



**REEF AND MARINE RECREATION MANAGEMENT (RMRM)  
THEMATIC AREA**

**KENYA**

**Watamu Marine Tourism Management  
Operational Strategy**

**VERSION 1**

**2014 - 2019**



**COLLABORATIVE ACTIONS FOR SUSTAINABLE  
TOURISM (COAST) PROJECT: REEF AND MARINE  
RECREATION MANAGEMENT (RMRM)  
THEMATIC AREA**

**KENYA**

**May 2014**

**Watamu Marine Tourism Management Operational Strategy**

**Version 1**

**2014 - 2019**

By:

Bernice Mclean\*

Jonathan Kingwill\*

Jayshree Govender\*

Violet Njambi Ogega\*

In collaboration with the COAST Demo Site Management Committee and other stakeholders

\* EcoAfrica Environmental Consultants

Collaborative Actions for Sustainable Tourism (COAST) Project funded by the Global Environment Fund (GEF) and United Nations Environment Program (UNEP), and implemented by United Nations Industrial Development Organisation (UNIDO) and United Nations World Tourism Organisation (UNWTO).

## Preface

It gives us great pleasure to introduce the “Watamu Marine Tourism Management Operational Strategy” to you, on behalf of the Collaborative Actions for Sustainable Tourism (COAST) Project, Third Thematic Area: Reef and Marine Recreation Management.

The marine and coastal environments of East Africa are renowned for their wealth of cultural heritage, natural beauty, and biological diversity. The sensitive ecosystems that provide a multitude of goods and services to support tourism and other economic sectors in coastal areas are however, under increasing pressure from threats such as rising pollution levels, degradation of sensitive habitats from poorly planned developments, competition for natural resources. In addition, local communities continue to suffer from crippling poverty and decreasing resources. In recognition of these challenges, the COAST Project worked to apply, through a series of practical demonstration projects, a number of Best Available Practices and/or Best Available Technologies (BAPs/BATs) within nine coastal tourism destinations in Sub-Saharan Africa.

The Reef and Marine Recreation Management (RMRM) Thematic Area, was one of three main Thematic Areas through which COAST activities were categorised. The objective of the RMRM activities were to promote sustainable reef and marine recreation practices in three selected Demonstration Sites to reduce threats to sensitive marine and coastal ecosystems and prevent the further loss of biodiversity. This document is the key outcome of the project activities. The aim of this document is to ensure that sustainable marine tourism within the Watamu Demonstration Site (hereafter referred to as Demo Site), is managed for the benefit of all users. This will ensure that the longevity of the reefs and marine resources are conserved, whilst generating economic revenue for the livelihoods of local people.

The Watamu Demo Site is located within the District of Malindi (Kilifi County), in the Coastal Province of Kenya. The Demo Site falls within a region that is a key recreational centre in Kenya and hosts several key tourism attractions such as boat trips, water sports, deep-sea fishing and snorkelling on the coral reefs. The area is home to many local inhabitants, and attracts an array of local and international visitors.

Kenyans have long used the area and the natural marine environment as a resource for their livelihoods. Watamu is also a renowned tourism destination and place of relaxation for both locals and visitors. The Watamu Marine Park & Reserve, situated within the Demo Site, protects a high biodiversity area including extensive mangrove plantations, coral reefs, seagrass beds and a host of important marine and coastal species. The Demo Site area is a highly popular tourist destination and as a result, the pressure on the environment by the tourism sector is a concern. Consequently a need was identified for the development of an action-based strategy that could guide sustainable management of the marine tourism in the Watamu area.

Project activities were coordinated through the Demonstration Site Management Committee (DSMC), and a smaller Technical (Tech) Team, comprising of Government institutions, Non-Government Organisations (NGOs), Community-Based Organisations (CBOs), researchers, the private sector and other local stakeholders.

The marine and coastal areas currently fall within the management regime of the Watamu Marine Park & Reserve Draft Management Plan. This Operational Strategy was developed through a participatory process and outlines a number of key objectives for better management of the complex. A need was however, identified through the COAST Project activities, to develop an operational strategy specifically for addressing the marine recreation aspects of the Demo Site. Therefore the development of this strategy towards sustainably managing the marine tourism in the Watamu area takes into account existing plans and policies, as well as the needs and gaps identified during this study.

A participatory sustainable management planning process resulted in the identification of a vision and key priorities for strengthening management of marine tourism in the area.

### ***Vision***

*The Watamu Demo Site has important ecological and cultural attributes that has supported tourism and has potential for providing a distinctive visitor experience and improving local community livelihoods.*

This document was conceptualised through discussions with DSMC members over the course of the project period, culminating in the final document, which was planned to be simple, yet dynamic. The underlying philosophy is that in a complex context, such as the Watamu area, with its multiple users stakeholders and managers, management must be approached in a participative, collaborative and transparent manner. It is important to bear in mind that sustainably managing the marine tourism in the Watamu area will not happen instantaneously, but will progress over time if driven collaboratively by the members of the DSMC and other key stakeholders. The improved management of marine tourism lies entirely in the hands of local stakeholders.

It should be noted that this document is the first Version of the Watamu Marine Tourism Management Operational Strategy and should be reviewed on a regular basis. It should be recognised as a working document that will be modified and updated to reflect new insights and innovations and address emerging issues and opportunities in the years to come. Work is already underway, but much more remains to be done in order to manage marine tourism effectively in Watamu. Stronger management is needed to promote sustainable marine tourism practices in Watamu as an example to the rest of East Africa.

Finally, we would like to express our gratitude and appreciation to the many individuals and parties, who participated in the development of this document, including those who contributed to workshops, generously supplied data and information, their time, or assisted our team in the field. The willingness of those who contributed will help to strengthen governance of the area and set a strong trajectory for collaboration and collective action.

Kenya Demo Site Management Committee

# Table of Contents

Preface.....	i
Table of Contents.....	iii
List of Figures .....	iv
List of Tables.....	iv
Acronyms .....	v
1 Introduction.....	1
1.1 Tourism in Marine and Coastal Areas .....	1
1.2 The Value of Healthy Marine Ecosystems for Tourism .....	2
1.3 The COAST Project in Watamu.....	2
2 Context of the Watamu Demo Site.....	3
2.1 Overview.....	3
2.2 Marine Tourism in the Watamu Demo Site .....	5
2.3 Challenges to sustainable marine tourism.....	7
2.4 Current Marine Tourism Management Measures.....	9
2.5 Stakeholder Consultations.....	10
3 Institutional and Regulatory Framework .....	10
3.1 Institutional Framework.....	10
3.2 Legislative & Regulatory Tools .....	12
4 Tourism Management.....	14
4.1 Process of Developing the Document.....	14
4.2 Key Issues Identified by Stakeholders.....	14
4.3 Rapid Ecosystem Assessment and Mapping Activities .....	15
4.4 Results from the Research.....	16
5 Vision, Principles and Objectives.....	19
5.1 Vision.....	19
5.2 Guiding Principles .....	19
5.3 Aim and Objectives .....	20
5.4 Potential Partners, their Roles and Responsibilities .....	20
5.5 Anchoring the Plan.....	22
6 Implementation Plan.....	23
6.1 Monitoring and Evaluation for Adaptive Management .....	24
7 Conclusion and Recommendations .....	40
7.1 General Conclusion .....	40
7.2 Challenges.....	40
7.3 Risks .....	41
7.4 Timeframe.....	41
7.5 Recommendations .....	41
7.6 Future of Version 1 Document.....	43
References .....	44
Annex 1: List of Guest Houses, Lodges and Hotels in Watamu .....	45
Annex 2: DSMC and Tech Team Members .....	46
Annex 3: Stakeholders Consulted.....	47

## **List of Figures**

Figure 1: Malindi-Watamu Conservation Area (KWS, 2013).....	4
Figure 2: Marine recreation activities within the Watamu Demo Site.....	6
Figure 3: Process for development of the Operational Strategy.....	14
Figure 4: Marine Tourism Impacted Areas of Watamu Demo Site.....	17

## **List of Tables**

Table 1: Marine Recreational Activities within Watamu.....	5
Table 2: Institutional arrangements relating to coastal resources management .....	11
Table 3: Role of NGOs and CBOs in Marine and Coastal Management .....	12
Table 4: Key Policies and Laws Relating to Marine and Coastal Protection.....	13
Table 5: Implementation Plan for Improving Reef and Marine Recreation Management .....	25

## Acronyms

BAPs	Best Available Practices
BATs	Best Available Technologies
BMP	Beach Management Plan
CBO	Community-based Organisation
COAST	Collaborative Actions for Sustainable Development
COBEC	Community Based Environmental Conservation
CBO	Community Based Organisation
CDA	Coast Development Authority
CORDIO	Coastal Ocean Research Development in the Indian Ocean
DPC	Demonstration Project Coordinator
DSMC	Demonstration Site Management Committee
EEZ	Exclusive Economic Zone
EMCA	Environmental Management and Coordination Act 1999
FPC	Focal Point Coordinator
GEF	Global Environment Fund
KEFRI	Kenya Forest Research Institution
KFD	Kenya's Fisheries Department
KFS	Kenya Forest Service
KEMFRI	Kenya Marine Fisheries Research Institution
KWS	Kenya Wildlife Service
LGA	Local Government Authority
LMMA	Locally Managed Marine Area
LOT	Local Ocean Trust
M&E	Monitoring and Evaluation
MCA	Marine Conservation Agreement
MCCC	Mida Creek Conservation Committee
MMNP	Malindi Marine National Park
MNR	Malindi National Reserve
MoT	Ministry of Tourism
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MWMCA	Malindi Watamu Marine Conservation Area
MZA	Maritime Zones Act 1989
NBSAP	National Biodiversity Strategy and Action Plan
NEAP	National Environmental Action Plan
NEMA	National Environment Management Authority
NGO	Non-Governmental Organisation
NK	Nature Kenya
RMRM	Reef and Marine Recreation Management
TBBC	Turtle Bay Beach Club
Tech Team	Technical Team of the DSCM
UNEP	United Nations Environment Program
UNESCO	United Nations Education, Science and Cultural Organisation
UNIDO	United Nations Industrial Development Organisation

UNWTO	United Nations World Tourism Organisation
VWWG	Voice of Watamu Women Group
WABO	Watamu Association of Boat Operators
WCS	Wildlife Conservation Society
WMA	Watamu Marine Association
WMNP	Watamu Marine National Park
WMNR	Watamu Marine National Reserve
WSSA	Watamu Safari Sellers Association
WTW	Watamu Turtle Watch



# **1 Introduction**

## **1.1 Tourism in Marine and Coastal Areas**

Coastal environments are complex, dynamic, highly sensitive and delicate ecosystems, comprising of significant habitats and rich biodiversity. Universally, the productive capacity and ecological integrity of the marine environment, which includes both estuaries and nearshore coastal waters, are being degraded, and in several of these places the degradation has intensified. In most cases, the main contributing driving factors to the degradation of these ecosystems are poor spatial planning, rapid growth and development-related activities in these coastal areas. These result from increasing population, urbanisation, industrialisation, tourism and maritime transport (UNWTO, 2013a).

Coastal environments have held a charismatic lure for tourists and perhaps more so now than ever before in the 21<sup>st</sup> century. Tourism in coastal areas is currently one of the largest and fastest growing global sectors and the industry holds a promise of contributing to the economic and social wellbeing of the destination countries. In Sub-Sahara Africa, many of these coastal areas have developed into flourishing tourism destinations, as countries are increasingly turning to tourism as a viable alternative option to accelerate their economic growth. The sector consistently demonstrates its ability to act as a key factor for growth in some of the poorest countries of the world (UNWTO, 2013a).

Coastal tourism is however, a fragile sector particularly within developing countries, where governance systems and development structures are emerging. Here, the local residents are more likely to experience the negative side of the tourism trade than the tantalising riches, which typically are held by those who have access into the sector. Negative impacts from tourism include for instance, rising pollution and degradation of sensitive marine and coastal areas from poorly planned developments, competition for fresh water, over-exploitation of scarce resources to feed the sector, tremendous demand on natural resources to support the building sector, rising real estate prices, displacement of local fishing and farming communities, immigration of people from rural areas towards an economy stimulated through tourism and irreversible damage to local heritage and culture. Simply stated, inappropriate tourism development destroys local natural and cultural resources and limits tourism business opportunity into the long-term. The good news is the growing recognition that not all forms of tourism are equally destructive and that tourism can be managed to deliver both quality visitor experiences and benefits to local economies and livelihoods, if planned and practised collaboratively and responsibly.

The purpose of the Watamu Marine Tourism Management Operational Strategy (hereafter referred to as the Operational Strategy) is to inform the public, local communities and private sector of the issues and threats facing the Demo Site, as well as the opportunities that exist for the site. Drawing from the existing plans, the DSMC identified a vision for the RMRM, which fits neatly into the existing management frameworks. This document is based on the findings of the research undertaken at the Demo Site. It reflects broad-based stakeholder input that will provide for better and more effective outcomes for managing the reef and marine environment. In addition this document provides guidance in terms of roles and responsibilities identified by local stakeholders.

## **1.2 The Value of Healthy Marine Ecosystems for Tourism**

Coral reefs, seagrasses and mangroves provide a host of essential functions such as coastal protection, carbon sequestration, nursery grounds and habitats for a great diversity of organisms, including important commercial fish species. Coral reefs are among the most biologically diverse ecosystems on earth. The health of reefs, seagrass beds and mangrove forest ecosystems is closely interlinked due to a strong interconnectedness of species and natural processes. Some of the main recreational opportunities provided by these marine ecosystems in Watamu include glass-bottom-boat viewing, snorkelling, recreational, sport fishing and SCUBA diving to name a few. Assessments of the annual economic benefits generated from these forms of tourism are estimated at \$9.6 billion. A 2013 analysis of the direct revenues generated from tourism relating to the observation of a single marine species (manta ray watching operations) in 23 countries around the world, valued the industry at over US\$73 million annually.

The direct economic impact of the associated tourism expenditures is placed at US\$140 million annually (O'Malley et al, 2013). The growth of coastal and marine tourism has, however, often failed to meet the promises of greater benefits to poor coastal communities, while leading to a host of serious environmental and social problems. Tourism in coastal areas is one of the largest and fastest growing sectors of the industry with a promise of contributing to the economic and social wellbeing of the destination countries. Yet tourism has become one of the most powerful, most influential and least-examined forces in the world to the extent that it is termed “the stealth industry of the 21st century” (Becker, 2013).

While different types and extent of marine recreation occur within the Demo Site, the fact remains that the tourism sector relies directly upon healthy and productive marine and coastal ecosystems for long-term sustainability. The reality however, is that many pressures threaten the health of these ecosystems. Over-utilisation of marine and coastal resources, destructive activities in sensitive ecosystems, and poorly planned and unmanaged coastal development and use are resulting in degradation of the resource base. The poverty, increasing fishing pressures and rising conflicts between users, exacerbate the threats to the sensitive ecosystems.

Just as “The Goose that Lays the Golden Egg”, marine tourism depends directly on healthy, functioning ecosystems. If the natural environment of coastal and marine destinations is maintained and utilised responsibly, the greater the opportunities will be for the tourism sector to grow and flourish over the long-term and the greater the support will be for ongoing economic development of the area.

## **1.3 The COAST Project in Watamu**

The Collaborative Actions for Sustainable Tourism (COAST) Project, implemented by United Nations Industrial Development Organisation (UNIDO), worked to apply, through a series of practical demonstration projects, a number of Best Available Practices and/or Best Available Technologies (BAPs/BATs) within nine coastal tourism destinations in Sub-Saharan Africa. These are all aimed at the reduction of negative environmental impacts resulting from the coastal tourism sector actions and pollutants. The Reef and Marine Recreation Management (RMRM) Thematic Area is one of three main Thematic Areas through which COAST activities are categorised, the other two being the Ecotourism Thematic Area and the Environmental Management Systems Thematic Area.

The Collaborative Actions for Sustainable Tourism (COAST) Project selected the Watamu area as one of the three East African Demonstration sites (hereafter Demo Sites) for the Reef and Marine Recreation Management (RMRM) Thematic Area. The aim of the Demo Sites is to demonstrate and support adoption of best practice approaches to promote sustainable reef and marine recreation practices. This document draws from activities undertaken in the area as part of the COAST Project and provides an overview of recommendations for improving the governance of reef and marine recreation in the Watamu area.

## **2 Context of the Watamu Demo Site**

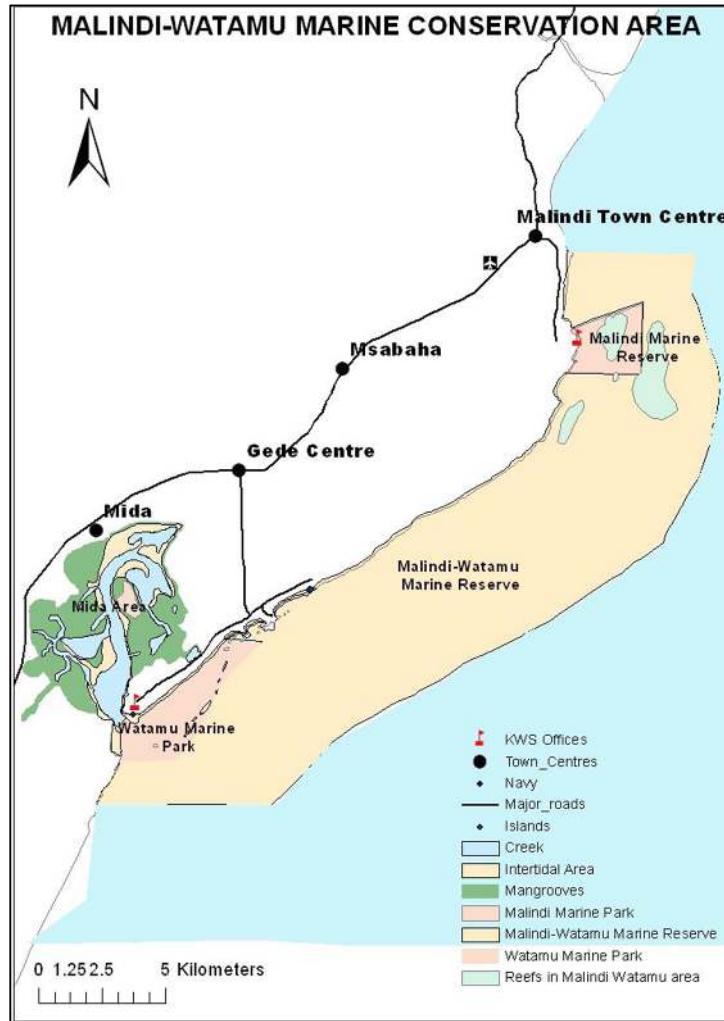
### **2.1 Overview**

The Kenyan coast has a wealth of marine and coastal ecosystems including coral reefs, seagrass beds and mangrove forests. These natural resources are crucial for the livelihoods of the majority of coastal people and for the Kenyan economy. Kenya's coast is a key part of the tourism industry in the country, an important industry that contributes 15% of the country's foreign exchange earnings and an enormous 12% of the GDP (McClanahan et al, 2005). Coral reefs provide food and income to coastal communities, as well as other goods and services of strategic importance to the national economy including: tourism, fisheries and coastal protection (Muthiga and Weru, 2002).

Despite the value of the goods and services provided by these ecosystems, coral reefs, mangrove forests and seagrass beds are all under increasing pressure. Human activities such as uncontrolled and destructive exploitation of resources, pollution and unplanned and/or poorly managed tourism and urban development are some of the threats facing these habitats. These impacts are projected to worsen as increased population growth leads to greater pressure on marine resources and climate change impacts (McClanahan et al, 2005).

The Watamu Demo Site is located on the Kenyan coast, approximately 120km north of Mombasa, within the Malindi District (Kilifi County) in the Coast Province of Kenya. The Watamu Demo Site extends 3.5 nautical miles seaward (according to the extent of the Kenya Wildlife Services (KWS) authority) and landward from Jacaranda Hotel to the end of Mida Creek mouth (border of Uyombo village). The Demo Site falls within the Watamu Marine Park and Reserve (also known as Watamu Marine Protected Area) and within the broader Malindi-Watamu Marine Conservation Area (See Figure 1 below). The Watamu area hosts an exceptional wealth of biodiversity, which forms the basis of tourism and trade along this stretch of coast.

The Watamu Marine Park covers an area of 10km<sup>2</sup> whereas the Reserve covers an area of 32km<sup>2</sup> in addition to a 100ft wide strip of coastal land above the high-water mark. It is well known for its pristine sandy beaches, rich marine biodiversity (including visiting whale sharks, manta rays and three species of sea turtle), and its reef-protected lagoon. The water is relatively shallow in the Demo Site apart from the area around the entrance to Mida Creek and a channel running along the length of the Marine Protected Area (MPA). Small coral patches (locally known as Coral Gardens) lying parallel to the shore are not exposed at low tide and are marked with buoys (KWS, 2013).



**Figure 1: Malindi-Watamu Conservation Area (KWS, 2013)**

The Malindi/Watamu Marine Protected Areas (MPAs) host a complex diversity of fringing, patch and deep-water coral reefs with more than 60 coral genera represented. Coral families include *Favidae*, *Poritidae* and *Acroporidae* and the underwater flora comprises mainly *Cymodocea* algae. The Park also hosts numerous species of fish from more than 12 families. Mida Creek features expanses of diverse seagrass beds and a highly productive mangrove habitat in which 9 mangrove species are recorded within an area of about 1,600 ha. The estuarine conditions of Mida Creek are maintained by groundwater seepage, with the adjoining Arabuko Sokoke Forest and Nature Reserve (42,000 ha) that forms the water catchment area (KWS, 2013).

The population of Watamu is approximately 9,000 inhabitants. The majority of the inhabitants are highly dependent on marine and coastal resources for their livelihood. Tourism is the key socio-economic activity in Watamu. The tourism sector is one of the primary employers for the local people and threats to its long-term sustainability are a serious concern to the residents and the government alike.

## 2.2 Marine Tourism in the Watamu Demo Site

A variety of tourism-related activities take place within the Watamu Demo Site. The vast majority are directly linked to the coral reefs, mangroves and other sensitive marine environments. Figure 2 illustrates the natural features, as well as the diversity of marine tourism activities in the Watamu Demo Site, illustrating that marine tourism-related activities depend on the beach and marine features. Tourism activities include beach traders, glass-bottom-boat and dive operations, dolphin tours, sport fishing, snorkelling, wind/kite-surfing, sailing and boating (see Table 1). Bird watching and mangrove walks are also offered in the Mida Creek area.

**Table 1: Marine Recreational Activities within Watamu (after McClanahan, 2005)**

Activities	Description
Glass-bottom-boat tours	Tourists and local residents hire glass-bottom-boats to visit the Coral Gardens reef and dolphin watching areas. Goggling is often done.
SCUBA diving	Tourists and locals are taken to the reef edge, wrecks, and caves for diving usually by companies affiliated with hotels.
Goggling/ snorkelling	Visitors use goggles to either swim from the shore or from the boats to the reef.
Sailing	Modern and traditional sailboats are used either for tourist or fishing purposes.
Windsurfing/kite surfing	Tourists and locals can windsurf in MPAs without paying a fee.

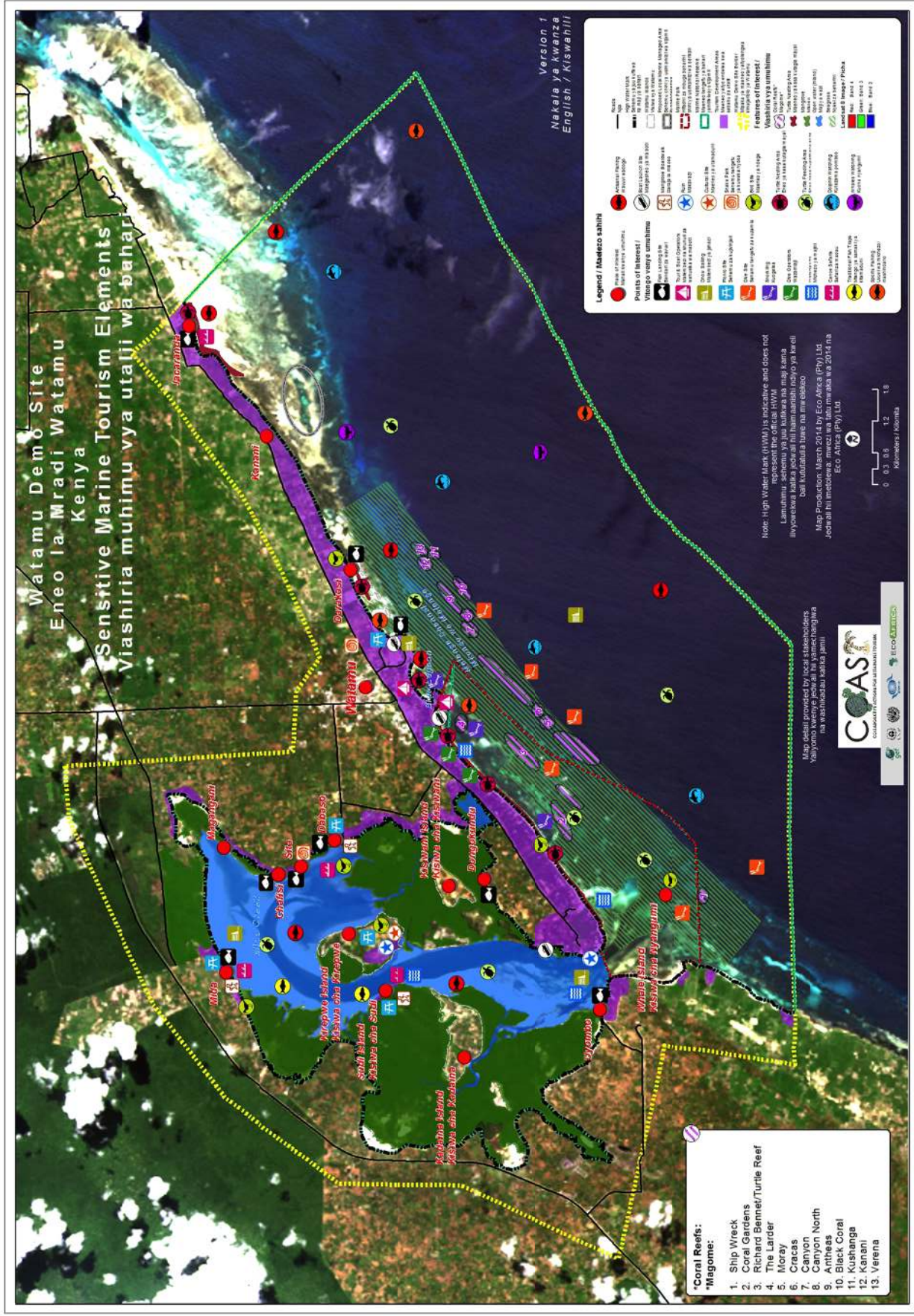
Numerous hotels, guesthouses and lodges are located within the Demo Site with the associated beach trade and boat tour operators (Annex 1 lists the guest accommodation). Ecotourism enterprises are growing in the area with community groups exploring the opportunities of sustainable tourism activities that can benefit both the environment and communities. Currently approximately 161 registered tour operators are located in both Malindi and Watamu and the majority of the owners are Kenyan, while the remainder are owned by Italian, German and Swedish citizens.

Three private SCUBA diving operators (Oceans Sport Resort, Blue Fin Diving and Turtle Bay Hotel) operate within the Demo Site. Local safari tours (inclusive of snorkelling) are offered by the hotels and private operators to the marine park. Presently the Watamu Demo Site has Codes of Conduct (CoC) for dolphin watching, snorkelling and marine tourism. Some reef monitoring is done by Coastal Ocean Research Development in the Indian Ocean (CORDIO), the Wildlife Conservation Society (WCS) and KWS. While the linkages between marine tourism and the local economy could be much improved in the Demo Site area, local marine tourism enterprises are prevalent in the area, with increasing interest by local residents in the opportunities of marine tourism activities.

While not related to marine recreation, it is important to note that artisanal fishing is a critical socio-economic activity in the area that supports the livelihood of many of the local residents. This activity also supplies many of the restaurants and hotels in the area with fresh seafood. Controlled fishing using legal fishing gear is permitted in the Reserve area, but fishing within the more restricted Watamu Marine National Park (WMNP) “No Take” zone is prohibited, due to the higher conservation status. Despite the importance of fishing, the income from tourism into WMNP is twice as high as income generated from fishing in nearby waters (Cowburn et al, 2013). Traditional fishing methods, although impacted by tourism development, are closely linked to the culture of the coastal communities in Watamu.



Figure 2: Marine Recreation Activities within the Watamu Demo Site



## 2.3 Challenges to sustainable marine tourism

Oceans around the world are under tremendous pressure. Global change, exacerbated by destructive activities such as land-based pollution, over-exploitation of marine resources, destructive fishing methods, poor urban development, a lack of effective governance and other human impacts, are all manifesting as a loss of biodiversity and degradation of critical marine and coastal ecosystems and a decline of essential marine resources in Watamu. While tourism activities are seldom considered as drivers of these kinds of impacts, poor management of tourism and recreation activities can result in pollution of sensitive marine and coastal areas, disturbance of natural processes and species, destruction of habitats from poor coastal tourism development, competition for scarce resources to feed the sector and local communities, rising real estate prices, displacement of local communities and a host of indirect impacts, such as rapidly increasing local populations.

The sensitive marine ecosystems and species in the Watamu area are subject to a number of threats, both natural and human-induced, and many of which are interlinked. The coral bleaching event of 1997-1998 caused the most significant impact on the Watamu coral reefs thus far and resulted in high levels of coral mortality (McClanahan et al, 2005). Most of the coral reefs that were severely damaged by 1998 El Nino bleaching event, are showing limited signs of recovery. Increasing siltation of the nearshore reefs from the Sabaki River, due to deforestation of the mangroves represents an ongoing threat. There is evidence of erosion and of increasing nutrients in the reef area from the neighbouring Mida Creek, due to deforestation of the mangrove forests (CORDIO, 2009).

Other threats relating to marine recreation include the heavy exploitation of corals and shells by visitors and local tradesmen for souvenirs and damage from trampling on the reef and pollution from land-based sources. Coral conditions in some reef areas in Watamu are considered poor, due to a high cover of turf and microalgae (CORDIO, 2009). A patch of reef known as Coral Gardens reef, the key target reef for the glass-bottom-boat tours and snorkelling activities, is an exceptional site as it has the highest recorded coral cover in the area. It is however, under constant pressure due to the high levels of visitation. An estimated 119 people visit Coral Gardens each day with an estimated 76 people swimming on the reef on a daily basis during peak season. Recent estimates place visitor numbers into the WMNP at just over 35,000 people per annum (Cowburn et al, 2013).

Selected key interlinked challenges relating specifically to reef and marine recreation that were identified through consultation with stakeholders in the Watamu Demo Site include:

### **1) Lack of general awareness of the conservation importance of marine & coastal environments in the Demo Site**

Stakeholders noted that many visitors to the area are unaware of the protected status of the marine area and of the value of the MPA and that very little information is provided to tourists visiting the WMNP. For instance, recent studies indicate that only 28% of visitors to the coral reefs knew they were in a marine protected area and that there were rules governing activities within the park (Cowburn et al, 2013). This lack of access to information and awareness raising is leading to additional pressure resulting from inappropriate use of the marine areas and conflicts among user groups. Better management of behaviour in and near these sensitive areas has therefore, become crucial for effective protection and sustainable use of the area.

## **2) Unsustainable marine tourism practices**

High levels of visitor numbers to specific reef areas are highlighted by stakeholders and researchers as causing noticeable amounts of damage to these reefs. Impacts arising from the lack of control of boat access during the lowest tides is also noted by stakeholders as an issue that is resulting in high levels of tourist contact with the reef and boat damage to corals during visitation, more intense during lower tides. The causes of the damage to the reef from visitors through harming and breaking coral, include finning that causes re-suspension of sediment in the water and scraping of corals, trampling of the substrate, holding or touching the corals, removing marine organisms and feeding of fish by tour operators and snorkelers to attract them for tourists and photographs (Cowburn et al, 2013).

In addition to damage to the marine ecosystems, stakeholders highlighted the fact that many foreign-owned/operated tourism businesses exist in the Demo Site and that benefits to the local residents from the sector are insufficient. While indirect impacts from coastal tourism have yet to be fully researched and quantified, even initial observations suggests that tourism continues to have a negative impacts. Primarily among these is pollution of the marine environment from land-based sources. Anecdotal evidence exists of algal growth on reefs, which may result from high levels of nutrients entering the sea from the adjacent coastal areas through the porous substrate (i.e. sewerage infiltration) or from runoff. This has still to be confirmed and fully understood.

## **3) Lack of adequate management of marine tourism**

Stakeholders cited insufficient management of human activities within and adjacent to the marine protected area and the lack of enforcement of tourism laws and regulations as key issues. This includes a lack of adequate management of tourist behaviour through enforcement of regulations and a lack of control of activities in the nearby coastal areas. For instance, a current issue at a location known as Plot 40 was cited as a location for increasing conflicts among user groups. This area is of high conservation significance as a nesting area for endangered marine turtles. There are however, uncontrolled beach vendor activities and the illegal establishment of sun bandanas and art and craft sales on the beach, as well as a growing popularity of the area for wind/kite surfing. These unmanaged activities are reportedly resulting in growing conflicts among the different user groups and are impacting the conservation activities in the area. Conflicts are also evident between SCUBA divers and fishermen when the two activities intersect and impact each other. The currently limited monitoring for management of sensitive marine ecosystems in the Demo Site, presents challenges for decision-makers in terms of guiding human activities and enforcing regulations.

Local government representatives highlighted issues of inadequate technical and financial resources that hinder execution of their monitoring and management responsibilities. The lack of specialist marine conservation managers and frequent change of staff within KWS, as rangers are moved between coastal and inland protected areas, was cited as an issue that impacts the regular monitoring of these marine areas. A related issue concerns the rise in conservation priorities in other protected areas in Kenya (i.e. due to the increase in poaching of rhinos and elephants) and the resultant loss of staff within KWS from the MPAs to inland areas.

Stakeholders also cited a lack of harmonisation of existing management frameworks and inadequate collaboration among decision-makers for improved management of the sensitive marine and coastal ecosystems as further challenges. The area falls within several management



frameworks however, these are not sufficiently harmonised to ensure efficient management and collaboration among different sectoral agencies. Some stakeholders believed that a lack of a conservation protocol for adaptive and collaborative management that includes a centralised database presents a management challenge within the Demo Site area.

#### 4) Inappropriate coastal development

Stakeholders mentioned that the high-density of tourism development in Watamu has resulted in restricted public access to the recreational beaches with the complete inaccessibility of some beach access points, while others have narrowed considerably due to encroachment. Local government authorities also highlighted the illegal building of tourism facilities by local operators without the adequate planning and development permissions as another key issue. Concerns exist of a lack of proper sanitation and degradation of the coastal and marine environment, as a result of these unregulated developments.

#### 5) Natural resource exploitation and degradation

While not directly related to marine recreation, the removal and degradation of mangrove forests in and adjacent to the Demo Site is cited as an issue that is causing increased siltation of the coastal waters and potential degradation of the coral reef habitats. Other factors such as the increase in the number of fishers and fishing effort in the Reserve area over recent years, reportedly resulting in declining catches, is also noted as a challenge to the health of the sensitive marine ecosystems. Destructive fishing methods, such as ring net fishing is cited as problematic, particularly given the challenges faced by authorities in enforcing regulations in the entire Marine Reserve areas.

## 2.4 Current Marine Tourism Management Measures

Kenya was the first country in Africa to established a marine protected area and since the late 1960s has declared a number of marine parks and reserves along its coast (See Table 2 (GOK/MOTW, 2007) below). Fishing is prohibited in the Parks, and only traditional methods of hand-lines and traps are permitted in the Reserves.

**Table 2: List of MPAs along the Kenyan coastline**

Site Name	Designation	Established	Area (km <sup>2</sup> )
Kiunga	Marine National Reserve, Biosphere Reserve	1979	600
Malindi-Watamu Marine National Park	Marine National Park, Biosphere Reserve	1968	16.3
Malindi-Watamu Marine National Reserve	Marine National Reserve, Biosphere Reserve	1968	245
Mombasa	Marine National Park	1986	10
Mombasa	Marine National Reserve	1986	200
Kisite	Marine National Park	1978	28
Mpunguti	Marine National Reserve	1978	11
Diani	Marine National Reserve	1993	75

The Watamu Demo Site falls within the Malindi-Watamu Marine Conservation Area that incorporated a complex of protected areas, including the Watamu Marine National Park (WMNP) and Watamu Marine National Reserve (WMNR), and the Malindi National Reserve (MNR) as core areas, as well as

a buffer zone of 500 meters that extends from the high water mark towards the inland and towards the deep sea around the MPAs.

The Demo Site is therefore covered by the management plan for this complex of protected areas. The Watamu and Malindi Marine National Parks were established in 1968. These were the first MPAs in Africa and are primarily designed to conserve Kenya's coral reefs. The larger protected areas also enclose important breeding sites for migratory marine birds, marine mammals and turtles. In recognition of the unique wildlife biodiversity of the area, the two Watamu and Malindi Marine National Reserves and the Watamu and Malindi Marine National Parks were declared Biosphere Reserves under the Man and Biosphere Reserve Programme of the United Nations Education, Science and Cultural Organisation (UNESCO). The Biosphere Reserve area is located at 03°14' to 03°25'S; 39°57' to 40°11'E and covers a total area of 19,600 ha (KWS, 2013).

## **2.5 Stakeholder Consultations**

A diverse group of stakeholders are concerned with reef and marine recreation in the Watamu Demo Site, including government representatives from different agencies, local and private sector tour operators and lodge owners, research organisations, NGOs and CBOs. At the beginning of the COAST Project, a Management Committee (DSMC) was established for the Watamu Demo Site. The purpose of the DSMC was to support implementation of project activities and to promote sustainability of project outcomes. The DSMC was comprised of relevant representatives from most stakeholder groups in the area. The DSMC also served to link local stakeholders with national government, facilitated by a Demo Site Project Coordinator (DPC). A Technical Team (Tech Team) was also set up for the Watamu Demo Site (see Annex 2 for a list of members of the DSMC and Tech Team). The role of the Tech Team was to work closely with the Thematic Areas of the project to provide additional support (in terms of their locally based knowledge) to the implementation project activities.

This document was developed through ongoing consultations with members of the DSMC and Tech Team, as well as other stakeholders both within the Demo Site and in the broader Western Indian Ocean region (see Annex 3 for a list of stakeholders consulted). In addition to the stakeholder consultations and discussions, participatory mapping and rapid reef assessments were conducted to inform the content of the document. Furthermore the relevant processes, policies and laws were also identified through these meetings and consultations.

## **3 Institutional and Regulatory Framework**

### **3.1 Institutional Framework**

A number of government agencies at different levels have jurisdiction over governing marine and coastal resources. The challenges and issues encountered in managing marine and coastal resources are multi-sectoral and therefore cut across various agencies. The sectors that have a direct impact on the marine and coastal environment include: maritime sector; fisheries sector; environment sector, wildlife sector; forestry sector; water sector; energy sector; agriculture sector; mining sector; and the tourism sector. At the national level, the Coast Development Authority (CDA) has the responsibility of planning and integrating coastal development activities (McClanahan et al, 2005).

The authority for management of Marine Parks and Reserves is vested with the KWS. According to the Policy Framework that led to the establishment of the KWS, the general goals of organisation are the: i) conservation of natural environments of Kenya, for the benefit of Kenyans and as a world heritage; ii) sustainable management of wildlife resources; and iii) protection of people and property from injury or damage from wildlife (McClanahan et al, 2005).

Adjacent marine areas fall under the jurisdiction of either the Fisheries Department or the Forestry Department depending on the ecosystem and the extractive activities. Municipal councils are usually responsible for administering the adjacent terrestrial areas. KWS currently falls under the Ministry of Environment and Natural Resources. The Fisheries Department licenses all fishing activities in the Marine Reserves. The first establishment of MPAs caused disagreement between the KWS and the Fisheries Department, due to conflicting mandates on coastal zones with one agency primarily mandated for conservation and the other for increased exploitation. The problem also still exists, whereby artisanal fishers believe that the protected areas were exclusively created for the tourism sector, as fishers are not allowed to fish in the parks (KEMFRI, 2011). The location of the Kenya Marine and Fisheries Research Institution (KMFRI) and the Kenya's Fisheries Department (KFD) in different government ministries and infrequent collaboration, created episodes of confliction (McClanahan et al, 2005). Recent development of a Memorandum of Understanding (MOU) between the two institutions aimed to clarify their mandates and create a basis for sharing authority and management. Table 2 (KEMFRI, 2007) below, lists the different government departments with jurisdiction over marine and coastal resources.

**Table 2: Institutional Arrangements relating to Coastal Resources Management**

<b>Department</b>	<b>Ministry</b>	<b>Department Role/Responsibility</b>
Kenya Wildlife Service	Environment and Natural Resources	Management and conservation of wildlife focusing on protected areas and endangered species.
Coast Development Authority	Agriculture and Rural Development	Promote sustainable coastal development and economic exploitation of coastal and marine resources.
Fisheries Department	Agriculture and Rural Development	Management and development of fishing resources, licensing, regulation of gear, promotion of aquaculture.
Forestry Department	Environment and Natural Resources	Management of forests (coastal and mangrove) including licensing of logging and reforestation.
Kenya Marine & Fisheries Research Institute	Ministry of Agriculture	Research into all aspects of aquatic systems including physical and social sciences.
Kenya Maritime Authority	Ministry of Transport and Infrastructure	Management of maritime vessel standards; registration of ships; navigation and maritime training management.
Kenya Ports Authority	Ministry of Transport	Management of ports.
National Environment Management Authority	Ministry of Environment	Environmental management.
Municipal councils	Local Government	Regulation, licensing and management of city activities.
Provincial and District Administration	Office of the President	Liaison with central government on all development activities at the grassroots.
Tourism Department	Ministry of Tourism	Management and regulation of all tourism activities.
Tourism Finance Corporation	Ministry of Finance	Financing domestic tourism development. Previously Kenya Tourism Development Cooperation.
Survey Department	Ministry of Lands	Mapping the boundaries of the maritime zone

Additional stakeholders involved in marine and coastal management in Watamu include the local NGOs and Community-Based Organisations (CBOs). Table 3 below lists these organisations and outlines their role.

**Table 3: Role of NGOs and CBOs in Marine and Coastal Management**

<b>Institution</b>	<b>Role</b>
A Rocha Kenya	Research and conservation of birds and more recently, marine ecosystems and experience in ecotourism development.
Community-Based Environmental Conservation (COBEC)	Providing capacity and support to community environmental and conservation initiatives.
Local Ocean Trust	Provide education awareness and conservation of sea turtles.
Mida Creek Conservation Committee (MCCC)	Umbrella organisation coordinating mangrove conservation and community ecotourism in the Mida Creek Reserve.
Nature Kenya	Training for ecotourism development.
Watamu Association of Boat Operators (WABO)	Umbrella organisation representing beach operators that take tourists on boat excursions to Coral Gardens.
Watamu Marine Association (WMA)	Umbrella organisation with coordination, communication and facilitation capacity and linkages to all relevant stakeholders.
Watamu Safari Sellers Association (WSSA)	Network of tour and safari sellers promoting ecotourism.

The Watamu Demo Site falls primarily within the WMCA and is therefore largely under the mandate of the KWS. However, management of this area remains challenging. The Kenya Marine Fisheries Research Institution (KEMFRI), CDA, WMA, NEMA and other agencies also play a role in the management in the area, but greater coordination is needed. For example the KWS mandate for the area commences from the high-water mark, including the 30m riparian zone, whilst the NEMA’s mandate commences from 60m above the high-water mark. Further complicating the management of the area is the lack of a zonation and development plan for Watamu and existing systems are not adequately enforced. For example, the Beach Management Plan (BMP) exists for the area, but is not implemented.

### **3.2 Legislative & Regulatory Tools**

Kenya has an array of national environmental legislation (see Table 4 below) that has created overlapping and conflicting mandates for managing marine and coastal issues. Much of the legislation is old and no longer sufficient to manage current pressures. Marine and coastal ecosystems have continued to degrade, even within protected areas. While the Tourism Policy and Law recognise the value of Kenya’s biodiversity and that tourism is nature-based, and that there is a need to ensure proper management of the environment and resource base for sustainable development, they still need to embrace ecosystem-based management and provide for multi-sectoral conflict management (KEMFRI 2007).

Specific MPAs are established under the Wildlife Conservation and Management Act of 1976. Although MPAs are governed under this Act, the regulations apply to protected areas in general and are not specific to marine areas. The KWS has therefore, developed specific regulations for MPAs. For example a 10-year (2011-2021) management plan for the Malindi/Watamu Marine Conservation Area (MWMCA) has been drafted following a highly participatory stakeholder consultation process.

This Management Plan, currently in draft form, was formulated to ensure that the economic health of MWMCA is preserved and the area is sustainably used (KWS, 2013).

Since the Malindi and Watamu MPAs are geographically and ecologically connected, and since the MPAs are managed primarily by KWS in collaboration with stakeholders, it was agreed that a single conservation area management plan titled the Malindi-Watamu Marine Conservation Area Management Plan would suffice. According to the draft MWMCA Management Plan, this document was formulated in line with the KWS Protected Area Planning Framework and provides a detailed methodology for the entire planning process, ensuring that all management plans are developed according to a standardised process and having a similar structure (KWS, 2013).

The Environmental Management and Coordination Act (EMCA) 1999, is relevant to Marine Conservation Agreement (MCA) and MPA implementation, as it establishes an overarching legal and institutional framework for the management of Kenya's environment. The Act recognises the coastal zone for planning and development purposes and imposes severe penalties for land-based marine pollution. While the Act recognises institutions with mandates for marine and coastal resources management, the institutional framework for the National Environmental Management Authority (NEMA), has yet to be fully effective.

**Table 4: Key Policies and Laws Relating to Marine and Coastal Protection**

<b>Policy or Law</b>	<b>Relevance</b>
Wildlife Conservation and Management Act 1976	Establishment of MPAs.
Maritime Zones Act (MZA) 1989	Consolidates the laws relating to the territorial waters.
Coast Development Authority Act 1990	Establishes an Authority to oversee and plan the implementation of coastal and Exclusive Economic Zone (EEZ) development projects.
Fisheries Act 1991	Development, management, exploitation, utilisation and conservation of fisheries resources.
Integrated Coastal Zone Management Policy	Integrated planning and coordination of coastal development. Nested in the MZA and the EMCA.
Physical Planning Act 1996	Governs all land use and planning, especially in urban centres.
Environmental Management and Coordination Act (EMCA) 1999	Legal and institutional framework for environmental management.
National Environmental Action Plan 1999	Overarching National environmental policy, approved in 1999.
National Biodiversity Strategy and Action Plan 2002	National framework of action for the implementation of the Convention on Biological Diversity.
Water Act 2002	Empowers the Minister to formally protect river catchments.
Local Government Act 2009	Regulates local authorities on waste management and treatment.

## 4 Tourism Management

### 4.1 Process of Developing the Document

This document was developed through a participatory process involving DSMC members, relevant stakeholders, NGOs, CBOs and researchers within the Demo Site. The approach followed a bottom-up, top-down consultative approach, utilising a number of techniques including baseline research, identification of Best Available Practices and Technologies (BAPs & BATs), ecosystem assessments, participatory mapping and planning, awareness raising, issues and needs identification, and discussions to identify priority solutions (see Figure 3 below illustrating the process).

This document is simple, practical and user-friendly manual that can be used by all marine resource users of the Demo Site interested in the improved management of marine tourism.

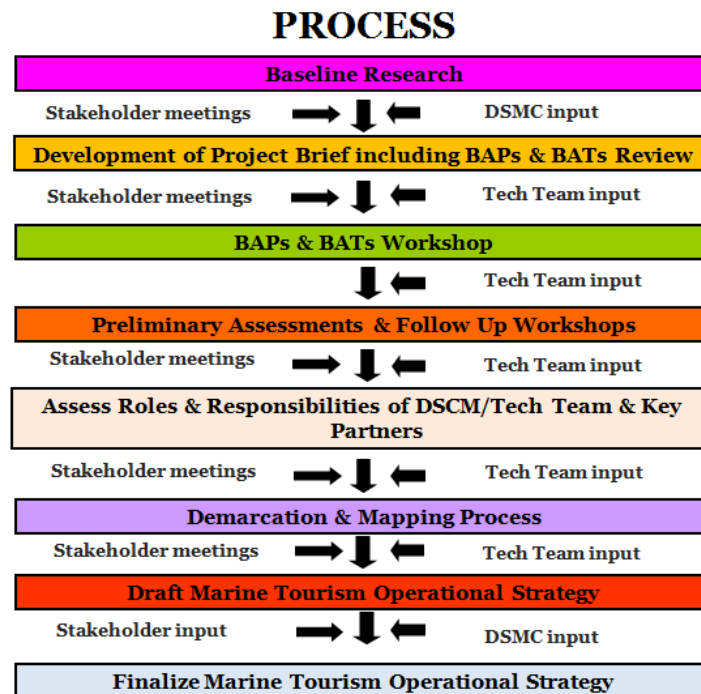


Figure 3: Process for Development of the Operational Strategy

### 4.2 Key Issues Identified by Stakeholders

As discussed above in Section 2.3, a number of key issues were identified by stakeholders. These include:

- Lack of general awareness of the conservation importance of marine & coastal environments in the Demo Site;
- Unsustainable marine tourism practices;
- Lack of adequate management of marine tourism;
- Inappropriate coastal development; and
- Natural resource exploitation and degradation.

### **4.3 Rapid Ecosystem Assessment and Mapping Activities**

The rapid ecosystem assessment and participatory mapping activities provided an indication of the impacts at key sensitive ecosystem areas. Rapid reef surveys were conducted on two reef areas that were suggested by the DSMC for assessment using rapid reef assessment approaches to obtain an understanding of the degree and type of reef usage, as well as the type of impacts from marine recreation. The rapid assessment approach using a combination of techniques such as: i) Photographic Profiling; ii) Fish and Coral Counts (hard and soft corals and other indicator species); iii) Photos along a Transect and; iv) Video Transects. These techniques were also piloted as future monitoring options.

Field visits were also conducted at other marine areas, including some of the deeper diving reefs, dolphin watching areas, selected sandy beaches and areas of Mida Creek. The field assessments were supplemented with existing mapping undertaken by UNIDO through the COAST Project, as well as research findings and stakeholder consultations. The assessment supported the identification of the sensitive marine areas within the overall Demo Site and the identification of some of the key current human impacts from marine tourism on the marine system.

The participatory mapping exercise was undertaken through ongoing consultation with stakeholders during field visits to identify key features, impacts, areas of concern, and opportunities for improved management. GPS points were recorded for major features relating to the reef and marine recreation. Additional information was collected through the ecosystem assessments, 'ground-truthing', existing research and stakeholder participation. Existing mapping by UNIDO of some of the major sensitive ecosystems was supplemented by data collection and information provided by researchers from Wildlife Conservation Society (WCS) and selected dive operators.

The draft maps produced, were discussed with the Tech Team members, researchers, dive operators and other stakeholders in the Watamu Demo Site. Areas of specific use or concern identified by the stakeholders during the consultation meetings were also mapped. A second draft map was presented to stakeholders for further feedback, which was incorporated into the final maps. The aim of the maps is to provide information to orientate management (sensitivities, degradation, threats, management arrangements and priorities, and information gaps) of the site. Figure 4 below illustrates the higher use zone and some of the key sensitive marine areas impacted by tourism including coral reefs, mangrove forests, seagrass beds and sandy beaches. The map provides a useful illustration of the location of sensitive ecosystems and their proximity to high tourism use (the area from Kanani, all along the coastline to Uyombo). It is evident that the higher use and impacted areas relate directly to the level of access by users of the areas and the need for improved management in these areas.

The marine areas under high use from marine tourism included selected dedicated coral reefs areas that are demarcated for snorkelling, nearshore areas and the sandy beaches. At the time of writing, KWS was investigating options for reducing the tourism pressure on the existing coral gardens reef area, such as shifting the snorkelling area to a different location. One of the beach areas of high visitor utilisation and also high conservation value is known as Plot 40. This area is a turtle nesting location, but is also popular with beach vendors and kite surfers. Stronger management is needed at this location to reduce user conflicts, improve the safety of visitors and users and protect the biodiversity. While visitor numbers were controlled by virtue of the fact that the marine area falls within the conservation area, these areas are still impacted by marine recreation activities that need better management.

## 4.4 Results from the Research

Some of the results emerging from this study demonstrate that presently there are signs of damage and stress being experienced within the reef and marine ecosystem. At the moment physical damage, bleaching and nutrification of reefs from land-based sources of pollution are evident in some areas as having significant impacts. Also evident within the Demo Site is anchorage damage, which can be seen at some nearshore reef areas due to unmanaged boat mooring. Within the Mida Creek area, the presence of mangrove deforestation is evident. Existing research and user perception suggests a decrease in species and a decline in the health of the reefs and associated ecosystems. Negative impacts from a number of possible factors such as fishing, pollution, coral bleaching, physical damage from visitors, natural impacts (storm events, nutrient loading through rivers, siltation, etc.) can be contributing to decrease in species numbers and diversity.

Some of the results emerging from the ecosystem assessment, mapping, stakeholder consultation and literature review are as follows:

- Clear evidence exists of ecosystem change and degradation in some of the higher-use areas from tourism activities. This includes breakage of corals as a result of visitation, disturbance of turtle nesting areas on the beach areas from unregulated and poorly planned development and conflicting user activities. This further threatens the nesting areas of the endangered marine turtles and increases the risk of disturbing or destroying other species.
- Risk to critical nursery and feeding areas within the Demo Site from inappropriate and uncontrolled activities, such as heavy visitor traffic, feeding of fish, disturbance to marine organisms (i.e. removal or moving of organisms), trampling of corals and degradation of mangrove forests.
- Minor evidence of coral recovery following the 1997/8 coral bleaching event.
- Marine pollution from multiple land-based sources in the coastal zone, due to poor development and inadequate waste management.
- The need for strengthening capacity (financial capability, infrastructure and staff numbers and skills) for marine monitoring, control and surveillance to mitigate against poaching and piracy and to enforce wildlife protection and integrated ecosystem-based management.
- Information of high-risk marine recreation areas and activities, as well as procedures to follow when injuries or mortalities occur, does not seem readily accessible. Safety of people participating in marine recreation activities is a growing concern and an issue that needs to be improved through stronger protocols and precautionary regulations, as well as greater awareness of the risks and options to reduce them.





While the rapid assessments are not sufficient to quantify specific cause and effect relationships for the degradation, the combined pressures of a number of impacts is likely contributing to the degradation including: over-utilisation of resources, destructive tourism and fishing activities, uncontrolled coastal development and poor waste management.

Figure 4 illustrates a shaded zone of higher tourism use that stretches along the coast from the mouth of Mida Creek to the North. The area of higher use illustrates a concentration of activities on sensitive marine ecosystems (reefs, sandy beaches and seagrasses) and highlights the need for improved management of tourism in this area. It also illustrates the need to zone specific areas for different uses and to manage visitor numbers and impacts for these areas relative to the type and extent of marine recreation activity.

From the reef assessment and mapping it is clear that human impacts are taking a toll on the health of the ecosystems in the area. The combination of unsustainable resource use driven by rampant coastal poverty, inappropriate tourism activities and coastal development, and management capacity challenges, is leading to the degradation of essential natural habitats. There is an urgent need for improved management, as well as targeted research and monitoring for specific impacts from tourism activities such as the Limits of Acceptable Change approach (an updated approach to that of determining the carrying capacity of an area), that informs adaptive management.

#### **Limits of Acceptable Change**

Management of visitor impacts can be tackled through the Limit of Acceptable Change (LAC) framework where visitor limits can be established as one management tool among a range of tools. The LAC management framework is based on constant monitoring of a site according to specific objectives and can be implemented as a nine-step process:

1. Identify area issues and concerns;
2. Define and describe opportunity classes;
3. Select indicators of resource and social conditions;
4. Inventory existing resource and social conditions;
5. Specify resource standards and social indicators for each opportunity class;
6. Identify alternative opportunity class allocations;
7. Identify management actions for each alternative;
8. Evaluate and select preferred alternatives; and
9. Implement actions and monitor conditions

(The Market Research Group, 2007).

## 5 Vision, Principles and Objectives

This Watamu Marine Tourism Management Operational Strategy was developed through extensive consultations with the Tech Team, members of the DSMC, key stakeholders and local users of the marine environment. This document serves to promote sustainable marine recreation and tourism practices within the Demo Site and to increase the social and economic value of the marine environment of the Watamu area. The document has as an immediate point of reference, being the MWMCA Management Plan.

### 5.1 Vision

Since this document is designed to be nested within the Management Plan for the MWMCA, and since the MWMCA was developed through a participatory stakeholder process, the Vision outlined below is drawn directly from the Tourism Development and Management programme of the MWMCA Management Plan:

*“The Watamu Demo Site has important ecological and cultural attributes that has supported tourism and has potential for providing a distinctive visitor experience and improving local community livelihoods.”*

From the Vision, a set of guiding principles and objectives were generated to guide the development of this document.

### 5.2 Guiding Principles

The guiding principles outlined below that underpin the implementation of this Operational Strategy, incorporate both the principles emerging from the MWMCA Management Plan, as well as some Best Practice principles for environmental and marine governance.

The guiding principles that should underpin the implementation of this plan include:

- a. **Intergenerational equity** -To ensure viable populations of marine resources and biodiversity and their habitat are in state that is good or better e.g. conservation of rare and endangered species including sea turtles, dugongs etc.
- b. **Ecological sustainability** -To ensure sustainable utilisation of marine resources is achieved for both social and economic development. Key elements of management and planning for ecological sustainability include protection of critical habitats, use not to exceed maximum sustainable yield or carrying capacity, and conservation of biodiversity in general.
- c. **Ecosystem-based management approach (EBM)** for reef and marine recreation management that views marine resources as elements of complex systems, acknowledges complexity in management and seeks to protect ecosystem health, while maintaining the ecosystem services needed by people. An ecosystem-based approach to marine management incorporates science and balances the demands of user groups for sustainable resource use.
- d. **Integrated planning and management** - To ensure effective and well coordinated planning of many activities that can potentially threaten the MWMCA. Consider all potential threats and develop a management protocol that addresses these threats. In order to do this, management will

need to be integrated with management responsibilities of the other relevant agencies. It also refers to the integration of science-based approaches in reef and marine recreation management and monitoring.

- e. **Adaptive management** -To ensure integrated research, monitoring and information exchange is enhanced to promote effective and informed management. Continual monitoring, evaluation and intervention, when required, are essential.
- f. **Collaboration and participatory planning and management** through extensive multi-sector stakeholder engagement and community consultation are key. Managing complexity involves collaboration among a diverse set of organisations and individuals in making decisions.
- g. **Locally managed marine areas** (LMMAs) and the use of local knowledge and traditional practices, whereby areas of nearshore waters and coastal resources are largely or wholly managed at a local level by the coastal communities, partner organisations, and/or collaborative government bodies based in the immediate area.

### 5.3 Aim and Objectives

The aim of this Operation Strategy is to guide the strengthened management of marine tourism activities in Watamu. It will also serve as a strategic tool for the decision-makers and users alike to modify the marine tourism sector to respond to economic, environmental and cultural needs. This document reflects broad-based stakeholder input that will hopefully stimulate action by all stakeholders for more efficient and effective outcomes for managing reef and marine recreation as a small piece of the broader tourism puzzle.

The objectives of this document are to:

1. Increase awareness of the significance of reef and marine environments to all users;
2. Promote awareness of the importance of improved management and sustainable use of the reef and marine environment through BAPs and BATs/sustainable practices;
3. Promote protection of important sensitive reef and marine ecosystems within the Demo Site;
4. Promote diverse, yet sustainable and appropriate reef and marine recreation practices (BAPs/BATs) at the Demo Site level for the benefit of all stakeholders and user groups;
5. Improve collaboration and cooperation among all user groups of the Demo Site; and
6. Support improved governance of marine resources and ecosystems.

Selected specific objectives relating to reef and marine recreation outlined in the MCMCA Management Plan for implementation of the Tourism Development and Management programme are incorporated within the broad objectives outlined above.

### 5.4 Potential Partners, their Roles and Responsibilities

A number of potential partners should be involved in the implementation and monitoring of this Operational Strategy and have been included in the Implementation Plan below. Most obvious are the members of the DSMC and Tech Team that represent most key stakeholders and who have played a central role in developing this document. Other government agencies that are not currently participating fully in the DSMC such as Fisheries and Planning should also become more involved. Key partners who have provided input and who will also be central to implementation of the objectives in this Operational Strategy include:



- **Kenya Wildlife Service** is the mandated authority for managing the Marine Parks and Reserves. KWS has been integrally involved in the RMRM activities of the COAST Project and should continue to play a central role in the implementation of this Operational Strategy.
- The **private sector boat, dive and tour operators and hotel and lodge owners** within the Demo Site will be critical to the success of any efforts to improve the sustainability of reef and marine recreation. Not only do they have direct influence on the behaviour of visitors to reef and marine areas, but they could also support the government to fulfil their responsibilities in the absence of resources and capacity.
  - Boat operators have received training in BAPs for taking snorkelling and boat safaris into the Marine Park and Reserve. As key users of the coral reefs, they will continue to be central to implementation of the actions outlined in the Implementation Plan below. Watamu Association of Boat Operators, which is a private organisation can work collaboratively with KWS in ensuring the tourists follow the Codes of Conduct (CoCs), i.e. No walking on corals, do not feed fish species on the boat tours etc.
  - The dive operator Aqua Ventures provided valuable information and advice to the RMRM team during the implementation of the RMRM activities. They have also worked closely with KWS to install buoys and have capacity for education and specialised tours on marine ecosystems and species.
  - Safari Sellers are involved in the Tech Team and play an important role in promoting sustainable coastal development and use.
  - Hotels and lodge owners are key to promoting sustainable marine recreation in the area.
- **Researchers** are integral to providing ongoing reef and marine monitoring and capacity development support.
  - The Wildlife Conservation Society (WCS) has conducted long-term targeted research in one specific coral reef area (GPS coordinate -3.383055556E; 39.9925S). CORDIO has collaborated with the RMRM team on reef assessment and monitoring and strengthening capacity of KWS rangers for reef management.
  - A Rocha has conducted in-depth research on the impacts of tourism in specific coral reef areas of the Watamu Marine Park and has identified some recommendations for improved management, which have been taken up into this Operational Strategy.
- **Kenya Forest Service** can assist in the management of the mangroves within the Demo Site, as well as provide local talks to the local communities, schools and other users in the area.
- **Kenya Marine Fisheries Research Institute**, while not directly related to marine recreation, should be integrally involved, as the engagement of local fishers is key to sustainable use of marine resources. The Beach Management Units for the area should be integrally involved in discussions on management of the marine area.
- **Watamu Marine Association** is an association comprised of numerous local stakeholders from the Demo Site. WMA is driving the Tech Team and has collaborated with the RMRM team to training boat operators on BAPs. WMA is a key partner for implementation of this Operational Strategy, can provide technical advice and assistance to the local authorities in terms of monitoring and managing the resources within the site.

- **Turtle Watch** is an active conservation and advocacy organisation that monitors the status of sea turtles, rehabilitates turtles and undertakes extensive awareness raising on the value of marine organisms and ecosystems.
- Beyond the Demo Site, **Provincial and National government, NGOs and research organisations** operating to the North and South of Watamu, should be drawn in to ensure that the Marine Conservation Area complex value of the broader region is realised.

The Implementation Plan presented in Table 5 below outlines a range of different partners for ensuring the achievement of prioritised activities. It should be noted that while the DSMC is identified as a key lead and collaborating body, this structure or a further variation thereof should persist following the closure of the COAST Project. It is therefore essential that the parties involved in the DSMC (and other interested organisations), decide upon a further mechanism or structure to drive the implementation of activities following the end of the project. Recommendations for such a structure are included in the Implementation Plan.

## 5.5 Anchoring the Plan

The MWMCA Management Plan was developed through a participatory stakeholder process and provides a framework to guide targeted activities for the MWMCA management. The MWMCA Management Plan outlines six programmes:

- Ecological Management Programme;
- Fisheries Resource Management Programme;
- Forestry Resource Management Programme;
- Tourism Development and Management Programme;
- Community Outreach and Education Programme; and
- MPA Operations and Security Programme.

Each management programme has a programme purpose statement and guiding principles, management objectives and a set of specific management actions. Currently, the guiding framework rests with the draft MWMCA Management Plan, but further action is needed to ensure collaborative and efficient governance involving all relevant stakeholders for improved marine recreation. From the existing MWMCA Management Plan, issues, threats, opportunities priorities, practical monitoring and evaluation systems (timeframe, targets and indicators) were identified. The relevant issues and objectives were incorporated into this Operational Strategy for strengthening marine recreation management in the Watamu Demo Site.

This Operational Strategy was designed to respond to marine tourism-related aspects of the Tourism Development and Management Programme of the MWMCA Management Plan and has incorporated some of the marine recreation-related objectives into the Implementation Plan. Any plan is only as good as its implementation that is typically guided by a coordinated implementing body. This body will need to continue from building on the DSMC to drive implementation of the steps outlined in this Strategy beyond the closure of the COAST Project in June 2014. Potential management systems and strategies for this site need to be outlined before the COAST Project ends.

The MWMCA highlights the need to establish a MWMCA Tourism Stakeholder Forum (TSF) that consists of representatives from all tourism stakeholder groups operating within MWMCA. The Forum will provide a platform for addressing tourism issues within the area and enhancing synergy among resource users and management. The MWMCA Management Plan suggests that the stakeholders to be included in the forum are the Ministry of Tourism, Boat Operators Association, Hoteliers, Safari Sellers, Curio Sellers, Divers, Ecotourism groups among other Community-Based organisations operating within the area. The MWMCA TSF could also incorporate the Implementation Plan outlined in this Operational Strategy as a guideline towards taking active steps towards sustainable marine tourism in Watamu.

## **6 Implementation Plan**

The Implementation Plan for the Operational Strategy provides the Watamu Demo Site with a clear template to roll out activities for strengthening management of marine tourism. The Implementation Plan has been developed so that individual elements can be easily taken up by different stakeholder groups into existing or future management programmes or plans. Development of the Implementation Plan was facilitated by the RMRM team, drawing from recommendations and assistance from the DSMC, Tech Team, and other stakeholders and partners identified during the course of project.

The Implementation Plan is designed to address the main issues, concerns and aspirations identified by stakeholders. Implementation is detailed in Table 5 below, outlining the key objectives and specific actions and steps for implementation. Indicators and performance measures are also identified for ease of monitoring of the implementation of the actions and steps. The table also suggests relevant implementing partners to lead or drive and to collaborate on implementing the actions. These roles should not be cast in stone, but should be viewed as suggestions for further agreement among participating entities. Each action is ranked in terms of levels of priority to highlight the urgency of particular actions. It is important to note that the Implementation also dovetails with recommendations made by United Nations World Tourism Organisation (UNWTO) in the document that was developed through the COAST Project entitled: “Action planning and supporting activity for sustainable tourism Governance and Management in Coastal Areas: Kenya” (UNWTO, 2013b).

It should also be noted that the Implementation Plan should be seen as a “living” and iterative document that is easily updated following regular review and revision. To fully operationalise the Implementation Plan, it will be necessary for each action to be further discussed, costed and agreed upon by the implementing party/parties and for adequate budget to be secured. This will require close cooperation between all parties identified in the Table and careful coordination by the body or agency that will continue to manage marine tourism in the area.

## **6.1 Monitoring and Evaluation for Adaptive Management**

In the absence of comprehensive scientific information to guide management, adaptive management provides an approach to “learn by doing” management. Monitoring and evaluation (M&E) measures that inform changes in management provide the only way to understand and to measure the impact of the management activities. Thus implementation of the actions outlined in this Operational Strategy must be carefully monitored and the findings considered in future management measures to ensure ongoing improvements based on the best available knowledge. It is proposed that the Implementation Plan be assessed on a regular (biannual/annual basis). Obstacles and emerging issues and opportunities can then be discussed and solved. The advantage of monitoring is that bottlenecks in management can also be easily identified and timely assistance can be provided to the respective and responsible parties.

Finally, an evaluation matrix that focuses on end results must also be part of the M&E system whereby the impact of this document can be evaluated. Not everything in the Operational Strategy may be as effective as originally anticipated. Certain approaches or actions may have to be modified and entirely new ones may need to be brought in to ensure that the desired effect is reached. This forms the basis of adaptive management. An added advantage is that a good M&E system can greatly assist in reporting to the relevant stakeholders and to raising awareness of important ideas, findings, opportunities and issues.



**Table 5: Implementation Plan for Improving Reef and Marine Recreation Management**

Action	Steps	Indicator	Performance measure	Responsibility	Priority	
<b>Objective 1: Raise awareness of the importance of healthy marine &amp; coastal environments to all users and decision-makers</b> 1.1. Develop and implement a targeted awareness campaign among coastal villages and selected schools on the value of the sensitive coastal and marine ecosystems for tourism & livelihoods	1.1.a. Develop an awareness raising campaign on the value of healthy coastal & marine ecosystems and sustainable resource use comprised of different elements and approaches suitable for all local stakeholders	<ul style="list-style-type: none"> <li>At least 1 annual awareness raising campaign with roles for all user groups</li> </ul>	Improved understanding among local users of the need for more sustainable use of marine and coastal resources.	KWS, MCMWA TSF, WMA, BMU, WABO, Beach vendors, MOT, KFS, KEMFRI, Hoteliers, Dive Operators, Turtle Watch, A Rocha, CORDIO	High	
	1.1.b. Undertake village meetings/talks on a regular basis as needed	<ul style="list-style-type: none"> <li>At least 1 talk per village per year</li> </ul>	Changes in behaviour of user groups to reduce their negative impacts on the resource base.	WMA, KWS, NGOs	Medium	
	1.1.c. Work with schools to include relevant marine resource content in school curriculum	<ul style="list-style-type: none"> <li>Incorporate marine educational content into 5 school curricula</li> </ul>	Greater involvement of citizens in management activities through volunteer activities.	WMA, KWS, NGOs	Medium	
	1.1.d. Use film events, radio and other media to communicate marine management issues to villages	<ul style="list-style-type: none"> <li>At least 1 annual film event on marine management</li> <li>At least 2 annual radio events on marine management</li> </ul>	Reduced conflicts among users concerning marine resources	WMA, KWS, NGOs	High	
	1.1.e. Facilitate local projects (reef protection, beach clean-ups, environmental youth groups, community monitoring of ecosystem/species; recycling etc.)	<ul style="list-style-type: none"> <li>At least 5 local projects per year focussing on citizen action for improved marine health implemented</li> </ul>		WMA, KWS, NGOs	High	
	1.1.f. Share research results with villagers & local government	<ul style="list-style-type: none"> <li>All local project results disseminated annually</li> </ul>				
					CORDIO, A Rocha, KWS	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
1.2. Increase awareness of visitors of the sensitivity and high biodiversity of the area	1.1.g. Work with fishers to identify and implement best practices and sustainable methods	<ul style="list-style-type: none"> <li>Annual training with at least 20 fishers on sustainable fishing practices</li> </ul>		KWS, WMA, KEMFRI, BMUs	High
	1.2.a. Disseminate existing WMA Codes of Conduct for dolphin watching, snorkelling and tourism	<ul style="list-style-type: none"> <li>CoCs communicated to at least 500 visitors per year</li> </ul>	Visitors aware of how to conduct themselves to reduce their impacts on marine and coastal ecosystems & species.	WMA, MCMWA TSF, Hoteliers, WABO, Dive Operators, NGOs	High
	1.2.b. Continue to promote & undertake activities that involve and inspire visitors to contribute & participate in responsible & authentic eco-tourism	<ul style="list-style-type: none"> <li>At least 5 annual responsible tourism activities implemented i.e. reef/beach clean-ups, community help activities etc.</li> </ul>	Changes in behaviour of visitors to reduce their negative impacts on the people & environment of the area.	WMA, KWS, MCMWA TSF, Hoteliers, WABO, Dive Operators, NGOs	High
	1.2.c. Develop & disseminate awareness information through visitor gateways (posters, leaflets, etc.)	<ul style="list-style-type: none"> <li>Materials promoting responsible tourist behaviour displayed and changed annually</li> </ul>	Greater demand by visitors for responsible tourism products.	KWS, WMA, MCMWA TSF, Hoteliers, WABO, Dive Operators, NGOs	High
	1.2.d. Continue and expand awareness events on ocean & coastal environment/issues for visitors	<ul style="list-style-type: none"> <li>Weekly awareness talks &amp; events to involve visitors held during high season</li> </ul>	More authentic eco-tourism experiences for visitors.	KWS, WMA, MCMWA TSF, NGOs	High
	1.2.d. Develop & install signage and information about the importance of healthy ecosystems / species & responsible tourism.	<ul style="list-style-type: none"> <li>5 signs on value/importance of ocean environments &amp; species installed (link to awareness raising campaign)</li> </ul>		WMA, KWS, MCMWA TSF, Hoteliers, Tour operators	Medium
	1.3.a. Communicate impacts of tourism on sensitive ecosystems to tour operators and hospitality establishments	<ul style="list-style-type: none"> <li>CoC information for marine tourism activities provided to 15 operators &amp; all</li> </ul>	Improved understanding among tour operators and hoteliers of the impacts	WMA, MCMWA TSF, KWS	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
biodiversity of the area	<p>1.3.b. Highlight options for hotels and operators to reduce their impact on the coastal &amp; marine environment through measures such as limiting visitor numbers to sensitive sites, minimising disturbance to nesting, breeding etc. species, following sustainable seafood ideals etc.</p>	<p>hoteliers</p> <ul style="list-style-type: none"> <li>CoC provided to all operators and lodges includes basic information on causes of impacts on marine environment and options &amp; steps to prevent the impacts</li> </ul>	<p>of tourism on marine and coastal ecosystems &amp; species.</p> <p>Greater effort by tour operators and hoteliers to promote responsible tourism.</p> <p>Reduced conflicts among users over marine resources.</p>	WMA, KWS, MCMWA TSF, Hoteliers, Tour operators	High
<b>Objective 2: Improved management towards sustainable marine tourism</b>					
2.1. Strengthen partnerships among the private sector, NGOs and government for improved management of marine-related tourism and of the sensitive ecosystems	<p>2.1.a. Support the establishment and operationalisation of the MWMCA Tourism Stakeholder Forum (TSF) as outlined in the MWMCA Management Plan (See Action 1.1 of the Tourism Development and Management Programme Objective Tree MWMCA Management Plan)</p>	<ul style="list-style-type: none"> <li>Establishment of the MWMCA TSF</li> <li>Operationalisation of the MWMCA TSF through conducting quarterly meetings</li> </ul>	<p>Improved stewardship of the environment by user groups to reduce the negative impacts of their marine tourism activities.</p> <p>A more sustainable marine tourism sector due to reduced impacts from poorly managed marine recreation activities</p>	KWS, Tech Team / MCMWA TSF, WMA, BMU, WABO, Beach vendors, MOT, KFS, KEMFRI, Hoteliers, Dive Operators, Turtle Watch, A Rocha, CORDIO, WCS, Other relevant groups.	High
	<p>2.1.b. Strengthen collaboration between the various stakeholders for improved management of marine-related tourism through workshops, meetings, trainings, etc.</p>	<ul style="list-style-type: none"> <li>Bi-annual workshops, meetings, trainings etc. for strengthening collaboration</li> </ul>		KWS, MCMWA TSF, WMA, BMU, WABO, MOT, KFS, KEMFRI, Hoteliers, Dive Operators, NGOs, Researchers	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
	2.1.c. Build on existing arrangements for assistance from lodges to government to enforce regulations & CoC for marine recreation	<ul style="list-style-type: none"> <li>At least 4 MoUs or similar agreements established between the TSF/ WMA and hoteliers and tour operators etc.</li> </ul>		MCMWA TSF, WMA, BMU, WABO, Dive Operators	High
	2.1.d. Strengthen arrangements between local communities and KEMFRI and the KWS to support sustainable fishing activities	<ul style="list-style-type: none"> <li>Support given to at least 20 fishers annually to stop using destructive fishing methods</li> </ul>		KWS, KEMFRI, BMU, Fishers	High
2.2. Improve benefit sharing from tourism and community involvement in marine and management	2.2.a. Support the Ministry of Tourism & KEMFRI to complete and implement the beach management plan for Watamu	<ul style="list-style-type: none"> <li>Watamu BMU plan completed and incorporates aspects related to marine recreation management</li> </ul>	<p>Improved wellbeing of communities</p> <p>Greater understanding of the status of the use and health of sensitive marine &amp; coastal ecosystems &amp; species</p> <p>Stronger collaboration among decision-makers and users of the marine resources</p> <p>Ongoing provision of essential ecosystem goods and services that provide the platform for the local economy and therefore greater sustainability of the</p>	MCMWA TSF, WMA, BMU, WABO, KWS, MoT, KEMFRI	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
	2.2.b. Review community needs and aspirations relating to marine tourism through meetings with the local community groups in Watamu	<ul style="list-style-type: none"> <li>Analysis of community needs and aspirations relating to marine tourism documented</li> <li>Results of analysis shared with the private sector operators and government</li> </ul>	tourism sector	MCMWA TSF, WMA, BMU, WABO, KWS	Medium
	2.2.c. Agree on benefit sharing mechanisms from marine tourism to motivate local communities to conserve	<ul style="list-style-type: none"> <li>At least 5 benefit sharing mechanisms for communities from marine tourism implemented annually</li> </ul>		MCMWA TSF, WMA, BMU, WABO, Hoteliers, KWS	Medium
	2.2.d. Support ongoing training of local marine tour operators in best practices for sustainable marine recreation	<ul style="list-style-type: none"> <li>Annual training of at least 20 marine tour operators trained in best practices for sustainable marine recreation, including monitoring</li> </ul>		MCMWA TSF, WMA, WABO	High
	2.2.e. Work with hotels to support local employment/recruitment and job security for local employees (See Action 3.8 of the Ecological Management Programme Objective of the MWMCA Management Plan and the WTO Kenya Action Plan for Sustainable Tourism), in marine tourism-related work	<ul style="list-style-type: none"> <li>Annual meetings held with hoteliers to agree on modalities for marketing community based marine recreation activities including excursions among others</li> <li>At least 3 mechanisms established annually</li> </ul>		MCMWA TSF, WMA, BMU, WABO, Hoteliers, KWS	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
		for local employment / recruitment and job security for local employees in marine recreation-related work			
	2.2.f. Ensure that community-based marine recreation opportunities and products are marketed in the visitor information centre to be established in Watamu (identified in the WTO Kenya Action Plan for Sustainable Tourism)	<ul style="list-style-type: none"> <li>Marketing materials for community-based marine recreation products are displayed in the visitor information centre and changed annually</li> </ul>		MCMWA TSF, WMA, WABO, KWS, MoT	High
2.3. Harmonisation of the existing regulatory frameworks	2.3.a. Clarify & agree upon institutional roles and responsibilities for the improved management of the area	<ul style="list-style-type: none"> <li>Agreements in place on responsibilities relating to management of marine ecosystems and user activities</li> </ul>	More sustainable land use and development that does not degrade the natural resource base upon which the local economy thrives  Greater sectoral synergy among planning and development sectors	MCMWA TSF, MoT, WMA, KFS, KWS, KEMFRI	High
	2.3.b. Ensure that marine recreation is covered in the Watamu tourism strategy that is to be developed through the COAST Project (identified in the WTO Kenya Action Plan for Sustainable Tourism)	<ul style="list-style-type: none"> <li>Management of marine recreation incorporated into the Watamu tourism strategy</li> </ul>		MCMWA TSF, WMA, KWS, MoT	High
	2.3.c. Ensure that the spatial land use	<ul style="list-style-type: none"> <li>Management of marine</li> </ul>		MCMWA TSF, MoT,	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
2.4. Strengthen enforcement of laws, regulations and by-laws preventing marine & coastal environmental degradation	<p>plan (identified in the WTO Kenya Action Plan for Sustainable Tourism) includes consideration of marine tourism issues</p> <p>2.4.a. Raise general awareness of all user groups existing laws and guidelines that serve to ensure safety of tourists and boat operators and prevent environmental degradation i.e. no cutting of mangroves, no removal of sensitive or protected species, requirements for environmental authorisations for coastal development etc.</p>	<p>recreation incorporated into the Watamu spatial land use plan</p> <ul style="list-style-type: none"> <li>• List of relevant laws and regulations relating to marine and coastal tourism is developed and broadly available</li> <li>• Specific laws &amp; regulations applicable to marine tourism disseminated to all tour operators and lodges</li> <li>• Ensure all boats are licensed and contain adequate safety equipment (See Action 1.6 of the Tourism Development and Management Programme of the MWMCA Management Plan)</li> </ul>	<p>Awareness of applicable laws and regulations is increased, providing a strong platform for enforcement.</p> <p>Citizens and user groups are more respectful of the legal framework and understand the impacts of non-compliance.</p> <p>Enforcement is more effective and transparent</p> <p>Resources for enforcement are shared and capacities built through cooperation</p> <p>Enforcement is more effective and transparent</p> <p>Greater stewardship by</p>	<p>WMA, KWS</p> <p>KWS, Tech Team / MCMWA TSF, WMA, BMU, WABO, Beach vendors, MOT, KFS, KEMFRI, Hoteliers, Dive Operators, Turtle Watch, Other relevant groups</p>	<p>High</p>

Action	Steps	Indicator	Performance measure	Responsibility	Priority
	2.4.b. Strengthen regular enforcement of relevant laws through partnerships with fishermen and the private sector (i.e. in the absence of resources for enforcement, the private sector can provide vehicles/vessels, accommodation, fuel etc.)	<ul style="list-style-type: none"> <li>• Coordination arrangements exist between government &amp; private sector for law enforcement</li> <li>• Agreements between government, private sector and resource users (fishers, resource harvesters) to avoid or sustainably use sensitive marine areas</li> <li>• Train all TPU officers on basic visitor handling and guiding practices (See Action 1.5 of the Tourism Development and Management Programme of the MWMCA Management Plan)</li> </ul>	citizens of their marine environment	KWS, Tech Team / MCMWA TSF, WMA, BMU, WABO, Beach vendors, MOT, KFS, KEMFRI, Hoteliers, Dive Operators, Turtle Watch, A Rocha, WCS Other relevant groups	High
2.5. Strengthen research and monitoring for improved management of marine recreation	2.5.a. Identify specific research needs for improved management of sensitive marine and coastal resources within the Watamu area including (but not be limited to) research on the status & use of:	<ul style="list-style-type: none"> <li>• Annual research needs identified through a collaborative process between government, researchers and user groups</li> </ul>	Greater understanding of the uses of and changes in marine and coastal ecosystems to guide management actions	KWS, CORDIO, KEMFRI, KFS, WCS, A Rocha, NEMA, WMA	Medium



Action	Steps	Indicator	Performance measure	Responsibility	Priority
	<ul style="list-style-type: none"> <li>○ Coral reefs</li> <li>○ Sandy and rocky shores</li> <li>○ Mangrove forests</li> <li>○ Seagrass beds</li> <li>○ Mida Creek</li> </ul>		<p>Greater local capacity for monitoring and managing marine and coastal ecosystem use and management</p> <p>Research is used to inform decision-making and prevent further degradation of marine and coastal ecosystems</p> <p>Greater stewardship among citizens for marine management and responsible tourism</p>		
	<p>2.5.b. In the context of the broader marine region develop a targeted research &amp; monitoring strategy that promotes citizen science, local capacity development and regional and global cooperation</p>	<ul style="list-style-type: none"> <li>• Targeted marine and coastal research &amp; monitoring strategy developed for Watamu within the broader marine context.</li> </ul>		<p>KWS, CORDIO, KEMFRI, KFS, WCS, A Rocha, NEMA, WMA</p>	<p>Medium</p>
	<p>2.5.c. Undertake targeted research activities that involves user groups and promotes citizen science and regional and global cooperation (i.e. recording &amp; mapping of species occurrence and resource use)</p>	<ul style="list-style-type: none"> <li>• Targeted marine and coastal research underway to inform management of marine and coastal use</li> <li>• Citizen science research activities</li> </ul>		<p>KWS, CORDIO, KEMFRI, KFS, WCS, A Rocha, NEMA, WMA</p>	<p>High</p>

Action	Steps	Indicator	Performance measure	Responsibility	Priority
		<p>established that involve user groups</p> <ul style="list-style-type: none"> <li>At least 5 new linkages made / maintained annually with regional and global networks for monitoring &amp; protection of key ecosystems (coral reefs, mangroves, seagrasses) and species (sea turtles, manta rays, whale sharks, dugongs, humpback whales, sharks, coral diseases, etc.)</li> </ul>			
	<p>2.5.d. Establish a system for communication and use of research results to government &amp; user groups for improved management (i.e. annual reports, meeting with stakeholders to share findings etc.)</p>	<ul style="list-style-type: none"> <li>Annual dissemination information provision and reporting on research activities and findings is operational</li> </ul>		<p>KWS, CORDIO, KEMFRI, KFS, WCS, A Rocha, NEMA, WMA</p>	<p>High</p>
	<p>2.5.e. Establish an adaptive management system that monitors the use and status of marine resources and ecosystems and informs implementation of management measures</p>	<ul style="list-style-type: none"> <li>M&amp;E system established as part of the KWS adaptive management system</li> </ul>		<p>KWS, CORDIO, A Rocha, WCS</p>	<p>High</p>

Action	Steps	Indicator	Performance measure	Responsibility	Priority
<b>Objective 3: Protect important sensitive reef and marine ecosystems</b>					
3.1. Improve knowledge and understanding of the marine and coastal environments and their use	3.1.a. Targeted research to understand the functioning and use of the marine and coastal environments and resources (See 2.5 above).	<ul style="list-style-type: none"> <li>Supplement the Base Inventory that was conducted as part of the developing the MWMCA Management Plan (See 2.5 above and Action 2.3 of the Ecological Management Programme Objective of the MWMCA Management Plan)</li> </ul>	<p>Greater understanding of the status, uses of, and changes in marine and coastal ecosystems to guide management actions</p> <p>Updated maps illustrating sensitive ecosystems are available in GIS for KWS</p> <p>Research is used to inform decision-making and prevent further degradation of marine and coastal ecosystems</p>	KWS, CORDIO, Rocha, WCS	High
	3.1.b. Develop maps of marine environment and habitats within MWMCA	<ul style="list-style-type: none"> <li>Supplement the maps produced through the COAST Project to use for MWMCA management purposes (See Action 2.4 of the Ecological Management Programme Objective of the MWMCA Management Plan)</li> </ul>		KWS, Tech Team, CORDIO, A Rocha, WCS	Medium
3.2. Strengthened monitoring	3.2.a. Monitor the use of CoC in	<ul style="list-style-type: none"> <li>Use of CoC is</li> </ul>	Greater understanding	KWS, MCMWA TSF,	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
of activities within the sensitive marine park and reserve areas	marine recreation (identified in the WTO Kenya Action Plan for Sustainable Tourism)	monitored and recorded annually	<p>of the status, uses of, and changes in marine and coastal ecosystems to guide management actions</p> <p>Research is used to inform decision-making and prevent further degradation of marine and coastal ecosystems</p> <p>Greater stewardship among citizens for marine management and responsible tourism</p>	WMA, BMU, WABO, MOT	
	3.2.b. Encourage compliance with the CoCs through sensitisation meetings and review meetings with WMA	<ul style="list-style-type: none"> <li>• Bi-annual sensitisation and review meetings held with WMA to promote compliance with the CoCs</li> <li>• Establish a Site-based enforcement Committee to ensure compliance by tourists / operators with the CoCs (See Action 3.2 of the Ecological Management Programme Objective)</li> </ul>		KWS, MCMWA TSF, WMA, BMU, WABO, MOT	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
		of the MWMCA Management Plan)			
	3.2.c. Involve marine tour operators in monitoring of the marine areas that they visit	<ul style="list-style-type: none"> <li>All tour operators involved in monitoring the marine areas that they visit (i.e. they record sightings of specific organisms, changes in the ecosystem, etc.)</li> </ul>		KWS, MCMWA TSF, WMA, BMU, WABO, MOT	High
3.3. Strengthen management of sensitive areas not currently protected within the marine park and reserve areas	3.3.a. Delineate and demarcate sensitive areas that are not currently protected	<ul style="list-style-type: none"> <li>Install a mooring buoy at the Larder (in from of Ocean Sports Hotel) where boats are mooring near or on sensitive coral reefs</li> <li>Demarcate the Marine Park boundaries clearly in areas where the demarcation buoys are not present</li> </ul>	Vulnerable marine areas protected and managed	KWS, CORDIO, KEMFRI, KFS, WCS, Turtle Watch, A Rocha, NEMA, WMA	Medium
3.4. Identify options for voluntary compliance initiatives to reduce the pressure on the marine ecosystems	3.4.a. Establish a coordination system to reduce the number of visitors to the Coral Gardens reef at the same time (i.e. agree to stagger ocean safaris and dives to ensure lower numbers of visitors at one time)	<ul style="list-style-type: none"> <li>System established among operators to meet the KWS requirements on reef carrying capacity to control visitor numbers</li> </ul>	Greater stewardship among citizens for marine management and responsible tourism	KWS, MCMWA TSF, WMA, MOT, WABO	High
	3.4.b. Encourage compliance with the codes of conduct and best practices for marine recreation	<ul style="list-style-type: none"> <li>See 3.2</li> </ul>		KWS, MCMWA TSF, WMA, MOT, WABO	High
	3.4.c. Develop green-labelling or	<ul style="list-style-type: none"> <li>Eco-certification</li> </ul>		KWS, MCMWA TSF,	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
	marine tourism-related eco-certification options	<p>initiatives developed for coastal &amp; marine tourism</p> <ul style="list-style-type: none"> <li>Awareness on the Eco-certification process is raised among the local stakeholders (See Action 3.7 of the Ecological Management Programme Objective of the MWMCA Management Plan and the WTO Kenya Action Plan for Sustainable Tourism)</li> </ul>		WMA, MOT, WABO	
<b>Objective 4: Promote sustainable marine tourism practices for the benefit of all stakeholders</b>					
4.1. Identify specific areas for improved management to reduce the conflicts among different user groups	4.1.a. Identify appropriate recreation practices and specific areas (zonation) both in the marine area and on land to reduce conflicts among users and reduce pressure on the natural resources (See Action 3.1 of the Ecological Management Programme Objective of the MWMCA Management Plan)	<ul style="list-style-type: none"> <li>A conflict management mechanism is established within the MWMCA TSF to address conflicts over marine resources and areas</li> <li>Appropriate recreation and uses for sensitive marine areas are identified through a participatory process with user groups</li> <li>User activities at Plot</li> </ul>	Marine and coastal areas are sustainably managed collaboratively and used more	KWS, MCMWA TSF, WMA, MOT, WABO	High

Action	Steps	Indicator	Performance measure	Responsibility	Priority
		40 are managed appropriately to protect the turtle nesting areas and reduce conflicts among user groups			
<b>Objective 5: Improve coordination &amp; communication among all user groups for improved management of the marine recreation</b>					
5.1. Improve coordination among tour operators to reduce the pressure on marine ecosystems and fauna	5.1.a. Establish a marine recreation management forum consisting of interested people to drive improved management of the marine tourism in the area	<ul style="list-style-type: none"> <li>A marine recreation management forum is established within the MWMCA TSF to address conflicts over marine resources and areas</li> </ul>	Marine and coastal areas are used sustainably and managed collaboratively	KWS, MCMWA TSF, WMA, MOT, WABO	High

## **7 Conclusion and Recommendations**

### **7.1 General Conclusion**

The marine environment of the Watamu Demo Site represents an area of global significance, environmentally, culturally and economically. This site is home to important and endangered fauna and flora species and an array of other marine and coastal organisms and sensitive coastal ecosystems. The complex and interconnected ecosystems, the coral reefs, mangroves, seagrass beds and sandy beaches, support a highly productive web of organisms that provide an essential resource base for the local economy of the area. The health of the reef and marine environment of the Watamu area is under pressure from numerous and diverse human impacts, many of which are associated with the tourism sector and tourism use.

The high levels of poverty among populations living within the Demo Site result in the direct dependence of the majority of local communities on the marine resources for livelihood. The benefits of marine tourism have yet to contribute sufficiently to the lives of local communities. The nexus between unsustainable tourism practices, over-utilisation and destructive methods of the natural resource use and the need for stronger and more collaborative management and higher levels of awareness of the value of the marine environment, is resulting in a steady decline in the integrity and productivity of the natural resource base. This is impacting negatively on the tourism sector and more significantly, on the social and economic well-being of coastal communities in the Demo Site and in surrounding areas.

Both the MWMCA Management Plan and this Operational Strategy provide a framework for addressing these threats and ensuring sustainable benefits from these essential ecosystems. Good potential exists to strengthen management of the area through good cooperation and collaboration among user groups, decision makers, researchers, NGOs and CBOs. This collaboration helps to boost the technical and financial resources needed for essential local coastal management tasks.

### **7.2 Challenges**

The main challenges in implementation of the actions outlined in this document relate to institutional strengthening, resource availability, and stakeholder collaboration and coordination. The continuation and extension of the stakeholder collaboration established through the DSMC and Tech Team or a similar multi-stakeholder forum that can drive and guide improved marine tourism management is a challenge in the implementation of priority actions. Suggestions are made in Table 5 for strengthening the institutional framework. This challenge should be addressed as a matter of urgency in implementation of this document. Additional stakeholders need to be brought in to the discourse about sustainable marine tourism, including local inhabitants and user groups (fishers, villagers), as well as additional research groups, private sector entities and government authorities such as fisheries and planning authorities. Resource availability remains a key issue in implementing the priority actions – both in terms of financial resources and human resources and capacities. The actions outlined in Table 5 will need to be costed and further planned as project activities and funding identified for implementation. Human resources and capacities for managing and monitoring the implementation will also be required. Challenges related to stakeholder collaboration and coordination both need to be strengthened in the Watamu area among all stakeholders.



### **7.3 Risks**

Some key risks to the implementation of the actions outlined within this document are related to the challenges mentioned above and involve the continued political will and resources to implement the priority activities, stakeholder collaboration, adequate safety and security protocols and the health of the marine ecosystems. A lack of political will to support ongoing efforts to improve marine tourism management will hinder the implementation of the priority actions and pose a risk to the likelihood of obtaining financial support for the Implementation Plan. A lack of collaboration among all stakeholders and continuation of the marine tourism sector as is presents a great risk to the health of the marine environment. Lack of engagement of villagers and fishers in the implementation of priority activities poses a further risk to the success of management efforts. Additional issues that pose a risk to the marine tourism sector and the tourism industry as a whole, include the lack of adequate safety and security protocols to govern the marine recreation activities, the lack of responsible tourism development, as well as ongoing degradation of the marine environment and over-exploitation of marine and coastal resources. Given the reliance of the tourism sector on healthy marine and coastal areas, and the presence of marine megafauna and other charismatic species that draw visitors, the degradation or disappearance of these presents a risk to the tourism sector as a whole. Other risks that may affect the local tourism economy in the Watamu area include, security issues unrest, natural disasters and conflicting extractive activities that negatively impact on the natural resource base through degradation or pollution.

### **7.4 Timeframe**

The timeframe for the implementation of the actions outlined in this document is 5 years, between mid-2014 and mid-2019. While ongoing monitoring and adjustment of the content of the document may be necessary according to emerging issues, changing legal and institutional frameworks and opportunities, it is recommended that review be done of the recommended actions after 5 years to keep the content relevant.

### **7.5 Recommendations**

The results presented in this Operational Strategy shed some light on the threats, priorities and opportunities inherent in the marine tourism sector in the Watamu Demo Site. While the issues of fisheries management and integrated coastal zone management lie beyond the scope of this Operational Strategy, they are both integrally related to the health of the marine environment. Given the importance of adopting a holistic, ecosystem-based approach to governance of the marine environment, that recognises the inter-linkages among different marine ecosystems and species and the threats impacting them, the Implementation Plan outlined above includes a few urgent actions for addressing fisheries and land-based impacts. It is clear that collaborative action is needed among all sectors and user groups to recognise the complexities inherent in managing multiple-user groups in a dynamic and diverse area and to prevent further degradation of the marine and coastal resource base. Fishers should definitely be involved in tourism projects, since the local economy and natural resource base are integrally linked. The local economy, development thereof and who receives the benefits needs to continue to be a primary consideration in terms of the management of negative impact from marine tourism. This document supports the improved management of marine tourism to the benefit all user groups, aims to reduce conflicts and support sustainable growth of the local economy.

In addition to the recommendations outlined in the Implementation Plan, the following broad recommendations can be made for action for promoting sustainable reef and marine recreation in Watamu.

The governance framework should be strengthened through harmonised policy and legislation, and institutional mandates needs to be implemented by government, ensuring that the tourism sector promotes sustainable and equitable practices that do not impact negatively on sensitive marine ecosystems and species. In addition, stronger enforcement of the laws by government agents is needed, as is greater community involvement in management issues to promote more effective compliance and ensure equitable benefits from the tourism sector. This can be achieved through cooperative agreements (such as the partnership MoU between KWS and WMA), and programmes, targeted communications, awareness campaigns, community events and discussions with decision-makers, to ensure that local voices are heard.

To support greater awareness of the value of the marine resource base, ongoing awareness raising and capacity development efforts are needed. Dissemination and use of the Codes of Conduct/Best Practice for snorkelling, dolphin watching and marine tourism developed by the WMA is critical to promote sustainable marine tourism. Training support would assist the communities to embark on viable and sustainable alternative livelihoods and improve their technical skills. A greater awareness on value of reefs and the important linkages among the different ecosystems and species would improve management and sustainable use of these areas. It is also recommended that the maps produced through the COAST Project are widely disseminated to all user groups within the Demo Site. The maps provide an illustration of the location and sensitivity of the marine environment and could help to improve general understanding of the complexity of that environment and the need for more sustainable marine tourism activities.

As mentioned in Section 6 above, from the reef assessment and mapping and the monitoring for specific impacts (i.e. tourism activities) a number of recommendations were outlined for different aspects of tourism management. These include:

- **Boat Operator Training Recommendations**

- i. Ensure that boat operators are trained regularly in sustainable tourism techniques and that materials supplemental to the training is made available to the participating boat operators; and
- ii. Regular (fortnightly or monthly) meetings are hosted to support the implementation of the training teachings.

- **Snorkeler Behaviour Recommendations**

- i. KWS rangers should actively communicate to snorkelling clients and guides that they must avoid touching or trampling on the reef substrate and to avoid extremely shallow reef areas;
- ii. Snorkel guides should be encouraged to actively lead their clients in the water, based on techniques taught in the training;
- iii. As part of the KWS Strategic Adaptive Management (SAM) Program monitoring activities, program rangers should be trained to conduct surveys of snorkelling clients and guides to determine the effects of the training workshop. These surveys should include the monitoring of the following behaviours: a) Alive Intentional (contacts with foot or hand on living

- substrate through trampling or holding. Examples include grabbing of substrate, steadying oneself, pushing oneself away from substrate, standing on substrate and laying on substrate.); and b) Accidental (when any part of a snorkeler's body or fins or camera etc. comes into contact with living substrate that the individual did not plan or was unaware of.); and
- iv. Three types of monitoring observations can be made on snorkelers and their behaviour in the marine park, and of the quality of the experience that they had: a) Questionnaires completed by a sample of tourists after their trip; b) Observations above-water on the number of boats, number of swimmers/snorkelers, and incidence of fish feeding; and c) Observations underwater on contacts between snorkelers and the reef.
- **Coral Reef Damage Recommendations**
    - i. KWS SAM rangers should use the monitoring approach of a 20m x 1m belt transect that is laid across a reef and used to record all hard coral colonies. The following aspect must also be recorded: a) Identify corals to genus level; b) Count the normal and impacted corals; and c) Collect photos of the different types of damage to help assure consistency among rangers.

#### **Tourism use of Rock pools/Intertidal Platforms Recommendations**

- i. Hotels and KWS marketing should promote sustainable rock pool tourism;
- ii. Awareness on pro-environment behaviours among guides and tourists is needed;
- iii. Strict enforcement of park regulations should be carried out at the rock pools; and
- iv. Monitoring observations should also be made on: a) the number of tourists and guides in the rock pools and their interaction with the environment; and b) Detailed baseline data for the target species, including the status of target species. KWS rangers should be trained on identification of the major target species at the rock pools, which can be used as indicators. KWS rangers should apply a monitoring protocol using random quadrats located by a coordinate system.

In addition to the above recommendations indicators are needed that reflect the above mentioned recommendations and that can be incorporated into the KWS SAM adaptive management programme for monitoring of wider marine and coastal environmental health.

## **7.6 Future of Version 1 Document**

This document, Version 1, must be recognised as a working document in progress. In addition to ongoing M&E of the actions outlined in the Implementation Plan, it is proposed that this document should be reviewed comprehensively after five years so that new data, information, statistics, etc. are incorporated. The review of this Version 1 should be done by the management entity that will take responsibility for continuing activities emerging from the COAST Project following the closure of the project in June 2014.

## References

- Becker, E 2013.** Overbooked: The Global Business of Travel and Tourism. Simon & Schuster, 466pp.
- Coastal Ocean Research Development in the Indian Ocean (CORDIO). 2009.** Coral Reef Resilience Assessments in Malindi and Watamu Marine Parks and Reserve. Unpublished Report.
- Cowburn, B., Smith, J., Sluka, R.D., Mohammed M.O.S.M., 2013.** Impact of snorkelling on marine habitats and tourism industry of Watamu Marine National Park. A Rocha Kenya Occasional Research Report No. 26.
- Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP). 2001.** A Sea of Troubles. GESAMP Reports and Studies No. 70. IMO. London: 35pp.
- Kenya Marine Fisheries Research Institution (KEMFRI), 2011.** Policy and governance assessment of coastal and marine resource sectors in Kenya in the framework of large marine ecosystems. Report for the ASCLME.
- Kenya Wildlife Service (KWS), 2013.** Draft Management Plan for the Malindi/Watamu Marine Conservation Area (MWMCA) (2011-2021).
- McClanahan T. R., Mwangi S., Muthiga N. A. 2005.** Management of the Kenyan coast. *Ocean and Coastal Management* 48: 901-931.
- Muthiga, N. and Weru, S. 2002.** Status and Management of Marine protected Areas in Kenya: A case study of the Malindi-Watamu MPA complex. KWS report.
- O'Malley MP, Lee-Brooks K, Medd HB., 2013** The Global Economic Impact of Manta Ray Watching Tourism. *PLoS ONE* 8(5): e65051. doi:10.1371/journal.pone.0065051.
- The Market Research Group, 2007.** The Purbeck Section of the Dorset & East Devon World Heritage Site Carrying Capacity Evaluation Report. Prepared for the World Heritage Steering Group, the Purbeck Heritage Committee and the Dorset AONB. Bournemouth University. Pg. 127.
- The Tourism Strategy Company. 2014.** Tourism Growth Strategy For Inhambane Province, Mozambique. Internet material: <http://www.tourismstratco.com>. Accessed March 30, 2014.
- United Nations World Tourism Organisation (UNWTO), 2013a.** Sustainable Tourism Governance and Management in Coastal Areas of Africa.
- United Nations World Tourism Organisation (UNWTO), 2013b.** Action Planning and Supporting Activity for Sustainable Tourism Governance and Management in Coastal Areas: Kenya. Internet material: [www.coast.iwlearn.org](http://www.coast.iwlearn.org). Accessed January 30, 2014.

## Annex 1: List of Guest Houses, Lodges and Hotels in Watamu

S/No	Name of Establishment	Location	No Of Beds
1	Ocean Beach Hotel	Watamu	7
2	Jacaranda Beach Resort	Watamu	340
3	Giriama Lodge	Watamu	6
4	Dante Hotel	Watamu	5
5	Miami Guest House	Watamu	10
6	Temple Point Village	Watamu	200
7	Bustani Ya Eden	Watamu	5
8	Beachview Guest House	Watamu	8
9	Crystal Bay Resort	Watamu	120
10	Twiga Beach Resort	Watamu	23
11	Eden Village Beach	Watamu	140
12	Arabuko Jamii Villas	Gede	7
13	Ocean Sports Hotel	Mida Creek	30
14	Hemmingways Hotel	Watamu	140
15	Aquarius Hotel	Watamu	100
16	Mumba Guest House	Watamu	4
46	Marijani Holiday Resort	Watamu	16
17	Villa Veronica	Watamu	9
18	Ora Resort Kenya Ltd	Watamu	40
19	Hotel Barracuda Inn	Watamu	174
20	Malob Masai Lodge	Watamu	6
21	Watamu Bluebay Village	Mida Creek	230
22	Scuba Diving	Timboni	22
23	Marina Hotel	Gede	8
24	Lucky Guest House	Watamu	3
25	Sunpalm Beach Hotel	Watamu	66
26	Mercy Guest House	Watamu	6
27	Igirasoli Resort Cottages	Casuarina	20
28	Juakali Guest House	Watamu	5
29	Lonno Lodge	Watamu	18
30	Azela Management Ltd	Timboni	9
31	Villas Watamu	Watamu	26
32	Mawe Resort	Watamu	20
33	Garoda Resort	Dongokundu	130
34	Krabella Cottages	Watamu	7
35	Royal Gede Resort	Gede	30
36	Kitsapu Hotel	Gede	5
37	Watamu Adventist Beach Resort	Watamu	86
38	Mama Diwani Guest House	Watamu	4
39	Giriama Residence	Watamu	15
40	Cacchumbari Villas	Watamu	10
41	Mida Ecocamp	Gede	6
42	Alba Club Sun Palm	Watamu	39
43	Jambo House Bed \$Breakfast	Watamu	4

## Annex 2: DSMC and Tech Team Members

### DSMC Members

Name	Organisation	Acronym	Type	Contact	Email
Elcah Nafula	Voice of Watamu Women Group	VWWG	CBO	+ 254 711 957 975	<a href="mailto:elcahnafula@gmail.com">elcahnafula@gmail.com</a>
Benjamin Karisa	Mida Creek Conservation Community group	MCCC	CBO	+ 254 718 734 367	<a href="mailto:ben2karisa@gmail.com">ben2karisa@gmail.com</a>
Hussein Mwasimba	Local Government Authority Malindi	LGA - Malindi	Gov.	+ 254 722 852 717	<a href="mailto:husseinmwasimba@yahoo.com">husseinmwasimba@yahoo.com</a>
Blessingtone Maghanga	Kenya Forest Service	KFS	Gov.	+ 254 737 536 364	<a href="mailto:mblessingtone@yahoo.com">mblessingtone@yahoo.com</a>
Lynn Njuguna	Kenya Wildlife Service	KWS	Gov.	+ 254 736 231 486	<a href="mailto:njerilynn@hotmail.com">njerilynn@hotmail.com</a>
Justin Kitsao	Watamu Safari Sellers Association	WSSA	CBO	+ 254 716 284 083	<a href="mailto:justinkitsao@yahoo.com">justinkitsao@yahoo.com</a>
Steve Trott (Chairman)	Watamu Marine Association	WMA	NGO	+ 254 721 275 818	<a href="mailto:stevetrott@watamu.biz">stevetrott@watamu.biz</a>
Rachael Oman	Local Ocean Trust/Watamu Turtle Watch	WTW/L OT	NGO	+ 254 708 206 262	<a href="mailto:info@watamuturtles.com">info@watamuturtles.com</a>
Stephen Musee	Ministry of Tourism	MoT	Gov.	+ 254 712 279 692	<a href="mailto:smalinga2002@yahoo.com">smalinga2002@yahoo.com</a>
Edward Mwamuye	Community Based Environmental Organisation	COBEC	CBO	+ 254 720 999 904	<a href="mailto:cobecnet@gmail.com">cobecnet@gmail.com</a>
Ken Ombok	Turtle Bay Beach Club	TBBC	Private	+ 254 720 825 923	<a href="mailto:community@turtlebay.co.ke">community@turtlebay.co.ke</a>
Benjamin Cowburn	A Rocha Kenya	A Rocha Kenya	NGO	+ 254 706 384 285	<a href="mailto:benjamindcowburn@gmail.com">benjamindcowburn@gmail.com</a>
Fazal Omar	Watamu Association of Boat Operators	WABO	CBO	+ 254 728 602 030	<a href="mailto:wabo_secretary@yahoo.co.uk">wabo_secretary@yahoo.co.uk</a>
Arafa Baya	Nature Kenya	NK	NGO	+ 254 733 626 573	<a href="mailto:asfnature@yahoo.com">asfnature@yahoo.com</a>

### Tech Team Members

Name	Organisation	Acronym	Type	Contact	Email
Blessingtone Maghanga	Kenya Forest Service	KFS	Gov.	+ 254 737 536 364	<a href="mailto:mblessingtone@yahoo.com">mblessingtone@yahoo.com</a>
Lynn Njuguna (Secretary)	Kenya Wildlife Service	KWS	Gov.	+ 254 736 231 486	<a href="mailto:njerilynn@hotmail.com">njerilynn@hotmail.com</a>
Justin Kitsao	Watamu Safari Sellers Association	WSSA	CBO	+ 254 716 284 083	<a href="mailto:justinkitsao@yahoo.com">justinkitsao@yahoo.com</a>
Steve Trott (Chairman)	Watamu Marine Association	WMA	NGO	+ 254 721 275 818	<a href="mailto:stevetrott@watamu.biz">stevetrott@watamu.biz</a>
Edward Mwamuye	Community Based Environmental Organisation	COBEC	CBO	+ 254 720 999 904	<a href="mailto:cobecnet@gmail.com">cobecnet@gmail.com</a>
Ken Ombok	Turtle Bay Beach Club	TBBC	Private	+ 254 720 825 923	<a href="mailto:community@turtlebay.co.ke">community@turtlebay.co.ke</a>

### Annex 3: Stakeholders Consulted

Title	Name	Surname	COAST Role	Institutional Address
<b>Kenya DPC/FPC</b>				
Ms.	Lilian	Ayimba	Regional tourism officer	Ministry of Tourism
Mr.	Baraza	Wangwe	Environment Focal Point	National Environment Management Authority (NEMA)
Mr.	Stephen	Katua	Environment Focal Point	NEMA, Kenya
Mr.	Samuel	Nganga	DPC	NEMA, Head-Coastal, Marine & Freshwater Sub-Dept. Nairobi, Kenya
<b>Kenya Tech Team</b>				
Mr.	Steve	Trott	Chairman	Watamu Marine Association
Mr.	Justin	Kitsao		Watamu Safari Sellers Association
Mr.	Edward	Mwamuye		Community Based Environment Conservation (COBEC)
Mr.	Ken	Ombok		Turtle Bay Beach Club
Ms.	Lynn	Njuguna	Secretary	Kenya Wild life Service
Mr.	Blessingtone	Maghanga		Kenya Forest Service
<b>Kenya DSMC Team</b>				
Ms.	Elcah	Nafula		Voice of Watamu Women Group
Mr.	Benjamin	Karisa		Mida Creek Conservation Community Group
Mr.	Hussein	Mwasimba		Local Government Authority Malindi
Mr.	Blessingtone	Maghanga		Kenya Forest Service
Ms.	Lynn	Njuguna	Secretary	Kenya Wild life Service
Mr.	Justin	Kitsao		Watamu Safari Sellers Association
Mr.	Steve	Trott	Chairman	Watamu Marine Association
Ms.	Rachael	Oman		Local Ocean Trust/Watamu Turtle Watch
Mr.	Stephen	Musee		Ministry of Tourism
Mr.	Edward	Mwamuye		Community Based Environmental Conservation (COBEC)
Mr.	Ken	Ombok	Conservation manager	Turtle Bay Beach Club
Mr.	Benjamin	Cowburn	Researcher	A Rocha Kenya
Mr.	Fazal	Omar		Watamu Association of Boat Operators
Ms.	Arafa	Baya		Nature Kenya
<b>Kenya Dive Operators Contacts</b>				
Mr.	Steve	Curtis	Owner	Ocean Sport Dive Centre
Mrs.	Helen	Curtis	Owner	Ocean Sport Dive Centre
Mr.	Erwin	Steiger	Owner	Turtle Bay Dive Centre
Mr.	Angelo	De Faveria	Owner	Blue Fin Diving

<b>Kenya Hotels/Lodges/Accommodation Contacts</b>				
Mr.	Henry	Kigen		A Rocha Kenya
Ms.	Nancy	Lukohe		Turtle Bay Hotel
Mr.	Gary	Cullen	Managing Director	Hemingways Resort
Mr.	Brian	Lees		Ocean Sports Resort
Ms.	Jana	Röttgers		Temple Point Resort
<b>Kenya Other Contacts</b>				
Mr.	Dickson	Korir	Warden	Kenya Wildlife Service Watamu
Mr.	Chula	Mwangona	Assistant Warden	Kenya Wildlife Service Watamu
Dr.	David	Obura	Coordinator	Coral Ocean Research Development Indian Ocean (CORDIO)
Dr.	Tim	McClanahan	Snr Conservation Zoologist	Wildlife Conservation Society (WCS)
Dr.	Nyawira	Muthiga	Director Marine Program	Wildlife Conservation Society (WCS)
Dr.	Melckzedeck	Osore	Research Scientist	Kenya Forestry Research Institute (KEFRI)
Mrs.	Juliet	Karisa	Research Assistant	Kenya Marine Fisheries Research Institute (KMFRI)



