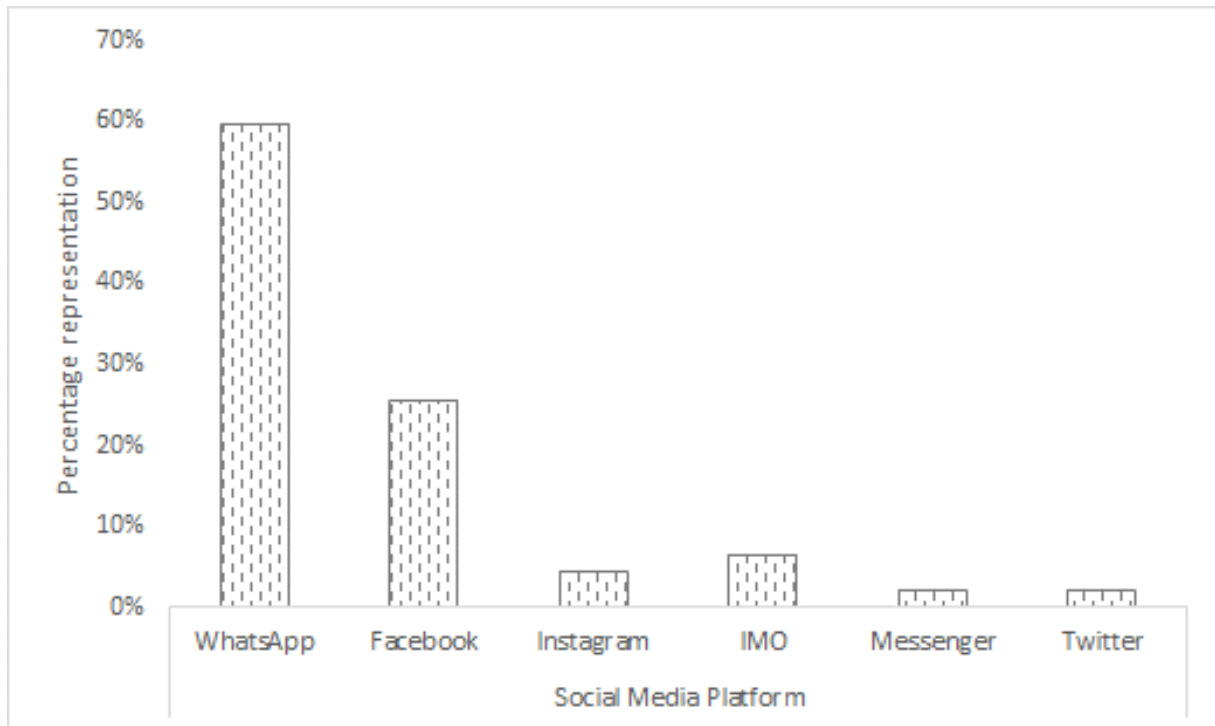
The survey was keen to know if talent/skills can be tapped and be included in promoting ecotourism in Gazi. Majority (65.7%) of respondents agreed that talent should be tapped and be included when marketing tourism ventures in Gazi. Suggestions given by respondents included, the need to use a professional photographer who will take exquisite photographs of Gazi and promote the area as an ecotourism hub. Use of an artist as a brand ambassador to be considered as an influencer for promoting ecotourism ventures. Talented members of the community who make beautiful artifacts and handcrafts should be included in ecotourism ventures. Also, traditional practices that include, fishing, Swahili cuisines, construction of thatched houses, traditional doctors, and folk songs should be included when promoting ecotourism in Gazi. Other opportunities suggested were the launch of swimming competition where people are invited, which will have a direct positive effect on the number of visitors coming to Gazi.

When asked about complains regarding ecotourism activities, 27.5% of respondents agreed indeed there were dissatisfaction amongst locals regarding ecotourism that needed to be addressed. Complaints mentioned by respondents:

- Poor management as many people visit the boardwalk without paying and lack of transparency on how money from ecotourism is handled
- Only a few people are involved in ecotourism activities, other members of the community are sidelined
- Poor implementation of project activities, promises made to the community i.e. sponsoring of children in school is only by word of mouth
- Moral decadency and poor dressing habits brought by tourist that don't respect Islamic tradition
- Youth are less involved in ecotourism activities and the locals want them to be more involved

#### **Internet Accessibility**

On internet accessibility, only 32.4% of the respondents said they were able to access the internet. Of these, 29.4% said they were able to access social media sites. The most used social media platform was WhatsApp (59.6%), followed by Facebook (25.5%) (**See figure 11**). The least used platform was Twitter (2.1%) and Messenger (2.1%).



**Figure 11:** Different social media platforms used by respondents

The ecotourism ventures in Gazi can take advantage of the fact that the locals are knowledgeable in the use of internet and social media to market tourism activities. Social media in particular can be used to reach many people, and with the right marketing strategies, Gazi ecotourism ventures can be known all over the world thus boosting the number of tourists who visit the area. In order of preference, 83.3% of respondents preferred to use WhatsApp reasons being it is easy to use i.e. share of information and communication, has privacy, and it is cheaper especially when communicating to people outside the country. When probed about frequency of use of the social media platform, 76.7% of respondents reported to use social media on daily basis.

## Recommendations

The most important issues that were found to be of urgent attention in order to promote ecotourism in Gazi include:

- Capacity building to the community to understand ecotourism and how they can be involved to promote it
- Improvement of the boardwalk to be of good condition and standards
- Building of cottages or camping facilities where visitors can relax when they come to Gazi
- Clean the environment and plant more mangroves in the forest to sustain ecotourism I Gazi
- More involvement of people especially youths in the community in ecotourism activities

The respondents also suggested that other projects that promote livelihood options i.e. mariculture should be brought to Gazi village, loans should be made available to locals to encourage local investment and modern marketing strategies like use of social media should be exercised to promote ecotourism in Gazi.

Highlighted recommendations by respondents regarding ecotourism ventures in Gazi.

1. A standard restaurant should be constructed within the community to promote Swahili dishes
2. Better marketing instruments should be used to promote ecotourism activities in Gazi i.e. marketing at the Kenya Ferry Course Way and use of social media to reach many people
3. More community members should be involved in ecotourism activities and capacity building should be done for people to understand the importance of mangrove conservation and benefits to the community
4. Frequent change of leaders heading ecotourism activities to promote progress
5. Many children should be sponsored from earnings from ecotourism activities in Gazi
6. Locals should be able to access loans for investment purposes to promote the economy of the area
7. A more colorful sign board should be constructed on the road to direct visitors of where Gazi Women Mangrove Boardwalk is
8. More projects should come to Gazi to promote ecotourism activities

#### ***OPPORTUNITIES FOR PROMOTING ECOTOURISM IN GAZI BAY***



*Youths of Black Gold Dance Crew entertaining visitors at Gazi Boardwalk*



*Visitors enjoying the serenity of the mangroves at the Gazi Women Boardwalk*



*Handicrafts made by Gazi Women Boardwalk Group*



*Local fishermen at Gazi mangrove Bay*

**ACKNOWLEDGEMENT**

Thanks to everyone who participated in the data collection exercise, analysis and most importantly to Rufford Foundation for the financial support towards the accomplishment of this study.