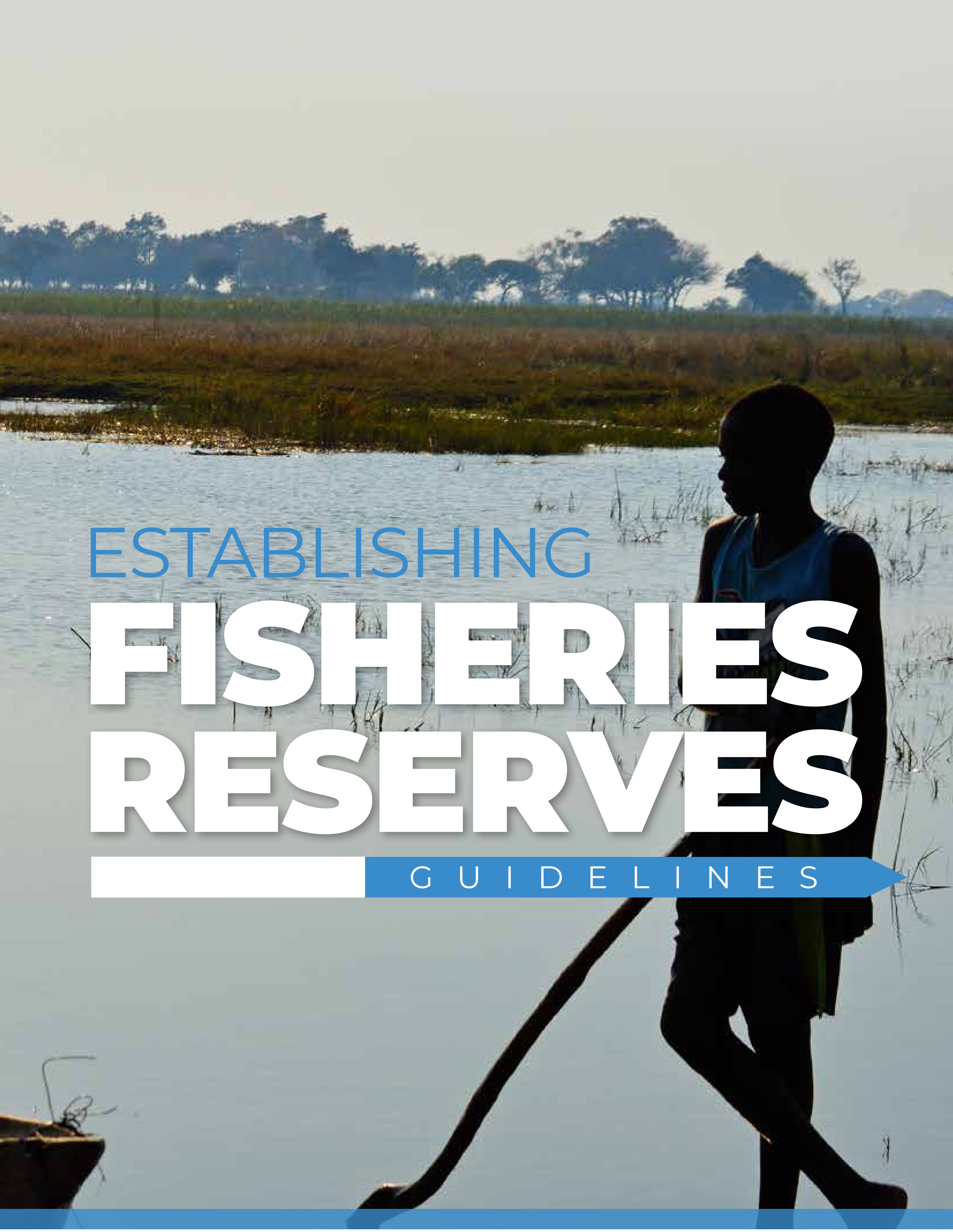

ESTABLISHING FISHERIES RESERVES

GUIDELINES

Ministry of Fisheries and Marine Resources

EUROPEAN UNION

WWF

FUNDED BY THE MORBY FAMILY CHARITABLE FOUNDATION

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CONTENTS

ACRONYMS

MFMR	Ministry of Fisheries and Marine Resources
FR	Fisheries Reserve
MET	Ministry of Environment and Tourism
IRDNC	Integrated Rural Development and Nature Conservation
NNF	Namibia Nature Foundation
WWF	World Wildlife Fund
KAZA	Kavango Zambezi Transfrontier Conservation Area
IFC	Inland Fisheries Committee
CC	Conservancy Committee

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1. PURPOSE OF THIS DOCUMENT

This document provides a set of guidelines for the establishment of Fisheries Reserves (FRs). Although Namibia will be used as a framework through lessons learned from the establishment of the Sikunga and Impalila FRs in Namibia, it is envisaged that these guidelines will be used for the broader KAZA area. Depending on the different Inland Fisheries Legislations of each particular country, minor adjustments can be expected. The transboundary nature of these fisheries, and especially FRs within the KAZA area, requires a harmonised approach for the efficient management of them.

These guidelines are for the KAZA area, not only for Namibia, but for this document the Namibian context has been used from the lessons learned during the establishment of the Sikunga and Impalila FRs in the Zambezi Region in Namibia. Fisheries Reserves could be established within conservancy boundaries or outside these boundaries.

2. INTRODUCTION

2.1. KAVANGO ZAMBEZI TRANSFRONTIER CONSERVATION AREA (KAZA)

Freshwater fish play an important role in the daily livelihoods of rural people within the KAZA area. The different fisheries identified within the KAZA area include:

- The Central Barotse floodplain in Zambia
- Zambezi and Chobe floodplain (Stratum V in Zambia and the formerly Caprivi floodplains)
- Kavango River, shared between Namibia and Angola
- Lake Liambezi (when inundated) in Namibia
- Kwando River in Namibia, Angola and Zambia
- The Okavango Delta in Botswana

Although several fisheries are identified within the KAZA area, they all face similar challenges. The increase in the human population within the KAZA area puts pressure on all natural resources, including fish. The nomadic nature of many fishermen has accelerated the decline of stock in fisheries. This influx of fishermen has increased fishing activity and the commercialisation of the resource, and it has introduced the use of destructive fishing methods and gear. This leaves local communities in peril as reduced stock makes it difficult for these communities to catch enough fish to safeguard their daily protein source. As these fishermen from outside often export their fish to other regions, local communities are prevented from fully benefitting from this resource. Fish stocks are limited and any increased fishing activity will most likely result in lower fish catches.

Potential threats to fisheries within the KAZA area include:

- Illegal fishing gear such as dragnets, monofilament gillnets, drift nets, and poison;
- Illegal fishing methods such as drag netting, bashing, and using lights at night;
- Influx of fishermen from outside the area;
- Commercialisation of the fish resource;
- Introduction of exotic aquatic fauna or flora (Aquaculture);
- Fish diseases (Aquaculture); and
- Destruction of habitats such as the floodplains, obstruction of water flow, water diversion, abstraction of water, changed hydrology, change in river morphology, pollution, etc.

2.2. NAMIBIA

Freshwater fish in the north, especially in the north-eastern parts of Namibia, are an important source of protein for the daily subsistence of many communities. The importance of this freshwater fish resource is sometimes underestimated. Along the Kavango, Kwando, Zambezi and Chobe Rivers, communities' daily activities are intertwined with the fish resource: it is a source of food (especially when crops fail during droughts) and an income generator, and plays a role in cultural values, social activities, and bartering. Many times, you will witness groups of young boys fishing with hook and line along the river after school in the afternoons or during weekends. Children and young people sometimes use fishing as a social gathering, especially during weekends and public holidays. These gatherings are essential as they strengthen bonds between community families, and this is important for the collective well-being of riverine communities.

Recent studies have shown that fish stocks are declining at a rate where not enough fish can be harvested for the daily needs of one household, and this begins to have an impact on these communities.

In particular, this can have a negative impact on poor rural communities, especially women and children, as well as unskilled workers who depend on fishing to earn an income as a means of support. The Inland Fisheries Policy of Namibia (White Paper on the Responsible Management of the Inland Fisheries of Namibia, 1995) states: “Resources will be managed to ensure long-term food security to the riparian populations who will be involved in the management and control of the resources… It is furthermore the policy to prevent harmful impacts on traditional fishers dependent on inland fish resources for food security by uncontrolled commercialisation of the resource.”

Recent commercialisation of inland fisheries started to occur mainly along the Zambezi and Chobe Rivers, due largely to the influx of fishermen from outside the area, and the improvement of road infrastructure in neighbouring countries and the subsequent development of lucrative fish markets outside the borders of Namibia. With the majority of inland fisheries in southern Africa being in dire straits, the increased demand for fish (and the subsequent increase of fish prices) fuelled the commercialisation of fish stocks. This, in turn, has led to a significant number of non-local Namibians, as well as outsiders, entering and fishing the fisheries in order to earn a decent living. As a result, large quantities of fish have been exported from Namibia, mainly to the southern and central parts of Zambia and the Democratic Republic of the Congo. In 2015, inland fish export was valued at N$ 1.7 million per month.

With limited resources from government to respond to this decline in the fish resource, the establishment of Fisheries Reserves (FRs) is seen as a potential solution to this problem. Section 22 of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003) makes provision for Fisheries Reserves by stating that “The Minister, on his or her own initiative, or in response to an initiative of any regional council, local authority council or Traditional Authority, and in consultation with the regional council, local authority council or Traditional Authority concerned, may by notice in the Gazette declare any area of inland waters as a fisheries reserve.”

3. BENEFITS OF FISHERIES RESERVES

Studies show that protected marine areas have had a positive impact on fish species diversity and abundance, as well as some spill over into adjacent areas. Similarly, results show that the protected Mahango Game Park along the Kavango River in Namibia has led to an increase in fish size and abundance compared to similar unprotected areas (open to fishing activities) along the Kavango River. The Mahango Game Park has pristine habitats, which is an additional contributor to increased fish abundance.

In addition to increased abundance, further benefits of Fisheries Reserves will include the devolution of power to local communities to manage their own resources, the potential increase in fish catches adjacent to the FRs, and the potential to generate income via recreational fishing at lodges in the area. A secondary benefit is the exclusion of outsiders, who are seen by many as a major contributing factor to the decline in fish stocks.

Fisheries Reserves will potentially increase the security of supply for poorer households. The increase in fish catches adjacent to the FRs can be utilised for local consumption, and surplus can be sold in order to purchase basic household commodities or to pay school fees.

Fisheries Reserves will enable smaller areas to be more efficiently managed, which will include the prevention of illegal fishing methods and gear and the commercialisation of the fish resource.

Fisheries Reserves will reduce conflict between local fishing and recreational fishing. The objectives of the FRs will take the interests of both parties into account.

Fisheries Reserves, which are managed by local communities, will reduce the workload of inspectors from the Ministry of Fisheries and Marine Resources (MFMR). The inspectors would then be able to fulfil more of a facilitation role, assisting fish guards during difficult situations in collaboration with the Namibian Police, and training with regards to legislation, enforcement procedures, and education. This process will increase the number of individuals who could fulfil the role as inspectors along the rivers without having to transfer the logistical and financial burdens to government.

4. OBJECTIVES OF FISHERIES RESERVES

The objectives of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003) are "to provide for the conservation and protection of aquatic ecosystems and the sustainable development of inland fisheries resources; to provide for the control and regulation of inland fishing; and to provide for related matters."

Section 22.1 of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003) makes provision for the establishment of Fisheries Reserves. The objectives of establishing such a protected area are:

a) to preserve the aquatic environment;
b) to protect, preserve or rehabilitate the natural environment of fish, related ecosystems including wetlands, lakes, lagoons, nursery and spawning areas, which are essential to maintaining the integrity of an ecosystem, species or assemblages of species;
c) to promote the regeneration of fish stocks; and
d) to protect fish resources and their environment from destruction, degradation, pollution and any other adverse impacts through human activities that threaten their health and viability.

Throughout Africa, fish are seen as a very important protein source. Fisheries Reserves are used as a means to safeguard this protein source for poor rural communities that would otherwise suffer should they have to find other readily available protein sources because of fish stocks declining below a certain threshold. Fisheries Reserves will therefore have a direct, positive impact on the subsistence of floodplain communities.

The cultural and social values that fish bring to communities should not be underestimated. Fish have always been a part of riverine communities, especially women and children, who are often seen incorporating the practice of fishing in their social interactions, which serves to strengthen inter- and intra-family relationships. Healthy FRs will ensure the continuation of these cultural and social activities.

4.1. INLAND FISHERIES COMMITTEES AND DELEGATION OF POWERS

Furthermore, in Section 29(2)c of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003), provision is made for the Minister of the MFMR to make regulations that will "provide for the establishment of inland fisheries committees for purposes of managing the fisheries in particular water bodies or in particular areas, and to define the functions, powers and duties of such committees."

And in Section 30(1): "The Minister may by notice in the Gazette...delegate...any power conferred on the Minister...except the power to make regulations, to an inspector who is not a staff member in the Ministry or to a person employed by a regional council or a local authority council."

A Fisheries Reserve can be declared at the request of a Traditional Authority (through a conservancy), and powers can be assigned to an Inland Fisheries Committee to manage the FR. The Minister of the MFMR may delegate different powers and functions to different committees that may or may not reside within a conservancy. These powers may relate to fishing methods or fishing gear, monitoring processes, patrols, resource use, etc.

4.2. INVOLVEMENT OF STAKEHOLDERS

Although local riverine communities play a key role regarding the utilisation of the fish resource, other stakeholders such as the tourism industry (fishing lodges), local angling clubs, and the surrounding communities also depend on a healthy fish population. Several stakeholders collaborate with fishing communities within conservancies, and play an important and supportive role through providing technical, financial, and legal and management advice.

Stakeholders that play such a supportive role in FRs in Namibia are the Ministry of Fisheries and Marine Resources (MFMR), the Ministry of Environment and Tourism (MET), Integrated Rural Development and Nature Conservation (IRDNC), the Namibia Nature Foundation (NNF), the World Wildlife Fund (WWF), the tourism industry, angling clubs, etc.

4.3. RULES AND REGULATIONS OF A FISHERIES RESERVE

Even though the rules and regulations of FRs are flexible and will be area/site specific, they must be in accordance with the Regulations of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003), or any other Namibian Act. These Regulations will be constituted by the Inland Fisheries Committee (IFC) of each FR according to their needs and aspirations, with guidance from fisheries scientists from local NGOs and the MFMR or any other line Ministry.

5. STEPS FOR ESTABLISHING FISHERIES RESERVES

5.1. INITIAL CONSULTATIONS

- Initial discussions should be held with local fishermen, conservancy management, and the local Traditional Authority to explain the potential benefits of establishing an FR, as well as the reasons for having such a protected area.
- Initial discussions should be held with all the interested parties (including the local Traditional Authority and especially fishermen who fish within the proposed FR) to decide on the boundaries of the FR.
- An Inland Fisheries Committee (IFC) needs to be elected if the FR falls outside of an established conservancy. The Conservancy Committee (CC) could function as an IFC if the FR falls within the boundaries of the conservancy.
- The boundaries need to be demarcated in detail by the IFC/CC.
- The IFC/CC, in collaboration with fisheries scientists, needs to develop a management plan (rules and regulations) for the proposed FR.
- Consultations should include all other stakeholders, as well as the Regional Council.

5.2. DEVELOPING THE CONSTITUTION

- As Inland Fisheries falls under the jurisdiction of the Ministry of Fisheries and Marine Resources (MFMR), it is recommended that a separate constitution for Inland Fisheries be developed when the proposed FR is within the boundaries of a conservancy. This will lower legal risks, and compared to having one integrated constitution it will be less complex, which will prevent future conflict. If conservancy members so desire, the Conservancy Legislation provides for the dissolution of the conservancy. Should this happen, it would leave the Inland Fisheries Committee (IFC) in a state of legal uncertainty. Therefore, having two separate constitutions lowers the risk. The decision, however, remains with the IFC as to whether there should be a separate constitution or not.

- The constitution should outline the aim and objectives of the FR, highlighting the purpose of establishing such a protected area.
- The constitution should further outline the composition and objectives of the IFC, and should define the powers of this committee. With the FR situated within an established conservancy, the Minister of the MFMR will recognise the Conservancy Committee as an Inland Fisheries Committee. Members from the community can be co-opted when necessary.
- The constitution should further allow for transparency for the functioning of the IFC.
- The constitution then needs to be reviewed and approved by members.
- It must be made clear to the community that not all FRs will generate financial benefits for the community. Areas where lodges or private enterprises fall within the boundaries of a community or conservancy could present opportunities to generate some form of income.
- The following procedures are recommended if the FR is in a position to generate income for the community/conservancy:
    - → Open a bank account for the FR, or use an already existing conservancy bank account if the FR falls within a conservancy. There should be a separate budget (approved at the Annual General Meeting) to carry out the independent tracking of income and expenses.
    - → Appoint a person with experience in book keeping.
    - → If the FR is within a conservancy, follow the same management procedures that the conservancy adheres to.
    - → If the FR is not within a conservancy, management procedures should be developed for the recording and tracking of any income and expenses, reporting protocol, the development of a budget, the approval to release funds, and the auditing of financial statements.
- The constitution should include:
    - → the procedure for the election and removal of IFC members;
    - → the schedule of when and how often the IFC should meet;
    - → the procedures for bank accounts for fisheries-related income and expenses (opening a bank account in the name of the IFC, or using the conservancy's existing bank account);
    - → guidelines for dispute resolution;
    - → guidelines for the amendment of the constitution;
    - → guidelines for the appointment of fish guards (inspectors);
        - ↳ Section 23 of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003) provides for the appointment of fish guards, who could fulfil the role as inspectors. This appointment could be staff members from specified Ministries, a Regional Council, or Traditional Authority. The Minister of the MFMR may also appoint any person nominated by the Traditional Authority as an inspector.
    - → appointment guidelines of fish monitors;
    - → guidelines for the remuneration of fish guards and fish monitors, which will be conducted in consultation with the Traditional Authority/conservancy; and
    - → the powers to be delegated to fish guards (inspectors).
        - ↳ Section 25 of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003) states the powers delegated to fish guards (inspectors). A fish guard (inspector) may:
            - ↳ stop and board any vessel which is used or suspected of being used for fishing and perform any act necessary to ascertain whether the provisions of this Act have been or are being complied with;
            - ↳ seize any vessel or fishing gear which the inspector has reason to believe has been used for fishing contrary to this Act or a condition of a fishing license;
            - ↳ seize any fish that the inspector has reason to believe has been caught or is being possessed in contravention of this Act or a condition of a fishing license;

        - seize any equipment, article or substance that the inspector has reason to believe has been used for fishing in contravention of this Act or a condition of a fishing license.
    - The committee (IFC/CC) may grant powers to fish guards for any other matters they deem necessary.

5.3. DEVELOPING A MANAGEMENT PLAN FOR A FISHERIES RESERVE

The main purpose of the management plan is to ensure that measures are taken to promote/facilitate the sustainable management of the FR. The management plan must be compliant with Namibian legislation relating to fisheries, water, the environment, conservancies, etc.

The management plan may include:

- the boundaries (detailed coordinates) of the body of water or area to be managed;
- the rules and regulations of the FR, which may include:
    - fishing gear that may be allowed, if any;
    - whether catch and release will be allowed, and the levies to be paid by recreational fishing activities;
    - whether trophy fish are allowed to be bought, and the price per kilogram;
    - whether any boats will be allowed during the night, or during any other particular time periods; or
    - regulations for the protection of habitats and water quality.
- the work plan and activities to be undertaken by the fish guards;
- the work plan to be undertaken by the fish monitors;
    - It is recommended that fishermen's catches are monitored on a weekly basis. Fish monitors must be trained by scientists from the MFMR, and employed on the floodplains, most suitably in the area where they reside. Fish monitors should visit all fishing landing sites in the early morning, two days per week (days should be rotated to cover every day of the week as well as weekends). The following data should be recorded:
        - ☐ Date
        - ☐ Name of recorder (fish monitor)
        - ☐ Identification (name) of landing sites
        - ☐ Type of gear used
        - ☐ Mesh size and net length (type of net used)
        - ☐ Location of where fishing was carried out
        - ☐ Identification, weight, and measurements of all fish caught, and the particular type of fishing gear each fish was caught with (note: it is very important to record this information carefully and completely)
    - Data sheets must be collected every month and archived at the MFMR offices. Data protocol according the MFMR rules must be followed.
- a cooperation plan (joint patrols or facilitation) between fish guards, the Namibian Police, and the Inspectors from the MFMR.

5.4. BENEFIT DISTRIBUTION PLAN

Currently, legislation is such that FRs can only generate income if lodges are within or close to the boundaries of a conservancy or an FR. Furthermore, provided that these lodges actually cater for recreational fishing activities, are they likely to contribute towards the FR and the functioning thereof. Additional non-financial benefits would include ownership of resources, which would prevent outsiders from entering the area and exploiting these resources.

If income is generated, the following should be kept in mind:

- Ensure that relevant requirements of legislation and guidelines are met;
- Ensure that a participatory and transparent process is followed; and
- Make use of existing resources to develop a benefit distribution plan, such as the NACSO Facilitator's Guide to Distribution Planning and Benefit Sharing.

5.5. APPROVAL OF A FISHERIES RESERVE

- Submit the proposal to establish an FR to relevant stakeholders (lodges, angling clubs, etc.) for their inputs.
- Then, submit the proposal to the Traditional Authority and to the Regional Governor for approval.
- Detailed minutes and attendance registers must be kept of all meetings held.
- Submit all documentation to the Minister of the MFMR for approval.
- Documentation may include the Fisheries Management Constitution; a Management Plan for a Fisheries Reserve; signed documents indicating approval for a Fisheries Reserve from the Traditional Authority, conservancies and the Regional Governor; and the minutes and attendance register of all meetings held.
- Draw up an Agreement between the conservancy and the adjacent tourism industry, which must include catch-and-release angling in the Fisheries Reserve, payment of fees to the conservancy, etc.

5.6. INTEGRATING FISHERIES MANAGEMENT INTO THE CONSERVANCY

- Provision should be made to establish an Inland Fisheries Committee (IFC) (sub-committee of the conservancy).
- The conservancy will then exercise their rights through this committee. It is important that the Terms of Reference for the conservancy and the IFC are clearly defined, and that the rules and responsibilities are explained clearly to prevent any confusion or conflict.
- Sustainable utilisation of the fish resource must be one of the objectives and goals of the conservancy.
- Although a separate entity, the IFC should be represented on the Conservancy Management Committee, and should attend the Annual General Meeting to report back on activities and budget issues.

6. INVOLVEMENT OF FISHERIES RESERVES IN TRANSBOUNDARY FORUMS

The majority of Fisheries Reserves are likely to border an international boundary. For situations where this exists, the management of the fish resource should be optimised by expanding the boundaries of FRs to neighbouring countries. This process can be initiated by including FRs on the agendas of transboundary forum meetings. One forum that could assist with this process is the Kavango Zambezi Transfrontier Conservation Area (KAZA) Fisheries Sub-working Group, which was established in 2016. Staff from FRs should attend these transboundary meetings to build communication networks with different communities, including those across international boundaries. Stakeholders may have to assist in logistical arrangements and financial contributions.

CHECKLISTS FOR ESTABLISHING FISHERIES RESERVES

MILESTONE 1

Assess Interest in Developing a Fisheries Reserve

OBJECTIVE:

- To confirm the community/conservancy's interest to establish an FR.

OUTPUTS:

- Minutes of meetings held with the community/conservancy indicating interest to establish an FR;
- Attendance register of meetings held; and
- Letter of interest from the community to the MFMR.

STEPS TO BE TAKEN:

☐ Visit the Traditional Authority to explain the FR concept (consider gender balances).

☐ Identify all stakeholders.

☐ Ensure that all interested parties are present and not only the leaders of the community. These interested parties could be:

→ Local community and fishermen
→ Conservancy management
→ Traditional Authority
→ Constituency councillor
→ Other stakeholders

☐ Hold meetings with stakeholders such as NGOs, government institutions, etc.

☐ Take accurate minutes and an attendance register to verify resolutions taken.

MILESTONE 2

Elect an Inland Fisheries Committee

OBJECTIVE:

- To elect an Inland Fisheries Committee (IFC) to oversee the management of the fish resource.

OUTPUTS:

- An elected IFC through a fair and transparent process;
- Minutes of meetings held with the community / conservancy indicating the process to elect the IFC; and
- Attendance register of meetings held.

STEPS TO BE TAKEN:

☐ Constitute a meeting with the community/ conservancy to elect an IFC.

☐ Define the roles and responsibilities of the IFC.

☐ Ensure that all interested parties are present and not only the leaders of the community.

☐ The community must agree to the election procedures of the IFC.

☐ Elect an IFC.

☐ Minutes and an attendance register must be available.

MILESTONE 3

Demarcating Boundaries of Proposed Fisheries Reserve

OBJECTIVE:

- To map detailed boundaries of the proposed FR.

OUTPUTS:

- Map with coordinates of the FR boundaries (most likely conducted during the high water level period); and
- Minutes of meetings and attendance registers.

STEPS TO BE TAKEN:

- ☐ Discuss the boundaries of the FR with all interested parties, and ensure that their concerns are documented. Make sure that the Traditional Authority and fishermen who fish within the proposed FR are present.
- ☐ Additionally, hold discussions with other stakeholders, such as neighbouring communities, lodges, angling clubs, the MET, the MFMR, etc.
- ☐ Ensure that the majority of the interested parties agree on the proposed boundaries.
- ☐ Ensure that the interested parties are part of the demarcation and sign off of the GPS coordinates for the proposed FR.
- ☐ For all steps taken, accurate minutes and attendance registers must be documented and filed to verify resolutions taken.

MILESTONE 4

Develop a Fisheries Reserve Constitution

OBJECTIVE:

- To develop an FR Constitution that will guide how the FR is governed.

OUTPUTS:

- A signed FR Constitution; and
- Minutes of the meeting and an attendance register.

STEPS TO BE TAKEN:

- ☐ The IFC should develop the FR Constitution, and representatives from all communities should be involved.
- ☐ The constitution should outline the composition and objectives of the IFC, and define the powers of the committee (draft a Terms of Reference).
- ☐ The constitution should furthermore provide guidelines for the functioning of the committee, financial procedures, dispute resolution, and for the appointment of fish guards and monitors.

MILESTONE 5

Appointment of Fish Guards and Fish Monitors

OBJECTIVE:

- To appoint fish guards to patrol the FR; and to appoint fish monitors to monitor the fish resource adjacent to the FR.

OUTPUTS:

- Documentation of the selection process;
- List of names of employed fish guards and fish monitors;
- Approved work plans and job descriptions for fish guards and fish monitors;
- Specifications of the powers delegated to the fish guards; and
- Training sessions for fish guards (powers delegated), and fish monitors (monitoring protocol).

STEPS TO BE TAKEN:

- ☐ Advertise for fish guards and fish monitors.
- ☐ Hold the necessary interviews with eligible applicants.
- ☐ Appoint fish guards and fish monitors.
- ☐ Conduct training to equip them with the necessary skills (MFMR inspectors for fish guards, and MFMR scientists for fish monitors).
- ☐ Apply to the MFMR to appoint the fish guards as fish inspectors.
- ☐ Draw up the necessary employment contracts, and arrange social security.

MILESTONE 6

Develop a Management Plan for the Fisheries Reserve

OBJECTIVE:

- To develop a Management Plan that outlines the rules and regulations of the FR.

OUTPUTS:

- An approved Management Plan for the FR; and
- Minutes of the meeting when the Management Plan was presented and approved, including the attendance register.

STEPS TO BE TAKEN:

- ☐ Develop aims and objectives for the Management Plan.
- ☐ Clearly define the boundaries of the FR.
- ☐ Stipulate the rules of the FR.
- ☐ Develop a data sheet for fish monitors to record fishermen’s catches.
- ☐ Develop a data protocol to safeguard data, ensure data validation, and facilitate data analysis and report writing.
- ☐ In a conservancy, integrate the Fisheries Management Plan with the Conservancy Management Plan, if necessary.

MILESTONE 7

Fisheries Reserve Gazetting

OBJECTIVE:

- To obtain a gazette notice of the declared FR.

OUTPUTS:

- Gazette notice as proof that the FR is officially recognised.

STEPS TO BE TAKEN:

- ☐ Submit documentation to request the establishment of the FR to the MFMR regional office (make reference to reference documents such as NBSAP2, NDP5, etc.) on behalf of the community/ conservancy. Documentation should include:
- → Minutes of all meetings held pertaining to the establishment of the FR
- → Attendance register of these meetings held
- → Approved Constitution (signed by the IFC/CC chairperson)
- → Approved Boundary description and coordinates of the boundaries of the FR
- → Approved Fisheries Management Plan (signed by the IFC chairperson)
- → Letter of consent by Traditional Authority, Regional Governor, and conservancy
- ☐ Ensure that the request letter from the MFMR regional office to the Permanent Secretary of the MFMR includes their assessment of the FR, and provides reasons for establishing this FR.
- ☐ The MFMR needs to prepare a gazette notice, and submit it to the Ministry of Justice.

MILESTONE 8

Monitoring and Evaluation of the Fisheries Reserve and Fish Stocks

OBJECTIVES:

- To ensure that management of the FR remains relevant, and that amendments are made when necessary; and
- To evaluate management and financial procedures in the Constitution and Management Plan.

OUTPUTS:

- Reports on patrols conducted (fish guards), and local fishermen's catches (fish monitors);
- A summary report delivered to the AGM at IFC/CC level; and
- Financial reports for the FR.

STEPS TO BE TAKEN:

- ☐ Ensure that all data recorded is reported to the MFMR.
- ☐ Conduct an annual evaluation of report backs from the IFC, fish guards and fish monitors.
- ☐ Ensure that financial reporting is completed.
- ☐ Evaluate management procedures.
- ☐ Provide Technical and Financial Reports.
- ☐ Continue support to management after gazetting.

NOTE: Concurrently to the implementation of all the above 8 Milestones, integration with other CBNRM structures in the same area (i.e. conservancy or community forest) should occur as much as possible. However, as a safeguard measure, all structures should be able to stand-alone if other structures break down.

Integrating Fisheries Management into Conservancies

OBJECTIVE:

- To obtain recognition by the Minister of the MFMR of the conservancy as an Inland Fisheries Committee, with the necessary powers to manage the fish resources in Section 29 of the Inland Fisheries Resources Act, 2003 (Act No. 1 of 2003).

OUTPUTS:

- Documentation as proof of recognition by the Minister of the MFMR of the conservancy as an Inland Fisheries Committee.

STEPS TO BE TAKEN:

- ☐ In the request to the MFMR regional office, include documentation such as minutes of meetings held and an attendance register for the integration of fisheries management into the conservancy.
- ☐ Ensure that the regional office of the MFMR is in consultation with the MET regional office during this process in order to keep them informed about the establishment of the FR within the conservancy.

MILESTONE 6 : GUIDELINES FOR DEVELOPING A MANAGEMENT PLAN FOR FISHERIES RESERVES

1. PART ONE – INTRODUCTION AND GENERAL GUIDANCE

1.1. INTRODUCTION

The purpose of these guidelines is to assist communities and stakeholders in developing a management plan for a Fisheries Reserve (FR). These guidelines should not be seen as prescriptive, but rather as facilitating directives for the development process.

A management plan can be seen as a tool to guide local communities, conservancies, managers, and other organisations on how to manage a particular area to ensure that specific aims and objectives are achieved, for the present and the future. Developing a management plan is not a once-off task; instead, it is a continuous process as their function requires them to be workable documents that need to be regularly reviewed and updated. The management plan should not be too complex as this will affect the efficiency of its implementation. The overall complexity of the plan does, however, depend on the protected area's objectives, its natural and anthropogenic threats, the number of interested parties, the involvement of stakeholders, and whether the protected area crosses an international border. In order to accommodate unforeseen events, management plans need to be flexible.

The objectives of a management plan for FRs are:

- to minimise duplication of procedures and functions;
- to promote consistency in management and environmental activities;
- to respond to unforeseen events;
- to provide feedback to ensure continuous improvement of environmental conditions; and
- to protect and conserve fish species and the different habitats and ecological processes within and adjacent to FRs.

1.2. PRECAUTIONARY PRINCIPLE

Accurate scientific knowledge and data is needed to prove that certain activities will not harm the environment before such activities are permitted. This Precautionary Principle has gained international acceptance in many policies around the world. However, due to the limited availability of accurate scientific knowledge and data, decision-making processes are sometimes either delayed or obstructed. Strategies will therefore need to be developed so that anticipatory action can be taken in the absence of such scientific data, which will prevent incidents that are harmful towards people or the environment.

1.3. LOCAL COMMUNITIES, STAKEHOLDERS AND THE PRIVATE SECTOR

The National Policy on Community-based Natural Resource Management (CBNRM) in Namibia aims to empower rural communities to actively engage in and benefit from the management of natural resources, while still protecting the ecological processes of the environment.

Fisheries Reserves have a positive impact on communities as well as the private sector (lodges and other tourism enterprises) as specified areas may restrict access and/or certain activities. During the proposed establishment of an FR, it is imperative that all potential stakeholders are consulted from the beginning, as no further discussions can take place until they have indicated their support or lack thereof. Committed stakeholders will be involved in the zoning of the proposed FR, formulating its rules and regulations, as well as overall management.

The involvement of communities and stakeholders from the beginning increases their sense of ownership, resulting in their committed support towards establishing the FR, as well as a better understanding of the need to conserve the area. Additionally, it creates a communication platform where the community and stakeholders can raise concerns and share their views, which greatly benefits the initial stages of establishing the FR.

Due to different interests and values, it must be expected that not everyone from the area will be in favour of the proposed FR. The implementation of a thorough and transparent process will build trust, and instil the value of the FR for the community as a whole. It is very important to address and resolve the concerns of those who are not in favour of establishing an FR. The undertaking of this process is crucial as it will ultimately contribute towards a well-managed and effective FR.

Below are a few lessons that were learned from the management of a marine protected area. (Source: Kelleher, 1999)

- Initially, all community members and stakeholders must be consulted regarding the proposed project.
- Participants should have a clear overall picture of the purpose of the project.
- Then, when the finer details are discussed:
  - → the number of participants should be kept to a minimum;
  - → the participants should be selected carefully after a detailed preliminary analysis of the protected area and the required skills;
  - → the people involved in managing the protected area should function as key members of this team;
  - → the manager of the protected area should play an integral role in this process;
  - → a time frame should be set for developing the project to ensure progress;
  - → the process must be transparent and must follow an orderly format, but must also be flexible to allow for unforeseen circumstances; and
  - → the budget must be adhered to.

Stakeholders can be divided into primary stakeholders: those that are directly affected by the management of the FR; secondary stakeholders: those that are indirectly affected; and tertiary stakeholders: those that are not involved but who can influence opinions.

1.4. SURVEYS AND MONITORING

Without surveys and monitoring, effective implementation of a management plan would not be possible. Firstly, before a management plan is implemented, data is needed to be able to determine a baseline or reference point for comparisons. Secondly, data needs to be continuously collected to verify whether the objectives of the FR are still being met.

1.5. ADAPTIVE MANAGEMENT

As ecosystems within FRs are dynamic, any particular management plan could, within a few months, need to be updated to incorporate any changes. A management plan must not be seen as a permanent document that will never change, but rather as a working document that will be reviewed and amended as necessary. Monitoring is therefore imperative as the continued collection of data will give a clear picture as to whether a management plan is still relevant, or whether any changes are required.

A management plan does not have to be perfect before it is implemented. It can be a work-in-progress document, where even though the plan is already implemented, development of the final management plan is still in progress.

1.6. MANAGEMENT PRINCIPLES

Twelve Principles for the management of Protected Areas and Protected Landscapes/Seascapes are listed in the IUCN Management Category V. These are defined by IUCN as "areas where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value, and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values."
It is important to include all these values when developing a management plan.

Principle 1

"Conserving landscape, biodiversity and cultural values are at the heart of the protected area approach."
Managing change should be done in such a way that environmental and cultural values endure.

Principle 2

"The focus of management should be on the point of interaction between people and nature."
Management should focus on the relationship between people (especially traditional approaches) and nature.

Principle 3

"People should be seen as stewards of the landscape."
The local people living within the borders of protected areas or use the services of these areas are the actual managers of protected areas. They will shape the environment for the future.

Principle 4

"Management must be undertaken with and through local people, and mainly for and by them."
Local people must be involved in the development and management of these protected areas. They should also be the beneficiaries of such areas.

Principle 5

"Management should be based on co-operative approaches, such as co-management and multi-stakeholder equity."
The processes must be open and transparent in shaping management decisions.

Principle 6

"Effective management requires a supportive political and economic environment."
Government plays a major role and must follow democratic processes to ensure that all parties are involved in the establishment and management of these protected areas.

Principle 7

"Management of protected areas should not only be concerned with protection but also enhancement."
The protected areas are usually lived-in landscapes or riverine areas where the environment would have

been manipulated, differing from protected areas such as national parks. New environmental or social assets could be created.

Principle 8

"When there is an irreconcilable conflict between the objectives of management, priority should be given to retaining the special qualities of the area."
There are usually environmental and/or social objectives in protected areas that could lead to conflict. During conflict, priority should be given to the protection of those qualities that make the area special.

Principle 9

"Economic activities that do not need to take place within the Protected Landscape should be located outside it."
As this is a lived-in area, economic activities taking place in the area must be evaluated to determine whether they can take place within the protected area, or whether they should be kept outside. Questions that should be asked are whether these activities contribute towards the overall goals of the protected area, and whether they are sustainable. These activities could be tourism, selling reeds, etc.

Principle 10

"Management should be business-like and of the highest professional standard."
Structures and procedures should be put in place to attract outside funding. All procedures and decision-making should be transparent and accountable to ensure an effectively managed protected area.

Principle 11

"Management should be flexible and adaptive."
Circumstances change over time, therefore management approaches should be flexible and adaptive to respond to these changes.

Principle 12

"The success of management should be measured in environmental and social terms."
Biodiversity is just one of several indicators; others are economic and social aspects that need to be monitored.

1.7. MANAGEMENT PLAN PREPARATION

The size of the management plan should be in accordance with the complexity of the proposed area, and should be as concise as possible. An elaborately complex management plan would be difficult to implement, and it would not serve the purpose it was developed for. A large area may require a more complex management plan. Should this be the case, the area could be divided into different management zones where each one could have its own management plan, or subsections could be created within the management plan.

Developing a management plan should be a team effort. Every person who has an interest in the proposed FR should be consulted while developing the management plan. Transparency is very important. This will ensure ownership of the FR, which increases the chances of success during implementation of the management plan. However, one person should be assigned the responsibility of overseeing development logistics, ensuring that the plan is developed according to the inputs of interested parties, and according to the time frame and budget.

Although there are many examples of management plan formats, the actual layout will vary according to the proposed area and the management plan's objectives.

The process to formally approve the management plan must take place. The conservancy or the Inland Fisheries Committee will then adopt the management plan and accept the responsibility of implementing it. This process will also give the manager the necessary powers to execute the management plan.

2. PART TWO – MANAGEMENT PLAN DEVELOPMENT PROCESS

2.1. PREPARING A MANAGEMENT PLAN

Step 1: Pre-planning phase

Pre-planning is an important part of preparing a management plan. The first step is to clearly define the objectives and the purpose of the FR so that they can be understood by everyone, preventing any conflict or misunderstandings during the implementation process. The next step is to lay out the planning process that must be followed, as well as the methods that will be used to develop the management plan. All the interested parties and stakeholders who will take part in the development of the management process must be identified. These would include local communities, Traditional Authorities, conservancies, the private sector (lodges, angling clubs, etc.), local and regional government, and line ministries. Due to the interconnected nature of ecosystems, a systems approach that requires input from experts from a variety of disciplines should be followed.

A planning team should be identified, as well as a responsible person to produce the management plan. This person may not necessarily be proficient in all the aspects involved, but he/she can obtain assistance from appropriate experts.

A work plan with a timeline should be developed.

Step 2: Data collection and background research

A management plan for an FR can only be effectively implemented if data is available for that particular area. Baseline data is important because it can be used to measure changes in the future, and to determine whether management can be considered successful in reaching the objectives initially outlined. Existing data must be reviewed, documented, and also evaluated for future reference purposes. It should be noted that not all data collected will necessarily be included in the management plan, but should nonetheless be available for reference purposes. It is also not necessary to wait for the collection of additional data before the management plan is developed. Wherever data is lacking in the management plan, these areas can be highlighted and suggestions or recommendations can be made on how to obtain the required information. When critical data is lacking, the Precautionary Principle (Part One, section 1.2.) should be applied.

It is recommended that a long-term data collection programme is developed for the FR, across all disciplines.

The following data should be collected:

- Ecological data
- Social and cultural data (subsistence and commercial fishing by communities, reed harvesting, etc.)
- Tourism data (recreational fishing, bird watching activities, etc.)
- Aesthetic aspects
- Future land use planning activities in the area
- Transboundary activities (if situated next to an international border)
- Any other data that could be necessary for the development of the management plan

Step 3: Data evaluation

This step explains the reasons for establishing an FR. These reasons must be clearly stated in order to obtain the support of the local communities. There are several aspects that can be considered important reasons for establishing an FR.

These aspects could be:

- rare and/or endemic fish species (or any other rare and/or endemic animal or plant species);
- the protection of ecological integrity to provide much-needed ecosystem services;
- socially important activities or culturally important sites;
- sensitive habitats that need protection;
- severely degraded areas that need rehabilitation; or
- areas that fall within worldwide protected categories, such as RAMSAR sites.

Step 4: Identifying constraints and threats, and opportunities

Constraints and threats should be identified during the process of developing the management plan. Some constraints and threats could be human-induced, and some could be the result of natural processes. The human-induced constraints or threats could be policy obligations, cultural or social activities, economic circumstances, tenure, illegal international border crossings, influx of fishermen from outside the area, etc.

Considering the decline in natural resources such as fish, the establishment of an FR could bring beneficial opportunities to local communities. These opportunities could be improved fish catches in the future, income generation through tourism and recreational angling, job creation, and ownership of resources.

Step 5: Developing a management vision statement and objectives

The management plan must have a long-term vision statement that clearly defines the envisioned outcomes of the process. In other words, it must clearly define the ideal condition the protected area should represent in the future. This will give clarity to the community on what is to be achieved and how they can benefit from such a protected area; it will give the management plan direction; and it will assist with determining progress made.

As the vision statement is considered a long-term goal, it is unlikely that it will be achieved in either short or medium time periods. The vision statement should include environmental, social, cultural and economic aspects, and should be written in the present tense.

Without a vision, management would be senseless and ineffective, and any success would be improbable.

The objectives should clearly explain the desired results and outcomes of the FR, and not the means of achieving them. The objectives should be listed according to priority. The objectives for an FR management plan should concern the key features of the protected area, and management activities.

The objectives could include the following concerns:

- Habitat and species protection
- Enforcement of rules and regulations
- Protecting and conserving culturally important aspects
- Income generation
- Research and monitoring
- Evaluation and reviewing of processes
- Awareness, training, and education

The objectives should be correctly and clearly defined to ensure effective implementation of the management plan, and all policies and legislation must be considered during development of the management plan.

The objectives should:

- be precise/specific;
- be achievable and realistic;
- be measurable;
- be time bound;
- contribute towards realising the vision statement;
- clearly explain the desired final results and outcomes, and not the means of achieving them; and
- be listed according to priority.

Step 6: Identifying and evaluating options (including zoning)

Once the objectives have been agreed upon, the next step is to decide how these objectives could be accomplished. Various options are usually available to achieve certain objectives. The simplest method with measurable results should be chosen. It could happen that a certain method does not render the desired results. Should this happen, consultation with appropriate parties needs to take place to devise a more suitable method that could be implemented.

If a protected area is very large and complex with a variety of habitats and sensitive ecosystems, it can be divided into several zones. Dividing such an area into zones may simplify the management approach. Each zone should carry its own specific and applicable regulations.

Step 7: Compiling a draft Management Plan

A draft management plan can now be compiled. Once completed, this draft must be circulated and made available to stakeholders and other interested parties. The format and complexity of the draft management plan will depend on the size and purpose of the FR. The draft management plan may be supplemented with support documents that contain more detailed background information.

Step 8: Public consultation

Public consultation regarding the draft management plan is a vital step towards the production of the final management plan. This process of consultation promotes transparency and communication, and ultimately reduces the potential of future conflict situations. The execution of this process depends on the legislation that is in place. Consultation could be conducted via extensively advertised meetings that are open to the public, written media, television, or websites. All stakeholders must be contacted, personally if possible, to ensure their input in the draft management plan; and they must be contacted well in advance to allow them sufficient time to prepare.

All comments and concerns raised during this process of public consultation must be clearly recorded. This is especially important because these comments and concerns will also be used for reference purposes in the future.

A translator should be present at all meetings held. If it is necessary, the draft management plan should also be translated to the relevant local language.

Step 9: Revision and compilation of the final Management Plan

Before the revision and compilation process of the final management plan, all comments and concerns recorded during the previous step should be taken into account. During this process, it may be decided that one or several of the recorded comments or concerns will not be included in the final management plan. To ensure that all comments and concerns recorded during public consultation are presented, they should be collated in a separate document that accompanies the final management plan. Actions taken for each concern must also be indicated in this accompanying document. The final management plan must be made available to the public through relevant media.

Step 10: Approval of the Management Plan

Approval of the management plan must be attained from the communities and stakeholders. Once approved, the management plan should form part of the documentation of the request letter to establish an FR.

Step 11: Implementation of the Management Plan

The process of approval gives full authority to the management plan, which forms the basis for the implementation of the management plan, as well as the enforcement of actions listed therein. Operational plans, work plans and budgets should not be included in the management plan; instead, they should be collated in a separate document that accompanies the management plan.

Step 12: Monitoring and review

Once the management plan has been approved and implemented, monitoring becomes important. Two aspects should be monitored: the management process to evaluate its effectiveness and appropriateness; and whether the objectives as set out in the management plan have been achieved, or are in the process of being achieved.

Monitoring can reveal whether work has been completed and/or whether results have been achieved. Ticking the completed task box does not necessarily mean that results have been achieved. This could be an indication that the strategies to obtain these results should be either amended or changed. It is therefore important that the objectives are measurable in order to facilitate the monitoring process.

Step 13: Decision to review and/or update the Management Plan

Results from the monitoring processes will indicate whether the management plan needs to be reviewed and/or updated. A time schedule should be established stating when the review and/or update of the management plan should be conducted. However, if it is clear that certain objectives will not be achieved within the proposed time frame, the management plan can be reviewed and/or updated at any time.

3. PART THREE – MANAGEMENT PLAN CONTENT

3.1. AIMS AND OBJECTIVES

Different communities may have different reasons for establishing an FR. These reasons could include keeping outsiders from utilising their resources, protecting rare and/or endemic fish species, ensuring the seeding of adjacent fishing grounds, or generating an income for the community through tourism or recreational angling. These aims and objectives may change over time as the priorities of the community change, or as the resource responds to management/protection measures. These aims and objectives are very important as they will determine how the rest of the management plan unfolds.

3.2. LOCATION BOUNDARIES AND DESCRIPTION OF THE AREA

Location

The location of the FR must be clearly indicated with GPS coordinates; and it must be clearly stated whether the area forms part of an existing protected area, or whether it is situated alongside an international border. If the area falls within the boundaries of an established conservancy, a brief description of the conservancy could be included. The rationale for selecting the particular location must be provided, and the management intent of the area should be highlighted. Land tenure and the legal status of the area (conservancies, lodges or other private enterprises) must be fully understood.

A map showing the area should be included.

Physical environment

A brief description of the physical environment, such as hydrology (flood cycle), seasonal differences, water temperature, or any other physical information deemed necessary, should be included in the management plan.

Biological environment

A brief description of the habitats/biomes existing within the area should be included in the management plan. Give emphasis to the presence of any alien species and the potential threat they present to the area. Collate a list of the important fish species that occur, outlining the status of the commercially important fish species; and of other important animals or plants in the area, both terrestrial and aquatic. These lists could be added as an appendix.

Infrastructure

Include a list and accompanying descriptions of all forms of infrastructure present in the area that may have an impact on the implementation of the management plan, or that are culturally important to the local community.

3.3. EXISTING LEGISLATION

It is important to take into account and mention all the existing legislation that may have an impact on the area. The management plan cannot include activities that oppose or contradict any laws of the country. It is very important to ensure that management plans are aligned with all acts and regulations pertaining to that particular area, or to proposed activities. This should also include any traditional management practices, or any user rights of stakeholders.

3.4. EXISTING USES

Include a summary of the past and present uses of the area, indicating who the users were/are, and where the activities were/are conducted. These uses could be spatial and/or temporal, and it should be indicated whether they have social, cultural or economic importance. These uses could relate to the land or to the aquatic environment.

Recreational

Include a list of any recreational activities currently taking place in the area, as well as recreational activities that could be allowed to take place in the future, bearing in mind the aims and objectives of the area. Strategies to develop recreational activities or tourism in the area should be highlighted. These activities could include fishing excursions, fishing competitions, bird sanctuaries, etc.

Commercial

Include a list of any form of past and present commercial enterprises in the area, including estimates of the current economic value of these enterprises. Also, include a list of any potential or planned commercial enterprises for the area, such as lodges, houseboats, game drives, etc.

Cultural

Include a list of any on-going traditional user rights and management practices, highlighting their importance for the local communities, and whether they will be continued or altered. Also, include an outline of any anticipated or potential conflicts regarding the overall aims and objectives of the protected area.

If there is potential for the future development of traditional practices that could contribute towards the communities' livelihoods, these should be listed and included.

3.5. INTEGRATED CONSERVATION STRATEGIES

Research and monitoring

Include a list of all past research (biological and social studies) conducted in the area. On-going research and monitoring activities must be planned and implemented for future evaluation of the effectiveness of the management processes, and to determine whether the objectives have been achieved. Research plans should be included as support documents. The format of these documents is flexible, depending on what research is required.

Research plans clarify the research agenda; provide a framework to effectively conduct research studies; and lay the foundation for incorporating research from outside universities and research institutions (locally and abroad).

Habitat conservation and management

Pristine habitats are critical to ensure healthy fish populations. Protection, conservation and management of these habitats should be a priority for the FR, and highlighted and included in the management plan.

Education, outreach and public awareness

Include confirmation that the public has been informed about the establishment of the FR. This can be achieved through media reports, social media, posters, brochures, and visits. Additionally, in order to strengthen communities' support of the FR, they need to be educated about the activities (monitoring, patrols, legislation, etc.) taking place within the FR.

3.6. LOGISTICAL SUPPORT AND INFRASTRUCTURE

Management of the FR will need considerable logistical support and, most likely, infrastructure. These needs could include boats for patrols, uniforms for fish guards, or monitoring equipment. Include a precise list and budget outline of these needs in the management plan.

3.7. MANAGEMENT ZONES

Purpose of management zones

Management zones are distinct geographical areas where certain management regulations are applied for the protection of the natural resources in that particular area, allowing or prohibiting any kind of utilisation thereof. These resources could include rare and/or endemic species of animals and plants, ecological processes, sensitive habitats, etc. Depending on the objectives, an FR can be one management zone, or it can be divided into several management zones. These management zones are flexible: they can be temporarily applied during certain periods of the year, or they can be permanently closed off. They could include natural resources, cultural aspects, visitors (tourism industry), etc., and they can also be linked to other events such as breeding seasons for fish or lower water periods when adult fish are vulnerable to netting.

Delineation of management zones

There is no specified size limitation for the protected area. The ultimate size will depend mainly on what the reasons are for protecting the particular area, and on whether it is acceptable to the communities because of the impact it may have on their daily lives.

Description of management zones

It is very important to clearly define the boundaries of the management zone/s to prevent any confusion. Communities should be involved in determining these boundaries, and this process must be transparent. GPS points must be determined, and, if possible, clear markers must be erected at these points. It must be kept in mind that visitors who are unfamiliar with the area must also be able to identify these boundaries, as this will enable them to know what regulations apply for that particular area. Ensure that the zonation map is included in the management plan.

3.8. ASPECTS OF MANAGEMENT

Inland Fisheries Committee (IFC)

Only after careful consultation with all stakeholders, should an Inland Fisheries Committee be established. The communities should elect the IFC, ensuring that all levels of the community are represented, especially fishermen. Committees must be representative of all communities if the protected area is shared between communities, locally or internationally. This is especially important if the protected area is shared between separate communities (i.e. transboundary protected areas). Clarification of any agreement between involved parties should be included in the management plan.

Interagency agreements

An FR usually includes several different stakeholders, and, usually, their agendas and objectives are also different from one another. These differences may lead to conflict between stakeholders while deciding on how an area should be managed, and on what the vision of the protected area should be. Therefore, it is important to have a transparent and concise agreement already in place that guides the management of the area, and clarifies the purpose of the area. Roles and responsibilities should be clearly laid out in this agreement in order to prevent or facilitate the resolution of any conflict that could arise between stakeholders. Clarification of any agreement between involved parties should be included in the management plan.

Regulations (by-laws)

Legal regulations concerning how the area should be managed and what activities/methods will be allowed or prohibited should be clearly documented to prevent any confusion.

These regulations could pertain to:

- any uses of the area which are not permitted;
- areas that are off limits to any visitors;
- time and space;
- fishing methods and fishing gear;
- the protection of habitats and water quality; or
- the setting of fishing quotas.

Resource utilisation

An FR will include a variety of natural resources. These resources are all interconnected, and the utilisation of one resource may have an impact on others. Therefore, the utilisation of different resources within the FR or adjacent to the FR must be clearly defined. Utilisation of resources could be for either commercial or subsistence purposes.

These resources could include:

- aquatic and terrestrial plants and animals;
- sand, gravel and minerals;
- water; or
- oil and gas.

Resource assessment

Resources need to be regularly assessed in order to ascertain whether the protection of the area can be considered successful, or whether any changes in the way the area is managed need to be considered. If assessment methods have already been developed, the assessment could either be continued or refined. If not, assessment methods should be developed. Although the purpose of these methods is to obtain the required assessment results, they should in no way harm any of the resources being assessed. Ensure that information obtained during the baseline assessment is included in the management plan.

3.9. IMPLEMENTATION

Stakeholders

All stakeholders must be informed when implementation of the management plan begins. As stakeholders have a vested interest in the area to be managed, communicating the implementation of activities will prevent future conflict, gain their continued support, and better the chances of a successful implementation of the management plan. Furthermore, this is particularly important as some stakeholders may even have a mandate for certain activities, or there could be legal obligations to liaise directly with them. Ensure that the stakeholder consultation process is mentioned in the management plan.

Supplementary plans associated with the Management Plan

The management plan could be accompanied by a number of supplementary plans that support the management plan. These supplementary plans could be annual work plans, business plans, action plans, operational plans, patrol plans, etc. It is important that these supplementary plans are linked to the activities that feature in the management plan. These plans (support material) need to be collated, and added as separate documents that accompany the management plan.

Communication with members

Communication between members of the FR is vitally important. These members include staff involved in the daily running of the FR, community members, stakeholders, government officials, and NGOs. Communication could take place through meetings (such as the Annual General Meeting), newsletters, social media, printed media, television, awareness campaigns, research and monitoring documents, etc. The work plan for the FR should include the means of communication with the community, committee, conservancy and stakeholders.

Building partnerships

Managing an FR cannot be accomplished by a single person or community. Building partnerships is fundamental for strengthening collaboration between stakeholders, who have a vested interest in the establishment of an FR and the managing component of the FR. These partnerships become more complex if the FR is situated alongside an international border with a transboundary agreement. Indication that there is integration between all partners should be included in the management plan.

Enforcement

Enforcement of the regulations pertaining to the FR needs to be clearly portrayed in the management plan. This could include the number of staff members assigned for patrols, how often patrols need to be conducted, how conflict should be handled, how arrests should be carried out, or how confiscated material should be dealt with. The involvement of the police, line ministries, and the private sector should also be clearly defined.

Staffing

Indicate present and future staff needs. Identify the people responsible for executing the management plan, as well as any supporting employment positions that may be required in the future.

Training

Identify and list any required staff training as well as relevant time frames. Training could include accounting, fish guard and fish monitor training, etc. All training costs must be included in the budget.

Facilities and equipment

Facilities and equipment are essential requirements for the effective implementation of the management plan. These requirements, which could include offices, consumables, boats, outboard engines, uniforms, etc., should be listed and included in the budget.

Budget

Even though it does not form part of the actual management plan, a budget must be developed.

The budget could include:

- any capital costs;
- running expenses (wages, utilities, etc.); or
- research and monitoring costs.

3.10. MONITORING

A monitoring procedure must be in place to establish whether the management plan is operating effectively and whether its objectives are being achieved; and to gauge whether the desired results concerning environmental and anthropogenic threats are being achieved. These monitoring results will determine whether the management plan is on track or whether it needs to be revised and/or updated. This can only be achieved if the objectives are measurable.

3.11. MANAGEMENT AUTHORITY

The FR will be managed by the Inland Fisheries Committee (IFC) on behalf of the community or stakeholders. The election process and duties of the members are stated in the constitution of the FR/conservancy. The IFC will report annually on their activities and progress, including any challenges or potential threats to the management of the FR. The management structure for the FR needs to be clearly defined in the management plan.

3.12. ADAPTING THE MANAGEMENT PLAN

After a period of time, and depending on the complexity of the FR, the management plan may need to be adapted to incorporate any new circumstances. Because the environment and the purpose of FRs change, the management plan must be updated to remain consistent with these changes. However, consultation with stakeholders is necessary before any changes can be made.