Management planning workshop for Kenyan IBAs

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BirdLife INTERNATIONAL

RSPB

NatureKenya

National Museums of Kenya

Kenya Wildlife Service

Forest Department

Darwin Initiative

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1. Introduction and overview of the workshop

The Darwin project titled *'Kenyan Important Biodiversity Areas; Improving monitoring, management and conservation action'* developed jointly by the Royal Society for the Protection of Birds (RSPB) and Nature Kenya – both Birdlife International Partners in the UK and Kenya respectively – aims at improving the monitoring, management and conservation action of 60 sites across the country known for their biodiversity importance. Nature Kenya, through a GEF-UNDP funded initiative (African-NGO Government partnership for sustainable biodiversity action project), has previously been able to identify 60 sites across the country important for biodiversity conservation (Important Bird Areas) and build the capacity of community based organisations or site support groups to implement conservation intervention projects such as species and habitat monitoring at site level. The Darwin funded initiative therefore attempts to build on this milestone by providing a framework for the establishment of a sustainable monitoring scheme that will feed valuable information to decision-making processes and ensure appropriate interventions/action is taken on sites important for biodiversity.

However, monitoring is not an end in itself, and will only be of value if its results are used to achieve conservation objectives. The most widely used technique for deciding conservation objectives for a site is through the production of a management plan. Management plans are currently in production for a number of Kenyan IBAs including Arabuko Sokoke, Mt. Elgon, Kereita and Ngangao forests.

The aims of this workshop were to:

- Familiarise participants with the steps in producing a management plan.
- Share experience in producing & implementing management plans*

* building on the 'Toolkit for Site Action Planning' produced by the GEF/UNDP BirdLife African NGO-Government Partnerships for Sustainable Biodiversity Action Project held in Kampala, Uganda in 2001 & Kenyan experience including the 25-year strategic management plan for Sokoke

The workshop concentrated on the following areas:

- Sharing experience of who to involve in producing a management plan for Kenyan IBAs and how to involve them (Section 3.4)

- Sharing experience of what information is needed to produce a management plan for Kenyan IBAs and how this information might be obtained (Section 3.5)

- Giving participants experience of producing parts of mock management plans for sites through group-work (Sections 3.6 & 3.7). These group exercises comprised the majority of the workshop.

The first of the group exercises involved groups evaluating information and producing a long-term vision/strategic plan, objectives and prescriptions for the same site - Kenya Wildlife Service's The Annex at Lake Naivasha. Groups were then asked to present their results, thus allowing the approaches taken by groups to be compared.

Groups were then re-arranged and asked to repeat the exercise for an area of rainforest (Group 1), a grassland (Group 2) and a complex of wetlands (Group 3). Each group was also asked to identify who they would involve in producing a management plan for their respective site and how they would involve them. It is hoped that the examples produced during these group exercises will help others in the setting out of long-term vision/strategic plans, objectives and management for the sites they are involved in.

The full programme of the workshop is contained in Appendix 1.

2. Acknowledgements

We are very grateful to all of our colleagues in Kenyan government and non-government organisations and within site support groups who have pledged to play their part in the national network of IBA monitoring. In particular we are grateful to those who gave their valuable time to attend this workshop. We are also grateful to the staff of the Kenya Wildlife Service Training Institute who hosted us so well during the time spent there. Finally we are most grateful to the Darwin Initiative of the UK Government for funding the IBA monitoring programme.

3. Proceedings

3.1. Participants' expectations

Participants had the following expectations:

- To understand/learn the management planning process
- To know who they should involve in producing a management plan
- To know if we need a management plan
- To understand different types of management plans
- To learn how to develop a realistic management plan
- To understand the legal implications of a management plan
- To identify potential stumbling blocks/hindrances/obstacles/constraints to the implementation of management plans
- To learn what problems do the management plans expect to solve
- To carry out a mock management planning exercise for a hypothetical site during the workshop
- To learn about integration of alternative livelihoods into the management planning
- To learn how to monitor the implementation of the management plan
- To learn about conflict resolution in the management planning process

3.2. Basic principles of management plans & management planning – summary of presentation by Malcolm Ausden (RSPB)

3.2.1. Introduction

In this presentation I will outline the basic format of a management plan and describe the basic principles in producing them.

3.2.2. Why produce a management plan?

The main reason for producing a management plan is because it helps you decide what to do at a site. The management plan sets out a series of steps that help ensure that you have followed a logical decision-making process. These steps are described below. In addition, the process of producing a management plan should help in obtaining agreement among stakeholders about what to do at a particular site.

Once the management plan has been produced, it should:

- Provide clear guidance to everybody involved in the site regarding their roles, what they need to do and when they need to do it by.

- Act as a bid for resources, by demonstrating that what you intend to do has been clearly thought through. Production of the management plan will also demonstrate accountability.

- Enable improved communication between sites, since the management plan will summarise the relevant information about the site, including what it intended to achieve and how it is intended to achieve it.

It is worth noting that 'Management' is simply the terminology used to describe what is done (or not done) at a site. 'Management' does not necessarily imply active management of a habitat, for example the planting of trees, grazing of grassland or control of water levels. Instead, 'management' may refer to lobbying for change in land use, consulting with local people, or managing an area by non-intervention. It is also worth making clear that management plans are for largely synonymous with site action plans.

3.2.3. Basic format of a management plan

There are lots of different formats for writing management plans, and often the layout and contents of management plans produced by different organisations appear to differ greatly from one another. Despite, this, all management plans have more or less the same basic sections and logic, which I will outline during this presentation. This basic format can be adapted to suit the needs of different organisations and sets of sites. It is hoped that it will be adapted (where necessary) for producing management plans for Kenyan IBAs. The basic format of a management plan is shown in the following table and described in more detail below.

Table 1. Basic format of a management plan

Section	Main function
1. Information	Collates & summarises information relevant to the management of the site
2. Evaluation	Evaluates the information about the site to help you decide what to do
3. Intention	Sets out *what* you want to achieve by describing your long-term vision/strategic plan for the site & the specific objectives that contribute to achieving this
4. Action	Sets out *how* you intend to achieve your specific objectives and *how* you intend to monitor *whether* you achieve your specific objectives
0. Summary	Is a summary of the whole plan that is accessible to non-specialists

Section 1: Information

Any decisions about what to do at a site need to be based on information. The first section of a management plan collates information relevant to the management of the site. The specific information required will vary between sites, but will generally include the following:

- Location, tenure, institutional/policy framework etc
- Environmental factors eg soils & hydrology
- Biological value eg habitats and species present, description of any important ecological processes at the site
- Human use eg resource use, cultural, recreational & aesthetic value, educational & scientific use, stakeholders & their roles

Information in Section 1 should be summarised, for example through use of tables and maps. The management plan should also indicate, though, where further relevant information is held. Any gaps in relevant information should be highlighted. However, gaps in information should not stall the process of producing a management plan. Instead, there should be actions/prescriptions later on in the plan aimed at filling these gaps.

What information is required to produce a management plan for a Kenyan IBA, and how to obtain this information, will be discussed in Section 3.5.

Section 2: Evaluation

This section evaluates information about the site to help you decide what to do. The layout and contents of this section probably vary most between different management plan formats. Most formats, though, seek to answer the following three questions:

What are the most important features at the site?

Features can be:

- biological (habitats, species & ecological processes that it is important to maintain)
- aspects of human use of the site eg economic/resource use, cultural, aesthetic, educational or scientific value

At many sites it is also worth evaluating not just features that are currently important, but also features that have the *potential* to become important in the future. Evaluating the potential importance of biological features is especially relevant at sites where habitat re-creation/restoration is taking place. It is also important at sites

where aspects of human use are likely to change. For example, bee-keeping might not necessarily be important for local people at a site at the moment, but has the potential to become an important form of land-use in the future.

Evaluating what are the most important features within the site helps you prioritise resources *within* the site. For example, a site may consist of an area of degraded secondary scrub and an area of near-pristine forest. The near-pristine forest is likely to be of higher conservation value than the scrub. It will be important to recognise this, so that the inevitably limited resources for conservation an be targeted at conserving the forest, rather than the scrub. Evaluating the important features at the site also helps to prioritise resources *between* sites. For example, a reserve containing near-pristine forest supporting a number of globally threatened species is likely to be of greater importance (and thereby probably should receive greater resources) than a reserve consisting solely of degraded scrub without any species of high conservation value. Demonstrating that a site is of high conservation is likely to be important in attracting donor funding.

Are there any current/future constraints on what we can do at the site, and if so, what are they?

Constraints on what it is possible to do at a site might include:

- Legal constraints
- Constraints due to land tenure
- Health and safety considerations
- Other factors affecting the site that are completely out of the stakeholders' control
- Resource/capacity constraints

It is important to consider whether the current constraints will *remain* constraints during the lifetime of the forthcoming management plan, or whether these constraints can be overcome in the future.

Having identified what is the key interest of the site and identified any constraints on what it is possible to do, the next step is to ask:

What are the main factors/threats/pressures that currently (or might in future) affect the key interest of the site?

The terminology for the 'things' that affect the key interest of the site differs between different management plan formats. 'Factors' is usually used to describe anything that affects some aspect of the site, be it positively or negatively. For example, at a wetland creation site, the main factors affecting the ability to create the desired habitat might be the availability and quality of water. Threats/pressures are used to refer to things that negatively affect the key interest of the site (see Bennun, 2002). These threats/pressures might be human induced, for example encroachment and

changes in land-use, or, for example successional changes reducing the value of the key interest of the site.

Finally, having identified the key interest if the site, identified constraints on what it is possible to do, and identified what are the main factors/threats/pressures affecting the key interest of the site, you are in a position to evaluate the potential management options and decide on your Intention and Action (see below).

The process of evaluating information about a site will be practised during Management Plan Exercises 1 and 2.

Sections 3 & 4: Intention and Action

These sections set out *what* you want to achieve (the Intention), *how* you intend to achieve it (the Action) and how you intend to monitor whether you're achieving the objective (also the Action). It is important to distinguish between the *Intention* and *Action*. It is very common for people to produce plans that only include *how* you are going to do something, rather than *what* they ultimately want to achieve by carrying out this action. If you don't define *what* you want to achieve, then it is difficult to decide the best way to achieve it!

The way that management plans define what you want to achieve is by setting objectives. Most management plan formats define objectives over two different timescales:

- A long-term vision/strategic plan that sets out the long-term broad vision/plan for the site over and beyond the life of the current management plan.
- Specific objectives that contribute to achieving this long-term vision/strategic plan. It is usually intended to achieve these objectives during the life of the current management plan.

The long-term vision/strategic plan and the objectives are usually accompanied by a rationale. The rationale briefly summarises the reasons for deciding on the long-term vision/strategic plan and objectives. An example of a long-term vision/strategic plan, based on the Arabuko-Sokoke Forest Strategic Forest Management Plan 2002-2027 is given below:

'To have an intact and fully functioning forest ecosystem with no reduction in the existing forest by 2027. The strategies to achieve this will include forest zonation, eco-tourism, environmental education, problem animal management' etc

The next stage is to decide *how* you intend to achieve the specific objectives. The actions needed to achieve your objectives are usually referred to as 'management prescriptions'.

Next set out how you will determine *whether* you achieve the objectives. The actions needed to monitor whether you achieve your objectives are usually referred to as 'monitoring *prescriptions'*. Management plan formats often further divide prescriptions into individual *projects*.

There often two levels of monitoring that take place at a site:

'First Tier' monitoring. This comprises basic monitoring that takes place across *all* sites within a particular network, for example monitoring of site integrity (see Bennun, 2002). It comprises monitoring prescriptions/projects that are relevant to all sites. An additional benefit of 'First tier' monitoring is that it enables monitoring methods to be standardised across sites, thus helping comparison of results between sites. This standardised set of monitoring prescriptions/projects also enables the effectiveness of the entire network to be evaluated.

'Second Tier' monitoring. This comprises additional, site-specific monitoring prescriptions/projects to determine progress towards site-specific objectives. For example, a specific objective at a site might be to increase numbers of Sharpe's longclaws, in which case it would be useful to monitor numbers of Sharpe's longclaws to determine whether your actions are proving effective, or whether they need revising.

It is useful to list prescriptions beneath individual objectives. This makes it easier to ensure that all the actions you carry out are contributing towards achieving your objectives.

Setting out a long-term vision/strategic plan, objectives and management and monitoring prescriptions for a site will be practised during Management Plan Exercises 1 and 2.

Examples for a forest site, based on the Arabuko-Sokoke Strategic Forest Management Plan 2002-2027, are given below:

eg Objective 1. 'To conserve and enhance the unique biodiversity of the forest'
Management prescriptions:
- *Increase understanding and knowledge of the forest ecosystem*
- *Improve local awareness of biodiversity*
- *Reduce external threats & interference*
- *Restore degraded habitats*

Monitoring prescriptions:
- *Monitor threatened bird species*
- *Monitor external threats & interference*
- *Monitor re-growth of degraded habitats*

Objective 2. To enhance the sustainable livelihoods of the forest-adjacent community
Management prescriptions:
•*Address causes of poverty amongst forest-adjacent communities*
•*Develop partnerships between government & forest-adjacent communities for shared benefits and responsibilities*
•*Develop a more systematic approach to local utilisation of forest resources*

Monitoring prescriptions:
•*Monitor livelihoods of forest-adjacent community*

When deciding upon your objectives and prescriptions it is important to ask the following questions:

- Do the objectives contribute to achieving the long-term vision/strategic plan?
- Will the management prescriptions contribute to achieving the objectives?
- Will the monitoring prescriptions be sufficient to determine whether we are successful in achieving the objectives?
- Is the prescribed monitoring the most efficient way to determine whether we are achieving the objectives ie could the monitoring be carried out in a way that requires fewer resources?

We will discuss this in the feedback sessions in Management Planning Exercises 1 and 2.

The final stage is to set out a work programme that details:

- What you intend to do
- Who will do it
- In what year it will be done
- What priority it would be
- And if possible, how much each action will cost

Section 0: Summary

The final stage of the plan is to produce a user-friendly summary that is accessible to non-specialists. This summary usually goes at the front of the management plan. The summary usually includes:

- A description of the site
- The long-term vision/strategic plan
- A summary of what you want to achieve and how you intend to achieve it

The summary should be accessible to local people and versions of it should be produced in the local language where relevant. The summary should also explain to local people how they will benefit from implementation of the management plan.

3.2.4. Basic principles of producing a management plan

Probably the most important thing to consider when producing a management plan is *who* to involve and *how* to involve them. This will be discussed in Section 3.4 and practised in Management Planning Exercise 2. In particular, the people implementing the plan need to be involved in producing it. Nobody likes being told what to do, without having been involved in deciding it! There are lots of examples of management plans that have been produced by consultants, but which have never been implemented because the staff on the ground have had no ownership of the plan. It is also important to consider how local people will benefit from conserving the biological value of a site.

It is often best if one lead agency *co-ordinates* the process of producing the management plan, as involving large numbers of stakeholders can be a lengthy and logistically complicated process.

The agreed management plan should be technically sound, economically viable, socially acceptable, *but* as short and clear as possible. A decision also has to be made regarding to what extent the actions contained within the management plan are constrained by existing resources, and to what extent the management plan acts as a bid for *further* resources (See Section 3: Evaluation).

3.2.5. Using the results of monitoring to improve site management

Monitoring is not an end in itself. Monitoring is only worthwhile if its results are used to improve the conservation status of the site and/or are used to inform others. If the monitoring shows that an objective is not being achieved, then there are two possible reasons for this. The agreed work might not be having its desired effect, in which case you need to revise the link between the actions and what they are seeking to achieve. Alternatively, the agreed actions might not have been fully undertaken, in which case you need to understand why they were not and ensure that they are undertaken in future. It is therefore important to also record what actions were actually implemented at the site.

3.3. Forestry Department experience in producing management plans – summary of presentation by Anthony Ochino (Forestry Department)

The Draft Kenya Forest Development Policy 2000

The broad objective of the New Forest policy is to provide continuous guidance to all Kenyans on sustainable management of forests and potential forestlands.

This policy has taken cognisance of other existing policies relating to land use, environment, agriculture, energy, and industry among others. The policy incorporates the current forest related values of the Kenyan people; international concerns and represents the national will.

The new policy recognizes that there are benefits arising from involvement of local communities and other stakeholders in forest management. To this end, the policy has identified strategies for their participation in forest management and conservation.

- The policy enumerates eight objectives, important amongst which include:
  - ✓ Conservation of biodiversity and habitats
  - ✓ Poverty reduction and employment
  - ✓ Maximum benefits from forest related industries
- The Policy gives prominence to subsistence needs of forest adjacent communities with wood fuel being recognized as a most important product
- The policy sates that supply of products from indigenous high forests is possible through multi-purpose forestry and zoning. However this will only be achievable with the following conditions:
  - All gazetted forest should remain intact without alteration of boundaries
  - Indigenous forests with high biodiversity values should be managed for non-extractive uses
  - Forest adjacent communities should be empowered to conserve forests in partnership with NGOs and the private sector
  - At least a minimum of 1% tree coverage on private land is recommended
- On plantation management, the policy recommends the enactment of policy and legislation that will recognize roles of other stakeholders including forest adjacent communities and allow them to participate I forest plantation management
  - Management of forest plantations on public lands will be geared primarily at increasing supply of forest based products and services

- Forest plantations will be efficiently managed to be self-supporting and profit oriented so that they may contribute in supporting essential non-profit forest activities such as forest conservation and extension
- Efficient utilization of raw materials will be promoted to take into consideration resource maximization, conservation, and market trends
  -Maximization entails use of lops & tops, stumps etc
  -Conservation & marketing; alludes to Forest certification, subscription to standards set by the forest stewardship council

- The Policy provides for management of state forests under a management agreement between the responsible authority and the management contractor subject to preparation of a management plan
- On the Trust lands, the policy calls for a closer working relationship with County Councils to enable more rational management of that resource. Tasks to be accomplished include, Gazettement, preparation of PFMPs
- The policy points to liberalization of wood imports as healthy, with protection of locally or domestically available products through tariffs.

The Forest Bill

- Its formulation started since the early 1990s. A series of stakeholder workshops and legal advice have provided inputs to the bill's version up to mid 2002.
  The bill is envisaged to bring wide-ranging changes to the forestry sector in general and the Forest Department in particular
- Any changes of existing forest reserve boundaries (excisions etc) will be subjected to very tight conditions:
  - Parliamentary approval must be sought
  - Provision is also made for carrying out of environmental impact assessment and *locus standi*
- The bill makes provisions for an autonomous Kenya Forest Service with ability to retain revenue. A board that would include a range of stakeholders would oversee the operations and functions of the service. The bill envisages a return to forest conservancies as the area of forest management through the setting up of Forest Conservancy Committees
- Through formation of enabling Forest Associations the rights and potential of communities to collaborate in forest conservation and management is given legal standing.
- On plantations the emphasis in management arrangements is on leasing, which could in theory include the lease to Forest associations. Areas of particular environmental values or that have endangered species should not be subject to lease agreements. Concessions for timber harvesting are also possible; this implies that although privatisation through leasing is possible so also is of management by the Kenya Forest Service
- A Forest management and Conservation Fund will support indigenous forest management, rehabilitation of provisional forests, extension and seedling production, and promotion of community based projects for forest adjacent communities

- Definition of forests is extended to include woodland areas that do not have closed canopy to be brought under management. The bill enables the declaration of provisional forests where local authorities or private forests are mismanaged. It also enables the Minister to declare an ungazetted forest area to be a local authority forest. Community involvement in the management of these is also enabled.
- The bill enables the Chief Conservator of Forests to develop regulations and guidelines to effect all the above actions. It would also give legal force to the Presidential decrees prohibiting tree felling.

Participatory Forest Management

- Community involvement in the management of forests takes a wide range of forms and is described by a number of terms. Paragraph 40 of the New Forest Bill refers to communities applying to the CCF for permission to participate in the conservation and management of a state or local authority forest.
- In principle, participatory forest management PFM could be applied in all forest types including the three main sub-divisions i.e. natural high forests, plantations and dry land forests.
- The main justification for community participation in natural resource management revolve around equity and efficiency. The equity driver refers to the livelihood benefits that forest adjacent communities can derive from the resource and the need to maximize these. The efficiency driver rests on the problems that the Forest Department has in protecting and managing a large resource, the cost involved and the fact that collaboration with local communities may result in both better management and reduced costs.
- In general the more critical the forest is in sustaining livelihoods of forest adjacent communities the higher the level of interest in participating in its management. But potential co-managers must be convinced that they stand to gain in a long-term and substantive fashion and they need some form of binding contract to prove this.
- In most cases however, securing of forest user rights through agreed management plans is the more common strategy
- In general the more easily definable the boundary of the resource and who has a primary stake the more straight forward is the process. The definition of who should benefit is often more difficult than assumed. Basing decisions on simple geographic proximity may ignore the rights and power of the more distant stakeholders.

  Correspondingly, the more diverse the range of benefits, the less useful is the simple notion of geographic proximity. The more heterogeneous the Community, the more difficult it is for them and the Forest Department to reach agreement on how to manage forests.
- There is increasing interest in the PFM as a testing ground for governance reforms. In forest management a high degree of interest in the resource is combined with a complex set of legal and institutional factors.
- The transfer of management responsibility supports the trend to reduction of state control and increased accountability of government agencies.

- In this sense PFM would strongly support the NARC manifesto commitments on good governance. The interest of many donor agencies rests on this good governance perspective.
- The PFM processes are long term and involve a complex set of actors beyond the Forest Department and communities.
  A high degree of political will is required to drive the institutional changes. Although joint forest management offers long-term savings, there is a heavy upfront investment of staff time and resources (human & monetary)
- The role of the Forest Department changes from player to a referee. Its monitoring role becomes critical and so does the part it plays in ensuring that elites don't capture benefits at the expense of the poor and less powerful.
  Replacing the traditional police function with a partnership process is very challenging. Forest staff will require a range of new skills and exposure to develop new attitudes and behavior. Community based organizations will require capacity building to manage internal processes. This building of capacity of CBOs would again be in line with the NARC manifesto commitments
- The catalytic role-played by donors and NGOs has been crucial where PFM has registered success. The best example is illustrated in the Nepal experience.
  Although the returns may eventually be substantial, those involved in the process have to be committed to a long-term investment.
  The foresters in Nepal predicted disaster as the end product of communities' involvement in managing forests.
  From a slow start in mid 1980's there are now 12,000 Forest User Groups. The forest condition has improved considerably. One of the present challenges is encouraging more active management to realize livelihood benefits.
- Mainstreaming i.e. incorporation of stakeholders' participation is possible. But long-term commitment is needed. And developing local ownership whilst piloting is crucial.
- In his work "*Principles and practice in forest co-management'* Brown notes that even donors and other funding agencies are also being realistic about what PFM can achieve and where.
- The interaction of a number or all of these factors addressed above, will determine the success of PFM. There is no single model that can be considered universally applicable.

Steps in the PFM preparation process

Activities	Output	Verifiable indicators	Assumptions	Time schedule			
				I	*II*	*III*	*IV*
1. Write application to the CCF or County Council to start PFMP process	Written Authority, consent to proceed	Letter of authority	No objection from the CCF or County Council				
2. Holding of public barazas/reconnaissance survey	Awareness creation	Minutes/ reports	Public goodwill				
3.Forest data collation/literature review; • Forest information, data collection & collation	• GAPS identified • Socio-economic survey report • Resource inventory report etc.	Quality reports	• Availability of funds on time • Public goodwill				
4. Conducting PFMP workshops • Presentation & discussions of reports • Stakeholders analysis • Identification of thematic areas • Forest zonation exercise	• Updated data/ information • Stakeholders identified • Themes developed • Forest zoned	Workshop proceedings Maps/ sketches	Funds available on time Public goodwill				
5. Compilation of 1st draft of the PFMP	1st draft produced & circulated to all stakeholders	Draft management plan Comments from stakeholders					
6. PFMP review workshop	Improved draft PFMP	Workshop proceedings	Funds available				
7. Editing & publishing of the final PFMP	Final plan produced	Final plan	Funds available				
8. Submission of PFMP to CCF for approval	Approved Plan	Authority fore approval (Signature)	CCF will approve the plan				
9. PFMP launching & implementation	Launched Plan	Minutes & reports on the event	Funds are made available				

3.4. Involving people in management planning – participants' experience

Participants were asked to discuss who they would involve in producing a management plan for Kenyan IBAs.

It was agreed that all communities who lived within or close to (within 3-5 km) of the resource should be invited to participate in the management planning process. These might comprise the following groups:

Licensees

- Fuelwood collectors
- Bee Keepers
- Saw millers
- Herbalists
- Grazers
- Water users

- Village elders
- Community Based Organisations

Initial approaches to these groups should be made through:

- The provincial administration (Provincial Commissioner, District Commissioner-District Officer-Chiefs)
- Local authorities
- Elders
- Politicians
- Relevant Government Departments

It was considered important to hold open discussions early on during the management plan process to explain the process of producing and implementing the management plan to user groups, and to seek their participation in the process. From participant's experience, the best way to do this is to hold an open meeting to which all user groups are invited. The user groups should then be asked to nominate an individual or individuals to represent their views on a user-group committee. A balance needs to be struck between seeking representative from a wide variety of interest groups, but not making the committee so large that it becomes impossible to reach decisions at them. It was noted that the views of poorer groups are likely to be under-represented on this user-group committee. Finally, an umbrella body should be set up incorporating this user-group committee, NGOs and Government departments. This umbrella group will produce the management plan.

Once the management plan has been agreed by the relevant stakeholders, a presentation should be made to the local community. This presentation should explain how implementation of the management plan will affect them.

3.5. What information do you need to produce a management plan for a Kenyan IBA?

Participants were asked to discuss what information they would need to produce a management plan for a Kenya IBA, and how they would gather this information.

It was suggested that the following information would be needed:

- Size of the site
- Location of the site, including a map of it and the surrounding area
- Land tenure
- Existing infrastructure
- Legal status of the site
- Climatic conditions (rainfall patterns, mean temperature, humidity)
- Geology and soils
- Drainage
- Natural resource inventory (ie habitats, species)
- Historical and socio-cultural aspects of the site
- Resource use systems
- Threats/pressures on the site
- Ongoing conservation activities/initiatives/interventions and by whom

The following methods were suggested for collecting this information:

- Mandating a planning team of relevant experts or lead people
- Carrying out a literature review
- Convening consultative workshops with stakeholders e.g. adjacent communities
- Seeking expert knowledge (liase with past workers, researchers, agencies etc to access existing information)
- Undertaking baseline surveys
- Forming thematic areas for information gathering, which are led by experts/lead agencies or people

3.6. Management Planning Exercise 1. Evaluating information and deciding on objectives and management for The Annex at Lake Naivasha

A field visit was made to The Annex (a Kenya Wildlife Service Reserve) at Lake Naivasha and participants were given a talk on the reserve by Kenya Wildlife Service and Anthony Githito of Lake Naivasha Riparian Association (LNRA) on the reserve. Participants then divided into three groups.

Part A. Each group was asked to evaluate information about the site by answering the following questions:

- What are the most important biological features (i.e. habitats, species, and ecological processes) at the site?
- What is the most important current and potential human use of the site?
- Are there are any constraints on what you would be able to do there, and if so, what are they?
- Are there any pressures / threats / factors affecting the key interest of the site, and if so, what are they?

Part B. Each group was then asked to agree their intention and action for the site by:

- Setting out a long-term vision/strategic plan for The Annex.
- Within this long-term vision/strategic plan, agreeing specific objectives for The Annex.
- Deciding what management they would carry out to achieve these objectives.
- Deciding what monitoring they would carry out to determine whether they are achieving their objectives.

Groups were then asked to present their results. During each presentation, participants were asked to consider the following:

How clear and unambiguous are the long-term vision/strategic plan and objectives that the groups have decided on, For example, would everybody who reads the management plan have the same understanding of what we wanted to achieve at the site?

Do the objectives contribute to achieving the long-term vision/strategic plan?

Will the management prescriptions contribute to achieving the objectives?

Will the monitoring prescriptions be sufficient to determine whether we are successful in achieving the objectives?

Is the prescribed monitoring the most efficient way to determine whether we are achieving the objectives i.e. could the monitoring be carried out in a way that requires fewer resources?

Presentations from the exercise

Part A. Evaluation

Biological features considered important at the site by the three groups are summarised in the table below:

Habitats	**Species**	**Ecological processes***	**Human use (current & potential)**
Littoral zone vegetation Acacia woodland Papyrus Swamp Open water Bushland + Scrubland	**Fauna:** large herbivores, various wetland bird spp., fish spp. **Flora:** Acacia woodland, Kikuyuy grass, *Cyperus* papyrus, *Typha*, Water hyacinth	Nutrient cycling Herbivory Predation and competition Regeneration and succession Foodchain Primary, secondary and tertiary food production Species invasion	Eco-tourism (game viewing and camping) and recreation Fishing Harvesting of papyrus Research and education

The following constraints on what it was possible to do at The Annex were identified, together with the pressures/threats/factors affecting the site:

Constraints

- The small size of the reserve
- The lack of clarity on who owns which areas of land makes discussions with landowners difficult
- Lack of resources
- Inter-agency conflicts

Pressures/threats/factors

- Over-abstraction of water
- Limited carrying capacity of the Annex
- Pollution (pesticides run-off & sewage discharge) flowing into the Lake
- Catchment destruction/deforestation/excisions affecting water flow into the Lake
- Natural disasters
- Poor farming methods on surrounding land increasing siltation & eutrophication of the Lake
- Illegal fishing on the Lake
- Uncontrolled development in the surrounding area affecting its suitability for large herbivores that use the Annex
- Overgrazing of surrounding land affecting its suitability for large herbivores that use the Annex
- Irrigation upstream reducing water supply to the Lake and its surroundings
- Poaching
- Aquifer water harvesting for Geothermal power production (Cooling process)

Points arising during feedback session

There was confusion over the reasons for identifying important ecological processes at a site, and over which processes to include. The reason for identifying them is to ensure that these important processes are maintained or restored. For example, large herbivores at a site might not necessarily be identified as being of high conservation importance in terms of their conservation status, but they might be important in providing suitable conditions for other species of high conservation value. Hence the objectives at a site would undoubtedly need to ensure that suitable densities of large herbivores are present. Because of this confusion, groups included a wide range of ecological processes taking place at the site, not all of which would influence the site objectives.

In the case of The Annex, it was generally considered that all the habitats present and that most of the conspicuous fauna were all of important. Interestingly, no groups referred to the fact that the area of The Annex supports two globally threatened bird species, grey-crested helmet-shrike and Basra reed warbler (see Bennun and Njoroge, 1999). In most cases these species would be evaluated as being of greater 'importance' than other species present. Also, from a global perspective (and that of most donor organisations), the presence of such species is likely to afford the site a much higher conservation status/priority for resources.

Part B. Intention & action

Presentation by Group 1.

Long-term vision/strategic plan for the Annex:

To enhance sustainable use of the rich biodiversity (Annex) while providing opportunities for socio-economic development of the surrounding communities in improving their livelihoods through collaborative involvement of all stakeholders. This Strategic Plan is for a 10-year period.

Objectives & prescriptions

Objective 1. To create/promote awareness about the importance of the rich biological biodiversity of the Annex for the local community, the nation and the world as a whole.

Management prescriptions:

- Provide education and outreach for schools and other target groups (local leaders, policy makers, hoteliers, local communities etc.)
- Prepare brochures, posters, documentaries, leaflets, websites etc.

Monitoring prescriptions:

- Record number of visits e.g. by schools
- Monitor Knowledge, Attitudes and Practices (KAP)

Objective 2. To promote eco-tourism activities in The Annex.

Management prescriptions:

- Improve campsites, nature trails, picnic sites
- Introduce/boat rides, tour guiding
- Provide visitor centre
- Capacity build (train guides)

Monitoring prescriptions:

- Record number of operational campsites
- Record the revenue realised

Objective 3. To formalise the existing wildlife corridors and lobbying with the landowners in order to allow for free movement of wildlife.

Management prescriptions:

- Mark out and legalise the corridors
- Fundraise for land purchase targeting traditional wildlife dispersal routes

Monitoring prescriptions:

- Carry out animal census

Objective 4. To protect and conserve the existing habitats and biodiversity.

Management prescriptions:

- Carry out regular surveillance patrols
- Carry out community policing
- Construct vantage points
- Regulate numbers of large herbivores e.g. through culling, translocation etc

Monitoring prescriptions:

- Census animals and water birds
- Monitor vegetation changes/trends
- Monitor number of fish eagles hatching successfully
- Monitor levels of poaching/encroachment
- Monitor water levels and water quality
- Monitor levels of siltation

Objective 5. To provide opportunities for income generation in and around the ecosystem.

Management prescriptions:

- Provide access to rural credit facilities to improve rural livelihoods e.g. for small enterprise developments
- Sell artefacts, curios etc. through establishment of a gift shop
- Provide cultural centres for dance troupes etc.
- Enable agro-forestry practices to supplement farming activities especially on the catchment areas
- Encourage farming methods that have a high economic return and reduced environmental impacts
- Provide for proper waste disposal and pesticide/herbicide use (promote organic methods)

Monitoring prescriptions:

- Monitor per capita incomes of the local community

In addition, there will be a mid-term review of our strategic plan and check on the implementation of specified objectives

Presentation by Group 2.

Long-term vision/strategic plan for the Annex:
To have a bigger, better ecologically managed sanctuary.

Objectives:
1. Expand the sanctuary
2. Improve the tourism infrastructure
3. Enhance the research activities and conservation education
4. Market the area for tourism
5. Conserve biodiversity of the area

Management prescriptions:
- Acquire more land through negotiation with relevant stakeholders
- Rehabilitate and expand infrastructure (Bandas, picnic sites, nature trails, camp sites, education centres)
- Have a management plan of The Annex in place
- Have a research and monitoring unit for the site
- Implement the legal framework that caters for the biodiversity conservation
- Market the area through tour companies or agencies e.g. KTB

Monitoring prescriptions:
- Census animal and produce species inventory
- Record number of visitors and revenue generated
- Monitor quality and quantity of the water
- Record number of visitor facilities restored or installed
- Record acreage of the sanctuary
- Obtain feedback from tour operators
- Track threatened species
- Monitor indicator species/keystone species

Presentation by Group 3.

Long-term vision/strategic plan for the Annex:
To have an intact, fully functioning ecosystem with a wider area of coverage for future generation. This will be achieved through sustainable use and management.

Objectives:
1. Ensure adequate wildlife habitat
2. Protect riparian ecosystem
3. Increase awareness on the importance of The Annex as a RAMSAR site
4. Promote research and monitoring activities within The Annex and adjacent riparian areas
5. Manage and develop The Annex into a recreation centre for local and international tourists

Management prescriptions:

- Manage and restore habitat
- Acquire land and share benefits
- Reforest areas
- Control diversion of water
- Develop participatory action learning (PAL) programmes

Monitoring prescriptions:

- Census populations of animals & birds
- Census tourists and record incomes
- Carry out regular socio-economic surveys
- Periodic sampling of vegetation types
- Monitor aquatic macrophytes
- Monitor nutrients and pesticide levels in the water mass

Points arising during feedback session

It is important that the wording of the long-term vision/strategic plan and objectives is clear and unambiguous. Otherwise, different stakeholders might have a different understanding of what it is intended to achieve at the site. For example, during the presentations there was discussion that over the definition of a 'fully functioning ecosystem' (see Group 2's long-term vision/strategic plan). From this discussion it was clear that different individuals had quite different interpretations of what the long-term vision for the site was. Although such discussions over definitions can appear pedantic and a waste of time, it is surprising how often they reveal fundamental differences about what different individuals want to achieve at a particular site.

It is also important to specify the time-frame over which it is intended to achieve the long-term vision/strategic plan and objectives (see presentation by Group 1).

It is best to list management and monitoring prescriptions beneath individual objectives. Without doing this, it is easy to find that you have included prescriptions, which do not contribute to achieving any of your objectives, and also to list objectives which don't have any prescriptions to achieve them.

It is worth devoting considerable thought to the most practical and efficient ways of monitoring whether you are achieving your objectives. For example, instead of monitoring the health of populations of all bird species at Lake Naivasha, it might be best to concentrate resources on just monitoring those of highest conservation value and/or those that might be moist sensitive to pressures/threats at the site (indicators species). At Lake Naivasha African fish eagles are thought to have declined because of a reduction in their main prey, red-knobbed coots (Bennun and Njoroge, 1999). It might therefore be more efficient (given limited resources) to monitor numbers of

African fish eagles (which would be relatively easy to do) to provide a measure of the health of the Lake, than to monitor numbers of certain other species.

3.7. Management Planning Exercise 2. Identifying stakeholders, evaluating information and deciding on objectives and management for Kakamega Forest, Kinangop Grasslands and Yala Swamp

Participants were re-arranged into three different groups. Each group was then asked to carry out the same exercise as Management Planning Exercise 1, but to do this for Kakamega Forest, a mid-altitudinal tropical rainforest (Group 1), Kinangop grasslands, an area of montane grassland (Group 2) and for Yala Swamp, a complex of wetlands Group 3). In addition, groups were asked to identify who they would involve in the production of a management plan for these sites.

Presentation by Group 1 – Kakamega Forest

Evaluation:

Important biological features
Habitats: closed canopy tropical rainforest, riverine, grassland, plantations
Indigenous flora: *Olea capensis*, *M. eminii*, *F. Africana*, *P. Africana* (
Plantation trees: *Pinus* spp., *Cupresus*, *Eucalyptus* (Plantations)
NB – Over 300 floral species
Fauna: primates, avi-fauna (2 Globally and 14 regional threatened species), amphibians, mammals, butterflies, insects

Important current and potential human use
NRC, saw-milling, eco-tourism, charcoal burning, fuelwood collection, water harvesting, apiculture, butterfly farming, grazing, research, socio-cultural uses, recreation.

Constraints
Inadequate facilitation for boundary policing, inadequate funds, inter-agency conflicts, conflicting legislation.

Pressures/threats/factors affecting the key interest of the site
Encroachment, excisions, illegal logging, charcoal burning, de-barking, forest fragmentation, overexploitation of fodder, political pressure, population. Pressure.

Intention & Action:

Long-term vision/strategic plan: To conserve and sustainably manage Kakamega's unique biodiversity while enhancing the socio-economic standards of the local community. This Strategic plan is for a 20-year period.

Objective 1. To promote conservation education and awareness.

Management prescriptions:

- Provide education and outreach for schools and other target groups (local leaders, policy makers, hoteliers, local communities etc.)
- Prepare brochures, posters, documentaries, leaflets, websites etc.
- Use the media, theatre, resource centres etc
- Carry out exchange programmes

Monitoring prescriptions:

- Record no. of school visits
- Record no. of exchange visits
- Record no. of environmental clubs formed and membership
- Record no. of Site Support Groups/Community Based Organisations formed

Objective 2. To enhance and encourage stakeholder participation in Kakamega forest conservation.

Management prescriptions:

- Put local coordinating committee in place
- Have regular meetings
- Fundraise for activities in the management plan

Monitoring prescriptions:

- Record no. of meetings
- Record no. of proposals submitted and funded projects

Objective 3. To protect and conserve Kakamega's unique biodiversity.

Management prescriptions:

- Carry out community policing
- Set-up species and habitat monitoring schemes
- Carry out advocacy and lobbying
- Harmonise existing legislation
- Implement forest thematic zonation for different user groups

Monitoring prescriptions:

- Record no. of arrests and court cases
- Record no. of confisticated items
- Record no. of surveillance patrols
- Census animals and water birds
- Monitor trends of indicator species

Objective 4. To promote alternative income generating activities.

Management prescriptions:

Eco-tourism promotion

- Capacity build (Customer care, PR, Visitor security, Community tour guiding, First Aid, Visitor handling)
- Improve/upgrade existing tourist infrastructure (Bandas, campsites, nature trails, roads etc)
- Implement marketing strategies (Billboards, brochures, websites, posters)

Alternative IGAs

- Promote agro-forestry, beekeeping, butterfly farming, curios and artefacts, gift shops, dance troupes, sericulture etc.

Monitoring prescriptions:

Eco-tourism:

- Collects visitor statistics
- Record revenue collected
- Record no. of personnel trained
- Record no. of tourist facilities set up
- Monitor feedback from visitors and tour operators

Alternative IGAs

- Record per capita incomes of the local community
- Carry out Knowledge, Attitudes and Practices (KAP) study
- Record no. of operational community small scale enterprises (SMEs)

There would be a mid-term review of our strategic plan and check on the implementation of specified objectives

Presentation by Group 2 – Kinangop Grasslands

Evaluation:

Important biological features
Habitats: grasslands (short grass and tussocks), woodlots (fields of planted trees), wetlands (man-made dams, marshes)

Species: Sharpe's longclaw, Aberdare cisticola, Jackson's widowbird, Hunter's cisticola, great-crested grebe, long-tailed widowbird and species of frogs and reptiles

Important current and potential human use
Farming (arable and livestock), quarrying for building stones, flower farming/horticulture, beekeeping, fishing, milk industry, eco-tourism, ecosystem restoration

Constraints
Land-use policy and private land ownership, inadequate awareness by local farmers

Pressures/threats/factors affecting the key interest of the site
Rapid population increase, habitat conversion to arable farming, land sub-division

Intention & Action:

Long-term vision/strategic plan: To improve the conservation status of threatened species through sustainable development.

Objective 1. To conserve the threatened species.

Management prescriptions:
- Acquire more land specifically for conservation of threatened species
- Develop a mgt plan through a participatory approach
- Carry out education and awareness
- Lobby for change of land-use from cultivation to dairy farming

Monitoring prescriptions:
- Carry out threatened species population census
- Record area of land acquired for conservation of threatened species

Objective 2. To improve livelihoods of the local people

Management prescriptions:
- Carry out a socio-economic survey
- Enhance community participation in conservation
- Introduce bee-keeping

- Develop infrastructure
- Establish cottage industries such as wool spinning
- Develop eco-tourism activities

Monitoring prescriptions:
- Monitor the performance of eco-friendly income generating activities
- Monitor carrying capacity of land-use

Presentation by Group 3 – Yala Swamp

Evaluation:

Important biological features (i.e. habitats, species, and ecological processes)
Habitats: papyrus swamp, open water (lake), bushlands/scrub, abandoned paddies, and grassland

Species:
Fish: mudfish, mumi, ong'alo, okoko, monye, fulu, odhadho etc.
Birds: papyrus gonolek, papyrus yellow warbler, Caruther's cisticola, white-winged warbler, papyrus canary, African fish eagle
Plants: *Cyperus papyrus*, *Typha* spp., *Lantana camara*, cactus, guava, water hyacinth, *Acacia*, *Euphorbia*, Figs etc.
Mammals: hippos, bats, hyena, sitatunga, reedbuck, vervet monkeys, leopards, otters, aardvarks, mole rats
Reptiles and Amphibians: green mambas, puff adders, cobras, frogs, toads, tortoise, terrapins, lizards

Important current and potential human use
Current: water abstraction, fishing, farming, livestock grazing, papyrus harvesting, macrophyte harvesting, water transport
Potential: rice farming (large scale), eco-tourism and bird watching, research and education centre

Constraints
Conflict of interest (stakeholders), limited awareness among locals, prevalence of poverty, lack of political will

Pressures/threats/factors affecting the key interest of the site
Pollution, inappropriate farming methods, invasive weeds, siltation, catchment degradation, flooding (periodic), excessive vegetation harvesting, human-wildlife conflicts, burning and reclamation, construction of dykes, poor fishing methods

Intention & action

Long-term vision/strategic plan: To have a well conserved fully functioning ecosystem for sustainable and improved livelihoods of adjacent communities.

Objective 1. To improve the community livelihoods.

Management prescriptions:
- Promote and develop IGAs
- Set up Yala Swamp Management Committee and liase with regional committees.
- Mobilise local groups to reach out to local institutions.

Monitoring prescriptions:
- Carry out socio-economic survey
- Survey disease prevalence rates and mortalities

Objective 2. To promote research and monitoring of ecosystem

Management prescriptions:
- Set up Yala Swamp Management Committee and liase with regional committees

Objective 3. To properly conserve and manage the catchment areas

Management prescriptions:
- Initiate reforestation of catchment

Monitoring prescriptions:
- Carry out periodic resource/habitat and ecological surveys

Objective 4. To create awareness on conservation of the swamp

Management prescriptions:
- Develop an education resource centre
- Publicise the site through mass media

Monitoring prescriptions:
- Record no. of people applying knowledge from the education centre
- Record no. of visitors to the site/centre

Objective 5. To control and regulate rate of infrastructural development

Management prescriptions:
- Set up a programme management committee to coordinate activities

Constitute by-laws and spell out penalties

Monitoring prescriptions:

- Record acreage covered by planning

3.8 Open session and feedback

Information from the feedback forms suggested that the workshop was useful and timely and that its pace and contents were suitable for the majority of participants. It was, though, considered that participants might need further support, both in terms of guidance and financial resources, to enable management plans to be produced for their respective sites.

4. References

Bennun, L. and Njoroge, P. 1999. Important Bird Areas in Kenya. Nature Kenya, The East African Natural History Society, Kenya.

Bennun, L. 2002. African NGO-Government Partnerships for Sustainable Biodiversity Action Project. Monitoring Important Bird Areas in Africa. A Regional Framework. Birdlife International, Cambridge, UK.

Appendix I. Outline of the workshop

Day 1 – Monday 13 October

Time	Session
07:30	**BREAKFAST**
08:30-10:30	Introductions/housekeeping Participants' expectations of the workshop Outline of the workshop Participants' experience in producing & implementing management plans
10:30-11:00	**COFFEE**
11:00-13:00	Basic principles of management plans & management planning Forestry Department experience in producing management plans
13:00-14:00	**LUNCH**
14:00-15:00	Involving people in management planning (discussion based on participant's experience) • Who to involve • How to involve them
15:00-15:30	**TEA**
15:30-16:15	RSPB experience in producing & implementing management plans
16:15-17:30	Collecting & summarising information about a site • What information do you need? • How would you collect it?
19:30	**DINNER**

Day 2 – Tuesday 14 October

07:30	**BREAKFAST**
08:30-09:30	Discussion on how to evaluate the importance of different biological features & aspects of human use at a site
09:30-13:00	**Exercise 1.** Field visit to The Annex at Lake Naivasha to evaluate the importance of different features at the site, identify constraints, identify the main factors/threats/pressures on the site & set objectives
13:00-14:00	**LUNCH**
14:00-15:30	Continuation of exercise & feedback
15:30-16.00	**TEA**
16:00-17:30	**Exercise 2a**. Decide, for your particular site, who you would involve in production of the management plan & how you would involve them Feedback from groups
19:30	**DINNER**
20:30-21:30	Video on Korup tropical rain forest in Cameroon

Day 3 – Wednesday 15 October

07:30	**BREAKFAST**
09:00-10:30	**Exercise 2b.** Identify what information you already have about your site, what additional information you would need, and how you would obtain it Feedback from groups
10:30-11:00	**COFFEE**
11:00-12:30	**Exercise 2c.** Evaluate: • what is important about your site, in terms of its biological features & human use? • what are the constraints on what you can do? • what are the main factors/threats/pressures affecting the key interest of your site?
12:30-13:30	**LUNCH**
13:30-15:00	Feedback from groups **Exercise 2d.** • Assess the options for addressing the main factors/threats/pressures affecting the key interest of your site. • Set out the long-term vision/strategic plan, objectives & management for your site
15:00-15:30	**TEA**
15:30-16:30	Feedback from groups
19:30	**DINNER**

Day 4 – Thursday 16 October

07:30	**BREAKFAST**
08:30-10.00	Open session on the format, ideas & issues discussed during the workshop Summing up
10:00	**CLOSE**

Appendix II. AN OVERVIEW OF PARTICIPATORY FOREST MANAGEMENT PLAN PROCESS

1.0 INTRODUCTION

The purpose of this paper is to share insights into the aspects of preparing a Participatory Forest Management Plan, the management and value of forest user groups for forest resource management as well as legal instruments for forest users' participation.

The destruction of forests has been an ongoing process ever since, and to control this the government has realized that forests cannot be protected by the Forest Department alone even if it was armed with strong legal instruments.

A gradual rethinking on strategies for efficient forest management culminated in giving emphasis on forests being entrusted to the actual users.

The Kenya Forest Master Plan of 1994 the official blue print on forestry development strongly advocates for participatory forest management and in line with this both the new Forest Policy along with the proposed Forest Bill 2000 were developed to articulate the concept of stakeholders participation in Kenya.

It is stipulated in section IV of the New Forest Bill that, the traditional forest users must form an Association of Forest Adjacent Community (AFAC) with its charter and a forest operational plan to get access to forest user rights.

Participatory Forest Management is globally gaining recognition as a way forward in enhancing sustainable forest resources utilization and conservation.
The PFM process is a highly participatory exercise among all stakeholders which requires initial trust building between the Forest Managers and the local community through a process of discussion about joint forest management in the context of:

- The roles of users
- Their right and duties
- Their needs for forest products, and
- Their perception of management possibilities

While special reference is made to the forest adjacent communities due to their dependence on the forests for their livelihood, other stakeholders including Government agencies, NGOs and private enterprises should not be overlooked.
The impacts of forests on forest adjacent communities are variable in nature. Adjacent communities cause damage to the forests through uncontrolled extraction of forest products, encroachment for agricultural development, forest fires, overgrazing and poaching on trees and game.

On the other hand forests negatively exert impacts on forest adjacent communities through crop damage and property or loss of human lives.
While the government agencies and the NGOs may be interested in forest conservation and sustainable resource uses, as well as improvement of livelihood standards of forest adjacent communities, the private sector may be interested in sustainable supply of forest products and services and to a lesser extent conservation of forests.

In preparation of the PFM plan, attention has to be given to the prevailing Government policies and legislation as well as the international conventions that this country is signatory to. The PFM preparation process has to conform to their regulatory requirements and mechanisms in ensuring orderliness, respect of all stakeholders as well as safeguarding the environmental functions of the forests.
It is prudent to note that of late the Government has accepted to accommodate stakeholders in the planning and management of forest resources.
Though the Forest Department still has the mandate to manage the country's public forests, it has entered into partnership with other Government agencies such as Kenya Wildlife Service, the National Museums of Kenya, the Kenya Forestry Research Institute and Nyayo Tea Zones Development Corporation and still is in the process of entering into more partnership with stakeholders outside the Government. Such include the functional partnership with the Forest Adjacent Dwellers Association (FADA) of Arabuko Sokoke Forest at the Coastal region of Kenya.

Having very little practical but fast developing experience on stakeholder involvement in the PFM, guidelines have been developed for participatory forest management based on experiences from piloting in Arabuko Sokoke, and the planning processes in Mt. Elgon, Rumuruti, Kereita, Eburu, Ngangao and Kitobo forests. More information has been sought on the same from regional experiences as well.

2.0 TYPES OF FOREST MANAGEMENT PLANS

A decision on the type of plan to be prepared depends in part on the status of the forest, the resource management capability of the forest adjacent communities and overall aim of preparing the plan.
A wide range of issues have to be given consideration during the planning process before arriving to a decision as to the type of plan to prepare. Drawing up of a participatory management plan takes time and it can be a very expensive undertaking. The communities' socio-economic status has to be given particular reference to avoid being over-ambitious. PFM plans are to be prepared as bargaining or lobbying tools to attract local and international funding and are of necessity drawn for implementation and not otherwise.
An operational management plan covering a period of up to five years is usually applicable where immediate remedial intervention measures are needed for proper resource management.

A strategic management plan spans over a period of up to twenty-five years and is used as a long term planning tool for sustainable resource management.
Both of the plans can be reviewed at different stages of implementation in line with recommendations from joint monitoring and evaluation management committees entrusted to oversee implementation.

3.0 THE PLANNING PROCESS

In the Kenya Forest Master Plan, it is stated that a number of fundamental issues have to be addressed if forest users are to continue enjoying the benefits provided by our forests.
Answers to the following questions should be provided:

i. Who are considered the forest beneficiaries?
ii. What are the benefits reaped from the forests?
iii. What are the forest values that need to be conserved?
iv. Currently, how are these values being used?
v. What is the sustainable capacity of the forests to produce the benefits/services?
vi. What should be the objectives of forest management?
vii. What strategies should be adopted to attain these objectives?
viii. What policy and institutional changes are needed to ensure sustainable management?

The PFM process must be open, transparent and all-inclusive by involving all the major stakeholders, the marginalized and vulnerable groups.
This is achieved through a series of public sensitisation meetings, seminars and workshops to discuss fundamental and critical issues that concern the stakeholders and the management of forests in general.
The planning process involves information gathering, field reconnaissance study and consultations at grassroots levels. It has been made mandatory that conservationist groups should seek clearance from the Chief Conservator of Forests before embarking on the plan process in all public forests. The groups are supposed to submit written applications for consent to initiate the process of writing joint forest management plans stating the expected course of action and the period within which the task is to be accomplished.
Key to the success of the plan process is the involvement of all stakeholders in all the steps. This not only ensures openness and accountability but also raises the chances of the plan's success and implementation.

The plan process involves the following actions:

3.1 Socio-economic survey

It is vital to establish the socio-economic status of the forest adjacent community along the following lines:

- How they use the forest
- What aspirations they harbour for the forests around them
- Their level of understanding of the forest values
- How they relate to the forest managers
- Whether they are ready to contribute towards sustainable forest management and in which way

As earlier stated, forests often exert negative impacts on the adjacent communities. These include problem animals, diseases inflicted by wild animals, localised climate changes and security risks to mention just a few. Mitigation of these impacts through some way of transforming them to become beneficial to the communities has to be sought. Animal problem for instance could be transformed through land use changes where game farming and eco-tourism replaces crop farming.
The same concept should be considered for other stakeholders, particularly the commercial forest users.

The technical capability and financial contribution to the plan process by conservationist groups willing to be enjoined in the plan should come out clearly before involvement.
Stakeholders' involvement in all the plan's stages injects confidence in owning up to decisions and increasing chances of the plan's success. It is important to know in advance the possibility of the plan's implementation.

3.2 Information Gathering and Data collection

In order to come up with an appropriate forest management plan, detailed information about the forest should be obtained. This entails defining the clear current status in which the forest is in with regards to vegetation cover, the history of the forest up to the time of compiling the plan and the threats the forest is faced with. All the vital information and data gathered would be used as a guide to devising intervention strategies or management actions that need to be taken.
Such information will include:

- The type of forest i.e. whether productive or protective forests. And for each type, the expected benefits.
- The type of products and services that are mainly obtained from the forest by the forest adjacent communities and other stakeholders
- The capacity of the forest to provide the benefits, either consumptive or non-consumptive

- Types of vegetation cover, their status, threats to biodiversity and habitats
- An attempt should be made to come up with some kind of forest values, i.e. water catchment, carbon sequestration etc

3.3 Policy and Legislation Framework

Reference should be made to the latest changes or amendments in the policy and legislation on forest management in the country. This is to ensure that the plan complies with these developments and not in conflict or contradicting the same.
Similarly, accepted concepts, rules and regulations made governing forest management made and altered from time to time should be given prominence in an effort to keep up with new trends. Strict adherence to these makes planning flexible as would otherwise be impossible with the rigidity of the law.

3.4 Institutional framework

In the plan process the mandate of participating stakeholders including government institutions in carrying out certain activities should be clear. The lead role expected of each institution should also be well defined. It is equally important to understand how the institutions are linked or connected to the Forest Department and to one another, and explore ways of strengthening the linkages in case weaknesses are identified.
The hierarchical position of the forest user association in relation to other development-oriented organs in the districts is of paramount importance. Also the organisational structure of the forest user association should indicate at what levels are the forest user rights transferable to the adjacent community from the Chief Conservator of Forests.

Ongoing programs carried out by any of the participating institutions should also be recognised to avoid future duplication. Information of social organisations existent within the community is to be collected stating the type of CBOs, their area of interest and activities. Possibilities should be explored of forming other non-forest user groups that may be enhanced to reduce direct dependence on the forest for provision of various products.

3.5 Management Planning Decision Making

This relates to the stage where decisions are reached on the roles different institutions and stakeholders will take in the process.
The plan should clearly state the mandates of the participating stakeholders as well as the roles other institutions are expected to play. Such decisions are reached at

during community workshops or seminars with the full representation of all participating stakeholders. Issues to be decided on at this stage include: -

- The choice of stakeholders that need to be involved in the planning process
- The suitable management plan to draw up-*operational/strategic*
- The plan's duration before review
- Assignment of lead roles
- The plan's objective
- Steps of the planning process
- Institutional arrangements
- Plan implementation

On the premise of the right governance, the organisations responsible for making management decisions and carrying out management activities are expected to be accountable to the wide range of stakeholders.
The governance structure should therefore spell out the responsibilities of each participating institution/organization and identify lead responsibility for each action. A conflict resolution mechanism should also be put in place

3.6 Multiple Use Zoning of Forests

Forests usually provide a number of services and benefits, including catchment protection, wildlife conservation, pole & wood fuel production and production of non-timber forest products. Forest planners need to ensure that the forest continues to provide these benefits on a sustainable basis.
Although it can be difficult to reconcile the conservation and production functions of forests, a system of management planning should evolve to accommodate these requirements.
The multiple- use zoning system divides the forest into functional units with two principal aims:

a) To maintain as much indigenous forest cover as possible, while guarding against the extinction of plant and animal species
b) To permit optimal use of forest resources on a sustainable basis

Forest Department's Planning Unit has a zoning system geared towards both production and protection. In the gazetted Nature Reserves there is maximum protection with no extraction or other disturbances permitted. Other protected areas are managed for activities such as conservation, water catchment protection, recreation and amenity. In practice subsistence extraction is normally permitted here.
Production areas comprise working circles for commercial production of sawn-wood, pulpwood, fuel wood and poles in plantations.
Before imposition of the ban on logging, there used to be logging circles in indigenous forests. Some forests have experimental working circles managed by Kenya Forestry Research Institute.

The Kenya Wildlife Service has produced management plans for National Parks and Game Reserves for some years through its Central Planning Unit. They include Aberdare National Park, Mt. Kenya National Park and Shimba Hills National Reserve. Forests are managed as a habitat type with few special management prescriptions.
The twin aims of conservation and sustainable exploitation are major objectives under the FD/KWS MoU. The proposed zoning builds on the existing Forest Department system, and includes the KWS system with the principal aim of conserving Kenya's Biodiversity.
There are three basic zone categories that can be applied to all forests, which should allow the overall management objectives to be realised:

- Protection Zone
- Utilization Zone
- Plantation Zone

In general, the different zones reflect different levels of forest resource extraction; ranging from none in the protection zone; moderate to great in the utilization zone and complete utilization in the plantation zone. A participatory management plan provides for a fourth zone, the Intervention or Community Landscape zone, outside the forest boundaries. The zones have to meet multiple objectives in order to provide for a wide range of goods and services for the multiple stakeholders.

3.6 Management Circles

Arising from the number of zones reached at during the zonation exercise with the participation of all major stakeholders, the PFM should provide for distinct or specific area-based management circles. In addition cross cutting thematic working circles can also be identified and incorporated in the plan.
Examples of area based working circles:

- Conservation of biodiversity working circle
- Production working circle
- Community use working circle
- Grasslands working circle

Examples of crosscutting working circles:

- Eco-tourism Development working circle
- Research and monitoring working circle
- Collaborative Forest management working circle

All the working circles need to be implemented if the objectives of the PFMP are to be achieved. Strategies and expected outcomes have to be designed for each one of the working circles. Activities are usually developed for all the strategies within the

entire plan period. The indicators to show progress towards achievement of desired objectives have to be given for each activity in addition to outlining the individual institutions responsible for implementing each activity.

4. THE PFM PLAN STRUCTURE

The plan's structure will to a large extent determine the type of plan to write. The plan implementation will involve people with different educational backgrounds. It is therefore necessary that the plans should be made simple to understand through use of symbols, should be reader friendly and not too detailed.
This does not mean that important details are to be left out, but rather it should be short, precise and focussed. It should further conform to scientific and technical norms of natural resource management, and should as well prove socially and economically feasible.

It should be designed along the following parameters: -

a. The plan should clearly state the objective and how to achieve it as well as the future trends of sustainable resource management
b. It must take into consideration the role of forests in the national economic development of this country
c. It should address the forest community's state of poverty. gender imbalance, and vulnerability of the less fortunate members
d. The plan should also respect the rights of stakeholders and address the inherent risks and assumptions in order to ensure the incorporation into the plan of appropriate mitigation measures
e. The plan should devise a workable conflict resolution mechanism
f. It should be clear on the issues and challenges to be addressed. It should also be clear on the target groups with their expected contributions and benefits towards sustainable forest management

4.1 Background information

Important among the areas to be looked at in the plan's structure are: -
This will include a detailed account of the forest area such as;

- The forest size and its geographical description and location
- The legal status
- Description of vegetation cover types
- The biodiversity and habitat status
- The forest's past history and record of events affecting its status to the present
- Socio-economic setting of the forest adjacent communities
- Main uses of the forest by the communities

- Problems challenges and threats facing the forest from forest adjacent communities or other forces from further a field
- Stakeholders analysis, and any other useful information noted in the course of data collection

4.2 Institutional framework

In the plan write up, the following information will be of much assistance:

- Brief description of the Government's institution mandated to manage the forest. Its structure, identified strengths and weaknesses and modalities of bridging this gap through assistance from other participating stakeholders
- Existence of other natural resource management agencies affiliated to the government, their roles in forest management and linkages with Government's mandated institution in forest management. Examination of the linkages and exploration into ways of strengthening them
- A note of ongoing conservation or management programs under NGOs, government institutions or community based organizations
- A survey of existing social organizations within the working area, their activities and how they can be incorporated into joint natural resource management or other income generating activities

4.3 Poverty and gender issues

The areas to be addressed here include:

- Improvement of forest adjacent community's livelihood though involvement in joint forest management
- Incorporation of the marginalized and vulnerable groups into the process
- Possible income generating activities that would reduce pressure on the forest
- Exploring cheaper/affordable and easily accessible alternative sources of forest products

4.4 Policy and Legislation framework

A brief account of inadequacies of past forest policy and law should be given and developments experienced up to the time of plan writing. The Government's forest policy objectives should be spelt out and indications of how the plan complies with it. Other relevant supporting policies should be highlighted in the plan.

To unblock the plan from rigidity of the law and guarantee its flexibility, accepted rules, concepts and regulations issued from time to time need to be recognized in the structure

4.5 Stakeholders

After careful identification of stakeholders who will participate in the PFM process, the result of stakeholder analysis should be presented, as well as their stake and impact they exert on the forest. This could all be presented in a matrix.

Stakeholder's analysis can be done on the basis of the following criteria:

1. Stakeholder ranking; based on interests and influence
2. Categorising stakeholders; on the basis of influence and interests
3. Stakeholder analysis; based on expectations

4.6 Methodology

This includes a description of the methods or ways used to collect data and information, the persons involved in the exercise and finally how the objectives and activities are decided upon. A clear account on this will reveal the openness and transparency of the plan.

5.0 Description of proposed programmes

The programmes planned for implementation in the plan could be numerous. In each one of the programmes the following components must come out clearly:

a) *Goal:* A statement on what the programme aims to contribute to overall forest development

b) *Objectives:* One or two statements on what the plan aims to achieve

c) *Strategies:* What should be put in place to achieve the objectives

d) *Risks and Assumptions:* The expected risks in the course of implementation and possible assumptions that may eliminate the risks

e) *Outputs:* Statements of what has to be achieved towards realisation of the objectives

f) *Activities:* These include statements on actions to be implemented in order to achieve the output and realise the objective

g) *Time frame:* This will indicate when each activity should take place within the programme period

h) *Inputs:* These include personnel, capital and material resources required during the programme duration. Indications on the possible sources of these inputs particularly from the forest adjacent community with possible implications are important to note. Utilisation of any existing resources should be justified.

Acronyms

i.	PFM	Participatory Forest Management Plan
ii.	FADA	Forest Adjacent Dwellers Association
iii.	AFAC	Association of Forest Adjacent Communities
iv.	NGO	Non Governmental Organisation
v.	CBO	Community Based Organisation
vi.	PFMP	Participatory Forest Management Plan

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Appendix III. RSPB experience with management planning – summary of presentation by Malcolm Ausden, RSPB

Introduction

In this presentation I will describe RSPB 's system of producing and implementing management plans, and how it ensures that the results of monitoring are used to improve the management of sites. There are several important differences, though, between RSPB reserves and Kenyan IBAs. The details of systems described will not necessarily be applicable to Kenyan IBAs, although the principles involved should still be relevant.

RSPB manages 171 reserves in the UK, covering a total area of 1,268 km^2. This represents 0.57% of the UK's land surface. Reserves vary in size from <10ha to 13,700 ha, but the majority (53%) are in the range 100-1000ha. A major difference between RSPB reserves and Kenyan IBAs is that RSPB has more or less complete management control over its land – 45% of their area is owned by RSPB and 55% of the area is under some form of management agreement, usually a lease. Hence there is little or no potential conflict of land-use between conservation and the immediate needs of local communities.

RSPB reserves have three main functions: 1) To conserve biodiversity, primarily rare and declining bird species associated with semi-natural habitats; 2) To provide for visitors and educational use; 3) To trial and demonstrate land-use practices that, if successful, can be used elsewhere in the wider countryside, particularly through incorporation into agri-environment schemes.

Another way in which RSPB reserves are different from Kenyan IBAs is that their habitats tend to be intensively managed. In the lowlands of the UK, most remaining fragments of semi-natural habitat are small and isolated and, apart from some woodland, are early successional habitats that have only survived because they have previously been managed to provide a resource for people. The natural processes that would prevent succession (eg grazing by large wild herbivores, fire, flood etc) are either absent or now only operate at an inappropriate scale for frequency to maintain the existing habitat in its associated species. In their absence, it is usually necessary to carry out often fairly intensive vegetation management to maintain the desired states of succession. In the uplands of the UK, the areas of remaining semi-natural habitat tend to e larger and the main conservation issue is over-grazing by sheep, and in Scotland, also by re deer.

A further difference between RSPB Reserves and Kenyan IBAs is that there is a substantial amount of habitat re-creation taking place on RSPB reserves, primarily re-creation of wetlands and of intertidal habitat to mitigate against looses due to se-level rise.

Because of these differences, management plans for RSPB Reserves set targets for the condition of the managed or re-created habitat and for individual species associated with them. The setting of such targets for habitats and species is likely to be of less relevance in management plans for Kenyan IBAs.

Management planning on RSPB Reserves

Each RSPB Reserve has a management plan which is reviewed and re-written once every five year. The first part of this review process involves collating information on the work undertaken during the previous five years and on the response of habitat and species to this work. This information is presented at 'pathfinder meeting'. The aim of this pathfinder meeting is to review the effectiveness of the work undertaken, and to agree the long-term vision and objectives for the site, and to broadly agree how to achieve them. Invitees to this pathfinder meeting include site staff, regional staff, HQ staff, representatives from government agencies (for government-notified sites), and where relevant, representatives of local communities, other organisations and other specialists. Even though, as mentioned above, RSPB has more or less complete management control over its land, it is still considered important to involve local communities in the decision-making process at many sites, or at least to invite them to a separate presentation explaining what we intend to do at the site. The level of involvement of local communities varies between sites. It tends to be greatest in Scotland where, due to historical reasons, there are greater issues over land-ownership, and at sites where large-scale changes in landscape or recreational use are planned. A major issue when involving local communities is identifying who actually represents the local community. Often, the people most willing to participate are well-educated, articulate individuals, who are often newcomers and don't necessarily represent the views of the wider community.

After the pathfinder management prescriptions for the site to the meeting's participants. Once these are fully agreed, the site manager writes the first draft of the management plan which is then re-circulated to the pathfinder's participants plus relevant regionally-based staff. Any comments from these are incorporated into a second draft. The most important sections of this second draft (the summary, long-term vision, objectives and work programme) are then sent to a team of senior regional staff and a team of senior HQ staff finally agreed to be finally signed-off ('validated'). Although the whole process of management plan production can prove lengthy, it is essential to have such a system of circulation and validation, to ensure that all levels of the organisation have agreed to the work that will take place at the site.

To increase the efficiency of management plan production, and ensure consistency of standards, all RSPB management plans adhere to the same format, irrespective of the size of reserve or the habitats that it contains. This format is described in a set of guidance notes which include a Word template on which ton write the management plan.

Recording and monitoring

Monitoring is considered a high priority on RSPB reserves. As mentioned in Section 3.2, to determine the effectiveness of your actions it is necessary to both record the actions undertaken plus the effect the actions have had. The actions undertaken on all reserves are recorded on a standardised computer programme called Countryside Management System. This has standardised codes for different management actions and a set of guidance notes to help ensure consistency of data entry across the reserve network.

There are two levels of monitoring carried out on RSPB reserves.

The 'First Tier' involves a set of monitoring actions carried out across all RSPB Reserves – primarily monitoring population of priority bird species and of a selection of non-avian species by site-based staff A list of the species to be monitored is produced by HQ and it is expected that all reserves supporting these species will monitor them annually (birds) or at usually less frequent, defined intervals (non-avian species). Implementation of this 'First Tier' of monitoring ensures that no species considered to be of a high national priority go unrecorded on reserves. It also allows the effectiveness of the entire reserve network to be evaluated against its reserve-wide objectives. 'First Tier' monitoring takes up on average 9% of site-based staff's time and costs £19 per ha per year (equivalent to 7% of annual site management costs).

The 'Second Tier' of monitoring involves additional site-specific monitoring of progress towards achieving site-specific management objectives. This 'Second Tier' involves many fewer projects which are usually monitored at less frequent intervals than 'First Tier' monitoring projects. 'Second Tier' projects mainly involve detailed monitoring of the effects of management on vegetation composition, structure and extent, and is usually carried out by HQ staff or by consultants paid for from a centrally controlled budget. Priority is given to monitoring the effects of new/novel management whose effects are difficult to predict, and particularly to management which, if successful, has the potential to be used more widely elsewhere. 'Second Tier' monitoring costs on average £2 per ha per year (equivalent to <1% of annual site management costs).

Ensuring the results of monitoring are used to improve management

As mentioned in Section 3.2, there is no point in carrying out monitoring if its results are not used to improve management of site. RSPB uses three systems to ensure that this happens.

Site audits. These involve auditing of the condition of a particular habitat on a suite of reserves. For example, the habitat condition of all lowland wet grassland on all reserves is assessed during the same year. Habitat condition is assessed using a standard proforma which defines the important measures of condition (attributes) of

the particular habitat. For example, for lowland wet grassland, this might include the number of different fields that have a sward height within a certain range of values etc. This audit also compares the condition of the habitat and population levels of key species against their desired state as set out in the reserve's management plan objectives. The audit is carried out by two HQ staff and the site manager.

The results of the audit are agreed between the HQ staff sand the site manager. The audit is then followed up by a workshop involving site staff and HQ staff. This workshop discusses generic issues across the suite of reserves, for example, difficulties in obtaining appropriate graziers. The workshop also agrees actions for the sites which are not currently achieving their desired condition. Theses sites are then re-visited the following year to assess whether these actions have been implemented and whether the habitat has responded accordingly.

It is easy to avoid carrying out such an audit system on the grounds that it is time-consuming and costly in the short-term. The cost of the audit is small, though, compared to the resources used to manage the site. For example, even with two people carrying out the audit, and the organisation and attendance at the following workshop, the costs of the audit are still only about 1.3% of annual site management costs. It is anticipated that such audits only need to take place once every five years ago, meaning that they will cost less than 0.3% of site management costs. If they increase the effectiveness of reserve management by more than about 0.3%, then, they will be money well spent!

Annual review meetings. These take place annually at all major reserves & less important sites that are undergoing major development. They involve site staff, the site staff's line manager and an Ecologist and Land Agent from HQ. Their purpose is to review the work carried out during the previous year and the results of any monitoring undertaken, discuss any issues that have arisen, and if necessary, make adjustments to the work programme planed for the following year.

Management plan pathfinders. The final system is that used to review management plans every five years, as mentioned earlier.

Appendix IV. Course participants & contacts

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