

PART 2

THE PLAN

7 MANAGEMENT OBJECTIVES

Management objectives were defined in three broad groups – administration, conservation and use (both for visitors and local communities). In a MZP the objectives primarily focus on the issues pertaining to visitor use and a strategy for the development of tourism facilities inside the park. In addition, it was necessary to define objectives for other functions needed to ensure that the park is managed effectively. These objectives – and others – will be addressed more fully during the preparation of a general management plan in the future.

7.1 ADMINISTRATION

1. Ensure that staffing levels, expertise and motivation are adequate
2. Provide appropriate infrastructure and equipment for effective management of the area
3. Improve communications at Village, District and Regional levels

7.2 CONSERVATION

1. Protect the natural resources from illegal use
2. Ensure that legal use of natural resources is sustainable
3. Develop an effective water management plan which rationalises the use of dams
4. Demarcate boundaries clearly
5. Develop and implement an appropriate fire management plan
6. Enhance monitoring and research
7. Ensure that there is an effective MOU regarding access to the salt extraction site and control of activities that will impact on the park
8. Ensure that Bagamoyo-Pangani main road does not detract from the resource values of the area

7.3 USE (VISITOR AND LOCAL COMMUNITIES)

Visitors

1. Ensure that all new permanent tourism facilities are developed outside the park boundaries (in keeping with TANAPA directives) and inform the villagers of their rights in this process
2. Ensure that roads, airstrips and ferries are of a sufficient standard to allow year-round tourist access to at least 50% of the Saadani high use zone roads.
3. Encourage a diversification of visitor activities (walking, boating, diving etc) and ensure that the legal and administrative structures are in place to allow this.
4. Ensure that visitor use is appropriate (certain high profile activities to be prohibited)
5. Ensure that the quality of the “visitor experience” remains high and that the Park does not become a crowded “day visit” type of experience.
6. Ensure that tourism facilities and services are appropriate (driver/guides to be “registered”) and information about them is disseminated both inside and outside Tanzania (advertising).

Local Communities

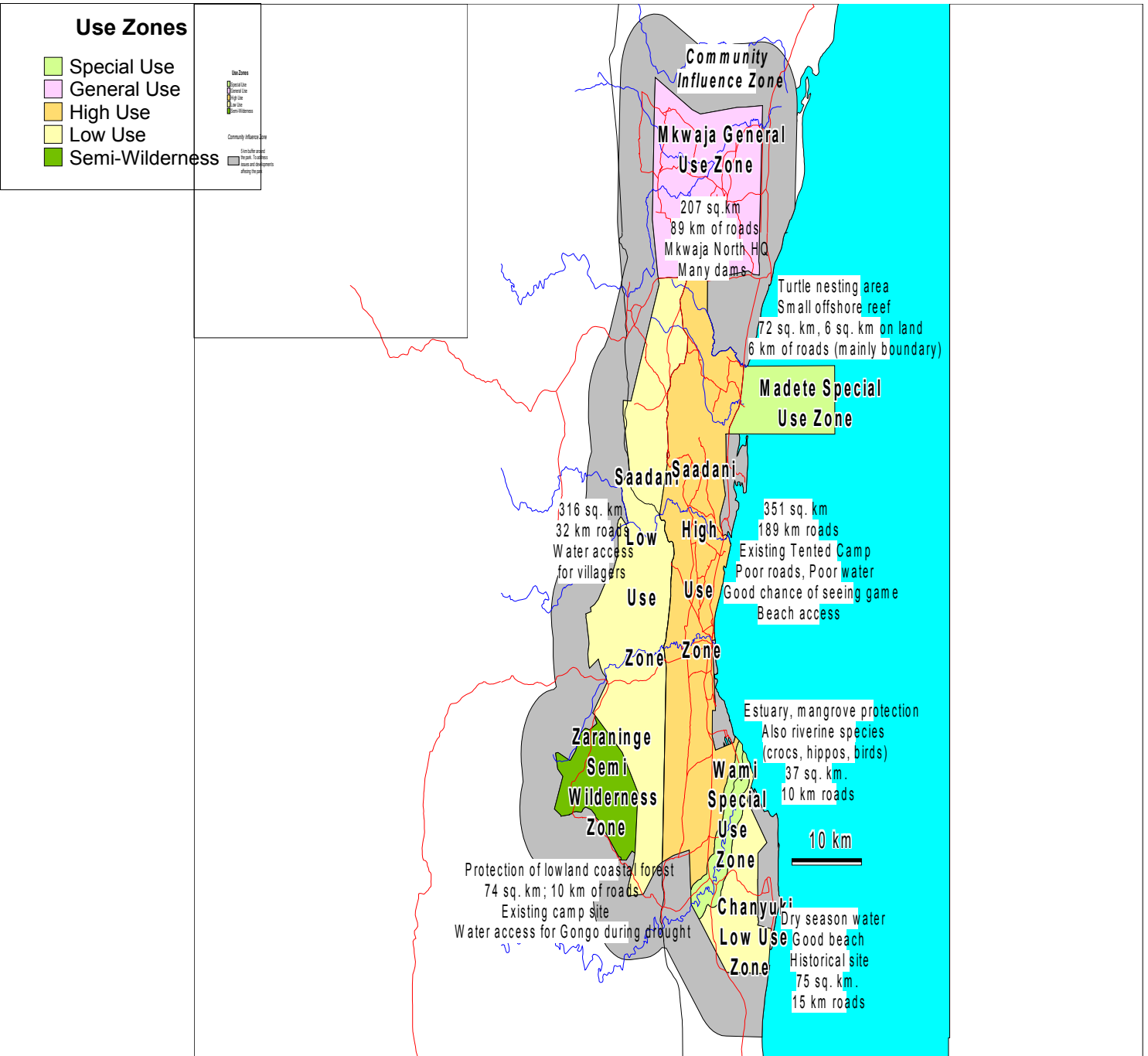
1. Ensure that an effective CCS programme is developed and implemented.
2. Improve the quality of life in the buffer areas by encouraging and advising communities on tourism developments with their areas
3. Assist in developing WMA's outside the Reserve in line with the Wildlife Policy of Tanzania, if the communities so wish.
4. Enable local people to benefit from the areas' natural resources by allowing controlled and regulated access. To this end develop an appropriate MOU.

8 MANAGEMENT ZONE PLAN

8.1 OVERVIEW

The Saadani NP was divided into seven zones for management purposes. These include semi-wilderness, low use, special use, high use and general use zones. In addition, a community influence zone was designated for areas outside the park (Figure 16).

Figure 16: Management Zones for the Saadani National Park



8.2 ZONING RATIONALE

The following aspects were considered when defining zones for management and use in the Saadani NP.

- Protection of exceptional resource values
- Constraints imposed by the landscape, physical features and ecological determinants
- Provision of a diverse range of appropriate visitor experiences – subject to the desired management objectives and resource limitations
- Prohibition of uses and activities that damage the resources
- Prohibition of uses and activities that present the management authorities with an unacceptable burden to police or control.
- Controls and limitations to ensure appropriate development within the park (levels, types and placement)
- Demand from outside sources for use of the park resources and infrastructure
- Strict adherence to the National Policies for National Parks in Tanzania

The broad rationale for the zones defined are given in Table 7.

Table 7: Rationale for the zones in the Saadani NP

ZONE	REASON
Saadani Low Use	Refuge for wildlife from high use zone Presence of Sable antelope
Saadani High Use	Has tourism facilities and tourism is already taking place. Potential for more tourism and activities. The area can be accessed by air, rail, road and sea Many attractions – both terrestrial and marine Big variety of plants and animals
Mkwaja General Use	The area has a lot buildings and facilities in place and is easily accessible by road, air and (sea). Habitat shows signs of recovery.
Wami Special Use	Wami river and estuary which is important for aquatic species. It is also the interface between the marine and freshwater environments
Madete Special Use	Only turtle nesting area on the northern Tanzanian coastline. This area needs special protection.
Zaranninge Semi-Wilderness	Largest lowland coastal forest remaining on the east African coastline. High degree of endemism Forest is not much disturbed by man Has some buildings and roads Large natural wetland
Chanyuki Low Use	Dry season water Good beach Forests, possible elephants
Community Influence Zone	Explore the possibilities for co-operation between developers and TANAPA Ensure that communities benefit from the park and its resources

Development zones are not specifically defined but rather development nodes are one of the activities permitted in certain zones. These vary from ranger posts to headquarters.

9 MANAGEMENT ZONE PLAN ACTIONS

9.1 PARKWIDE

TANAPA has established a number of general regulations for activities and developments on the land under its custodianship. This includes the following (see appendices).

- National Policies for National Parks
- Roads
- General Park Regulations
- Overnight Accommodations Regulations
- Campsite Regulations

These specify the regulations for parkwide activities and developments.

Relevant to this management zone plan are the policies of TANAPA to

- Prohibit all high profile activities
- Prohibit all consumptive use of resources
- Allow “fly-camping” activities
- Accommodation facilities to be outside the park where possible. Privileges would be given to operators based outside the park who worked with TANAPA and who demonstrated a strong community orientated approach to their business.

In addition, the planning team identified the following parkwide activities as being of special importance (Table 8). It must be remembered that the development of the Saadani NP is at an early stage (e.g. the area still needs to be gazetted) and therefore it had to be assumed that some activities associated with the general running of a protected area would occur.

Table 8: Parkwide activities for the Saadani National Park

Aspect	Activities
Poverty	<ul style="list-style-type: none"> • Develop a long-term programme to deal with poverty • Establish a revolving fund for small groups • Educate and encourage local communities on ways to carry out cultural tourism • Collaborate with local communities in improving social services (schools, dispensary, water) • Saadani NP tour operators should give local communities priority when employing staff • Areas for small businesses should be set aside near the entry points and tourist accommodation facilities
Communications	<ul style="list-style-type: none"> • Improve the major roads in the Saadani NP to all-weather roads • Rehabilitation and construction of the park road should be done in accordance with the TANAPA road improvement guidelines • Improve airstrips at Saadani and Mkwaja • Improve the radio call communications for the park operations • Encourage the establishment of a telephone in Saadani • Establish environmental committees in surrounding local communities
Outreach	<ul style="list-style-type: none"> • Provide environmental education and raise awareness on the importance of conservation
Problem Animals	<ul style="list-style-type: none"> • Assist villagers around the park to prepare local land use plans • Plant tree species (michongoma) that will play a role as a fence in blocking problem animals
Poaching	<ul style="list-style-type: none"> • Improve anti-poaching operations • Provide environmental education
Water Supply	<ul style="list-style-type: none"> • Assess water requirements both inside and outside the park. Supply or provide water according to the needs assessment

Aspect	Activities
Wildfires	<ul style="list-style-type: none"> • Prepare a long-term fire management plan <ul style="list-style-type: none"> – Put in fire breaks – Provide education to the local communities on the impact of wildfires • Provide fire-fighting equipment • Signs prohibiting fires
Tourism	<ul style="list-style-type: none"> • DALP, The MZP and LAU should be used to guide investors and speed up the investment process • Erect appropriate signage in the park
Equipment and Facilities	<ul style="list-style-type: none"> • A study should be carried out to identify the type and amount of equipment and facilities needed for the smooth operation of the park
Information	<ul style="list-style-type: none"> • Develop and implement an information management system
Boundaries	<ul style="list-style-type: none"> • Local communities should be informed about what is going on with regard to the extension of the park boundary • Demarcate the boundary clearly

9.2 ZARANINGE SEMI-WILDERNESS ZONE

9.2.1 Zone Description

The Zaraninge Semi-Wilderness Zone, as currently defined, covers the entire Zaraninge lowland coastal forest and much of the dense woodland that is associated with this forest. The area is 74 km² and includes 10 kilometres of road inside the zone (and the forest). The main access road runs through the villages of Gongo and Tumbilini.

9.2.2 Permitted Activities and Limits of Acceptable Use

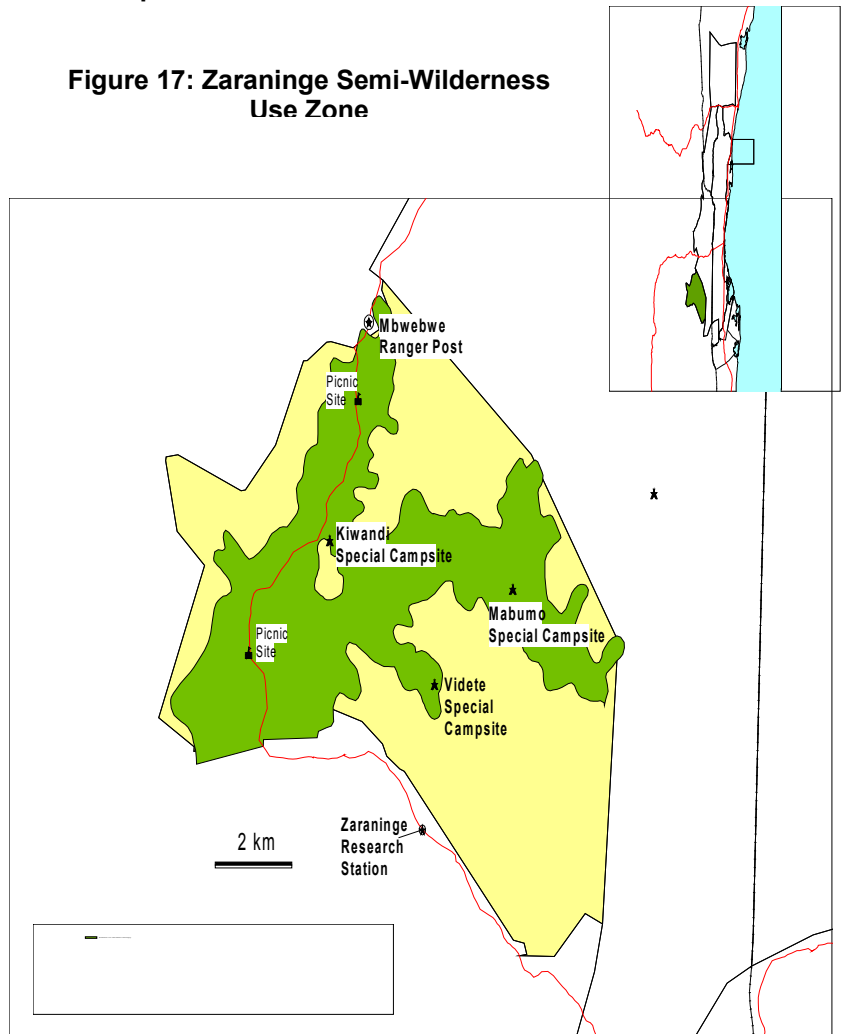
Permitted Activities
Eco-tourism activities
Transit traffic
Special campsites
Picnic sites
Water collection in special circumstances
Walking trails
Specifically NOT Permitted
Permanent developments

Tourist Accommodation
3 Special Campsites
(Kiwandi, Videte, Mabumo)
2 Picnic sites (along road)

Visitors
3 groups per day of 10 people (overnighting)

Developments
Ranger Post (Existing)
Research station (WWF Zaraninge offices)

Figure 17: Zaraninge Semi-Wilderness Use Zone



As a matter of urgency TANAPA should investigate ways to provide water to villagers from the Kiwandi swamp or an alternative source. The current practice of unlimited access is not satisfactory.

NB: Site locations are approximate pending further information

9.3 WAMI SPECIAL USE ZONE

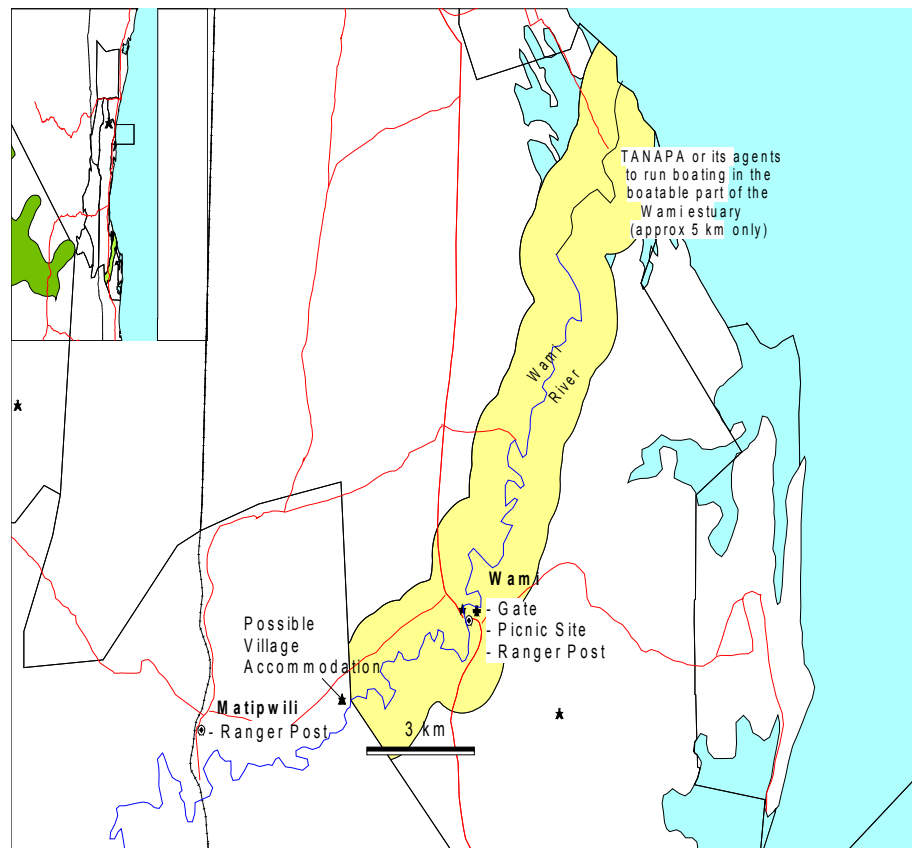
9.3.1 Zone Description

The Wami Special Use Zone is effectively a one kilometre buffer around the Wami river. The area is approximately 39 km² and the main road passes through it. The Wami ferry crossing site is also in this zone. There are approximately 10 kilometres of roads in this zone, including a road leading to the water extraction site for Sea Salt Ltd. Most tourist pressure on this area occurs in the last 5km before the river enters the sea. In addition, game viewing is best at low tide which further concentrates this pressure.

9.3.2 Permitted Activities and Limits of Acceptable Use

Figure 18: Wami Special Use Zone

Permitted Activities
Boating
Walking safaris
Pump station (Sea Salt and Tanapa)
Specifically NOT Permitted
Camping (and fly camping)
Walking downstream of the boat launching site in the lower Wami
Boat access via the ocean
Driving away from designated roads
Tourist Accommodation
Picnic Site (Ferry)
Visitors
Tanapa to “run” boating activities on the Wami. All use will be through Tanapa or its agents. Maximum of two boats but preferably one only. A booking system will need to be established to ensure fair and equitable use of this resource
Developments
Ranger Post (Ferry)
Gate (Ferry)



NB: Site locations are approximate pending further information

9.4 MADETE SPECIAL USE ZONE

9.4.1 Zone Description

The Madete Special Use Zone is approximately 72 km² and includes about 66 km² of the Indian Ocean. Roads (except for the beach access road) are limited to the boundary road – approximately 6 kilometres. The site is specifically to provide special protection for the green turtle nesting site at Madete beach, but the presence of a small offshore reef is an added attraction.

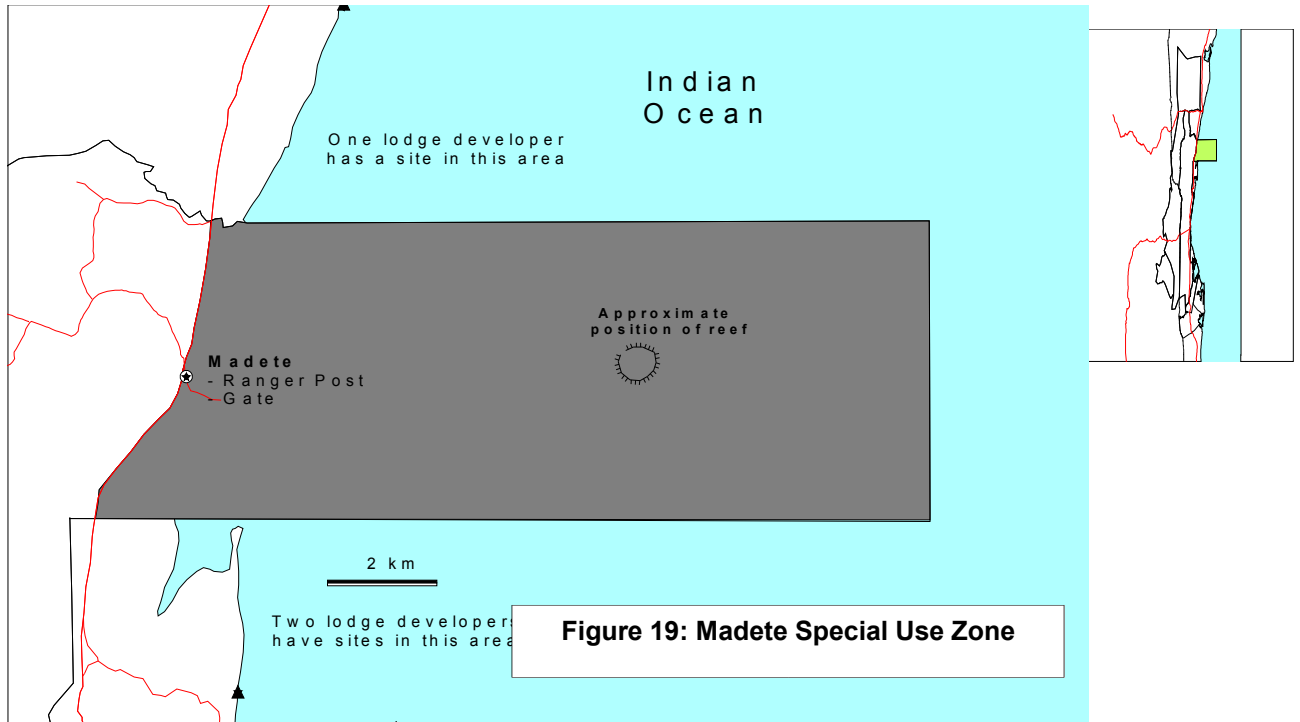


Figure 19: Madete Special Use Zone

9.4.2 Permitted Activities and Limits of Acceptable Use

Beach Zone	Reef Zone (Booking system needed)
Permitted Activities	Permitted Activities
None	Boating; Swimming Diving, Snorkelling
Specifically NOT Permitted	Specifically NOT Permitted
Driving; Camping Walking; Boats on beach	Fires

Accommodation	Developments
None	None
Developments	
Ranger Post/Gate (Existing on boundary)	

It is important that a full study of the reef resources be carried out. This should include recommendations for “best practice” to balance use and conservation.

A detailed study on the use of the beach by turtles should be carried out. Until this is done the beach should be “off-limits” to visitors. Picnic sites can be established on village land, if required.

9.5 SAADANI LOW USE ZONE

9.5.1 Zone Description

The Saadani Low Use Zone includes much of the western part of the park. This land is on higher ground and has fewer developments than the land nearer the coast. The area is 316 km² and has 32 kilometres of roads at present. The railway line forms the eastern boundary but also cuts through the northern part of the zone.

9.5.2 Permitted Activities and Limits to Acceptable Use

Figure 20: Saadani Low Use Zone

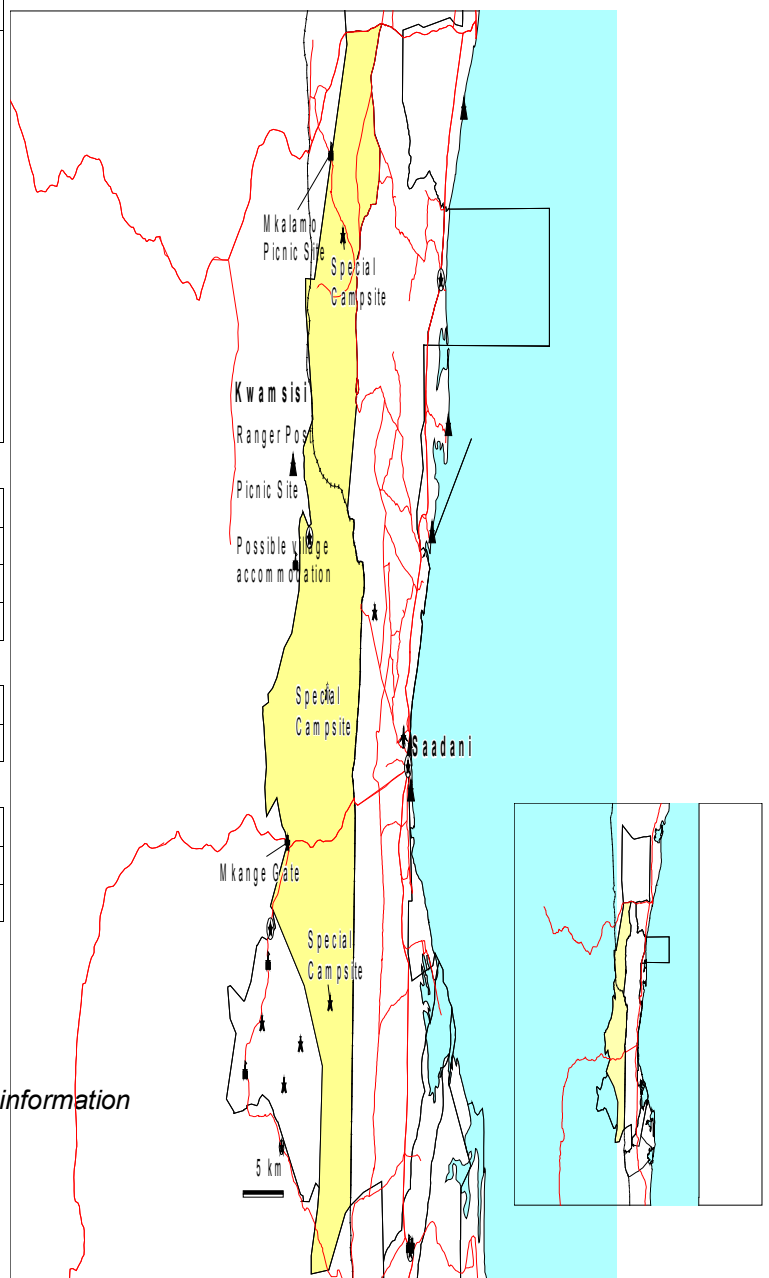
Permitted Activities
Transit traffic
Limited permanent tourism facilities
Game viewing on designated roads only
Designated picnic sites
Walking safaris
Access to water
Traditional worship
Designated roads
Artificial water points
Fly camping
Special campsites

Tourist Accommodation
Possible village accommodation (outside)
3 Special campsites
2 Picnic sites (Mkaramo and Kwamsisi)

Visitors
5 cars/Day

Developments
Ranger Post
Gate (Mkange)

NB: Site locations are approximate pending further information



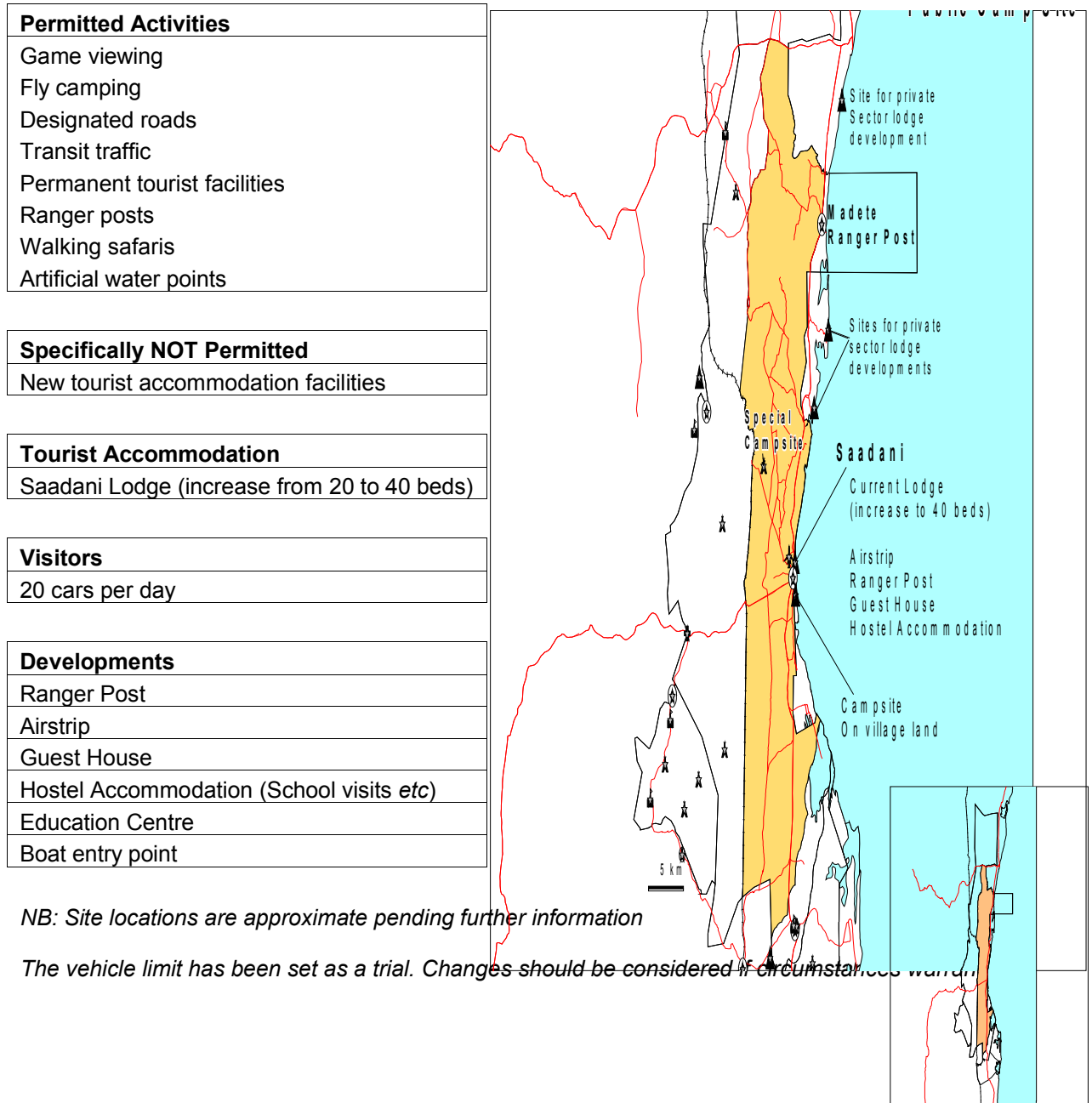
9.6 SAADANI HIGH USE ZONE

9.6.1 Zone Description

The Saadani High Use Zone is effectively the “coastal zone” of the park. This area is 351 km² in extent and has approximately 190 kilometres of roads. Most of the current tourism is carried out here and there is a good chance of seeing game.

9.6.2 Permitted Activities and Limits to Acceptable Use

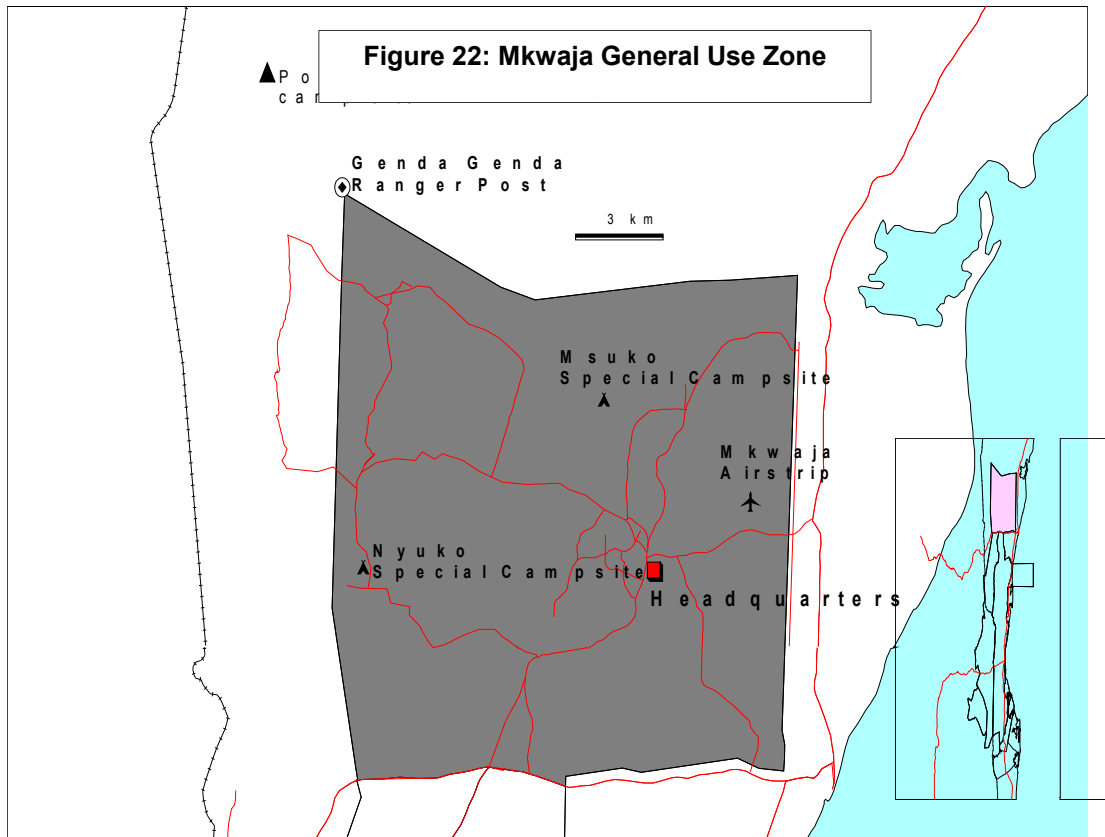
Figure 21: Saadani High Use Zone



9.7 MKWAJA GENERAL USE ZONE

9.7.1 Zone Description

The Mkwaja General Use Zone is the area previously known as Mkwaja North. The area is 207 km² and has 89 kilometres of roads. It is relatively well developed as it was a cattle ranch. The most obvious of these developments are the headquarters complex, the extensive road system, an airstrip and at least 25 dams. However, the vegetation has also been subject to considerable modification in the past to accommodate cattle, and probably more importantly, to try and control the tsetse fly. Therefore large parts of the area constitute modified vegetation which in various stages of recovery.



NB: Site locations are approximate pending further information

9.7.2 Permitted Activities and Limits to Acceptable Use

Permitted Activities	Accommodation
Game viewing Fly camping Designated roads Permanent tourist facilities Ranger posts Walking safaris Artificial water points	2 Special Campsites (max 16 people each) (Msuko and Nyika)
Developments	
Headquarters (Mkwaja)	Airstrip
Ranger Post (Genda Genda)	

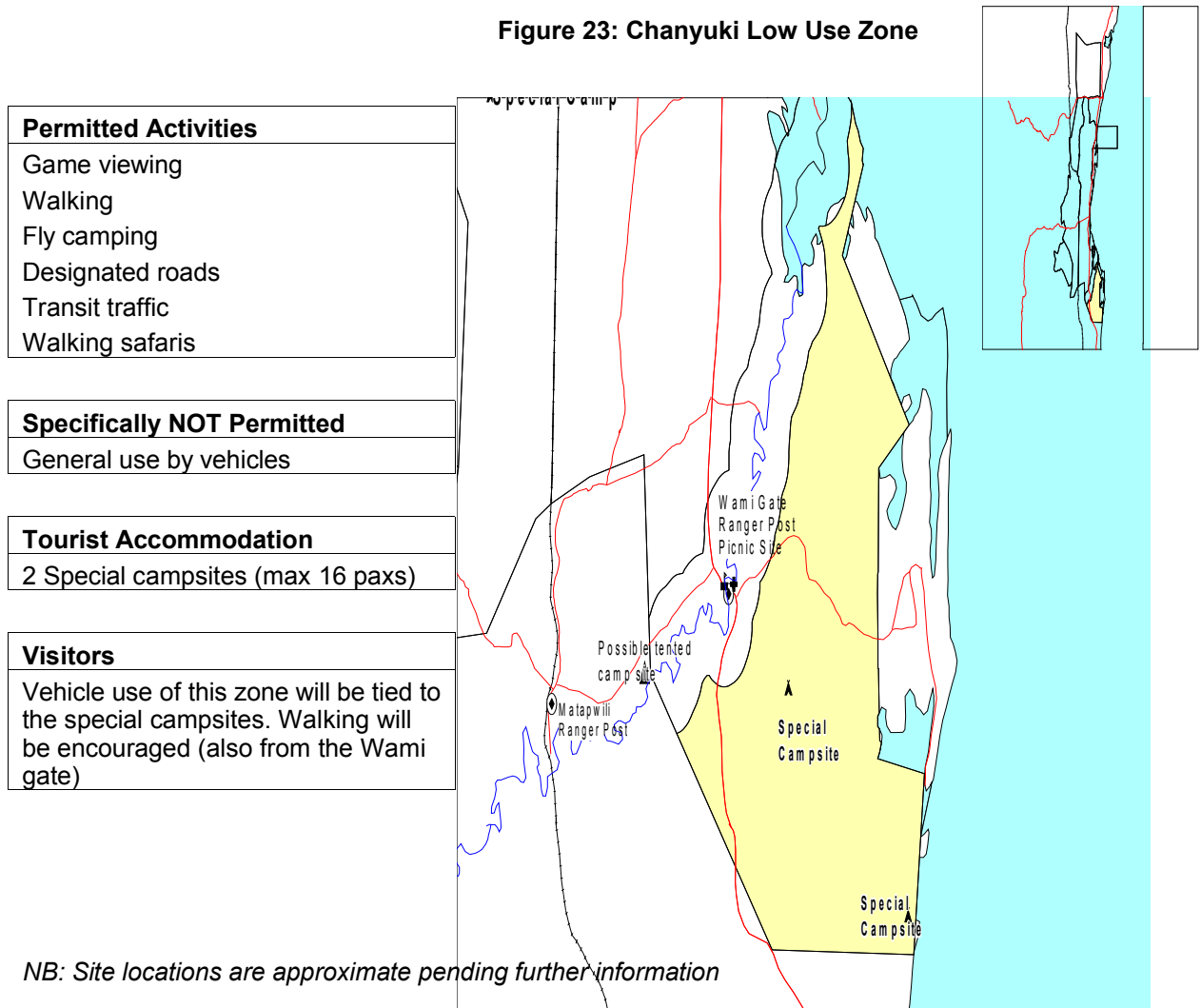
9.8 CHANYUKI LOW USE ZONE

9.8.1 Zone Description

The Chanyuki Low Use Zone is land annexed to the national park from the Razaba Ranch. The area is 75 km² in extent and has approximately 15 km of roads at present. The vegetation consists of fairly dense bush and extends from the main road down to the coast. One of its main features is that it contains some permanent pools which have provided refuge to hippos from the Wami river in years of low water. Other attractions include good beaches, a historical site and the possible presence of elephants.

9.8.2 Permitted Activities and Limits to Acceptable Use

Figure 23: Chanyuki Low Use Zone



9.9 COMMUNITY INFLUENCE ZONE

9.9.1 Zone Description

The Community Influence zone does not have specific boundaries (although they are indicated on the map below for a broad overview). Rather, it takes into account all developments close enough to affect the operation and use of the park. The map below was created with a 5 kilometre buffer around the current park boundaries.

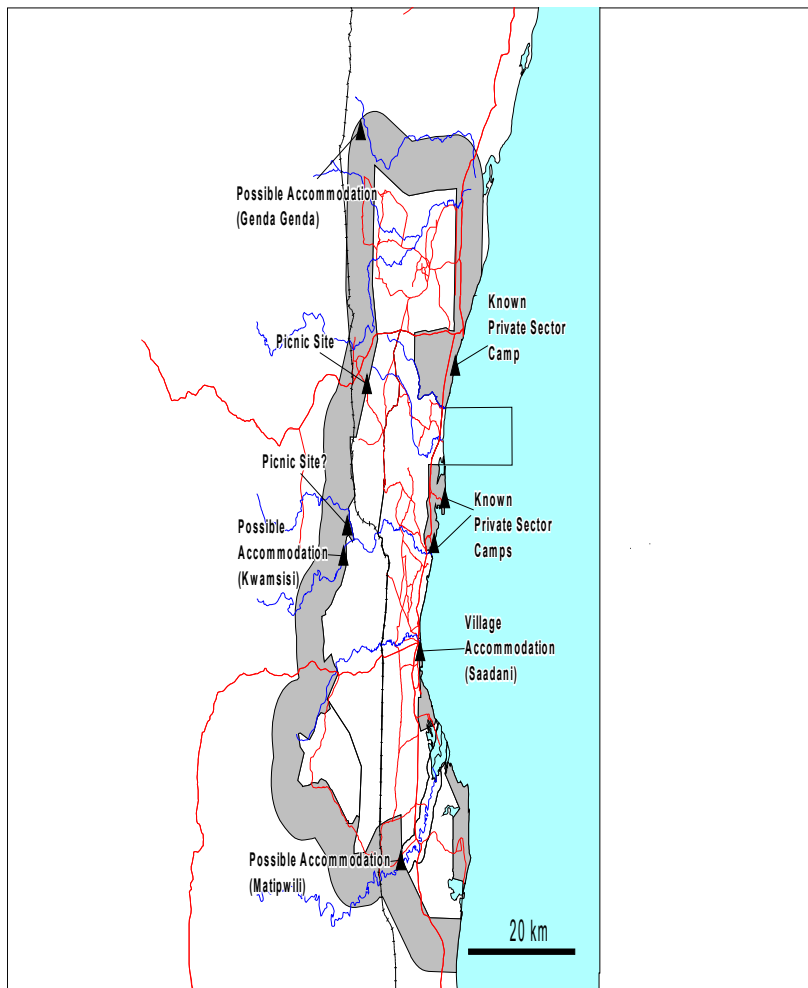
9.9.2 Permitted Activities and Limits to Acceptable Use

This zone was created for the following reasons:

1. To encourage communities to participate in, and benefit from, tourism opportunities in and adjacent to the park.
2. To enable TANAPA to explore ways to work with developers in areas adjacent to the national park. These developers could be communities, their agents or the private sector.

Special access to the park and other privileges will be considered on a case-by-case basis. In addition the results of a study on the rights of communities and other developers is expected soon and will help to guide the process.

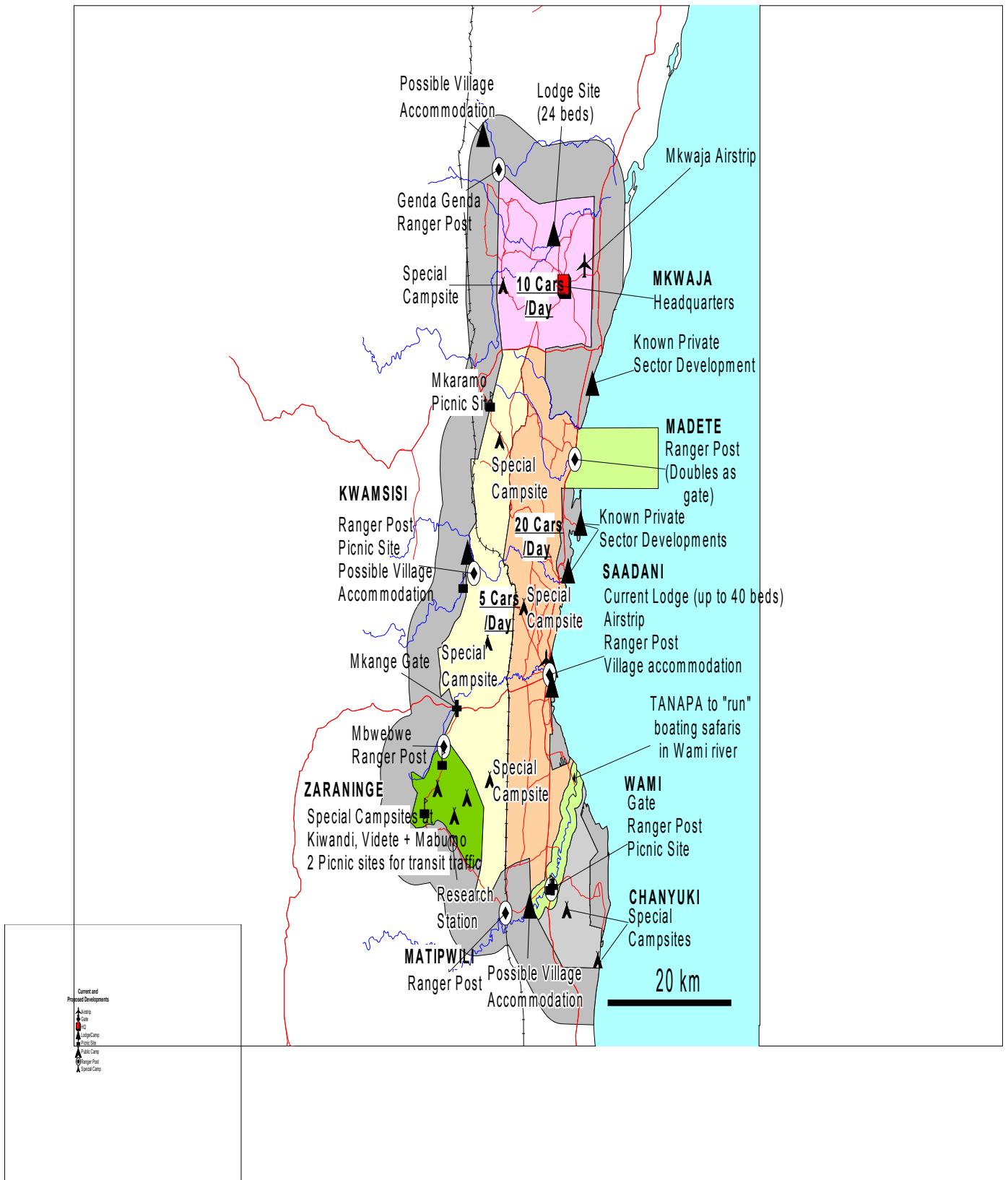
Figure 24: “Community Influence Zone”



9.10 SUMMARY

All developments proposed for the individual zones, and sometimes the adjacent areas, are shown in Figure 25.

Figure 25: Summary of proposed developments for Saadani NP



PART 3

ENVIRONMENTAL IMPACT ASSESSMENT

10 INTRODUCTION

An environmental impact assessment (EIA) is part of the accepted procedures leading towards the development of a management zone plan (MZP). It must be noted that this is a general EIA of the plan and its proposed developments, actions and activities. It is not a detailed EIA of these developments and activities - as these are often site specific and need to be carried out at a later stage.

Broadly speaking an EIA is a process for identifying the likely consequences on the bio-physical environment - and for man's health and welfare - of implementing particular activities or developments. The TANAPA definition of environmental impact is a change in condition of the resource caused by a proposed action and this change can be both qualitative or quantitative.

The main purpose of an EIA is to avoid adverse impacts, to maintain, restore and enhance environmental quality where possible and to suggest mitigatory actions for adverse effects. These mitigatory activities should reduce or eliminate the adverse effects and they can either be direct (e.g. design standards, re-vegetation etc) or indirect (e.g. some kind of monitoring activity or research)

In the framework of park planning and implementation EIAs are an ongoing and evolving process. They start generally and then become more specific. For example, they are first carried out at park or reserve level and then become more site-specific towards roads and camps.

The first step is to identify those actions and developments in the MZP that can impact on the environmental and social environment. This is followed by the identification of "impact topics". The possible effects of the actions and developments on the impact topics is then discussed and mitigatory activities suggested where possible.

10.1 SUMMARY OF ACTIONS AND DEVELOPMENTS IN THE MZP

The draft MZP was analysed to generate a summary of management actions and developments that could impact on the biological, physical, social and economic environment in the Saadani NP and surrounding areas. This was divided into two sections:

1. General or "parkwide" actions
2. Those actions resulting directly from the MZP.

These are discussed briefly below.

Firstly, as the development of the Saadani NP is at an early stage (e.g. the area still needs to be gazetted) it had to be assumed that some activities associated with the general running of a protected area would occur. For example, the workshop assumed that the roads would be improved even though (at this stage) there was no indication of which roads would be improved and to what standard. Therefore the EIA statement reflected an assumed improvement in the road network and considered the effects of this on the impact topics (see next section). Many of these actions were generated from the purpose and significance statements of the park (see previous workshops).

Secondly, the actions and developments which would result directly from the implementation of the MZP were listed separately. For example, the zone plan designates special protection zones for sensitive areas (Wami estuary, Madete beach and Zaraninge Forest). This would limit access and use of these areas and would impact on the topics outlined in the next section.

The following table summarises these proposed actions and developments.

Table 9: Proposed actions and developments that are likely to occur in the Saadani NP

General or “Parkwide”	Resulting from MZP
Improved roads and infrastructure <ul style="list-style-type: none"> - To the park - Inside the park 	Special protection for unique areas (Wami, Madete and Zaraninge)
Improved protection	Re-routing of main road
Adequate and experienced staff in place	All new tourism facilities to be outside the park
Adequate equipment	Encourage diversification of tourism activities
Improved relationships with districts and communities	Appropriate visitor use
Improved control and monitoring of legal use of the park (tourism, water natural resources)	Encourage low to medium density tourism
Improve water management	Ensure advertisement of Saadani attractions
Clearly marked boundary	Educate and support communities on tourism options
Improved fire monitoring and management	Increased tourism and revenues
Improved research and monitoring	
CCS programme in place	

10.2 ENVIRONMENTAL IMPACT TOPICS

The environmental and socio-economic topics were developed based on knowledge of the area and also of TANAPA operational procedures. They were as follows:

Biological/Physical	Socio-Economic/Cultural
<ol style="list-style-type: none"> 1. Marine/Coastal resources 2. Vegetation/Soils 3. Wildlife 4. Estuaries 5. Village Enclaves 6. Water Resource 	<ol style="list-style-type: none"> 1. Visitor use/Experience 2. Historical/Archaeological sites 3. Park Revenue 4. Culture 5. Local communities 6. Tourism industry 7. Park operations

A brief description is given below

10.2.1 Biological/Physical

Impact Topic	Brief Description
Marine/Coastal resources	This refers to marine part of the park and the intertidal zone (reefs, fishes, invertebrates etc). In addition it also refers to the green turtle and dolphins. Mangroves are specifically excluded and dealt with under the category of estuaries. Beaches are included here as they are impossible to separate from the marine environment.
Vegetation/Soils	This refers to the vegetation of the park but again excludes mangroves. Savannah, coastal forests, grasslands and thickets are included. It should also be remembered that the park contains a significant number of exotics.
Wildlife	This section refers to all terrestrial wildlife in the park. Marine life (including dolphins and turtles) are excluded. Birds, reptiles, amphibians, freshwater fish, invertebrates <i>etc</i> are included.
Estuaries	The Wami is the most important estuary in the park but reference is also made to other estuarine areas (e.g. Mligaji). Mangroves were specifically discussed here.
Village Enclaves	Owing to the way in which Saadani was created there are several "village enclaves" essentially within the park. These include Saadani itself, Buyuni, Mkwaja, the sea-salt extraction works and an area to the south of the Wami river. The park and the way it is managed will have a considerable effect on these communities and consequently on the environment in these areas.
Water Resources	Surface water is a problem in Mkwaja. In the sections that were used for cattle ranching in the past a number of dams have been constructed, the condition of which is variable. In addition the area affords protection to several locally important catchments and to the final stages of the Wami catchment. Underground sources are not well understood but it is known that there can be problems with quantity and quality for human use.

10.2.2 Socio-Economic/Cultural

Impact Topic	Brief Description
Visitor use/ Experience	Visitor use is expected to increase. In addition, the inclusion of the Wami estuary, the coral reef and Zaraninge forest in the park will greatly enhance the visitor experience.
Historical sites	The area has a number of historical sites and, although most the known sites are outside the park, the management of the park and its attendant tourism will have an effect on these.
Park revenue	Park revenue is expected to increase as more tourists visit the area. But the establishment of facilities and the maintenance of a large ranger force will significantly affect park budgets.
Swahili Culture	Saadani is the centre of the Swahili coast culture and traditional life continues here in many of the villages. Tourism can have considerable negative effects on sensitive local cultures.
Local communities	The effect on local communities in the area will be substantial, given that the area is a new national park. This category is different to that of "Swahili culture". The effects of establishing a national park are already been felt with village land being sold to potential investors. In additional, this impact topic considers communities away from the coastal zone.
Tourism industry	The tourism industry in Saadani is in its infancy with only one existing operation. There is considerable interest in the area owing to its proximity to Dar es Salaam and the effective management of the park can only have a beneficial effect on Tanzania's tourist industry.
Park operations	The area is in the process of being transferred from the Wildlife Division to TANAPA. This will have an effect as the two departments have slightly different management regimes. In addition, the Saadani GR was a low priority area and was managed with less than 20 staff. Once TANAPA is operation the number is expected to be over 60.

11 ENVIRONMENTAL IMPACTS

11.1 INTRODUCTION

The main purpose of an environmental assessment is to identify adverse impacts and to reduce the effect of these impacts on the environment and socio-economic structure of the area. In addition, beneficial effects need to be amplified, if possible. This section begins with a summary of the identified adverse effects. Mitigatory activities for these negative effects are summarised in the next two sections.

- More pressure on beaches and inter-tidal areas from increased numbers of visitors
- Opening of roads will destroy some vegetation.
- Inappropriate fire management plan will lead to thicket formation
- Potential for overgrazing.
- Problems between animals and adjacent communities.
- Localised vegetation destruction at sensitive waterholes.
- Disturbance from visitors, especially in the Wami estuary
- Less access to the park resources.
- More potential for human-wildlife conflicts.
- Conflict between tour operators and villages over limited water resources.
- Limited access to NP
- Destruction of sites through vandalism and excessive use
- Increased expenditure in the short-term. Tanapa will need to improve park facilities considerably.
- Decreased revenue to Tanapa as facilities are outside the NP.
- Erosion of the old way of life.
- Loss of land to investors.
- Villagers “cheated” on land issues.
- Increased expenditure to rehabilitate the park.
- Increased management cost to regulate visitor activities.

11.2 BIOLOGICAL/PHYSICAL IMPACTS

Impact on Marine and Coastal Resources

<i>Description</i>	This refers to marine part of the park and the inter-tidal zone (reefs, fishes, invertebrates etc). In addition it also refers to the green turtle and dolphins. Mangroves are specifically excluded and dealt with under the category of estuaries. Beaches are included here as they are impossible to separate from the marine environment.
<i>Plan elements affecting topic</i>	Increased protection. Special protection. Increased tourism. New tourism facilities to be outside the park
<i>Potential positive impacts</i>	Protection for marine resources through NP status. Limits on use of sensitive areas. No developments on beaches inside the NP.
<i>Potential negative impacts</i>	More pressure on beaches and inter-tidal areas from increased numbers of visitors
<i>Mitigation/ Comments</i>	Ensure that LAU are adhered to. Lobby to resolve issue of commercial trawlers fishing close to the coast.

Impact on Vegetation and Soils

<i>Description</i>	This refers to the vegetation of the park but again excludes mangroves. Savannah, coastal forests, grasslands and thickets are included. It should also be remembered that the park contains a significant number of exotics.
<i>Plan elements affecting topic</i>	Increased protection. New and improved roads. Special regulations for sensitive areas (e.g. Zaraninge)
<i>Potential positive impacts</i>	Increased protection and limits to use of coastal forests. Fire management.
<i>Potential negative impacts</i>	Opening of roads will destroy some vegetation. Inappropriate fire management plan will lead to thicket formation
<i>Mitigation/ Comments</i>	Follow existing Tanapa road construction guidelines. Carry out PEIA prior to commissioning construction of roads. Investigate the fire management options carefully.

Impact on Wildlife

<i>Description</i>	This section refers to all terrestrial wildlife in the park. Marine life (including dolphins and turtles) are excluded. Birds, reptiles, amphibians, freshwater fish, invertebrates etc are included.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism. Fire management. Water management
<i>Potential positive impacts</i>	Increased numbers of wildlife
<i>Potential negative impacts</i>	Potential for overgrazing. Problems between animals and adjacent communities. Localised vegetation destruction at sensitive waterholes.
<i>Mitigation/ Comments</i>	Monitor wildlife. Monitor vegetation around waterholes

Impact on Estuaries

<i>Description</i>	The Wami is the most important estuary in the park but reference is also made to other estuarine areas (e.g. Mligaji). Mangroves were specifically discussed here.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism. Special regulations for sensitive areas (e.g. Wami).
<i>Potential positive impacts</i>	Decreased illegal activity, especially cutting of mangroves. Protection for hippos and crocodiles
<i>Potential negative impacts</i>	Disturbance from visitors, especially in the Wami estuary
<i>Mitigation/ Comments</i>	Control of boating activities in Wami estuary

Impact on Village Enclaves

<i>Description</i>	Owing to the way in which Saadani was created there are several “village enclaves” essentially within the park. These include Saadani itself, Buyuni, Mkwaja, the sea-salt extraction works and an area to the south of the Wami river. The park and the way it is managed will have a considerable effect on these communities and consequently on the environment in these areas.
<i>Plan elements affecting topic</i>	Increased protection Increased tourism. Increased wildlife. All new tourism developments outside the park. Improved CCS programme. MoU with Sea-Salt.
<i>Potential positive impacts</i>	Benefits to communities from developments. Better relationships between Tanapa and communities. Decreased illegal activities.
<i>Potential negative impacts</i>	Less access to the park resources. More potential for human-wildlife conflicts.
<i>Mitigation/ Comments</i>	Encourage those operators who work with Tanapa and distribute tangible benefits to communities. Discourage those who do not. Lobby to ensure that Sea-Salt extraction lease is not renewed on its expiry.

Impact on Water Resources

<i>Description</i>	Surface water is a problem in Mkwaja. In the sections that were used for cattle ranching in the past a number of dams have been constructed, the condition of which is variable. In addition the area affords protection to several locally important catchments and to the final stages of the Wami catchment. Underground sources are not well understood but it is known that there can be problems with quantity and quality for human use.
<i>Plan elements affecting topic</i>	Increased tourism. Increased protection. Tourism facilities outside the NP
<i>Potential positive impacts</i>	Improved water for both people and wildlife. Protection to catchments of rivers, especially the Mavave.
<i>Potential negative impacts</i>	Conflict between tour operators and villages over limited water resources.
<i>Mitigation/ Comments</i>	Resolve the unlimited access to the water resources of the NP, especially in Zaraninge and Mkwaja South.

11.3 SOCIAL/ECONOMIC IMPACTS

Impact on Visitor Use and Experience

<i>Description</i>	Visitor use is expected to increase. In addition, the inclusion of the Wami estuary, the coral reef and Zaraninge forest in the park will greatly enhance the visitor experience.
<i>Plan elements affecting topic</i>	Increased protection. Low to medium density tourism encouraged. New facilities to be outside the park. Alternative uses (walking, fly camping) to be encouraged
<i>Potential positive impacts</i>	Comfortable and quality game viewing experience, Unusual, interesting and diverse experience offered (reefs to coastal forests)
<i>Potential negative impacts</i>	Limited access to NP
<i>Mitigation/ Comments</i>	Work with tour operators to ensure appropriate access to NP resources

Impact on Historical Sites

<i>Description</i>	The area has a number of historical sites and, although most the known sites are outside the park, the management of the park and its attendant tourism will have an effect on these.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism.
<i>Potential positive impacts</i>	Protection for sites. Advertisement of sites
<i>Potential negative impacts</i>	Destruction of sites through vandalism and excessive use
<i>Mitigation/ Comments</i>	Awareness programme for visitors and villagers.

Impact on Park Revenue

<i>Description</i>	Park revenue is expected to increase as more tourists visit the area. But the establishment of facilities and the maintenance of a large ranger force will significantly affect park budgets.
<i>Plan elements affecting topic</i>	Increased protection. Roads rehabilitated. Increased staffing and equipment. Increased Tourism. New tourist facilities outside the park.
<i>Potential positive impacts</i>	Increased revenue to Tanapa. Added attractions under Tanapa control (reefs to Africa's highest mountain) will attract more visitors.
<i>Potential negative impacts</i>	Increased expenditure in the short-term. Tanapa will need to improve park facilities considerably. Decreased revenue to Tanapa as facilities are outside the NP.
<i>Mitigation/ Comments</i>	The primary aim of resource protection mitigates any loss of income through having tourist facilities outside the NP.

Impact on Swahili Culture

<i>Description</i>	Saadani is the centre of the Swahili coast culture and traditional life continues here in many of the villages. Tourism can have considerable negative effects on sensitive local cultures.
<i>Plan elements affecting topic</i>	Increased tourism. All new developments outside the park,
<i>Potential positive impacts</i>	More income and better quality of life.
<i>Potential negative impacts</i>	Erosion of the old way of life.
<i>Mitigation/ Comments</i>	Education programme for both visitors and communities.

Impact on Local Communities

<i>Description</i>	The effect on local communities in the area will be substantial, given that the area is a new national park. This category is different to that of "Swahili culture". The effects of establishing a national park are already been felt with village land being sold to potential investors. In addition, this impact topic considers communities away from the coastal zone.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism, All new developments outside the park,
<i>Potential positive impacts</i>	More income and better quality of life.
<i>Potential negative impacts</i>	Loss of land to investors.
<i>Mitigation/ Comments</i>	Encourage reputable operators. Education programme to ensure that communities are aware of their rights and also so that they understand the options available to them.

Impact on Tourism Industry

<i>Description</i>	The tourism industry in Saadani is in its infancy with only one existing operation. There is considerable interest in the area owing to its proximity to Dar es Salaam and the effective management of the park can only have a beneficial effect on Tanzania's tourist industry.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism. All new developments outside the park. Low to moderate visitor use encouraged. Diversification of activities.
<i>Potential positive impacts</i>	Increased incomes. Improved visitor experience. Increased tenure for operations outside the park
<i>Potential negative impacts</i>	Villagers "cheated" on land issues.
<i>Mitigation/ Comments</i>	Liaise with tour operators to ensure harmonious and mutually beneficial relationships

Impact on Park Operations

<i>Description</i>	The area is in the process of being transferred from the Wildlife Division to TANAPA. This will have an effect as the two departments have slightly different management regimes. In addition, the Saadani GR was a low priority area and was managed with less than 20 staff. Once TANAPA is operation the number is expected to be over 60.
<i>Plan elements affecting topic</i>	Increased protection. Increased tourism
<i>Potential positive impacts</i>	Increased incomes to Tanapa
<i>Potential negative impacts</i>	Increased expenditure to rehabilitate the park. Increased management cost to regulate visitor activities.
<i>Mitigation/ Comments</i>	Ensure that the area is legally gazetted as a NP as soon as possible.

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