MINISTRY OF FISHERIES DEVELOPMENT

WAA COMMUNITY BASED MARINE CONSERVATION AND ECO-TOURISM PROJECT

A

PROJECT PROPOSAL SUBMITTED

BY

D.M. GAMBO

FISHERIES MINISTRY

On behalf of

The Waa-Kikadini Beach Management Unit Kwale South- Coast and the East African Whale Shark Trust. (Seaquarium Ltd)

15th Sep 2012
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>1-2</td>
</tr>
<tr>
<td>BACKGROUND INFORMATION</td>
<td>3</td>
</tr>
<tr>
<td>MAP OF THE AREA</td>
<td>4</td>
</tr>
<tr>
<td>PROBLEM STATEMENT</td>
<td>5-6</td>
</tr>
<tr>
<td>JUSTIFICATION</td>
<td>6-8</td>
</tr>
<tr>
<td>PROJECT GOAL</td>
<td>9</td>
</tr>
<tr>
<td>PROJECT OBJECTIVE</td>
<td>9</td>
</tr>
<tr>
<td>IMPLEMENTATION STRATEGY</td>
<td>10-11</td>
</tr>
<tr>
<td>SOME PROBLEM ANALYSIS</td>
<td>11-12</td>
</tr>
<tr>
<td>INVOLVED ORGANIZATIONS</td>
<td>13</td>
</tr>
<tr>
<td>GOVERNMENT AGENCIES</td>
<td>13</td>
</tr>
<tr>
<td>PRIVATE INSTITUTIONS</td>
<td>13</td>
</tr>
<tr>
<td>PROJECT IMPACT</td>
<td>14-15</td>
</tr>
<tr>
<td>EXTERNAL FACTORS AND RISKS</td>
<td>15-16</td>
</tr>
<tr>
<td>PROJECT SUSTAINABILITY</td>
<td>16-17</td>
</tr>
<tr>
<td>REVENUE DISTRIBUTION MECHANISM</td>
<td>17-18</td>
</tr>
<tr>
<td>PROJECT BENEFICIARIES</td>
<td>19-20</td>
</tr>
<tr>
<td>ORGANIZATION ROLES</td>
<td>20-21</td>
</tr>
<tr>
<td>PROJECT MANAGEMENT</td>
<td>22</td>
</tr>
<tr>
<td>REVENUE ESTIMATES</td>
<td>23</td>
</tr>
</tbody>
</table>
Summary

This action plan seeks to address the need for effective and sustainable utilization of Marine National Resources through Local Community and investor collaboration and aims at establishing a community based marine sanctuary managed by/through the Fisheries Beach Management Unit and supported by a local investor and marine life expert in Waa area of Kwale County, South Coast.

The Waa-Tiwi area, and to a larger extent the whole of Tiwi Diani and Msambweni is an area where conventional management systems has been ineffective and unable to stem out the decline of Coastal and marine natural resources, hence a continuous decline has been left to happen for a long period. The Beach Management Units that have been formed lack both the Financial and technical capacity to operate and stem out the issues affecting their resources. This project will seek to set aside an area for conservation and surround it into an enclosure. Two whale sharks will be introduced into an open water enclosure through a marine expert to attract local and foreign visitors thus introducing the first ever whale Shark Tourism in Kenya and Africa. A sample of a Marine life will have been set aside for conservation in the area as other areas are degraded. When established this project will reduce poverty and offer direct tangible benefit to the local community through
their BMU hence encouraged to conserve their marine natural resources.

The Waa Tiwi area which is in the same Diani Chale area is an area where the Coastal and marine natural resources have heavily been degraded over a long period of time and poverty level among the local community has risen up to 65%. The local Digo community has for long decades remained a fishing community and fishing which is mainly artisanal is no longer sustainable. This project seeks to help conserve a marine Biom sample and introduce the current world famous whale shark Tourism and bring income to the community and diversify the economy as it will as well greatly improve the Tourism sector of the country.

If successfully implemented this project will present the first ever working case of area based management by community and investor collaboration within a Coastal setting in Kenya and will serve as a model and set example for the development of another such initiative across the Coastal belt of Kenya and beyond.
1.0 BACKGROUND INFORMATION

The Waa Community based Marine/Sanctuary will be established in Waa Location of Kwale County in Kenya’s South Coast. The project will be implemented along the reef and up to a minimum water depth of 12 metres depending on water tide.

The Waa Project area is situated at approximately 15kms South of Mombasa town along the Mombasa to Lunga Lunga road and is 10 minutes drive to the Diani Beach. The area is endowed with a high attraction of Coastal and marine natural resources that include the fringing coral reef as well as a high diversity of marine life species. Some of the endangered species are also found here like the sea turtles, whale sharks, Dolphins and the coconut crabs. The Waa local community in Diani is essentially a fishing community and they draw their livelihood from near shore fishing. In the last few decades however, Tourism has been introduced in neighbouring centres that has brought an influx of people from other parts of the country and outside the country. Birth rate and poverty levels have risen high among the indigenous Digo community.

An influx of migration fishermen is also present which contributes to the increase of population and human activities in Waa Tiwi Diani area.
2.0 PROBLEM STATEMENT

The rise in human population has brought an increase of human activities in the Waa Tiwa Diani Chale area. This increase in human activities in the area has led to the degradation of the Coastal and marine natural resource and has now made the area operate beyond maximum sustainable yield (MSY). Some of the problems in the area include the decline of mangroves arising from land manipulation and uncontrolled harvesting, siltation of corals from upstream agricultural activities, decrease of water birds and Turtle population due to loss of Habitat and nesting ground and pollution of coral reefs from inadequate sewage system and solid waste disposal. Fisheries resources have also tremendously declined. The Human Population increase resulting from the high birth rate of the Digo community and the influx of the migratory fishers has led to the rise of the number of fishermen. Again majority of the fishers are poor and cannot afford to purchase better and strong fishing equipment to take them off-shore, hence use small boats and beach seining nets to operate in-shore along the reef thus causing extensive damage to the reef and fishery resource.

Recently some measures were put to try and correct the situation and save the Tiwi-Diani Chale marine resource; Around 1996, The Kenya Wildlife Service gazetted the Diani Chale to a marine reserve. When they tried to move in they were rejected by the local community, claiming that the community was not consulted. Again around 2002 the Diani Chale
management Trust was formed to try and manage the resources of the area but again they lacked capacity and most important the legal mandate.

In 2007 the Fisheries Ministry introduced in their legislation the BMU regulations giving the local communities legal authority to manage their resources and benefit from it. But again this has been faced by a challenge of fiscal and technical capacity to develop and manage their resources to reap benefits. The situation therefore creates an essential need to bring in collaboration between communities and investors to assemble financial and required technical capacities and combined with community’s willingness in order to achieve sound management and sustainable operation.

3.0 JUSTIFICATION

The Waa Diani Chale area has been degraded overlong decades and this trend still continues. The area now operates beyond maximum sustainable yield. Mangrove ecosystems that are important as spawning and recruitment of fish have declined due to uncontrolled harvesting and land manipulation and the coral reef ecosystem has been damaged by pollution from inadequate sewage and solid waste disposal and destructive fishing gears. The degradation of these important marine ecosystems has led to a decline in fish catch production hence poverty to the community. They use small canoes and Ngalawas and concentrate on fishing along the reef which is no longer sustainable. Hence creating an area to conserve as a sample and
acceptable by the community will go along way to save the endangered marine life in the area.

Most resent information on whale sharks in Kenya is that the number of whale sharks has dramatically decreased from 58 sightings over a period of 12 days in 2005, to 12 sightings over a period of 30 days in 2010. Hence whale shark sightings are more sporadic and no larger predictable. These huge marine animals have been targeted for their liver which is turned into shark liver oil that is used to impregnate wooden fishing boats against shipworm as commonly observed in Lamu’s Pate Island. They are also used as delicacies! To ensure that these animals are not finally wiped out, samples would be introduced in the conservation area and put under surveillance in captivity but using open water enclosure designs as already in successful use in Japan.

The introduction of whale sharks in open water enclosure would create more attraction to visitors both local and foreign and mark the beginning of whale shark Tourism in Kenya and in Africa.

The world’s whale shark Tourism is currently estimated to be worth 380,000,000 US Dollars. Revenue collected from viewing fees would go directly to the local community through their legally recognized Beach Management Unit and some to the local county council hence remove poverty and improve the economy of the local surrounding while bring foreign exchange to the country.
Feeding whale sharks with scrimps in Okinawa; whale sharks are completely harmless to humans. Whale sharks are fed a variety of scrimps, minced fish, squid and krill. Whale sharks do very well in open water enclosures, the longest period a whale shark has been held is 17 years (Churaumi Aquarium, Okinawa 2012)
Revenue generated from conservation to the local Beach Management Unit would among others help to purchase better and strong fishing gear to go to harvest fish in deep waters and leave the reef to regenerate.

Previous interventions in the area have not been able to stamp out the destruction of the marine natural resource. This venture will tap in the willingness and support of the local community and the important/necessary fiscal and technical expertise from investor collaboration to conserve and improve economic benefit to people.

The goals and objectives of this proposed project are in line with the global millennium Development goals of tackling poverty, sustainable utilization of natural resources and conservation of Biodiversity. They also confirm with the National Vision 2030 of reducing poverty.
4.0 PROJECT GOAL

To establish a community marine sanctuary through collaboration of the local community and the private investor to sustainably utilize the Marine Natural Resource and bring economic improvement to the community of Waa area of Kwale County and the country at large.

PROJECT OBJECTIVES

The objectives of this project will be;

1. To introduce community and investor collaboration in sustainable utilization of marine Natural Resource and help to conserve for Biodiversity and posterity.

2. To introduce whale shark Tourism in Kenya and put Kenya to compete in the 380, 000,000 US Dollar Whale Shark Tourism in the world and bring foreign exchange.

3. To give the local Fisheries Beach Management Units the fiscal and technical capacity to sustainably manage their Marine Natural Resources and realize economic benefits for their community.
5.0 IMPLEMENTATION STRATEGY

The project will seek to work in collaboration with the community of Waa Location under the Waa-Kikadini Fisheries Beach Management Unit and the local investor, the Seaquarium Ltd under the East African whale shark Trust. Other stakeholders will be involved such as the local county council, the Ministry of Fisheries, NEMA, KEMFRI, and area Mosques and CBO’s.

Currently sensitization of the community has taken place and formation of the Waa-Kikadini Beach Management Unit done. A Waa Location Development Committee has also been formed to assist the Fisheries Beach Management Unit which is the legal body. The site for the sanctuary has been identified through collaboration of the community and the investor and there is willingness and acceptance of the project by the community. The investor (Seaquarium Ltd) will purchase the necessary equipments and install into the place. He will also assist in introducing the whale shark into the open water enclosure plus other technical requirements needed. The investor will participate in bringing in visitors mostly foreign visitors. The local Beach Management Unit will be doing patrols and issuing entrance tickets for their Revenue Collection. The local Kwale County Council will also charge Levy from each visitor entering the sanctuary.

This project will need to pass through a stakeholder forum and most important the District Development committee to build
support for the area management as well as obtain top level commitment from key Government agencies that currently hold authority. The Ministry of Fisheries Development in this Project is a lead Government agency since the Beach Management Units are legally formed under the Fisheries Act Cap 378 and BMU regulations. The whale shark is a fish hence protected under the same fisheries act. Other relevant Government agencies in this project are the Ministry of Tourism, Kenya Marine and Fisheries Research Institute, National Environment and Management Authority; Kwale County Council, Provincial Administration, and the Kenya Tourism Board among others.

6.0 SOME PROBLEM ANALYSIS

The root cause of the problems in this area is the ever increasing human population that exerts pressure to the resources, poor and unsustainable methods of resource exploitation, low level of community awareness and therefore leading to increasing poverty that is known to have risen to 65% within the indigenous Digo Community.

Some specific problems in this area’s community is the lack of alternative source of income and again lack of funds to transfer from poor and unsustainable fishing practice to better practice or from one sector to another. The community is dependent on artisanal fishing that is no longer sustainable.
Another issue is the absence of a suitable and acceptable management approach that would give capacity and empower the community. This proposed management approach that brings in the collaboration of the local community through the/a Fisheries (Govt) BMU Policy and the private investor is important in that it will bring in the fiscal and technical capacity to introduce better and sustainable methods of resource utilization and build economic empowerment to the community and save the resource from further degradation.

The introduction of whale shark Tourism activity in the place will lead to diversification of area’s economy and create funds to transfer from poor fishing practice to better practice and from the tourism sector to other sectors. Fishermen using destructive fishing gears like beach seining nets and canoes along the reef lack funds to buy better fishing equipments like strong motorized Boats and gill nets to venture into deep sea fishing where fish stocks are abundant. Concentration of artisanal fishing along the reef has led to destruction of corals and whole marine ecosystem and is no longer sustainable. Funds created through the whale shark Tourism activity by the local fisheries Beach Management Unit will enable the local fishermen to purchase strong and better fishing equipments and move away from the reef to venture into off shore fishing to improve their fish catch production. This would give them better income as well as allow the coral reef ecosystem to regenerate hence bring Biodiversity conservation and livelihood improvement.
7.0 INVOLVED ORGANIZATIONS

7.1 GOVERNMENT AGENCIES

The main Government agencies that are involved in this project are the Ministry of Fisheries Development under whose policy the project is anchored on the Ministry of Tourism and the Kenya Tourism Board who are big beneficiaries of the project; National Environment Management Authority, the Kwale County Council (a beneficiary); the Kenya Marine and Fisheries Research Institute, the provincial administration, and the District Development Committee etc. The support of these institutions to the project is vital.

7.2 PRIVATE INSTITUTIONS

These are the Seaquarium Ltd under the East Africa whale shark Trust. These are sponsors of the project and their fiscal and technical support is important for the project to take off and run successfully.

7.3 THE COMMUNITY

These are the fisher folk, fishtaders, schools, Dispensaries, Muslim religious leaders, Church elders, Kaya elders, Boat owners, Beach operators and other local CBOs. These will be the greatest beneficiaries of this project and owners of the resource and project through their BMU. Their support is very essential.
8.0 PROJECT IMPACT

This project has been designed with a view of injecting fiscal and technical capacity in sustainable utilization of marine natural resources through the local community and private investor collaboration to achieve the desired goal of Biodiversity conservation and economic empowerment to the surrounding area and the country at large.

Hence this project will bring positive environmental impact and assist in conservation. It will contribute to economic development and have impact on poverty reduction through enhanced and diversified sectors of economy. Currently the community is dependent on Fisheries sub sector of the economy that is not even well developed and sustainable hence the introduction of Tourism activities will bring diversification and create improved income and therefore reduce poverty.

This project will also have impact on foreign Tourism Markets and increase the flow of foreign exchange to the country. The introduction of whale shark into an open water enclosure will mark the beginning of whale shark Tourism in Kenya and in Africa. The whale shark is the biggest fish in the ocean and these gentle giants are known to be harmless to humans. Worldwide it is considered to be a number one wildlife encounter if one is lucky enough to swim with a whale shark. The world whale shark Tourism is also known to have a tremendous growth over the last decade with Australia having the biggest market share worth US Dollar 30,000,000 in 2010.
followed by Mexico with the beginning turn over of US Dollar 240,000 in 2002 then US Dollar 17,800,000 in 2011.

The world whale shark Tourism is currently estimated to be worth US Dollar 380,000,000 and Kenya being a world leader in conservation would have a huge boost both internationally and economically if it would offer tourists a chance to swim with the biggest fish in the ocean in the morning and again track the biggest animal on land, the Elephant in the afternoon. Certainly Kenya would have a chance to brand itself as a country of the Big Six instead of the Big Five and easily compete in the International Tourism Market.

9.0 EXTERNAL FACTORS AND RISKS

Despite this project being economically, environmentally and socially sound unfavorable internal and external factors may contribute to the fall of the project. Of late there has been negative contribution from various freelance conservationists who even lack proper awareness of the problems facing the resource and people of the area and purpose of the project.

This may bring discouragement and cause the investor to take off and leave the problem unsolved. Support from the relevant government agencies is therefore necessary for the project to
take-off and achieve its aimed objectives. The project already has acceptance from the community.

The continuous flow of success of this project that is anchored on conservation and Tourism activities is also dependent on the steady market availability of Tourism. Any negative effect on this sector will affect the project. To evade this problem some funds created by this project will go towards purchase of better fishing equipments to improve the Fisheries sub sector and other funds go to establish other sub sectors of the economy.

Another risk is when the investor decides to leave the project perhaps due to unfavourable inducement. It is important that a proper agreement is reached and the investor given proper inducement to be able to carry on in the project. The agreement should be supervised by a Government agency. There should be also a way of transferring technology from the investor to the community through formal training. The idea of the project has received applause from leading world conservation personalities and institutions.

10.0 PROJECT SUSTAINABILITY

Once this project gets support from the relevant Government agencies and also the investor and community’s acceptance so that it takes off, the project can easily sustain itself both
environmentally and economically. The area set aside will be free from frequent activities of destructive fishing gears hence allow regeneration and improve environment. The community is already sensitized and united under the Fisheries Beach Management Unit hence the project has social acceptance. The investor has also severally attended in community Forum discussions and participated in identification of the site and has expressed his willingness to join and participate in the project, hence investors' acceptance. Once the project is established it will attract visitors both locally and foreign and generate huge volume of Revenue and bring a lot of foreign exchange to the country. Visitors will be charged per head as entrance fees to view the marine life and swim with whale shark. Hence the project will be highly sustainable economically and improve the living standard of the area. Support from the relevant Government agencies particularly the ministry of Fisheries Development Ministry of Tourism NEMA, Provincial administration and the Kwale County Council is now necessary.

11.0 REVENUE DISTRIBUTION MECHANISM

The Revenue collected from the site of project will be in form of Entrance fees that will be charged per head at a rate of Ksh. 1000/= per head. The entrance fees will all go to the local Beach Management Unit. The local Kwale County Council will also
charge separate levy per head at a rate of Kshs. 400/=.
Government agencies will charge their various licenses
according to their relevant laws. The investor who will
participate in bringing visitors to the place will get the share
from the top up he receives from the visitors.

The Bulky of the money generated from the project will go to
the Beach Management Unit on behalf of the local Waa
Community. This money will be used to benefit the whole
community of Waa Location and according to the set regulations
of the Government Fisheries Beach Management Unit of 2007.
## 12.0 PROJECT BENEFICIARIES

<table>
<thead>
<tr>
<th>BENEFICIARY</th>
<th>TYPE OF BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The local community (BMU)</td>
<td>-Improved understanding of Resource Utilization</td>
</tr>
<tr>
<td></td>
<td>-Improved capacity to address different issues.</td>
</tr>
<tr>
<td></td>
<td>-Enter into National and International attention through wide publicity.</td>
</tr>
<tr>
<td></td>
<td>-Improved income generation hence economic empowerment</td>
</tr>
<tr>
<td></td>
<td>-Access to benefits from diversified economic activities.</td>
</tr>
<tr>
<td>2. Kwale County Council</td>
<td>-Improved Revenue Collection</td>
</tr>
<tr>
<td></td>
<td>-Improved area resource management</td>
</tr>
<tr>
<td></td>
<td>-Attract and obtain more foreign Visitors to Kenya.</td>
</tr>
<tr>
<td></td>
<td>-Increased Foreign exchange to Kenya</td>
</tr>
<tr>
<td>5. Government Agencies</td>
<td>-Improved revenue collection through various licenses.</td>
</tr>
</tbody>
</table>
- Improved relationship to local community
- Improved security
- Improved customer satisfaction.
- Improved management of natural Resources.

5. Investor

- Customer satisfaction
- Improved Business

6. Tourism Industry Operators

- Reduced Conflict with the community.
- Customer Satisfaction
- Increased Business and Profit

7. Kenya Revenue Authority

- Increased collection of Revenue in form of various Taxes.

13.0 ORGANIZATIONS ROLES

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beach Management Unit (BMU)</td>
<td>- Overall Management of the area but in conjunction with the investor</td>
</tr>
<tr>
<td></td>
<td>- Carry out patrols and ensure security.</td>
</tr>
<tr>
<td></td>
<td>- Issue tickets in revenue</td>
</tr>
</tbody>
</table>
2. Government Agencies

- Initial support of the project
- Provision of Policy and regulatory guidance

3. Kwale County Council

- Issue tickets in collection of Levy
- Make in kind contribution and where necessary financial contribution to the project.

4. Waa Locational Development Committee

- Participate in the BMU Committee as an ex-official member representing whole of Waa Community.

5. Investor (Seaquarium Ltd)

- Bring the initial Funds and equipments and technical expertise to set up the project.
- Advertise the place to reach external markets and bring Tourists to the place.
- Participate in running of the place and be an ex-official member of the BMU.
14.0 PROJECT MANAGEMENT

This project will be managed under the Waa Kikadini Beach Management Unit but in cooperation with the investor and the Waa location Development Committee. The Waa Location Development Committee was set up to add further weight and put more emphasis on Waa Local Community Participation. They will be included together with the private investor as ex-official members of the Beach Management Unit Committee. The Committee will run the project as per the requirement of the Government Fisheries BMU Regulations of the year 2007. The committee will be composed of the chairman, vice-chairman, secretary, Ass. Secretary, the Treasurer and a maximum of other 10 members bringing to a maximum of 15 members but excluding ex-officials. The committee will meet on set times to discuss and deliberate on issues and pass important decisions.
<table>
<thead>
<tr>
<th>Period</th>
<th>No. of Visitors</th>
<th>Estimated Revenue</th>
<th>Revenue per Visitor</th>
<th>Rate/Visitor</th>
<th>Estimated</th>
<th>Revenue per Year</th>
<th>Estimated Revenue per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year I</td>
<td>2,100,000</td>
<td>6,000,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>150,000</td>
<td>400</td>
</tr>
<tr>
<td>Year II</td>
<td>1,200,000</td>
<td>1,800,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>480</td>
<td>400</td>
</tr>
<tr>
<td>Year III</td>
<td>450,000</td>
<td>630,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>252</td>
<td>400</td>
</tr>
<tr>
<td>Year IV</td>
<td>690,000</td>
<td>240,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>96</td>
<td>400</td>
</tr>
<tr>
<td>Year V</td>
<td>730,000</td>
<td>30,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>12</td>
<td>400</td>
</tr>
<tr>
<td>Total</td>
<td>3,470,000</td>
<td>2,250,000</td>
<td>1,000</td>
<td>400</td>
<td>000</td>
<td>1,110</td>
<td>400</td>
</tr>
</tbody>
</table>

Local Kwale County Council

The following is estimated revenue that will go direct to the local Beach Management Unit and the

150 Revenue Estimates