

Final report

Development of the Botswana Guidelines for Utilisation of Forest Reserves for Ecotourism Activities

Prepared by the Centre for Applied Research for

**The Department of Forest and Range Resources
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Contents

| | |
|--|----|
| List of Tables | 4 |
| Abbreviations..... | 6 |
| 1 Introduction | 7 |
| 1.1 Background and objectives | 7 |
| 1.2 Forest Reserves | 9 |
| 2 Findings of analysis..... | 9 |
| 2.1 Tourism | 9 |
| 2.2 Forestry | 11 |
| 2.3 Natural resource management..... | 13 |
| 2.4 Concluding remarks | 15 |
| 3 Results of consultations | 16 |
| 4 Major issues and options for ecotourism in Forest Reserves | 18 |
| 4.1 Management of FRs | 18 |
| 4.2 Land use zoning of and within FRs..... | 19 |
| 4.3 Under-utilisation of FRs | 19 |
| 4.4 Improving access to FRs..... | 21 |
| 4.5 Managing forest encroachment..... | 21 |
| 4.6 Increasing local benefits..... | 22 |
| 4.7 Reducing damage by elephants and fires | 22 |
| 4.8 Research and education..... | 24 |
| 4.9 Financing of FR management..... | 24 |
| 4.10 Enabling policy environment | 24 |
| 4.11 Tourism marketing..... | 25 |
| 4.12 Tourism products and diversification | 26 |
| 4.12 Logging | 27 |
| 5 Guidelines for ecotourism in Forest Reserves | 29 |
| 5.1 Introduction | 29 |
| 5.2 Guiding principles for ecotourism in FRs | 31 |
| 5.3 Global, regional and national policy requirements..... | 32 |
| 5.3.1 Global requirements | 33 |
| 5.3.2 Regional requirements..... | 33 |
| 5.3.3 National requirements..... | 35 |
| 5.4 Ecotourism | 37 |
| 5.4.1 Role of tourism in FRs and the region at large..... | 37 |
| 5.4.2 Code of conduct for tourists and operators | 38 |

| | | |
|--------|--|-----|
| 5.4.3 | Botswana tourism certification schemes..... | 41 |
| 5.4.4 | Ecotourism options for FRs | 42 |
| 5.4.5 | Allocation of ecotourism rights..... | 44 |
| 5.5 | Ecotourism and other uses in FRs | 46 |
| 5.5.1 | Other uses | 46 |
| 5.5.2 | Dealing with subsistence uses | 48 |
| 5.5.3 | Conflict prevention and minimisation | 48 |
| 5.6 | Ecotourism and communities | 49 |
| 5.6.1 | Enhancement of local benefits | 50 |
| 5.6.2 | Community participation | 51 |
| 5.7 | Natural resource management and ecotourism in FRs | 52 |
| 5.7.1 | General environmental management issues | 54 |
| 5.7.2 | Damage control..... | 56 |
| 5.8 | Institutional roles and responsibilities..... | 58 |
| 5.8.1 | Roles and responsibilities of institutions | 58 |
| 5.8.2 | Effective and constructive partnerships | 62 |
| 5.8.3 | Monitoring and evaluation | 63 |
| 5.8.4 | Compliance and enforcement..... | 65 |
| 5.9 | Financing sustainable FR management and ecotourism | 65 |
| 5.10 | Research and education in FR management and ecotourism | 67 |
| 5.11 | FR and ecotourism infrastructure | 69 |
| 5.11.1 | Tourism facilities | 69 |
| 5.11.2 | Public ecotourism support infrastructure..... | 72 |
| | References | 74 |
| | Appendix 1: Summary of local consultations..... | 78 |
| | Appendix 2: List of relevant policies and strategies | 86 |
| | Appendix 3: Definitions of terms | 88 |
| | Appendix 4: Limits of acceptable change | 91 |
| | Appendix 5: Principles of and guidelines for sustainable forest management | 92 |
| | Appendix 6: Some useful websites | 94 |
| | Appendix 7: The BTB ecotourism certification scheme (final draft; May 2009)..... | 95 |
| | Appendix 8: Summary of the Global Code of Ethics for Tourism | 101 |
| | Appendix 9: Layman’s draft ecotourism guidelines for Forest Reserves..... | 103 |

List of Tables

| | |
|---|----|
| Table 1 Ecotourism lessons from the literature..... | 11 |
| Table 2: Natural resource management lessons from the literature | 14 |
| Table 3: Assessment of FR management options | 18 |
| Table 4: Assessment of land use zoning of FRs..... | 19 |
| Table 5: Land use zoning within FRs | 20 |
| Table 6: assessment of options for other and multiple uses of FRs | 20 |
| Table 7: Assessment of options to improve access to FRs | 21 |
| Table 8: Assessment of options to curb encroachment into FRs | 21 |
| Table 9: Assessment of options for increasing local benefits..... | 22 |
| Table 10: Assessment of options to reduce damage to forest resources by elephant and fire | 22 |
| Table 11: Assessment of options for research and education..... | 24 |
| Table 12: Assessment of financing options..... | 25 |
| Table 13: Assessment of options for the policy environment | 25 |
| Table 14: Assessment of tourism marketing options. | 26 |
| Table 15: Assessment of options for tourism diversification | 27 |
| Table 16: Assessment of options for logging | 28 |
| Table 17 Check list for national policy and legislative requirements | 35 |
| Table 18: Potential ecotourism spots in Forest Reserves | 43 |
| Table 19: Checklist for capturing more economic benefits | 49 |
| Table 20: Guidelines and issues for community participation in ecotourism | 51 |
| Table 21: Options for land zoning/ categorisation of FRs..... | 53 |
| Table 22: Options for institutional management models for FRs..... | 53 |
| Table 23: Comparative strengths and weaknesses of potential partners | 62 |
| Table 24: Preliminary key performance indicators..... | 64 |
| Table 25: Possible sources of funding for FR management..... | 66 |

List of Figures

| | |
|--|----|
| Figure 1: Location of Forest Reserves and some potential ecotourism spots | 8 |
| Figure 2: Fire scars in 2008 | 23 |
| Figure 3: Key definitions | 29 |
| Figure 4: Need for action beyond words and definitions | 29 |
| Figure 5: The ecotourism potential within the sustainable development perspective..... | 31 |
| Figure 6: Importance of biodiversity conservation and utilisation..... | 32 |
| Figure 7: Status of the KAZA initiative..... | 34 |
| Figure 8: Botswana vision for biodiversity..... | 35 |
| Figure 9: Important tourism documents | 37 |
| Figure 10: Code of conduct for tourists and travellers | 38 |
| Figure 11: Code of practice for Botswana Ecotourism operators..... | 40 |
| Figure 12: The right to use biodiversity by local communities | 44 |
| Figure 13: Checklist for lease conditions for tourist operators | 46 |
| Figure 14: Harvesting of firewood | 47 |
| Figure 15: Guidelines for handling subsistence uses in FRs..... | 48 |
| Figure 16 Focus of reserve managers and staff | 54 |
| Figure 17: Checklist for developing ecotourism in FRs | 55 |
| Figure 18: Elephant damage compromises effectiveness of firebreak..... | 56 |
| Figure 19: Fires and communities..... | 57 |
| Figure 20: Communities and the monitoring and evaluation process..... | 63 |
| Figure 21: Proposed funding sources for FR management..... | 67 |
| Figure 22: Need for proper signposting and information provision | 68 |
| Figure 23 Checklist for development of infrastructure | 70 |
| Figure 24: DFRR camp 171 in Sibuyu FR..... | 73 |
| Figure 25: Maintenance of firebreaks..... | 73 |

Abbreviations

| | |
|--------|---|
| BBDSAP | Botswana Biodiversity Strategy and Action Plan |
| BD | Biodiversity |
| BTB | Botswana Tourism Board |
| CAR | Centre for Applied Research |
| CBNRM | Community-Based Natural Resource Management |
| CBO | Community-Based Organisation |
| CECT | Chobe Enclave Conservation Trust |
| CH | Controlled Hunting Area |
| ChDC | Chobe District Council |
| CNP | Chobe National Park |
| CPR | Common Property Resources Management |
| DDP | District Development Plan |
| DFRR | Department of Forest and Range Resources |
| DoT | Department of Tourism |
| DWNP | Department of Wildlife and National Parks |
| FR | Forest Reserve |
| GR | Game Reserve |
| HATAB | Hotel and Tourism Association of Botswana |
| IUCN | International Union for the Conservation of Nature |
| KAZA | Kavango Zambezi Transfrontier Conservation Initiative |
| LAC | Limits of Acceptable Change |
| LEA | Local Enterprise Authority |
| NDP | National Development Plan |
| NGO | Non-Government Agency |
| NRM | Natural Resource Management |
| PA | Protected Area |
| SADC | Southern African Development Community |
| SMSE | Small and Medium Sized Enterprise |
| ToR | Terms of Reference |
| UN | United Nations |
| VDC | Village Development Committee |
| WMA | Wildlife Management Area |
| WWF | World Wildlife Fund |

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1 Introduction

1.1 Background and objectives

Forest Reserves (FRs) are only found in northern Botswana and they are protected by the Forest Act. The FRs are managed by the Department of Forestry and Range Resources (DFRR). They are six in number: Sibuyu, Kazuma, Maikaelelo, Kasane Extension, Kasane and Chobe FRs. The FRs are richly endowed with natural resources including wood, grass, edible and medicinal veld products, they also provide habitat for wild animals and are important for wildlife migration.

The Government through the DFRR seeks to develop the FRs for multiple purposes in order to increase their contribution to national and rural development. This is in line with recommendation of the FR inventory from the early 1990s and with the recommendations made during recent local consultations held by DFRR.

The general objective of the consultancy is to develop operational guidelines for the use of designated Forest Reserves for eco-tourism activities within the context of appropriate national, regional and global best practices.

The study is subdivided into the following components:

I. Identification and analysis of the following:

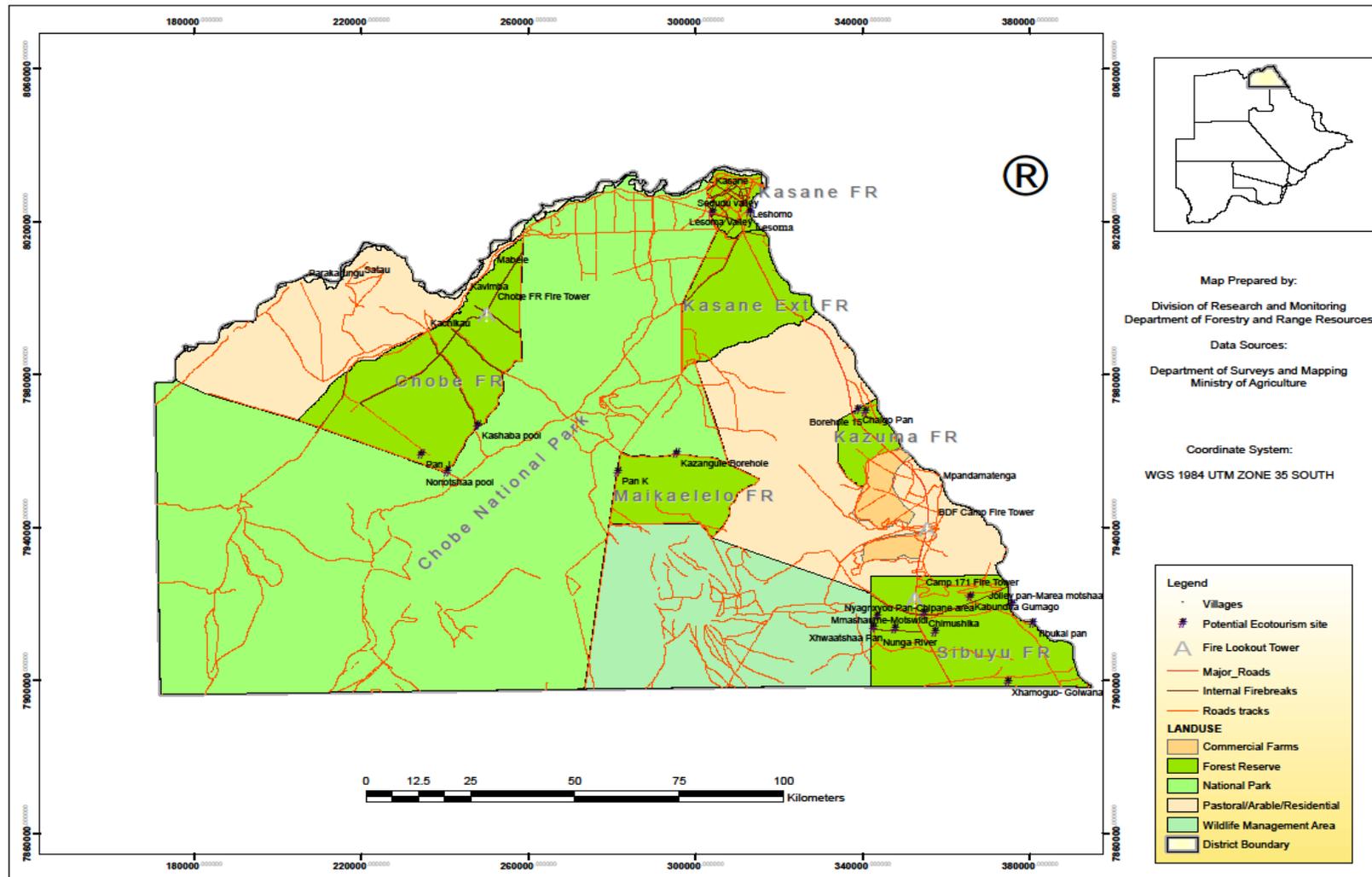
- Current issues concerning the use of designated Forest Reserves for eco-tourism activities nationally, globally and in southern Africa;
- Issues of significant importance to the utilisation and conservation of designated Forest Reserves for tourism activities in Botswana within the immediate and mid-term;
- Implications of Multilateral Environmental Agreements (MEAs) and regional protocols as they address issues of Forest Reserves Management, forest biodiversity management and utilisation;
- National policies and legislation which relate to forestry and the conservation and protection of Forest Reserves and have implications for eco-tourism;
- Socio-economic issues linked to land use planning, land tenure (zoning and de-zoning of forest reserves), access to forest reserves and their resources, and benefits thereof.

II. Identification and review of strategic options for FR management;

III. After selecting the preferred option, or a combination of elements from various options, prepare the Guidelines for Utilisation of Forest Reserves for Ecotourism Activities.

The consultant shall review relevant literature and legislation at the national, regional and international level. There is need for benchmarking, identification of best practices and consultation with stakeholders.

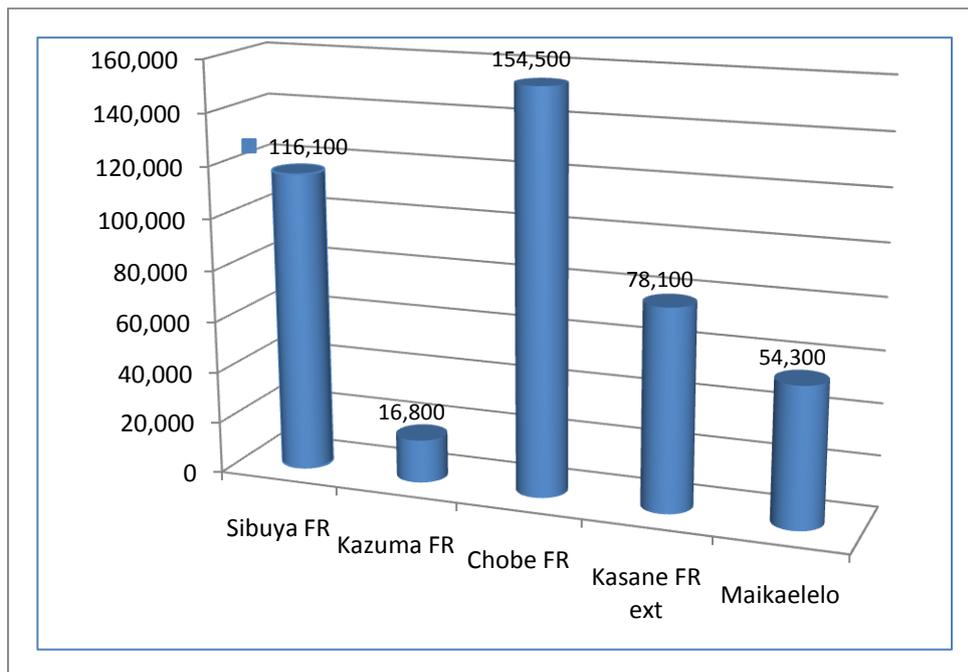
Figure 1: Location of Forest Reserves and some potential ecotourism spots



1.2 Forest Reserves

Botswana has five Forest Reserves (FR) in Chobe District ranging from a small FR of 16,800 ha (Kazuma FR) to almost ten times that (154 500 Chobe FR). The size of each FR and their location are shown in Figures 1 and 2.

Figure 2: Size of Chobe's Forest Reserves



Source: DFRR data

Forest Reserves are declared under the 1968 Forest Act. The President declares Forest Reserves and has the right to adjust the boundaries. The Act does not indicate the objectives of the FRs or criteria for the selection of FRs. FRs fall under the management jurisdiction of DFRR. No material may be used from the Forest Reserve (FR) without permission (and a license) from a Forest Officer (art 12-15). Villagers from Kasane, Kazungula and Lesoma are exempted from applying for licenses for subsistence use of selected grasses and trees.

2 Findings of analysis

2.1 Tourism

Botswana has adopted the International Ecotourism Society's definition of ecotourism, which says that: *'ecotourism is responsible travel to natural areas that conserves the environment and sustains the well being of local people'* (Department of Tourism, 2002). In Botswana, ecotourism refers to the country's cultural as well as natural heritage, and great importance is placed on the active involvement (as opposed to mere consultation) of host communities and other Batswana in all aspects of the industry's management and development (Department of Tourism, 2002).

Previous DFRR consultations (DFRR, 2006 and 2007) show that local stakeholders endorse the opening up of forest reserves for ecotourism. Communities acknowledge the potential benefits from CBNRM and are convinced that they can utilise the skills in running ecotourism in the FRs. However, assessment of CBNRM has shown that communities often lack the capacity to run ecotourism businesses and that they often rely on income generated through safari operators, with whom communities have a joint venture agreement (e.g. Jones, 2000; CAR, 2003). Some of the weaknesses of community based organisations (CBOs) include book keeping, financial management, marketing and promotional skills. Whilst the village development committees (VDCs) and Trusts are supposed to represent their constituency, this does not always appear to be the case. Education is very important to sensitise community representatives on their critical roles in seeking their constituency views before making any major decisions. Distribution of benefits is another major challenge for communities. Villagers must see tangible benefits derived from ecotourism and this is often not sufficiently the case. Buying-in by communities is very important for the success of ecotourism. Concrete village developments at household level could be an example.

The FRs reserves could offer a wide range of ecotourism products (more than national parks), which would enhance Botswana's appeal as an ecotourism destination. Among the ecotourism products identified were cultural and heritage tourism, agro-tourism, photographic safaris, walking safaris, campsites, lodges, game drives, bird watching, etc. DFRR has identified twenty two high potential spots for ecotourism, which can act as foci for ecotourism (Basalumi, 2004). DFRR needs to carry out further work to ensure that ecotourism activities will not exceed the Limits of Acceptable Change (LAC).

Ecotourism, like any other form of tourism has both positive and negative impacts. It is important that local stakeholders capitalise on opportunities and positive impacts such as improvement in the livelihoods of community (infrastructure development, schools, employment creation, conservation of culture and traditions and conservation of flora and fauna, etc). Ecotourism would stimulate development of complementary businesses and linkages, for example, selling of artefacts and souvenirs, opening up of restaurants and eating and sleeping places, convenience stores, supply of locally produced foodstuffs to the hospitality establishments. This would create more jobs and local income. The challenge would be to train local suppliers in service quality, health and hygiene aspects.

Ecotourism can also lead to negative impacts such as the extinction of the flora and fauna. What is important is to come up with strategies to ameliorate the negative impacts of ecotourism. Examples include planning and limits of acceptable change. LAC assesses the probable impact of an activity, decides in advance how much change will be tolerated, monitors what's happening systematically and regularly, and determines what actions are appropriate if agreed-upon quality standards are surpassed.

Whilst policies advocate citizen empowerment, evidence on the ground shows that tourism businesses are foreign-owned which has resulted in benefits leaking outside the country (Mbaiwa, 2004). The general consensus was that ecotourism business in the FRs should be reserved for Botswana. In particular, Trusts should be given priority over private operators since they are already running businesses in the area. In addition, there should be longer leases than the current ones.

Sustainability of ecotourism in the FRs reserves is dependent upon:

- Business skills development among communities. This could be done through engaging young local people to be meaningful participants and beneficiaries of Trusts;

- Inventory of ecotourism resources and development of detailed management plans and LACs;
- Empowerment of communities full ownership of ecotourism resources;
- Community access to traditional livelihood resources such as medicinal plants and fruits; and
- Forging trusting, beneficial and secure partnerships between communities, tourist operators and government.

The literature review yielded a number of lessons for ecotourism in FRs (Table 1).

Table 1 Ecotourism lessons from the literature

| Lesson | Source |
|---|--|
| There is need to streamline government ministries and departments that deal with ecotourism related issues. If there are too many players, it can lead to competing interests among government ministries and departments | Hannam, K. 2004. |
| To achieve effective management of FRs there should be devolution of powers to communities and participatory management. | Saarinen,J., 2007. |
| There is need for strong community leadership who is able to champion the cause | Wunder, S., 1999. |
| Communities do not have capacity to run ecotourism businesses. There is therefore a need for business Linkages and societal marketing | Murray, F., 2005. |
| Community/private sector partnerships should be strengthened as they lead to successful community-based ecotourism businesses | Botswana government CBNRM |
| Political expediency and interference militates against the success and sustainability of community-based ecotourism | Mutumukuru et al., 2006. |
| Unrealistic expectations and lack of business skills by communities can result in the collapse of ecotourism businesses | Wunder, S., 1999. |
| There is need to train communities in project management | CAR, 2003 |
| Community-based approach of stewardship of natural resources can lead to sustainability of resources | Ayoo, C., 2007 |
| There is need to have information centres and good signage in order to reduce pressure on tourism resources | Murray, F, 2005 |
| Ecotourism has both negative and positive impacts | Weaver, 2005; Boo, E., 1990 |
| There is need for communities to have access to resources for traditional use | Deborah Baranga, 2007 |
| Zoning and creation of buffer zones is an effective management strategy for FRs | Arun Rijal, 1998 |
| Provision of technical support to community-based businesses enhances their sustainability | Gulzade Kahveci, Kenan O.K. and Ersin Yylmaz |
| Pro-poor tourism unlocks opportunities for the poor | Ashley, 2000; Holland et. al., 2003; Roe, D. And Khanya, P.U., 2002. |

2.2 Forestry

The FRs constitute areas of high biological diversity for Botswana (Government of Botswana, 2007b), which need protection, especially in the context of climate change and increasing pressure from human activities (Miller, 1987). Current management is informed by the Chobe Forestry Inventory (1993), but this plan is inadequately implemented (Norwegian Forestry Society, 1993).

The physical environment of the Chobe Forest Reserves is characterised by a semi-arid climate, generally infertile soils and degraded ecosystems resulting from past logging as well as elephant and fire damage. Despite this, local communities view the reserves as a valuable resource which has been denied them and harbour negative attitudes towards the FRs. For example, people are reluctant to help extinguish the fires which devastate the forest on an annual basis.

One of the problems identified is that local communities seem ignorant of the rights which they possess under the Forest Act. These rights are extensive, enabling activities such as harvesting dead fuel wood, grazing cattle, harvesting thatching grass and gathering fruits to take place, in most cases through the issuing of licenses. This situation is in part the result of inadequate availability of manpower and resources within the DFRR in the Chobe District (Norwegian Forestry Society, 1993). This is responsible for the lack of protection of FRs from illegal activity such as poaching, felling of live trees etc.

De-gazetting of FRs would pose serious biodiversity risks and therefore it is better to foster multiple uses as recommended by the Chobe Forestry Inventory, including logging and ecotourism.

Logging of hardwood species, especially *Baikiaea plurijuga* and *Pterocarpus angolensis*, has led to depletion of valuable timber resources, in particular *Pterocarpus angolensis*. The relatively brief period since commercial logging was stopped should have seen some restoration of the forest ecosystems within the reserves. DFRR staff seems doubtful that this has happened because of continued elephant damage, fire and illegal activity within the reserves. Until regular inventories are conducted or commissioned by DFRR uncertainty regarding the amount and quality of valuable tree species will persist. An indicator of a negative trend is the paucity of juvenile trees (most susceptible to elephants and fires) that is observed. Well maintained firebreaks around and within all reserves are essential but will be even more effective if communities can become involved in efforts to reduce fires both in the FRs and in the areas adjacent to them. The current forestry policy suggests that there should be efforts to be guided by international conventions in addressing forestry issues and in the involvement of communities, taking account of indigenous knowledge, and being cognizant of the cultural roles of forests to local communities (Government of Botswana, 2007c).

A survey of ecotourism and community forestry projects in Africa and other parts of the world reveals marked similarities in the extent to which they have been influenced by international conventions and protocols such as the UN Convention on Biological Diversity. In particular the UNCED Forestry principles were influential in encouraging the change in forestry management towards community-inclusive forestry planning and management. Where success has been achieved, policies have won the support of local communities by affording them a major role in decision making and in the ownership of enterprises.

A final consideration involves the very nature of the Chobe forests themselves. It seems that successful forest ecotourism projects identified in the literature are located in areas of luxuriant rain forest characteristic of the humid tropics. They feature massive trees of great height and a well developed canopy (home to most of the indigenous fauna and subordinate vegetation), which tourists can view from elevated walkways or tramways. Such forests are much more spectacular than the dry deciduous forest of Chobe, which to the non-specialist eye differ little from denser types of savanna. Indeed, many ecologists view most savanna vegetation types as an anthropogenic fire climax, the product of man's interference with original forest cover through lengthy periods of burning, grazing and cultivation. Such activities open up the forest, allow for the presence of grasses to a much greater extent and create a balance between man's activities and the species which can accommodate themselves to the changed conditions. It seems possible that the Chobe forests represent an early stage in such a process of savannisation (Tivy, 1977). There is a need to bear this

in mind when the interests of the community are considered. Flexibility will be essential in accommodating public interests so that they do not conflict with the maintenance of biological diversity. In particular, for each forest reserve it will be necessary to define areas of High Value Conservation in line with international models

It is questionable to what extent the FRs in general (not the high potential spots!) are sufficiently attractive for ecotourism. It is primarily this aspect of the valuable forest reserve of Botswana that necessitates that foresters should be competent in championing and encouraging the public to buy in their management. Of particular importance will be the creation of a trusting relationship between the forester and the community. This should replace the current perception of the DFRR as guardian of the forest as opposed to the public as exploiters with no regard for resource sustainability. Joint management may require additional training and a change in mind-set of foresters. Collaboration with NGOs experienced with participatory rapid appraisal (PRA) for planning joint management between the forestry authority and communities was a prerequisite in Scotland to implement Forestry Principles in line with the UN 1994. Recruitment of high level expatriate staff was necessary to implement community involvement in forest management and change tenure rights. There is a pressing need to focus on the hotspots in the forests and to classify the reserves as High Value Conservation Areas.

The success of forest ecotourism depends on:

- Joint defining of areas of high biological diversity with the community;
- Defining land tenure and therefore tree tenure;
- Conducting regular inventories to guide utilisation;
- Educating the public about silvacultural interests;
- Treating the public as equal partners in safeguarding the status of the forests; and
- Making the public aware of their rights in line with the Forest Act and how they can implement them in the interests of future generations.

2.3 Natural resource management

The current situation of FRs leaves much to be desired and is likely to ultimately lead to their de-gazetting. This would adversely affect the area's and country's biodiversity. FRs need to generate significant benefits, be better managed and be perceived as beneficial by the local population as compared to alternative land uses. The following major inter-related natural resource management issues have been identified from the literature:

- improving management of the FRs, among other through participatory management;
- improving access to and benefits from FR resources;
- More productive and multiple use of FRs;
- Increasing local benefits;
- Curbing FR encroachment and illegal use;
- Limiting damage by elephants and fires;
- Establishment of an enabling policy environment; and
- Appreciation of the proper value of forest resources.

There can be no doubt that the benefits of FRs must be increased and that more benefits need to filter down to the local population, either directly (income, employment, subsistence) or indirectly (e.g. through land rentals or part of the revenues of forest reserves). This implies that resource access for the local population needs to be improved. Otherwise, forest encroachment will accelerate or the FRs may be entirely abolished/ de gazetted.

While multiple use of FRs is widely recommended, views differ about the type of uses that need to be promoted. Given the importance of tourism in the district and the characteristics of the FRs, promotion of ecotourism generates many development advantages. However, local communities need to reap more benefits from eco tourism than from agriculture in order to make them support this option. This goes back to the issue of increasing local benefits and local participation in FR management. Opportunities for other multiple uses such as sand abstraction, collection of thatching grass and hunting should be considered, and ecotourism guidelines should therefore incorporate measures how to deal with other activities. Lessons can be drawn from the concept of wildlife management areas, making in this case ecotourism and forest use the primary forms of land use and other land uses will be subordinate and should not adversely impact on tourism and biodiversity. For example, suitable areas could be zoned for collection of thatching grass and fuel wood or mining of sand and gravel (and perhaps later be rehabilitated for tourism purposes).

The following requirements for sustainable NRM management of FRs were identified:

- There needs to be sufficient capacity (human and financial resources) to manage the FRs;
- Participatory management needs to be encouraged which include local communities and other stakeholders (tourist operators, NGOs and other government departments);
- NRM needs to balance resource conservation and utilization. There is need to increase the benefits through multiple use, i.e. tourism, logging and other uses;
- Ensuring a fair distribution of the benefits and costs over different stakeholders (but all should benefit to ensure their cooperation);
- NRM in FRs needs to cover the entire ecosystem, its biodiversity and all resources (flora and fauna); FRs are diverse and NRM needs to recognise and exploit this diversity;
- NRM of FRs needs to be planned and implemented in the broader context of land use in Chobe District and KAZA. For example, linkages with National Parks, Wildlife Management Areas (WMA) and communal areas need to be take into account; and
- Communities need to benefit more from FRs than from communal land in order to contain encroachment and develop appreciation for forest conservation.

Given their resource endowments, the management objective of FRs could become to manage, conserve and utilise the biodiversity of the FRs (both flora and fauna). Lessons for natural resource management of FRs are summarised in Table 2.

Table 2: Natural resource management lessons from the literature

| Lesson | Source |
|--|---|
| There is a need to increase local benefits from forests in excess of opportunity costs. This may require policy changes. Greater benefits will also reduce the threat of forestry encroachment | Re. Mogaka et. al., 2001; Alers et. al., 2007; Dudley et.al., 2008. |
| Community participation is helpful to reduce the occurrence and impacts of fires and to increase resource appreciation | Kurtulmuslu and Yazici, 2000. |
| Need for clearly formulated and widely supported management plans that will guide NRM. Monitoring of implementation and resource trends is essential | Alers et .al., 2007 |
| State run NRM of Forest Reserves does not work because of capacity constraints (financial & human resources), enforcement problems, illegal uses and encroachment | Botswana – DFRR |
| Focus on timber and general undervaluation of forests gives them lower policy priority in terms of management and resource allocation | Mogaka et.al., 2001. |
| Need to give more prominence to funding (also after projects) of protected areas, including payment for ecosystem services, revenue | Alers et al, 2007 |

| | | |
|--|---|--|
| | generation mechanisms and fund management | |
| | There needs to be linkages between livelihood support and conservation goals, which need to be endorsed by local stakeholders | Mogaka et.al., 2001; Dudley et al., 2008 |
| | Need for enforcement and monitoring & evaluation, including development of appropriate indicators for BD monitoring. | Alers, et al., 2007 |

2.4 Concluding remarks

Chobe District has a large land portion devoted to Protected Areas, either National Park or Forest Reserve; there is one WMA. Communal areas are small and expansion opportunities of residential areas are restricted because of the FRs. Chobe District has a relatively small population (around 20 000 people), but major development projects are currently being considered (e.g. bridge, irrigation expansion around Pandamatenga and a railway link to Kasane). The combination of these factors will lead to a considerable increase in the pressure on FRs.

Tourism is a major rural sector in the Chobe District and the development of eco-tourism can strengthen the sector in several respects. Firstly, ecotourism in FRs will spread tourism more evenly over the district and reduce tourism congestion along the Chobe River. As a spin-off under-utilised parts of Chobe National Park could benefit and poaching could be reduced. Secondly, FRs have high potential ecotourism spots that are currently under-utilised and the FRs can be used for tourism activities that are not permitted in Chobe National Park. These include night drives, cultural activities/ villages, walking trails and horseback riding. Communities and CBOs have already expressed interest in developing activities at some of these spots. Others have been used by safari companies in the past. Thirdly, it will enhance Botswana's position and role as a leading wildlife and tourism destination in KAZA.

The FRs currently have not generated national and local benefits after their main activity, i.e. timber logging, was suspended in 1993. The FRs need to generate significantly more benefits if they are to be retained in future.

Local communities need to benefit more from the FRs in order to reduce encroachment and illegal use, improve local livelihoods and contribute to a more positive popular attitude towards FRs. A more positive attitude is required to improve the management of FRs. In simple terms, the local population needs to benefit more from FRs and ecotourism than from traditional agriculture in order to bring about this shift in perception.

The future of logging appears uncertain. Salvage logging is most frequently mentioned as a desirable activity in FRs. Other uses such as collection of thatching grass, building sand and subsistence livestock grazing will add value to the FRs.

The infrastructure in FRs is minimal. This applies to roads (often impassable during the wet season), communication and tourism infrastructure. Settlements are close to some FRs (e.g. Kasane and Chobe FRs) but other FRs are remote (e.g. Maikellelo FR) and closer to CNP. Activities inside FRs will require the development of adequate infrastructure.

Chobe Forest Reserve (on Tribal Land) is already used for ecotourism by CECT. This is the only FR with a detailed land use and resource management plan.

Current management of FRs is inadequate and therefore a collaborative management system needs to be developed. Collaboration can include the following:

- Involvement of other government departments (e.g. DWNP, DoT and BTB);

- Involvement of communities (e.g. existing and new CBOs);
- Involvement of the private sector; and
- Involvement of NGOs.

Collaborative management expands the capacity and often reduces conflicts and enforcement problems. It is equally important to develop management plan for individual FRs with clear objectives, instruments and monitoring and evaluation procedures. Communities have indicated that they want to be empowered in ecotourism and assume more responsibilities in time. This requires evolving partnerships.

Forest Reserves are more than valuable trees. There are important non-timber products and abundant wildlife resource (including migratory routes) and FRs are valuable biodiversity areas. Therefore their management needs to focus on the biodiversity and ecosystem conservation and utilisation rather than on individual natural resources. Moreover, management of FRs needs to consider their role and importance in the regional network of protected and resource management areas, which extends across the border.

There is need for more resource monitoring, data collection and research on the FRs. Existing data are old and no apparent resource monitoring occurs (except for wildlife aerial surveys that cover FRs).

3 Results of consultations

This section summarises the views expressed during consultations held by DFRR in 2006 and 2007 and during the consultations carried out for this project in February 2009. More detailed results of the consultations are given in appendix 1.

Conservation and livelihoods

Most of land in Chobe District is devoted to conservation and protected areas, FRs and national park. FRs are being destroyed by elephants and fires, without any positive benefit to the community. It appears that government gives higher priority to resource conservation than improving people's livelihoods. For example, people are allegedly not allowed to harvest medicinal plants¹.

There should be a deliberate strategy or policy that ensures that local communities and small to medium enterprises benefit from opening of the FRs. For instance, communities should be given priority in the allocation of land for ecotourism activities.

Boundaries of FR

It is important to establish the amount of land needed for other uses such as residential, arable, business over a period of twenty years. Reserve that established piece of land for future expansion and the remainder is allocated to ecotourism. This will avoid future expansion into tourism areas.

Opening up FRs for ecotourism activities will create business, employment and market opportunities for communities. However, there is need to convert parts of the FRs into communal land to cater for growing population and development of the settlements.

¹ The Forest Act allows harvesting subject to stringent conditions.

Partnerships between communities and safari companies

The partnership between the community trusts and safari companies mainly benefits the safari companies. There should be investment in capacity building of community trusts to ensure that communities benefit from the opening up of the FRs.

CECT is already operating safaris and other tourism activities in the Chobe FR. They have two concessions which are CH1 and CH2. CH1 is used for hunting and photographic safaris whilst CH2 is strictly for photographic safaris. CECT already has a Management Plan in place for CH1 and CH2.

Other uses of FRs and conflict mitigation

The opening up of FRs for ecotourism activities will benefit the community and district. However, there are other urgent land needs for arable farming, livestock rearing and expansion of the settlements. Livestock, particularly cattle, form part of Batswana culture. Many residents of Chobe communities are farmers and their agricultural land needs have to be considered when opening up the FRs. The land needs of communities should be addressed to avoid negative impact on the sustainability of ecotourism. Some FRs were used by communities as grazing land and cattle posts before they were declared FRs (1968 and 1981). Traditional user rights should be protected such as accessing veld products e.g. wood harvesting, thatching grass, and traditional medicine. FRs are the sources of sand in the district, therefore sand harvesting should be considered when opening up FRs for ecotourism activities. Logging of salvaged wood should be considered for future FR use.

It is important to consider uses other than ecotourism but the district has a sensitive ecosystem. It is important to consider opening forest reserves for other uses that will not have irreversible impacts on the FRs and these uses should add value to the national economy. The wildlife migratory routes should also be considered when building eco tourism structures to avoid conflicts between the activities and animals.

Community participation and consultation

In the past, the community in general was not properly informed about upcoming development initiatives and this partly led to less participation of local community. Therefore, it is important to inform and update communities on the process of developing the guidelines and their eventual approval so that the locals can find ways or position themselves to benefit from the opening up of FRs.

FR management

DFRR faces several challenges in managing the FRs. These include: lack of person power, inadequate facilities, difficult access during the rainy season and illegal use of FRs. There are four forest guards to police all the six FRs. The size of the FRs varies from 16,800ha to 154,500 ha and the areas are situated far apart. This makes adequate policing by the four forest guards a challenge and this is compounded by lack of transport at the district office. Monitoring the FRs becomes more difficult and less frequent during the rainy season because of lack of access roads within the FRs and muddy soils. There are currently two DFRR forest camps in Sibuyu and Kachikau. The Sibuyu FR is the only FR that is manned by one camp keeper and there are no adequate accommodation or office facilities. The DFRR facilities in Kachikau Camp are not used and run down. The FR Management Plan has not been fully implemented. Illegal activities have been reported in the FRs. Some tourists are reported to be illegally camping in the FRs and this does not benefit the local communities or the government since they are not paying for camping in the FRs. Similarly, tour operators are said to be operating in some FRs without permission from DFRR. In addition, there illegal harvesting of sand in the FRs resulting in burrow pits.

The forests should be managed by the DFRR in association with communities. A partnership between the community and DFRR would be a better management strategy where DFRR would provide technical expertise and the community undertakes day-to-day monitoring, policing and protection of the forest reserves.

Research and studies in FRs

Collaboration is necessary between community trusts and researchers, either individuals or institutions, in undertaking research studies within the FRs. The community can benefit in-kind through research results or researchers paying in cash.

4 Major issues and options for ecotourism in Forest Reserves

4.1 Management of FRs

Alternative management models for the current state-led management model of FRs would be:

- Privatisation of resource management. For example, FRs could be leased out as private tourism concessions;
- Common property resource (CPR) management. CPR could be led by communities or the Land Board on tribal land², but communities are the only option for FRs on State land. This would be the CBNRM model;
- It would also be possible to adopt an extended State-controlled NRM model by giving responsibilities to other departments such as DWNP or the Department of Tourism (DoT). For example, FRs could be included in National Parks (NP) or Game Reserves (GR) or designated as wildlife management areas (WMAs).

The (dis-)advantages of each option are explored in Table 3.

Table 3: Assessment of FR management options

| Options | Advantages | Disadvantages |
|--|---|---|
| Privatisation (mostly an option on State land) | Rapid development & investments Multiple use development possible Employment creation | Need for monitoring of NR conditions by government Commercial use only/lack of community access to FRs – compromise regarding subsistence use required. |
| CPR-management CBNRM (only works with nearby communities; can work on State and Tribal Land) | Community appreciation of FRs Community commitment Multiple use possible Combination of subsistence & commercial use Income and employment (direct and indirect) Possibility for JVP | Limited CBO capacity and possible poor performance and conflicts. Need to consider joint venture agreements with private sector Some need for government monitoring of NR conditions (shared with CBO) |
| Extended State management (on State land only) | Draw upon additional capacity and skills of DWNP and DoT Better opportunities for multiple use | State-managed NRM has not worked well in country and is unlikely to be the solution. |

² Communities have earlier suggested that Sibuyi FR could be converted into Tribal Land

Given the poor record of state-managed NRM, the CPR or privatisation options are preferred. The specifically preferred option may differ for each FR. For example, Maikaelelo FR is remote, adjacent to a NP and has no settlements in its surroundings. Therefore, it could be preferable to integrate this FR into the NP or make it a WMA for private exploitation. In contrast, Kasane and Kazuma FRs are close to settlements and could be declared WMAs for community use (Chobe Forest Reserve on Tribal land already has that status).

4.2 Land use zoning of and within FRs

Land use zoning is important to minimise conflicts between different uses of FRs and to fully exploit the potential of the FRs. The advantages and disadvantages of options for land use zoning of FRs are given in Table 4.

Table 4: Assessment of land use zoning of FRs

| Options | Advantages | Disadvantages |
|----------------------------|---|--|
| Business-as-usual | Biodiversity conservation prioritised. | Inadequate resource management No comprehensive resource management Few if any management plans Very few benefits |
| Convert into National Park | Comprehensive ecosystem management and biodiversity conservation | Need for monitoring of NR conditions by government Commercial use only/lack of community access to FRs – compromise regarding subsistence use required. |
| Convert into WMA | Fits within existing policy environment | Shift in focus towards wildlife resources Change in management responsibility to DWNP and loss of DFRR skills and expertise |
| FRs & WMA | Fits within existing policy environment Opens up access to resources Opportunities for greater community benefits Additional public sector capacity and expertise (DWNP) | Requires close collaboration between DWNP and DFRR May be difficult if large scale logging is planned or resumed. |

Within FRs, different land use zones need to be planned, based on the environmental and socio-economic requirements. The advantages and disadvantages of different zoning options within FRs are summarised in Table 5.

4.3 Under-utilisation of FRs

The main option is to promote non-conflicting multiple uses of FRs. While the ToR focus on ecotourism as an additional use of FRs, consultations clearly showed that stakeholders wish to consider a broader range of multiple uses for FRs. The mix of multiple uses may differ for each FR, and user zones may be designated within FRs. Importantly, experiences with tourism concessions show that conflicts may arise between commercial and subsistence uses in the same area (e.g. subsistence fishing and ecotourism in the Okavango delta).

The advantages and disadvantages of possible additional uses are summarised in Table 6.

Table 5: Land use zoning within FRs

| Options | Advantages | Disadvantages |
|---|--|---|
| Community (subsistence) zones | Improves resources access and benefits for communities (e.g. grazing, veld products) | Need to control use and avoid most sensitive areas |
| High potential tourism spots | Priorities for tourism development | Need to avoid or minimize conflicts with ecologically sensitive and BD rich areas |
| Ecologically sensitive, BD rich areas and wildlife migratory routes | Helps to restrict development and use levels at such spots and conserve biodiversity | |
| Sand collection sites | Improved access to building sand Controlled abstraction & rehabilitation | Need for monitoring |
| Zones for hunting and other commercial uses (e.g. veld products and timber). | Benefits from commercial non-ecotourism sectors | Possible conflicts with other uses of FRs such as ecotourism. |
| Public infrastructure such as roads, entrance gates, information centres, government camps etc. | Avoid sensitive areas & even spread of development of the FRs | |

Table 6: assessment of options for other and multiple uses of FRs

| Additional uses | Advantages | Disadvantages |
|--|---|---|
| Ecotourism | Creation of significant extra employment and income Builds upon tourism & wildlife resources strengths of the district and neighbouring Zimbabwe Helps to spread tourism more evenly over the district Fits well into plans for transboundary KAZA | Local benefits are often limited; Seasonal conflicts with hunting Reported conflicts between lodges and livestock owners (near Lesoma and Mabele villages) Ecotourism attraction mostly for specific spots and not necessarily for entire FRs. |
| Commercial hunting | Creation of some extra employment and income Fits well into plans for transboundary KAZA | Local benefits are limited; Seasonal conflicts with ecotourism and gathering |
| Commercial collection of veld products | Extra income and employment | Seasonal conflicts with hunting |
| Mining | Creation of (mostly national) income & some local employment Collection of building sand & gravel as suitable sites are mostly inside the FRs | Incompatible with most other land use (depending on the mining process and size) |
| Subsistence activities | Livelihood support in terms of veld products and wood resources, particularly important to the low income groups | Easily in conflict with commercial activities |

The additional issue for this project is therefore to consider possible other uses of FRs within the ecotourism guidelines.

4.4 Improving access to FRs

The options would focus on increasing access to FRs resources (see Table 7 for advantages/disadvantages):

- Granting controlled community access to existing FRs (e.g. creation of community zones similar to those for National Parks and Game Reserves);
- Declaration of dedicated seasonal commercial thatching grass collection zones;
- Sub-leasing of tourism concessions and resource rights to communities (e.g. WMA status);
- De-gazetting of FRs.

Table 7: Assessment of options to improve access to FRs

| Options | Advantages | Disadvantages |
|--|--|---|
| Community zones | More access and community benefits | |
| Thatching grass and sand mining collection zones | More benefits | Needs to be monitored and controlled to avoid negative biodiversity impacts |
| CBNRM | Improved community access and benefits | Community capacity and skills constraints |
| De-gazetting of FR | Improved access | Loss of biodiversity (flora and fauna) Uncertain benefit distribution |

4.5 Managing forest encroachment

Emerging options for handling FR encroachment are:

- Re-alignment of FR boundaries to cater for future settlement expansion;
- Increase local use and benefits of FRs (direct and indirect). Local benefits need to exceed the opportunity costs of FRs;
- Inclusive and participatory management of FRs with clearly defined roles for local communities and stakeholders.

The advantages and disadvantages of option to control forest encroachment are given in Table 8.

Table 8: Assessment of options to curb encroachment into FRs

| Options | Advantages | Disadvantages |
|--|---|---|
| Re-alignment of boundaries around settlement | Reduces friction between settlements and FRs Reduced un-authorized use of FRs | Loss of PA for flora and biodiversity |
| Increased local use and benefits | Greater appreciation of FRs and need for their conservation Livelihood improvements through subsistence benefits, employment and income | Risk of over exploitation and loss of species/ biodiversity without effective NRM model |
| Inclusive & participatory NRM | Greater sense of responsibility for FRs management Better understanding of the value of FRs and their conservation Reduced illegal use and lower enforcement requirements | Requires a change in mindset of government staff |

4.6 Increasing local benefits

There is need to increase local benefits from the FRs. This requires an increase in beneficial use of the FRs as well influencing the distribution of the benefits to the advantage of the local population. The options are assessed in Table 9.

Table 9: Assessment of options for increasing local benefits

| Options | Advantages | Disadvantages |
|--|---|--|
| Employment in the tourism industry | Multiplier effect on local economy | Menial and seasonal jobs |
| Small and medium sized enterprises (SMSE) running ecotourism | Empowering communities and sustainable management of FRS | inability to compete with the private sector because of different objectives |
| Linkages through outsourcing by the private sector | Creates multiple stakeholders and improves utilization of resources | Problems control (quality, financial, expertise) |
| CBO management of FRs or tourism operations/ sites | Direct local benefits | Skill constraints Uneven distribution of direct benefits |
| Private/community partnerships | Reduced investment costs in human resources, and other business start-ups Polling of CBO and private sector capacities | Increased management time, unrealistic expectations, |

4.7 Reducing damage by elephants and fires

Damage of elephants and fires need to be curbed and contained (see figure 3). This has proven to be difficult over the past decades. The following options exist:

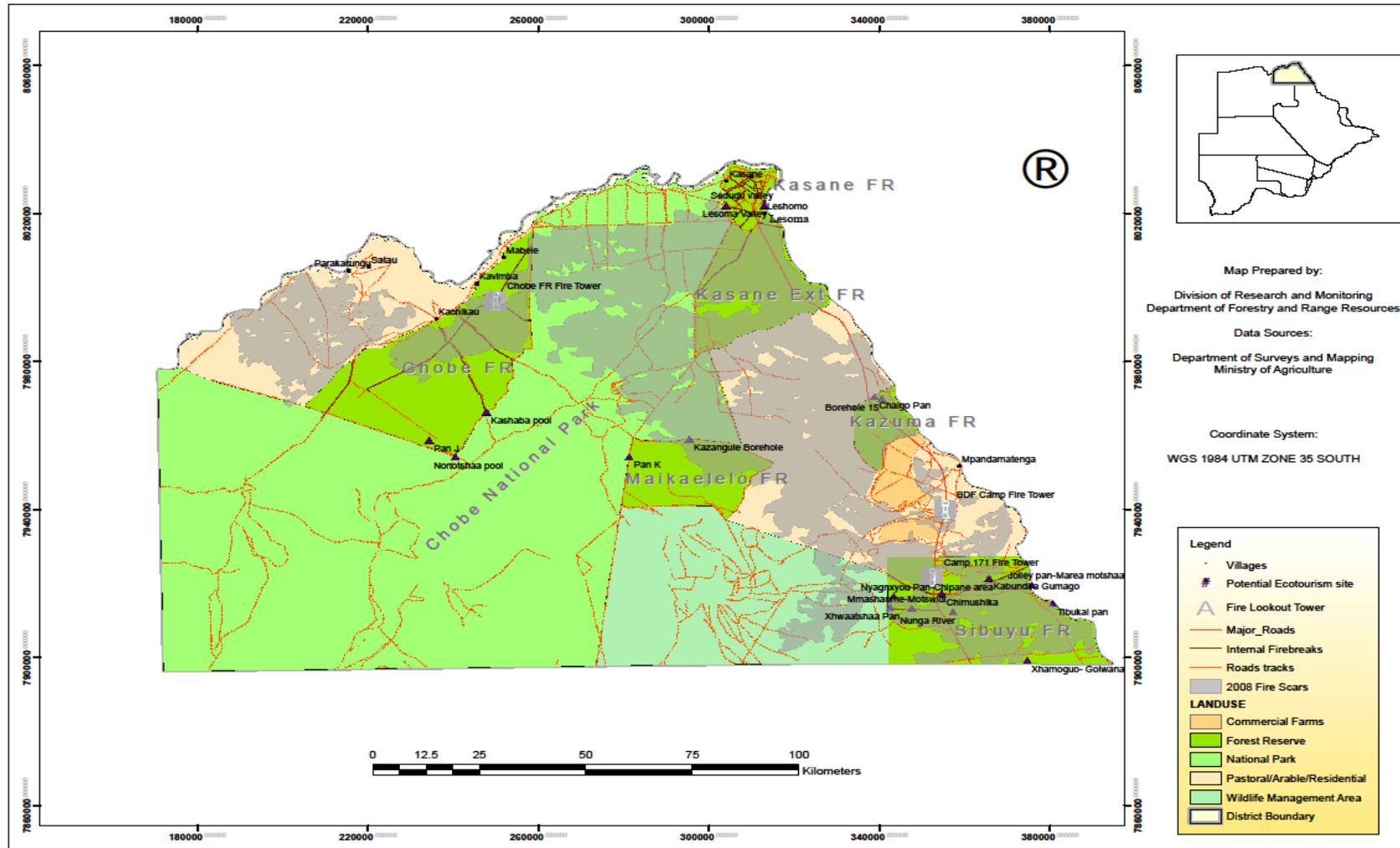
- Greater participation of stakeholders, especially communities;
- Implementation of the elephant management plan developed by DWNP;
- Full incorporation of fire hazards and control in management plans for FRs and ecotourism, especially protection of human lives and tourism infrastructure (e.g. draft fire management plan)

The advantages and disadvantages of these options are summarised in Table 10.

Table 10: Assessment of options to reduce damage to forest resources by elephant and fire

| Options | Advantages | Disadvantages |
|--|--|---|
| Community participation in & benefits from FR management | Fire prevention or reduction Better control of fires through community participation | Lack of interest or cooperation? |
| Mitigation of elephant damage through protection of high value wood areas and full integration of elephants in FR management | Lower damage costs and negative perceptions In line with new draft elephant management strategy | Sufficient collaboration between DFRR and DWNP? |
| Fire contingency plans for ecotourism and possible other uses, including insurance. | Reduction of damage to property and human lives In line with new fire management plan | |

Figure 2: Fire scars in 2008



4.8 Research and education

Research and education are needed to better understand the conditions of the FRs and to develop a proper understanding of and appreciation for their importance and value. Little is known about the nature and functioning of these forest ecosystems. Full appreciation of the value of forests, including the ecological services, is a pre-requisite for their conservation and management (Sekgopo, undated; Mogaka *et. al.*, 2004; WWF, 2006).

Such research may be welcome to the newly established Tropical Forestry Conservation Fund in Gaborone which is funded by USAID. It seems likely that it could provide the finance to encourage people-focused conservation of forests, and the expertise which is needed to initiate ecotourism. There may be scope for a Forestry and Tourism Research Centre or branch.

Table 11: Assessment of options for research and education

| Options | Advantages | Disadvantages |
|---|---|---------------------------|
| Applied research such as regular forest resource inventories, economic valuation studies and production of the history of Botswana's FRs. | Insight in the quality and potential of FRs Management performance assessment Contributions to NBDSAP | Means required. |
| Academic research for Master and Ph.d students | Cheap Identifies new NRM issues and potential | Results often unavailable |
| Development of an educational & information centre in FRs | Better understanding and appreciation | Means required |
| Development of community and educational material about the FRs | Better understanding and appreciation | Means required |

4.9 Financing of FR management

Increasing financial resources for FRs management is a requirement for effective FR management. No benchmarks for sustainable forest resource management were found in the literature. For appropriate management of Wildlife Protected Areas, figures of US\$ 100 to 200/km² feature in the literature. Taking the average of US\$ 150/km², an estimated US\$ 0.6 million or around P 4.5 million would be annually required³. The advantages and disadvantages of funding options are summarised in Table 12.

4.10 Enabling policy environment

Botswana has enabling policies for the development of ecotourism. Ecotourism certification and guidelines are under review. This is an attempt to bring the policies in line with the current thinking and trends in ecotourism. However, some policies have been in a draft form since 2001.

The following issues in the current policy environment need to be addressed and assessed (Table 13):

³ Regrettably, no figures are available for the actual expenditures on FRs.

- Community access to resources for both commercial and domestic use;
- Licensing and operational guidelines of ecotourism businesses; and
- Implementation and monitoring of FR management and guidelines.
-

Table 12: Assessment of financing options

| Options | Advantages | Disadvantages |
|--|--|---|
| User charges for tourists, timber companies, collectors of thatching grass and sand and grazing fees. Research and education charges | Revenue generation for FR management Shows the value of FRs In line with the user-pays-principle | Extra cost for poor subsistence users (exemption?) Cost of collection |
| Forest Conservation Fund (USAID and Government) | Existing facility which can be used | Limited size |
| Public funding and budgets | Funding security | Competition with other public expenditure priorities Subject to government financial situation |
| Innovative funding sources such as carbon trading, voluntary donations/ funds, donor grants | Provide additional funding | Limited duration of donor funding Unpredictable level of voluntary donations |

Table 13: Assessment of options for the policy environment

| Options | Advantages | Disadvantages |
|--|--|--|
| Community access to resources for both commercial and domestic use | Would strengthen commitment to conservation as communities would be empowered to make decisions regarding usage of the FRs | Outsiders who would be excluded from using the resource might cause problems of sustainability (e.g. illegal use). |
| Licensing and operational guidelines of ecotourism businesses | Would help arrive at agreed standards and quality to differentiate the Botswana ecotourism products | BTB has just completed the first roll-out of the accommodation grading and classification and a lot of facilities owned by Botswana do not meet the minimum standards. This scenario is likely to be repeated in the FRs thereby de-marketing the community-based establishments |
| Implementation and monitoring of guidelines | Advantage is that it will ensure compliance. | The government does not have the capacity to monitor and implement the guidelines, thereby leading to non-compliance |

4.11 Tourism marketing

For ecotourism to attract eco-tourists, awareness building about the existence of the product is a prerequisite. Specialised marketing skills and significant financial resources are required to promote the product to the source markets. Extensive research often precedes marketing and promotion in order to establish which products are required, who are the eco-tourists that would be attracted by the FRs (e.g. origin and socioeconomic profile) and which media or other fora should be used for marketing. Most communities do not have the capacity and means to carry out marketing and promotion. Not only do they lack the expertise to do justice to the marketing of their products, but they cannot afford marketing and promotion costs.

Individual operators as well as community –based ecotourism should collaborate and work with the Botswana Tourism Board to market Botswana to potential clients abroad. This will greatly enhance the quality of the ecotourism experience.

Ecotourism in the FRs needs to focus on the identified high potential spots, and ensure that ecotourism in the FRs adds on the tourists’ experience in Chobe National Park. In this way, tourists would stay longer in Chobe and the pressure on the river front of CNP would be reduced. Partnerships between FR based communities and companies and existing Kasane tourism operators would facilitate marketing and reduce the costs thereof.

The advantages and disadvantages of different marketing options are given in Table 14.

Table 14: Assessment of tourism marketing options.

| Options | Advantages | Disadvantages |
|--|---|---|
| Societal marketing which is driven by community priorities | Would capture the vision of the community and reflect what communities want portrayed to the external environment | Community generally have difficulty in reaching consensus on what should be true identity of a community image |
| Private sector driven marketing | Have the resources and networks to undertake such an exercise effectively | Would not incorporate community-based products and might also mis-represent community resources (false marketing) to attract large numbers of tourists |
| Community/public and private sector strategic alliances under the umbrella of the Botswana Tourism Board and HATAB | Would cut costs and be representative of diverse stakeholders interests. It would also facilitate the development of community-based new products, such as cultural heritage tourism which are relatively unknown to potential ecotourists. | Conflicting interests are likely to surface and the one who pays for the financing of the marketing and promotion is likely to dictate the final content. The second problem is that of communities’ capacity to make a meaningful contribution to the process. |

4.12 Tourism products and diversification

Botswana is known for its rich and diverse wildlife resources at the expense of other ecotourism resources which have not been sufficiently developed and marketed (e.g. cultural resources and forests). Opening up of Forest Reserves presents an opportunity to expand the range of tourism products of Botswana and diversity and expand the tourism sector.

Botswana has a rich diversity of ecotourism products which would make the tourist experience enriching. Some of the products include heritage and cultural tourism (heritage trails, traditional villages, traditional food, curios and artefacts). The forests have archaeological remnants of antiquity, burial sites and other cultural artefacts. The forests have diversity of flora and fauna. Other ecotourism products would include game drives and bird watching. Neighbouring villages could also develop agro-tourism to enhance the product offering. LAC and management plans should precede ecotourism development within the FRs.

The advantages and disadvantages of options for tourism diversification are summarised in Table 15.

Table 15: Assessment of options for tourism diversification

| Options | Advantages | Disadvantages |
|---|---|--|
| Moving away from traditional livelihoods to ecotourism | Foster environmentalism (incentives to protect natural flora and fauna). It would also provide economic benefits for peripheral areas.(employment, multiplier effect, aesthetic and spiritual benefits) | Capacity of communities would need local commercial partner which would result in leakage. Some sensitive areas would be exposed to high traffic leading to their defacing |
| Ecotourism to complement other livelihoods | Communities are able to continue with their traditional culture which they can use to attract tourists, e.g. agro-tourism | Not all community members would support the ecotourism resources. Sustainability would still be an issue. |
| Segmentation and zoning of types of tourism activities to be undertaken | Ensure the regeneration of species and protection of sensitive areas. | There would be losers and winners. The losers (who would be outside areas designated for tourism development) would destroy the flora and fauna. |

4.12 Logging

Historically, logging dates back to early last century and logging provided rural employment and income until it was suspended. Based on a proper resource assessment, a policy decision needs to be taken as to the future of logging in the FRs. If logging is resumed, in what form will this be and on what scale? Which upstream and downstream industries can increase the rural development benefits?

There is need to conduct inventories to establish the level at which logging should be resumed. With the present degradation by fire and elephant damage, along with the over- exploitation of relatively recent commercial logging, a resumption of logging may not be viable. This can be tested by seeking tenders for sustainable commercial logging in FRs. If no logging company expresses interest for sustainable logging under government conditions, clearly it is not viable. If it is decided to resume commercial extraction it is essential that it should focus on import substitution of timber and be directed towards salvageable material from dead and senile trees. Also significant is the need to extend the hardwood species harvested beyond just *Baikiaea plurijuga* and *Pterocarpus angolensis*, especially as community involvement means that more species will be important. If logging would be resumed, it is important that logging is carried out in a sustainable and certified way and that the forestry products would be certified and recognised as responsible trade (www.wwf.org). Moreover, logging would need to be combined with a processing industry that augments the development benefits of logging.

Table 16: Assessment of options for logging

| Option | Advantages | Disadvantages |
|--|---|---|
| Resume logging | Will remove dead material which fuels fires. Will provide material for crafts and address log import substitution Input for local wood mills and wood processing industry | High cost of monitoring and supervising logging operations effectively by GoB/local communities |
| Prohibit logging | Species diversity more likely to be maintained | Fire fuel accumulates in all reserves |
| Conduct inventories with community botanists | Will take into consideration all species and their management | Needs high financial input but is essential |
| Certification of logging and forestry products | International recognition of logging and products Greater acceptability to eco tourists | Requires certification expertise & monitoring |

5 Guidelines for ecotourism in Forest Reserves

Figure 3 Key definitions

Adaptive management: the process by which research and learning is continually incorporated in management planning and practice. Specifically, it is the integration of design, management and monitoring to systematically test assumptions in order to adapt and learn (Guidelines for Forest Management ITTO/IUCN Forests Policy Development 17)

Biodiversity (also referred to as biological diversity) is the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (UNCBD; ITTO/IUCN).

Commercial resource use is the use of natural resources for the purpose of selling, trading and/or profit making.

Community based natural management is a 'development approach that incorporates natural resources conservation, the resource management ultimate aim of which is to manage and protect the natural resource base'. (Botswana CBNRM Policy)

Conservation refers to the protection, maintenance, rehabilitation, restoration and enhancement of natural resources and includes the management of the use of natural resources to ensure sustainable use (modified from SADC Wildlife Protocol and SADC Regional Water Policy).

Consumptive resource use refers to permanent removal, or removal of parts of natural resources (modified from game ranching policy).

Cultural tourism refers to cultural aspects that are of interest to the visitor and can be marketed as such, including the customs and traditions of people, their heritage, history and way of life.

Eco-tourism is purposeful travel to natural areas to experience and understand the culture and natural history of the area taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people.

Forest Reserves are 'any area declared as a Forest Reserve by the President in pursuance of the Forest Act.

Limits of acceptable change (LAC) assesses the probable impact of an activity, decides in advance how much change will be tolerated, monitors what's happening systematically and regularly, and determines what actions are appropriate if agreed-upon quality standards are surpassed

Sustainable development is development that meets the needs of the current generation without jeopardising the ability of future generations to meet their needs (WCED, 1987)

Sustainable tourism refers to tourism development, management and any other tourism development activities that optimise the economic and other societal benefits available without jeopardising the potential for similar benefits in the future.

More definitions are given in appendix 3. LAC is further explained in appendix 4.

Figure 4: Need for action beyond words and definitions

While definitions can be useful, what is more important is the appropriateness and the quality of action, not what it is called (WWF, 2001, p. 2).

5.1 Introduction

The Forest Reserves in Chobe District constitute an area of high biodiversity (GoB, 2007). Facilitated by relatively high rainfall, the FR have a number of tree species of economic value as timber, a wide

range of fruit trees and shrubs of socio-economic importance (Norwegian Forestry Society, 1993). The diverse flora makes the reserve a preferred habitat for wildlife and birdlife and they provide buffer zones for the Chobe National Park. The Forest Reserves are important areas for wildlife migration within Botswana and between Botswana and Zimbabwe. Several wildlife migratory routes depend on Forest Reserves and these require continued protection. The diversity of the vegetation is however threatened by over browsing by elephants and annual veld fires that coupled with climate change make the Forest Reserves extremely vulnerable. Therefore, these guidelines need to ensure that ecotourism in the Forest Reserves does not pose an additional threat.

In a regional context, the Forest Reserves are part of the miombo woodlands, which extend to parts of other SADC countries such as Angola, Malawi, Zambia and Zimbabwe. They are also part of the KAZA area, which is a transboundary conservation area (in the Kavango and Zambezi river basins).

Current management is informed by the 1993 Chobe Forestry Inventory, but the implementation has been inadequate and the focus on biodiversity conservation and utilisation has been limited. As a result, the current resource status is largely unknown and resource use and conservation is minimal. Development of sustainable ecotourism and multiple uses is a positive development, but care has to be taken that biodiversity and the forests' integrity is being maintained.

Against the above background, these guidelines serve the following objectives:

1. Improve the management of the ecosystem and resources of the Forest Reserves;
2. Promote better use of the reserves by promoting ecotourism and other multiple uses of resources within the Forest Reserves;
3. Minimise conflicts between different resource uses, in particular between ecotourism and other resource uses;
4. Increase the benefits of Forest Reserves for the local communities, in particular the poor and vulnerable.

The target groups of these guidelines include the tourism sector (companies, communities and tourists) and resource managers. Resource managers include the Department of Forest and Range Resources, Department of Wildlife and National Parks, Department of Lands, Technical Advisory Committee (TAC), Department of Tourism, Chobe Land Board and Chobe District Council (CDC) and Botswana Tourism Board (BTB).

A composite layman's draft 'Guidelines for Ecotourism in Forest Reserves' is provided in Appendix 9. (as requested in the ToR). The list is divided into specific key areas in which efforts to develop and implement a sustainable forest ecotourism action plan should be made. A sustainable forest ecotourism action plan should be part of the management plan for the specific forest area.

The guidelines are meant to offer general guidance for ecotourism in the Forest Reserves. They do not provide all the detailed answers, or a recipe of one-size-fits-all answer to the challenge of ecotourism in forest areas, but rather they provide for a framework to establish principles and guide decisions. These guidelines are in line with the existing ecotourism framework, standards and best practices in Botswana, but they also make use regional and global guidelines and best practices (see appendix 6 for useful web links).

These guidelines are therefore to encourage a consistent approach to management of forest ecotourism, whilst assist stakeholders in the planning and management of forest areas, visitor recreation and the ecotourism industry, so that ecotourism can develop in a sustainable fashion, while respecting local conditions and local communities. The importance behind the exercise is

management of resources and visitors today, so that visitors of tomorrow can also experience quality sites, and the conservation values that these places represent.

In any case, in order for visitors to be attracted to an area, the area has to be developed in a way that it projects its own uniqueness, while contributing to the common goal of sustainable conservation. That is, forest ecotourism management must be responsive to local conditions as well as public demand for higher standards in conservation management (Figure 5).

In total, thirty one guidelines are presented grouped under ten principles that relate to various key issues of concern to forest ecotourism initiatives. These appear in appendix 9.

Figure 5: The ecotourism potential within the sustainable development perspective

Ecotourism is no panacea. It is important not to exaggerate the opportunities and benefits it can bring. Careful planning and improved knowledge is needed. Ecotourism and responsible tourism should be part of the wider sustainable development strategies, whether at a community or an international level (WWF, 2001, p. 30).

5.2 Guiding principles for ecotourism in FRs

The Forest Reserves will be managed, utilised and conserved based on the principles of sustainable development and the ecosystem approach. Both sustainable development and the ecosystem approach are the foundation of current environmental management policies in Botswana (e.g. environmental management act, forestry policy and ecotourism strategy). A balance needs to be pursued between conservation and use of biological diversity. At the same time, forest management must recognise that change is inevitable. This refers to climate change, settlement expansion and establishment of new projects. Ecotourism and all other uses of Forests Reserves need to operate within these principles.

Developing ecotourism activities in the Forest reserves is meant to:

- Generate more economic benefits from the FRs;
- Spread tourism more evenly over the Chobe District and enhance the District's potential for KAZA as prescribed by NDP 9, the National Ecotourism Strategy, and the Tourism Management Framework;
- Actively involve local communities in ecotourism in the FRs and increase the community benefits from the FRs;
- Secure the long-term integrate of the ecosystems of the FRs, including the miombo woodlands and the wildlife migratory routes; and
- Increase the awareness of the importance of the woodlands among tourists and Batswana.

Development and benefit sharing principles

- ✓ FRs are valuable ecosystems that must contribute to development of Chobe District and the country at large. Multiple uses of resources must be encouraged, but conflicts between different uses need to be minimised;

- ✓ Local benefits from FRs, in particular ecotourism, must be tangible to the local population and need to exceed the benefits from traditional agriculture and other rural livelihood sources in order to reduce encroachment into FRs; and
- ✓ Leakages of economic benefits from the FRs should be reduced to ensure more local benefits. This can be done by making better use of local supplies and services as well as further development thereof. Some leakages are inevitable (e.g. international marketing and some imports).

Resource conservation and management principles

- ✓ FRs must be managed to conserve and utilise their biodiversity, vegetation and fauna;
- ✓ Consumptive use of natural resources (e.g. harvesting of veld products and timber) must be controlled and remain below the level of natural regeneration;
- ✓ FRs must be managed within the broader context of land use planning in Chobe district and neighbouring countries to recognise and protect their regional importance (e.g. wildlife migration);
- ✓ Ecosystem must be managed within the limits of their functioning and the management objectives need to be long term ones.

‘Societal’ principles

- ✓ Resource management should be:
 - participatory (government, communities and private sector);
 - multidisciplinary (e.g. ecology, economics and social sciences); and
 - decentralised (e.g. local authorities and FR specific management strategies).
- ✓ The objectives of management of land, water and living resources are a matter of societal priorities and choices, including affordability.
- ✓ The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

5.3 Global, regional and national policy requirements

Figure 6: Importance of biodiversity conservation and utilisation

The diversity of nature is the foundation of the world’s material wealth. From biodiversity we develop food crops and derive the raw inputs and genetic materials for industry, agriculture and medicine. These benefits are worth many millions of dollars each year, and people spend further billions to appreciate nature and its diversity through tourism and recreation. Collectively, biodiversity stabilizes our atmosphere and climate, protects water catchments, and renews the soil. It also helps keep ecosystems adaptable, should environmental conditions change abruptly. (ITTO/IUCN Policy Development 17, 2009)

Forests are under pressure from human activities, elephants and climatic change, and ecotourism is one potential that could offer a more productive use of the forests while maintaining biological diversity (Figure 6). Forests and woodland constitute areas of high biological diversity: ‘it has often been noted that what is good for forest management and sustainability tends to be good for biodiversity’ (ITTO/IUCN, 2009). In order to reinforce the importance of biodiversity conservation in forestry, minimum standards are set by policies and regulations globally, regionally, and nationally.

5.3.1 Global requirements

- ✓ Need to balance conservation of biodiversity resources with their sustainable use (UN CBD; CITES; UNCED; ITTO/IUCN, 2009);
- ✓ Fair and equitable distribution of the benefits from the utilisation of easily accessible genetic resources and biotechnology (UN CBD; CITES; UNCED; ITTO/IUCN, 2009);
- ✓ Endangered species of wild animals and plants should not be traded internationally or trade should be restricted and controlled (CITES);
- ✓ Component parts of habitat of some species should be preserved (CITES; UNCCMSWA-Bonn Convention; UNCWII-Ramsar Convention; World Heritage Convention; UNCED);
- ✓ Species, including birds and fish, should be protected during their migrations (UNCCMSWA-Bonn Convention);
- ✓ Climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases may be disastrous on organisms and their surroundings for sustainable natural resources. Intergovernmental efforts to tackle the challenge posed by climate change should be put in place (UNFCCC; UNCED);
- ✓ Need to combat desertification and land degradation, as well as mitigate the impacts of droughts, particularly in Africa (UNCCD; UNCED);
- ✓ Use wetlands wisely as they are a key element in the delivery of inland freshwater and coastal ecosystem conservation, including wildlife conservation and protection of habitat (UNCWII-Ramsar Convention; UNCED);
- ✓ Cultural and natural heritage are recognised as fundamental features not only in the conservation of natural resources and the habitat, but also in ecotourism. There is therefore a need for their protection and conservation (World Heritage Convention; UNCED);
- ✓ Sustainable management of forests should be through community involvement in forestry planning and management (UNCED).

5.3.2 Regional requirements

Botswana is a member of the African Union and the Southern African Development Community [SADC]. Several instruments have been developed, in particular for SADC, to enable members to apply uniform minimum acceptable standards in utilising natural resources for poverty reduction and alleviation through sustainable development.

African Union

- ✓ Conservation and management of natural resources for sustainable use should be done through comprehensive approach in research, conservation, education, development plans, and national conservation services. (ACCNNR)

SADC

- ✓ The region needs to achieve sustainable utilisation of natural resources and effective protection of the environment through harmonisation of political and socio-economic policies and plans, and appropriate institutions and mechanisms for the mobilisation of requisite resources. (SADC Treaty)
- ✓ Need to establish common approaches to conservation and sustainable use of wildlife resources; and assist in effective enforcement of laws, through harmonization of legal instruments governing wildlife use and conservation among member states, facilitation of exchange of information, capacity building, establishment of trans-frontier conservation areas, and establishment of community based natural resources management practices.

- (SADC Protocol on Wildlife Conservation and Law Enforcement; SADC Protocol on Development of Tourism; SADC Protocol on Forestry.)
- ✓ All types of forests, trees, and their products in the region must be developed, conserved, managed and utilized sustainably for effective protection of environment, alleviation of poverty, generation of economic opportunities, and for safeguarding the interests of the present and future generations throughout the region. (SADC Protocol on Wildlife Conservation and Law Enforcement; SADC Protocol on Development of Tourism; SADC Protocol on Forestry.)
 - ✓ Regional forestry management programmes should apply the concept of trans-frontier conservation as in the case of wildlife and tourism (e.g. Kavango - Zambezi Trans - frontier Boundary (KAZA; see Figure 7). (SADC Protocol on Wildlife Conservation and Law Enforcement; SADC Protocol on Development of Tourism; SADC Protocol on Forestry.)
 - ✓ National laws and agreements that regulate the use and management of, access to, and tenure in state-owned forests should give sufficient security of tenure to parties managing or using forest resources to create incentives for sustainable forest management; and clearly define ownership and occupancy rights. (SADC Protocol on Wildlife Conservation and Law Enforcement; SADC Protocol on Development of Tourism; SADC Protocol on Forestry.)
 - ✓ Involve participation of all stakeholders, including the public, local communities, private sector, and NGOs in the policy development, planning, and management whilst protecting traditional natural resources knowledge and equitable sharing of benefits derived therefrom. (SADC Protocol on Wildlife Conservation and Law Enforcement; SADC Protocol on Development of Tourism; SADC Protocol on Forestry; SADC Protocol on Tourism; RETOSA)
 - ✓ In promoting unity and consistency in shared watercourse areas, sustainable management and poverty alleviation should be incorporated in the protection and utilization of shared watercourses. (SADC Protocol on Shared Water Courses Systems)
 - ✓ The region should, through sound sustainable policies on utilisation and management of the natural and cultural resources and environment, be promoted aggressively as a single but multifaceted tourism destination, capitalising on its common strengths, whilst highlighting individual's unique tourist attractions, with due consideration of the overall development in partnership with local communities and other stakeholders (SADC Protocol on Tourism; RETOSA; SADC Protocols on Fisheries and Forestry).

Figure 7: Status of the KAZA initiative

Kavango-Zambezi Transfrontier Conservation Area

A collaborative effort of Angola, Botswana, Namibia, Zambia and Zimbabwe. Current status:

- *Memorandum of Understanding (MoU) signed in December 2006*
- *Treaty in preparation and planned to be approved in 2010.*

The MoU:

- *Describes the geographical extent of KAZA TFCA (in Botswana; the Okavango Delta, Moremi GR, Chobe Linyanti, Makgadikgadi-Nxai NP and other land determined by migratory wildlife movement.*
- *Outlines the principles (e.g. protection of the ecosystem and tourism development so that activities in one country will not affect areas in other countries;*
- *Describes objectives of the TFCA, including promotion of cross border tourism, harmonisation of national NRM approaches and community participation and benefits;*
- *Establishes an institutional framework including a Ministerial committee, technical committee, secretariat, working groups and task forces.*
- *Describes funding sources as member state contributions, donations and contributions from other stakeholders and donors.*

Source: MoU KAZA

5.3.3 National requirements

Biological resources must be conserved through understanding of biodiversity, putting in place effective ecosystems management, addressing the needs of threatened species, the rehabilitation of degraded ecosystems, and the use of indigenous knowledge systems, but with fair access to these resources as well as equitable sharing of the benefits arising from their use, along with increased levels of participation in conservation (The Botswana Biodiversity Strategy and Action Plan –BSAP and Figure 8).

Figure 8: Botswana vision for biodiversity

“A nation in balance with nature with fair access to biological resources where the benefits derived from the use of these resources are shared equitably for the benefit and livelihoods of current and future generations and where all citizens recognize and understand the importance of maintaining Botswana’s biological diversity heritage and related knowledge and their role in the conservation and sustainable use of Botswana’s biodiversity.” Botswana Vision: Botswana Biodiversity Action Plan 2007

Policies and legislation must be put in place or revised so as to incorporate the current trends in forestry ecotourism, including preservation of natural, cultural and historical resources; involvement of all stakeholders at all levels of decision making; fair accessibility of natural resources that also allow access for cultural or spiritual purposes; equal sharing of benefits arising from the use of natural resources; the use of indigenous knowledge systems in sustainable conservation, management and utilisation of natural resources and the habitat; protection of intellectual property rights arising from indigenous knowledge and practices; provision of sufficient security of tenure to create incentives; clear demarcation of ownership and occupancy rights; regular gathering, sharing, monitoring, and dissemination of information; public education and awareness.

There is need to harmonise policies and legislation on forestry ecotourism with policies and legislation regulating other issues but are relevant to forestry tourism. Some relevant policies and legislation relevant to forestry management and ecotourism are listed in Appendix 2.

Table 17 Check list for national policy and legislative requirements

| Subjects | Requirements |
|---|---|
| General environmental management (EIA and draft EMA Act) | <ul style="list-style-type: none"> ✓ Requirement for an Environmental Impact Assessment (EIA) following established EIA guidelines (EIA Act, 2005 and subsequent guidelines). This includes the requirement of a scoping phase, a full EIA and Environmental Management Plan (EMP) and mitigation and decommissioning measures. Furthermore, environmental audits are provided for. ✓ Minister for environmental affairs must prescribe activities that are likely to cause significant adverse effects on the environment, and subject them to environmental impact assessment before such activities are undertaken [Section 3 EIA]. ✓ Compliance with EIA-guidelines for tourism facilities ✓ The applicant for a particular activity <u>must</u> take all measures necessary to seek the views of the people or communities which are likely to be affected by the activity. [Section 7(1)]. ✓ The applicant / developer must bare costs for hiring a consultant [Section 8(5)], and/or for environmental impact assessment [Section 9(1)]. ✓ Adoption of sustainable development as the guiding development concept and the precautionary principles, user-pays principle and the polluter-pays-principle (draft Environmental Management Act) |
| Revised 2007 National Biodiversity Strategy and Action Plan | <ul style="list-style-type: none"> ✓ Implementation of the National Biodiversity Strategy and Action Plan ✓ National, district and local biodiversity strategies, plans and regulations that are based on national and local priorities should be reflected in each forest ecotourism management plan. |

| | |
|--------------------|--|
| Rural development | <ul style="list-style-type: none"> ✓ Promotion of community based rural development and participatory rural development (1996 Community-based Rural Development Strategy and 2002 Revised Rural Development Policy); ✓ Rural development programmes, including natural resources (animals, plants, and their habitats) management, and ecotourism should promote community-based-management principles that put emphasis on involvement of local communities in all aspects of development. (Rural Development Policy, CBNRM Policy, Wildlife Policy Draft 2008, Wildlife Act Bill 2008, Tourism Policy Draft, BTB Best Practices, Forest Policy Draft, NDP 9 & 10) |
| 2007 CBNRM Policy | <ul style="list-style-type: none"> ✓ CBNRM policy promotes community based natural resource management and development, including forest management (2007 CBNRM policy) |
| Land resources | <ul style="list-style-type: none"> ✓ Land Boards allocate land rights and manage tribal land resources (Tribal Land Act) ✓ State Land is managed by the department of Lands ✓ Private land owners should be encouraged to adopt necessary measures for management of sustainable forest reserves since their land cannot be declared as such without their consent (Section 11(1)(b) Forest Act) |
| Wildlife resources | <ul style="list-style-type: none"> ✓ MEAs that promote wildlife conservation, utilisation and management must be incorporated in national wildlife instruments. (Wildlife Policy Draft 2008, Wildlife Act Bill 2008) ✓ Wildlife shall be utilized in a manner that does not impinge on cultural values, compromise the quality and value of the resource, or degrade the carrying capacity of supporting ecosystems. (Wildlife Policy Draft 2008, Wildlife Act Bill 2008) ✓ Government shall devolve more user and development rights to the private sector, local communities, and NGOs. (Wildlife Policy Draft 2008, draft Wildlife Act Bill 2008) |
| Tourism | <ul style="list-style-type: none"> ✓ Promotion of tourism in general and ecotourism in particular (NDP9 and tourism policy) ✓ Allocation of tourism concessions through competitive tendering (tourism policy and Act) ✓ Five ecotourism principles and seven objectives (nat. ecotourism strategy) ✓ Diversification of tourism products, including cultural tourism (nat. ecotourism strategy and tourism management framework) ✓ Greater spatial spread of tourism over the country and relief of pressure on major parks (tourism management framework) ✓ Diversification away from only low-volume, high cost tourism (NDP9) ✓ Certification and grading of tourism facilities by BTB (best practices manual and draft certification scheme) |
| Forest resources | <ul style="list-style-type: none"> ✓ No use of forest reserves without permission and license of DFRR (Forest Act) ✓ Residents of Kasane, Kazungula and Lesoma are exempted for subsistence use of specified trees and grasses (1968 and 2005 Forest Act)? ✓ Department of Forest and Range Resources is the designated management institution of the Forest Reserves (Forest Act) ✓ Boundary adjustment of FRs is possible through de-gazetting. This has happened before. ✓ No settlements are permitted inside Forest Reserves (Forest Act) ✓ Concept of forest product certification, but not yet operational (draft Forestry policy) ✓ Promote government collaboration with NGOs, Private Sector and CBOs (National Forest Policy, 2007) |
| Waste management | <ul style="list-style-type: none"> ✓ Reduce, re-use and recycle as much waste as possible (Waste Management Strategy) ✓ Waste disposal is only permitted at designated and registered waste disposal sites ✓ Permits required for waste transport and storage (Waste Management Act) |
| Water resources | <ul style="list-style-type: none"> ✓ Permit required for abstraction of ground and/or surface water from Water Apportionment Board ✓ Duty to return water in unpolluted stage and effluent discharge standards ✓ Potable water standards (BOBS) ✓ Need for application of water rights |

The following Acts and policies are currently under revision or in preparation. The guidelines need to be regularly up-dated after approval of the final draft of the new Acts and policies:

- ✓ The Environmental Management Act and the 2005 Environmental Impact Assessment Act;
- ✓ The 1986 Wildlife Conservation Policy and the 1992 Wildlife Conservation and National Parks Act; draft 2008 Wildlife Policy and 2008 Bill;
- ✓ The 2005 Forest Act and a new Forest Policy;

- ✓ The merging and up-dating of the 1974 Agricultural Resources Act, the Herbage Preservation Act and the Forest Act;
- ✓ The 1990 Tourism Policy, the final draft 2008 Tourism Policy, the draft Tourism Act and the 2009 Tourism facilities certification scheme.

Several tourism documents are important for these guidelines, in particular the Ecotourism Strategy and the Ecotourism manual (Figure 9).

Figure 9: Important tourism documents

- ✓ 1990 Tourism Policy (and draft 2008 Tourism Policy)
- ✓ 1992 Tourism Act (and the draft Tourism Act)
- ✓ 2000 Tourism Master Plan
- ✓ 2001 Tourism Development Framework
- ✓ 2002 Ecotourism strategy
- ✓ 2009 BTB certification scheme; grades (green, green + and ecotourism)
- ✓ 2009 Ecotourism manual

5.4 Ecotourism

5.4.1 Role of tourism in FRs and the region at large

Wildlife viewing and safari hunting dominates the type of tourism activities that are undertaken in the Chobe District. One of the hot spots is the Chobe River, which offers unique opportunities to view wildlife when drinking. There are also two animal corridors in close proximity to the Chobe River. There has been, as a result, congested development in the form of lodges, hotels, all competing for the river resources. Opening up forest reserves for ecotourism would open up alternative tourism development areas which will reduce pressure on the riverfront.

Development of ecotourism in the Forest reserves offers an opportunity to diversify the tourism product range offered in the district. The five forest Reserves have a diversified range of products which if well developed and marketed can create new tourism opportunities for the Chobe District. However, there are a number of managerial and planning issues that must be addressed before this can become successful:

- ✓ An inventory of available tourism resources should be undertaken. This can be an up-date of the KAZA inventory (Suich *et. al.*, 2005);
- ✓ Assessment of the potential product range of tourism products from the FRs;
- ✓ Market research. Without knowing the market characteristics of the products, it is difficult to full develop the product. The Botswana Tourism Board together with communities can then develop the tourism product that truly reflects the product range in the forest reserves.
- ✓ Tourism is a service based product and training in service culture, are paramount;
- ✓ Development of a good information and educational centre, which show the history of the FRs and their importance for biodiversity.
- ✓ Public and private sector collaboration with respect to marketing and promotion. One of the possible products to be developed includes cultural and heritage tourism, this type of tourism cannot only be developed with the cooperation of local communities. Development of cultural tourism should, however, not compromise respect for social and cultural and religious rights of local people.

Tourism promotion in Botswana has put too much emphasis on international tourists at the expense of domestic tourism. Segmentation of domestic market is required. In the domestic tourism market price differentiation is necessary for researchers, educational trips by school children as well as leisure visitors who would mainly be visiting over weekends and public holidays. The scientists/researchers could be charged a nominal fee whilst school educational trips and domestic leisure tourists could be charged a slightly higher fee than the researchers.

Tourism by its very nature is seasonal. There are times of the year when occupancy rates are very low. New tourism products could fill the low season dips in tourism and increase overall tourist numbers. Its multiplier effect would be creation of better employment conditions and provision of a stronger base for local economic development. Above all, occupancy should be monitored to show progress in extending tourism season.

5.4.2 Code of conduct for tourists and operators

Tourism is a fragmented industry, which involves actors from other unrelated industry but have a role in influencing the tourist decision to return to the destination. There are public sector agents through various related and unrelated ministries and departments (Environment and Tourism, Immigration and policy). The former being the related ministry whilst the latter being the unrelated ministry which have a greater influence on future tourist decision to visit a destination. For example if the immigration officers are sloppy in the way they handle visitors at the border post they can scare away potential tourists. Government ministries and departments regulate and develop tourism. They are responsible for sustainability of the tourism resources. The private sector is another agent in tourism. They develop and run tourism businesses. The local community is another important agent in tourism. They enhance the product through skills such as indigenous knowledge systems. They are also influential in the sustainability of the resources. NGOs have recently played a pivotal role in conservation of the resources and training of local communities to take a meaningful role in managing and running tourism businesses.

Figures 10 and 11 summarises codes of conducts for tourists and tourist operators.

Figure 10 Code of conduct for tourists and travellers

Do's and don'ts

- ✓ As a traveller, you can do a lot to help ensure that tourism in developing countries remains a positive experience for everyone. The following guidelines offer suggestions for low-impact and culturally sensitive travel:
- ✓ **Stay on the trail:** straying from the trail while hiking can cause erosion and other environmentally harmful impacts.
- ✓ **Respect the wildlife.** Viewing animals from a safe distance is fine; touching, feeding, or cornering them is not.
- ✓ **Respect endangered species:** Do not buy products that exploit wildlife, aid in habitat destruction, or come from endangered species.
- ✓ **Do not litter.** This is one time when the old adage "When in Rome, do as the Romans" doesn't apply. Even if you see a local person littering, set an example and dispose of your garbage appropriately.
- ✓ **Reduce waste.** Recycling is extremely limited or non-existent in most developing countries. Avoid products with excess packaging; opt for beverages in glass bottles as they tend to be re-used.
- ✓ **Protect local water systems.** Use only biodegradable soaps and shampoos while camping. Avoid sun block while snorkelling as the chemicals are harmful to the coral reef - wear a T-shirt instead.
- ✓ **Respect cultural differences.** Local customs and traditions may be different from our own. Take the time to learn what behaviour is acceptable and what isn't.

- ✓ **Take photos with care.** Always ask permission to take photos of people and respect their wishes if they refuse. If you do take a photo, offer to send copies back to them and make sure to follow through with your promise. If your subject wants immediate compensation in return for the photo taken, offering a piece of fruit or bread, or a souvenir from your home are ways to do it.
- ✓ **Learn a few phrases.** Take the time to learn about the country you are visiting. Learning about the customs and a few words in the local language can go a long way and is appreciated by the local people. It also makes your interactions more meaningful and memorable.
- ✓ **Giving gifts.** Do not offer money to people begging on the streets. Parents often send their children out into the streets, since a child can make more than their parents make begging on the street. This promotes further dependency and encourages more parents to send out their children. Instead, we would suggest offering a piece of bread or fruit. Perhaps you could offer postcard from your home, or a small pin etc.
- ✓ **Support Local Artisans.** Support local artists and artisans by purchasing locally made goods. Many communities sell handmade crafts that you may purchase while on tour. You may also ask your Tour Leader for recommendations about where to find local markets, stores and cooperatives. As a traveller, you have a responsibility to help ensure that tourism in developing countries remains a positive experience for everyone. The following "Travel Code" offers guidelines for low-impact, culturally sensitive and environmentally friendly travel.

Learn about Botswana and Forest Reserves before you visit

- ✓ Start enjoying your travels before you leave by tapping into as many sources of information as you can.
- ✓ To get the most out of a trip, seek out lots of information – not just the obvious sources like guidebooks.
- ✓ Try reading some classic and contemporary literature of the country. The internet is a fantastic resource.
- ✓ Try to check out the behaviour and dress codes that will be expected of you.
- ✓ Visiting religious sites, markets or rural communities looking as though you forgot to get dressed that morning is probably not a good idea! Swimwear and revealing shorts and T-shirts are often only appropriate on the beach.
- ✓ One of the major impacts holidays and travel have on a destination is economic: you can be a vital source of income for many.
- ✓ If you want to make sure you bring some economic benefit, find out whether there are any community or locally run/owned businesses to use in the places you're visiting.
- ✓ Learn a few phrases in Spanish before you travel.
- ✓ Even better take a short language course. A few basic words will go a long way to improve the quality of your interaction with local people.

Thinking about the impacts of your expenditures

- ✓ Think about where your money goes – be fair and realistic about how cheaply you travel.
- ✓ Think about where your money goes - it's very easy to forget the consequences when you're on a budget trying to save every penny. Competing for the cheapest price and not wanting to get ripped off is common, but some travellers misunderstand how far to go and are overly suspicious or aggressive.
- ✓ By all means negotiate (it's often expected after all) but don't go over the top – smile and pay a fair price. A small difference, of say 30 BWP, could mean the person you're buying from can feed his or her family that day. It doesn't really hurt to be fair and realistic; in fact it can be very rewarding.
- ✓ Try and put money into local businesses. For instance, drink local beer or fruit juice rather than imported brands – they're probably cheaper and just as good if not better.
- ✓ Thinking about where your money goes also includes using local guides and locally-owned accommodation. Tours and excursions run by locals will educate you and benefit them. If possible, support community projects.

Minimise your adverse environmental impacts

- ✓ Think about what happens to your rubbish - take biodegradable products and a water filter bottle. Be sensitive to limited resources like water, fuel and electricity.

- ✓ Help preserve local wildlife and habitats by respecting rules and regulations, such as sticking to footpaths, not buying products made from endangered plants or animals. Exploring the delta, trekking, going through remote desert regions, – all these are things that travellers' dreams are made of. But if everyone who visited such environments did it without working out how to limit their environmental impact, damage would soon follow.
- ✓ Recycling is extremely limited in many areas of Botswana. Opt for drinks in glass bottles as these tend to be re-used.
- ✓ Use only biodegradable soaps and shampoos while camping but don't use them directly in the water as they won't decompose. Batteries are one of the most damaging products to leave behind.

Taking pictures

- ✓ Don't treat people as part of the landscape; they may not want their picture taken. Put yourself in their shoes, ask first and respect their wishes. Most travellers want photos to remind them of their travels, but there are times when photography can offend and intrude. So how do you get your photos of your lifetime without offending the people you are visiting?
- ✓ Consider the feelings of local people and, if it's inappropriate, don't take it. You may find that sometimes people will ask you for payment for the photograph to be taken. You may think that paying for pictures is a way of putting money into local hands, but it can encourage begging especially amongst children. However, if it is obvious that the locals have dressed up in traditional clothes only to have their photos taken; negotiate a price first before taking a photo.
- ✓ In colourful markets it may be more appropriate to buy something from the store-holder such as fruit or vegetables rather than paying for taking a photo. Often the best way you can take photos is to offer to mail them a copy. Many locals will be thrilled to receive their picture.
- ✓ Avoid giving children sweets for photos; again it encourages begging as well as being bad for their teeth.
- ✓ Flash photography can damage works of art – check if it's okay first or use a fast film.

Source: 2002 Ecotourism Strategy

Furthermore, tourist should respect the culture and dignity of the local population and not exploit their more economic power, for example by improper behaviour and engaging in commercial sex.

Figure 11: Code of practice for Botswana Ecotourism operators

Resource use and efficiency

- ✓ Conserve water through the uses of flow restrictions, low-flush toilets and efficient kitchen equipment
- ✓ Recycle water through drip irrigation
- ✓ Monitor and continually lower consumption
- ✓ Use alternative energy efficient (energy star rated) appliances
- ✓ Minimize the use of fuel burning equipment (vehicles, generators, etc.)

Wildlife and resource conservation

- ✓ Conduct conservation programs and support local conservation projects
- ✓ Protect and enhance existing ecosystems and species
- ✓ Never intentionally disturb or encourage the disturbance of wildlife or wildlife habitats
- ✓ Ensure vehicles and hikers always stay within a confined trail, and road corridor
- ✓ Avoid animal feeding

Pollution and waste

- ✓ Reduce packaging and buy bulk
- ✓ Eliminate all hazardous chemicals
- ✓ Compost all biodegradable materials including kitchen waste
- ✓ Separate and recycle paper, metal, glass
- ✓ Ensure that non recyclable and biodegradable materials are sent to an organised dump site
- ✓ Print all materials on recycled paper using non toxic ink

Carbon footprint

- ✓ Offer a carbon-offset program to our guests

Local benefits and development

- ✓ More than 60% of the employees come from the local community and region
- ✓ Local businesses are used when possible to purchase supplies and services
- ✓ Provide financial and in-kind support for local community events and activities
- ✓ Practice "truth in advertising"
- ✓ Maximise the use of electronic marketing technologies
- ✓ Cooperate with local Botswana cultural groups and respect their privacy
- ✓ Provide opportunities for the production and sale of local art and handcraft
- ✓ Hire local entertainers and storytellers

(Environmental) education and training

- ✓ Design and deliver quality environmental education programs, including visits to local communities, nature reserves and special features of the region
- ✓ Provide pre-trip information and adequate education materials for the guests
- ✓ Provide on-going training programs for all staff
- ✓ Ensure guides are adequately trained to provide a quality ecotourism experience
- ✓ Ensure guides appreciate and understand local culture
- ✓ Introduce guests to the traditions and cultural heritage of the region through planned encounters with locals
- ✓ Establish strategic alliances with other tourism business that share a similar environmental ethic and standard
- ✓ Promote green business practices to other companies in the community and region
- ✓ Be aware of current environmental issues, particularly within the local area
- ✓ Inform others of our eco-friendly activities with an annual electronic newsletter and encourage partners to adopt similar initiatives

Compliance with standards and legislation

- ✓ Comply with all Botswana Tourism Board Standards
- ✓ Adhere to the rules and regulations of all reserves and potential areas
- ✓ Implement the Ecotourism Best Practices Guidelines

Source: adapted from the BTB Botswana Ecotourism Best Practices Manual, 2009, p.12.

Botswana adheres to the Global Code of Ethics for Tourism of the World Tourism Organisation through the Department of Tourism. This Code of Conduct covers similar areas to those covered by the BTB discussed above. One has to realise, however, that the Global Code applies to all forms of tourism and operators as well as tourists, and is not exclusive to ecotourism. Moreover, the Global Code encourages tourism for gender equality, for meeting the Millennium Development goal of alleviating poverty and protecting the rights of the most vulnerable members of society.

5.4.3 Botswana tourism certification schemes

The BTB has drafted a tourism certification scheme for tourism facilities and for tour activities (Table 18). Facilities are certified in three categories: green, green plus and ecotourism. The expectation is that operators improve their facilities to attain higher level certificates. More details are provided in appendix 7.

Table 18: Draft BTB ecotourism certification scheme

| Certificate | Requirements |
|-------------|--|
| Green | The basic certificate with indicates compliance with 89 mandatory certification criteria (out of a total of 215 criteria), mostly in the area of prudent environmental management. |
| Green plus | Compliance with the 89 mandatory criteria and additional compliance with at least another 36 criteria out of the list of 215. This level is considered to up to international scrutiny and certification |
| Ecotourism | Compliance with the 89 compulsory 'green' criteria and compliance with another 50 'compulsory' criteria, which have been determined by the Nat. Ecotourism Strategy. |

Source: BTB, 2009.

Communities and the local population should approach the tourism sector in a constructive and dignified way and try to use the opportunities for livelihood improvement that it offers. Communities and people need to be proud of their local culture and practices, and only share those parts of their culture with tourists that they are willing to share. Communities need to protect their cultural identity and refrain from copying tourists. Moreover, communities need to ensure that social ills associated with tourism are minimised (e.g. commercial sex work and begging).

5.4.4 Ecotourism options for FRs

The Forest Reserves need to offer tourism activities, which complement and enhance the tourism attractions in the Chobe National Park and along the Kasane-Kazungula river front. In addition, tourism in Maikaelelo FR offers opportunities to enhance the use of the adjacent parts of the CNP, which are currently under-utilised and experience poaching problems.

- ✓ Carry out an inventory of attractions and the conditions of such attractions;
- ✓ Carry out a market survey to establish whether there is sufficient demand for such attractions;
- ✓ If there is sufficient demand, then work with communities to develop the products to internationally acceptable standards;
- ✓ Botswana Tourism Board should work with the private sector to form partnerships in both the marketing and development of the ecotourism products;
- ✓ Come up with development plans for each forest reserve opened up for ecotourism;
- ✓ Assess the limits of acceptable change for development of the ecotourism products;
- ✓ Develop the following ecotourism activities:
 - cultural and heritage tourism;
 - agro-tourism;
 - photographic safaris;
 - walking safaris;
 - game drives and
 - bird watching
- ✓ Include local foods on the menu and encourage local businesses to sell local crafts.
- ✓ Ensure that ecotourism activities comply with the (final draft) BTB certification requirements.

Tourism activities would focus on the spots with an indentified ecotourism potential. DFRR efforts and consultation to-date have identified several spots with ecotourism potential. It is recommended that tourism development prioritise based on the following criteria:

- ✓ The 'highest potential' spots
- ✓ Ease of access to the areas;
- ✓ Spots with existing, old facilities such as boreholes;

- ✓ Spots with evidence of current tourism use; and
- ✓ Spots, which have been identified by CBOs for community tourism development.

Earlier DFRR research has identified over twenty spots with a tourism potential in all FRs (Table 18).

Table 18 Potential ecotourism spots in Forest Reserves

| Sibuyu FR 10) | suitable for | And suitable for | Current infrastructure |
|----------------------------|-----------------------------|-------------------------|--|
| Nyagnxyou Pan-Chipane area | game drives | | |
| Xhwaatshaa Pan | historical site | | |
| Mmashaume-Motswidi | camping site | walking safaris | |
| Kabundira Gumago | camp site | | borehole, remains of houses and ablution from Hunters Africa Safaris |
| Nunga River | game viewing | historical site | remnants of Basarwa ploughing |
| Xhamoguo- Golwana | game drives | bush dinner | old Basarwa camp |
| Chimushika | game drives | | old safari camp |
| Biga-Digwere | game viewing | bird viewing | |
| Jolley pan-Marea motshaa | game drives | bush dinners | |
| Tibukai pan | game drives | bird watching | |
| Kazuma FR (5) | | | |
| Chaigo Pan | game drives | | Old Basarwa camp around perennial pan |
| borehole 15 | cultural & historical site | | Old borehole for pastoral farmers before exporting livestock |
| Kabare Pan | game viewing | bush dinners | much wildlife & birdlife |
| Kazuma Pan | historical site | overnight stay | Evidence of use by safari companies |
| Maikaelelo FR (6) | | | |
| one big pan | lodge development | | |
| | tented camp | | |
| 8 small pans | | | |
| Chobe FR | | | |
| Ghoba Pan | proposed camp | | |
| Nonotshaa pool | game viewing | part of CECT | |
| Kashaba pool | game viewing | part of CECT | |
| Kasane FR | | | |
| Lesoma valley | camp site | | illegal night and day drives |
| | cultural tourism | game viewing | |
| | attraction area | | |
| Kasane ext. FR (10) | night drives & bush dinners | | cutline already used |
| | bird watching | | |

Source: Balasumi, 2004.

Suitable opportunities for ecotourism development are the following:

Kasane Forests Reserves. Kasane FR should be developed as high potential ecotourism. It is easily accessible, well-known and therefore marketing costs will be low. It is suitable for game drives, camping and safari walks. There is no need for permanent structures as the FR is close to Kasane, Kazungula and Lesoma. Mobile safaris operators should be allowed in the Kasane Forest Reserves.

Chobe Forest Reserve should be developed as high potential ecotourism spot. It has a good road network and has in place an approved resource management and land use plan. It should be allocated to CECT on a long lease basis. The area is suitable for development of bird watching and

game viewing. Campsites can be developed in accordance with the CECT plan. For example, a campsite can be developed at Ghoha pan.

Kasane Extension Forest Reserve is a high potential spot. Safari companies are already taking their clients to the reserve. It is suitable for development of night drives, bush dinners and bird watching.

Kazuma Forest Reserve should be developed as medium potential spot for ecotourism. Much of the reserve is not accessible during rainy season because of flooding. Game drives at Chaigo pans and bush dinners at Kebare pan and Kazuma pan as well as cultural and heritage tourism could also be developed. No permanent structures should be built in the Reserve only camping can be undertaken. KALEPA Trust is interested in developing a rest camp and bird sanctuary around a well. Feasibilities studies have already been undertaken with the assistance of the Department of Wildlife and National Parks (DWNP).

Maikaelelo Forest Reserve is medium potential for ecotourism development because of its remoteness and limited accessibility. It should be developed in close collaboration with the CNP. The FR could work as a buffer between the CNP and communal areas. A lodge with permanent structures can be developed as well as tented camp. The reserve should specialise in game drives.

Ecotourism development in Sibuyu Forest Reserve need to be further investigated with communities and tourist operators. Consultations in Pandamatenga revealed that the community wishes to use the Sibuyu FR for hunting safaris and camping. As the Reserve is located on a wildlife migration route, hunting is considered to be less suitable and game drives and camping are recommended instead.

Guidelines:

- ✓ Ecotourism in Maikaelelo FR needs to be fully integrated with tourism development and marketing in the adjacent part of CNP;
- ✓ Ecotourism in Kasane and Kasane Extension FRs need to be harmonized with and add value to ecotourism in the river front area of the CNP;
- ✓ Development of ecotourism in Kazuma and Sibuyu FRs can be used to reduce pressure on the river front and to increase community participation; and
- ✓ Promote ecotourism outside the current peak periods, especially in the river front area.

5.4.5 Allocation of ecotourism rights

The Botswana Government places great importance on the active involvement of host communities and other citizens in all aspects of the industry's management and development (Department of Tourism, 2002 and figure 12).

Figure 12: The right to use biodiversity by local communities

"Local communities should have the right to use biodiversity to meet their economic and cultural needs and should be involved in its management and protection. Clearly demarcated and defined tenure and resource use rights might benefit biodiversity by providing local people with incentives for conservation and sustainable use." (ITTO/IUCN Series No 17 2009)

Nevertheless, communities' lack of capacity, in terms of skills and finances, cannot be ignored. Establishment of partnerships, where needed, is recognised as the best alternative. This does not, however, negate the long term responsibility of training local people. It is important that the private sector should identify young local talent and encourage further training so that they can eventually manage and run of community-based ecotourism resources.

Guidelines for allocating tourism rights

1. Tourism rights should be legally allocated to local communities or the private sector. Working partnerships between different role players should be encouraged.
2. Land Status. Forest Reserves on State Land are under the Department of Lands; Forest Reserves on Tribal Land (currently only CH2) are the responsibility of the Chobe Land Board.
3. Types of Allocation. Land should be leased to:
 - ✓ Local communities. Priority should be given to communities in Tribal Land and in areas with recorded past community use. Where the communities lack capacity, communities could lease to private sector or collaborate with other suitable stakeholders.
 - ✓ Private sector but with communities having access to skill development, controlled natural resources use, and other forms of local development; as well as active involvement. Private tour operators need to be certified by BTB in order to qualify for allocation. They need to maintain their grade in time and preferably advance to 'ecotourism grade'.
4. Procedure
 - ✓ Land allocation processes must be transparent and fair, based on evidence that promotes investments that will enhance local sustainable livelihoods.
 - ✓ Land use plans should be developed from national level to the local level, including individual forest ecotourism areas. Allocation of land should be through government allocation or open tenders (preferred for commercial tourism)
5. Property Rights/Lease Period. Property rights govern the rights and duties associated with the use of a particular asset or resource.
 - ✓ Ownership of the relevant forest ecotourism land should remain in the hands of Government as the custodian for the benefit of the people.
 - ✓ The land must be clearly demarcated, and tenure and resource use rights must be defined to avoid conflict.
 - ✓ Requirements to set limits of acceptable use should be embodied in protected area legislation, which should also give managers of protected areas the power to act quickly when inappropriate activities are occurring to prevent damage.
 - ✓ Land should be leased to local communities and/or private sector, which should have user rights to natural resources but subject to sustainable biodiversity and natural resources.
 - ✓ The lease periods should be long enough for the investments to reap fruits. The lease period should be increased from 15 to 25 years.
 - ✓ Local communities should, in all situations be actively involved in decision making and should have access rights to natural resources and other benefits subject to sustainable conservation of natural resources and environment.

Applying the above guidelines, communities would be given tourist rights in Chobe FR, Kazuma FR and Sibuyu FR. Kasane (Extension) FR and Maikaelelo FR should be tendered among commercial tourist operators, with the conditions of guaranteeing generating benefits to local communities and people.

A checklist for lease conditions for tourist operators is presented in Figure 13.

Figure 13: Checklist for lease conditions for tourist operators

| |
|--|
| <ul style="list-style-type: none">✓ Delivery of proposed economic benefits✓ Community participation plan✓ Listing and valuing of community benefits✓ EMP (and EIA)✓ Training programme✓ Local sourcing programme✓ Plans to minimise social and cultural ills✓ Compliance with BTB best practice manual and certification requirements |
|--|

5.5 Ecotourism and other uses in FRs

Currently, no settlements are allowed inside the FRs and any commercial use of FRs requires a license from DFRR. Logging has been suspended since the early 1990s. Subsistence wood and grass collection is permitted from Kasane, Kazungula and Lesoma. This use is restricted to certain species. The use of Chobe FR needs to comply with the CECT Management Plan. The FRs are now opened up for tourism and other uses subject to sustainable resource management. Management plans for each FR need to indicate which and what level of other uses are permitted, and at what locations. Below, guidance is provided for other uses and their relationship with ecotourism.

5.5.1 Other uses

Mining and construction sand

Mining activities in the FRs should be avoided as much as possible given the sensitivity of the ecosystem and conflicts between mining and ecotourism. However, where there are no suitable alternative sites for mining available or where there are overriding national interests at stake, some mining activities can be permitted, provided a full EIA is carried out, satisfactory mitigation measures are proposed and the environmental management plans are fully implemented and regularly audited (as prescribed in the 2005 EIA Act). All mining sites should be rehabilitated, and their potential use for ecotourism must be considered. Any mining activity must be fully integrated into the FR Management Plans.

During consultations, stakeholders expressed the wish to develop some burrow pits in the FRs to alleviate the shortage of construction sand. The District Land use Plan (not yet developed) should identify suitable burrow pits outside the FRs and NP. If these sites prove to be inadequate to meet future demand, suitable sites in FRs could be explored. During operation, burrow pits should have temporary green shields to minimise damage to the scenery.

Where illegal extraction of sand has occurred (e.g. in Kasane Extension FR), sites need to be rehabilitated or the affected areas should be de-gazetted.

Harvesting of veldproducts

As Chobe's communal areas are small, veld products are often sourced from the Forest Reserves (Figure 14). Ecotourism operators should recognise this need and be informed by FR management and communities about the type and details of veld product use in 'their' areas. Similarly, communities need to be sensitised about the preferences of ecotourism and minimise adverse impacts of gathering on ecotourism. A 'gathering' agreement needs to be reached between the tour operator and community as part of the (sub-) lease contract. In Tanzania the sustainable forest management planning involved the local communities. Agreements with communities were signed

regarding access to wood fuel, honey, poles and timber while requiring them to avoid sites of silvicultural importance and those of high conservation value (Blomley, 2009).

Figure 14: Harvesting of firewood



Source: DFRR, 2009

Livestock grazing

Chobe District is experiencing a shortage of communal grazing areas. The potential carrying capacity for livestock of the land resources in the FRs is estimated to be 8 ha per livestock unit⁴ (Field, 1978). Consultations have shown that communities wish to access FRs for livestock grazing. This could expose FRs to the same environmental problems as communal grazing areas elsewhere in Botswana: poor livestock management and high stocking rates, causing bush encroachment, loss of scenic beauty and biodiversity. Significant livestock numbers would reduce the wilderness experience of the FRs. Therefore, livestock grazing should be avoided and only be considered during extreme events such as droughts: on a small scale, under stringent conditions and subject to monitoring (permanent herding, controlled rotational grazing, night kraaling of livestock and for a limited number of livestock). Browsing should be avoided and no small stock should be allowed under any circumstance. Ecotourism could contribute to livestock development outside the FRs by establishing a council abattoir to facilitate meat inspection and utilisation of local meat products.

The following activities need further consideration:

1. Use FRs (and Pandamatenga area) for livestock fodder and feed animals outside the FRs (zero grazing);
2. Agro-forestry to support livestock can then be promoted as part forestry development and help farmers focus their interest on forestry away from the forest reserves and ecotourism sites reducing conflict.
3. Use FRs as grazing reserves for dry season or droughts only.

⁴ A livestock unit is an animal of 450 kg.

Logging

Salvage logging is perhaps one of the most important other uses for sustainable forest management. Dead trees are common and pose fire hazard and therefore they should be put to beneficial use. Additionally there is need for removal of senile and diseased plants, which are suitable for craft work. Such logging can be applied to tourist enterprises wishing to extract material for infrastructure development i.e. lodges and banker beds.

While frequently gum poles are used, if the forest inventory suggests that there are adequate resources, use of local material can be encouraged. This should be coupled with very strong focus on sustainable forest management, for example through forest product certification. Tourism initiatives that use indigenous woodland should have clear contracts for extraction with good environmental policy and comply with extraction of resources in high value conservation areas.

5.5.2 Dealing with subsistence uses

Successful forest management requires the incorporation of subsistence needs of neighbouring communities. Such communities should however also be sensitised to appreciate the conservation principles.

During consultations, it became clear that local communities wish to consider a broader range of multiple uses for Forest Reserves, but conflicts may arise between commercial and subsistence uses in the same areas. Veld products and wood resources are important for local communities' livelihoods. Therefore, guidelines need to clarify, secure and control subsistence user rights (Figure 15).

Figure 15: Guidelines for handling subsistence uses in FRs

- ✓ Identify current subsistence use rights and their details (e.g. location, seasonality and purpose) in consultation with the local authorities and communities (e.g. medicines, building material, energy etc.)
- ✓ Identify possible conflicts with ecotourism activities and identify mitigation measures such as:
 - Zone the land between different uses in the FRMP.
 - Timing of activities so as to avoid conflicts
 - Spatial spread of activities
 - Minimise environmental disturbance (e.g. litter and waste)
 - Follow code of conduct for subsistence users and ecotourist operators.
- ✓ Establish a registry on different subsistence uses, and land-use zones.
- ✓ Define control mechanisms for subsistence use, like who has the right to use forest products, restriction of species, seasonal uses, and use of Omang as a method for identification.
- ✓ Monitor subsistence use (e.g. operators, and communities) Educate and inform communities and tourist operators of the existing rights, obligations, and controls.
- ✓ Develop mechanisms for regular reviews and update stakeholders with changes.

5.5.3 Conflict prevention and minimisation

Multiple uses of FRs may inevitably create conflicts between activities. These conflicts need to be pre-empted and where they still occur they need to be minimised and mitigated. Opening forest to local use without creating livelihood alternatives and effective management controls is likely to lead to "the tragedy of the commons".

Guidelines for conflict prevention and minimisation:

- ✓ Conflict prevention is better than mitigating the impacts of conflicts;
- ✓ Conflicts can be prevented and minimised by a combination of the following measures:
 - Holistic district development and land use planning. Chobe District urgently needs a District Land Use Plan that addresses subsistence and commercial land and resource needs. The plan would need to ensure that human activities are promoted at the most suitable locations, incompatible land uses are separated through buffers, and that compatible land uses are permitted simultaneously. Improper land use planning will increase conflicts and associated costs;
 - Taking into account seasonality of use and ‘fall-back’ functions of land areas during droughts and other extreme events;
 - Development of Resource and Land Use Plans for individual FRs for similar reasons as the District Land Use Plan. The CECT management plan and the general 1993 FR management plan can inform the development of MP for each FR.
- ✓ Conflict mitigation and resolution:
 - Fencing. Fencing is an effective way of conflict management, but it interferes with wildlife mobility and the tourists’ wilderness perception. Moreover, it is a costly investment and has high maintenance costs. Therefore, fencing should be avoided as much as possible, and it should not be permitted in wildlife abundant and wildlife migratory areas.
 - Adherence to lease conditions and good management practices;
 - Establish and enforce periods for commercial harvesting of thatching grass and salvage timber to minimise conflicts with ecotourism;
 - Based on good faith and mutual respect, discussions and agreements between the affected parties to resolve conflicts. This requires adaptive resource management.

Promoting the planting of species such as *Schinziophyton rutananii* (mongongo), *Berchemia discolor* (motsentsela) and *Uapaca kirkiana*, which play an important role in community household economy as fruits and medicinal plant, can go a long way in off-setting public interest in forest resources as well as empowering communities in regenerating the biodiversity of the area. It can also become part of ecotourism in the FRs to promote indigenous tree planting.

5.6 Ecotourism and communities⁵

Table 19 lists opportunities to create more economic benefits from ecotourism. It is important to capture as many as possible in tourism planning and development.

Table 19: Checklist for capturing more economic benefits

| |
|--|
| <ul style="list-style-type: none"> ✓ Increase number of tourist: good potential ✓ Increase the length of stay; good potential as ad-on to visits to Chobe National Park ✓ Attract richer tourists with greater ability to spend: small potential as Botswana is already upper market; |
|--|

⁵ According to the CBNRM policy, a community refers to a group of people that share an interest in the management and sustainable use of natural resources in their common area. While CBNRM promotes community based organizations, it does not exclude individuals who are members of a local community with interest in establishing ecotourism businesses. Such individuals would fall here under the private sector as they have to comply with legislation governing businesses, for example in respect of registration of companies, SMMEs, VAT, income tax, health and safety etc. In its Best Practices Guidelines (p 27), the BTB encourages “involvement of communities, as well as individual local entrepreneurs”.

- ✓ Increase purchases/ visitor; good potential through provision of services
- ✓ Provide lodges and other accommodation: new opportunities in FRs
- ✓ Provide guides and other services: new opportunities for guides in FRs
- ✓ Host special events: good opportunities, for example hosting national tree planting day
- ✓ Purchase local foods and drinks: good long term potential but it requires the development of a support industry

- ✓ Note of caution: avoid adverse environmental impacts and adhere to the limits of acceptable change model.

Source: Eagles *et. al.*, 2001

5.6.1 Enhancement of local benefits

Ecotourism should bring additional benefits from the Forest Reserves and ensure that a fair share of the benefits accrue locally. Local benefit enhancement can be pursued in different ways.

Firstly, user and development rights for high potential spots or an entire FR can be granted to a community based organisation in accordance with the CBNRM Policy. The community needs to do the following in order to be granted exclusive rights:

- Form a RALE (representative, accountable and legal entity);
- Develop a resource management plan for the area or site;
- Apply for resource rights from the relevant authority (Land Board or Dep. of Lands/ DFRR);

Once successful, the CBO need to submit annual reports. With the assistance of LEA, communities should be encouraged to establish SMMEs to operate tourism activities.

Communities have the option to exploit the resource rights themselves or engage in a joint venture partnership with a commercial partner. The JVA tends to generate more positive results as the strengths of companies and communities are pooled together. However, caution is required to make sure that both parties benefit and that the partnership is based on trust and mutual respect and that it offers security for each partner to ensure investment. Communities should not consider companies as a temporary inconvenience but instead aim to learn from their skills and experiences (e.g. marketing and tourism facilities' operations). Similarly, companies should not consider communities as an unavoidable burden, but instead take an interest in their traditional knowledge and culture, craft skills and in advancing their capacity as a long term partner. Both partners need to understand that rights go hand in hand with responsibilities.

Secondly, user and development rights can be directly granted to commercial companies with conditions that ensure significant benefits to local communities. The FR offer more opportunities for benefits than NP. Examples of local benefits include:

- Employment generation (tourist guides, lodge personnel);
- Tourism related community activities (e.g. cultural villages, dance, crafts);
- Participating in the product chain both down-stream (e.g. beef, chicken, fish and eggs) and down-stream (e.g. marketing and transport services)

If DFRR decides to grant tourism right to commercial companies, the latter need to indicate and guarantee (as part of their bid) the expected local benefits to communities. A special programme for the development of SMMEs needs to be developed with the assistance of LEA and CEDA. Such support and mentoring would improve the chances of economic success of infant businesses.

Communities are also to gain from intangible benefits such as:

- Training and skills development;
- Improved infrastructure and communication;
- Greater appreciation of the traditional culture.

However, the risk exists that communities lose traditional values as they get exposed to cultures of tourists and that local people get exploited by tourists and tourist operators due to imbalances in wealth. These risks require careful discussions and handling at the community level.

5.6.2 Community participation

Ecotourism's main pillars are community involvement in all areas of the development of the ecotourism product. One of the critical issues is the danger of commercialisation of the culture, which then loses its significance. Communities should be encouraged in their design and development of craft and other cultural workers to maintain the authenticity and cultural values of their products. They should be encouraged to use their traditional knowledge systems to explain to the tourists the cultural values and history of their crafts. Communities should also be involved in product development and marketing strategies because they are better placed to decide what an acceptable portrayal of their community is. Not only should communities interact with tourists at formal settings, but opportunities should be created for tourists to interact with the local community in unstructured way. Information centres could also be used by tourists to provide feedback on community owned tourism products. Table 20 gives a detailed outline of guidelines for community participation. There is need for a community participation plan. Many local communities have a strong tradition of respect for wildlife and natural environments that needs to be fostered (WWF, 2001, 4).

Table 20: Guidelines and issues for community participation in ecotourism

| Key issues | Guidelines | Issues and questions |
|--|---|---|
| Establish whether ecotourism is an appropriate option | Consider the potential conservation gains | Are the right incentives in place? Identify and mitigate adverse conservation impacts through EIA Does ecotourism generate more benefits than other livelihood sources such as traditional agriculture? |
| | Check the pre-conditions for ecotourism | Initial assessment is required (done) What are the pre-conditions for successful ecotourism at local and national level and do they exist? Pre-conditions include: <ul style="list-style-type: none"> • FR must be have attractive landscape and be able to absorb visitors without causing too much damage • Awareness and interest of local communities • Effective community decision making • No obvious threats to local communities • Initial market assessment needs to show market potential and to avoid over supply |
| | Adopt an integrated approach towards sustainable development & conservation | Understanding of and linking with other livelihood sources and opportunities Understanding ecotourism in FRs in the broader context of Chobe District and KAZA. The District urgently needs to develop a land use plan Development of management plans for individual FRs |
| Planning of ecotourism with communities and other stakeholders | Finding the best way for community involvement | Work with existing community structures and identify possible leaders and 'champions'. Fair distribution of benefits and appropriate participation of women and youth Ecotourism must be seen as a business and therefore joint ventures (with training and hand-over period) and benefiting from private companies must be considered. |
| | Working together on an | Assessment of strengths and weaknesses of communities and |

| | | |
|---|---|--|
| | agreed strategy | collaborators Agree on transparent and realistic strategy Includes issues such as sharing of visitor fees, community zones etc. |
| | Ensuring environmental and cultural integrity | Adopt LAC approach of culture and the environment Culture: Tourism products should be based on traditional knowledge, values and skills Communities need to decide which parts of their culture they wish to share with tourists and which one not. Tourist management: Agreements about number of groups and visitors Code of conduct for visitors EIA for all tourism projects and activities Land use zoning Monitoring and evaluation |
| Developing viable community-based ecotourism projects | Ensuring market realism and effective promotion | Failure to attract sufficient tourists most common cause of failure of community tourism projects Market analysis and plan |
| | Putting forward quality products | Low quality is a common problem Focus on detail, promotion and information provision and authenticity and ambience Training and collaboration with private companies is essential |
| Strengthening community and environmental benefits | Managing impacts of ecotourism | Maximise use of local products and services Adopt good practices Use of certification schemes |
| | Provide technical support | |
| | Obtain support of visitors and tour operators | Good communication with tour operators and tourists Code of conduct for tourists |
| | Monitor impacts and ensure continuity | Covering fields of economic performance, tourist satisfaction, community response and well being and environmental change. |

Source: expanded from WWF, 2001

Options for community involvement with the private sector include:

- Employment opportunities. Communities need to guard against poor wages and conditions and ensure that training is offered;
- Local individuals selling crafts etc. to tourists;
- Local individuals running own tourism companies;
- Joint venture partnerships; and
- Communally owned and run enterprises.

Communities need to assess their strengths and weaknesses and design strategies to overcome weaknesses and maximise returns to strengths.

It is important that communities realise the potentially adverse cultural and health impacts of ecotourism. These include an increase in commercial sex work and HIV/AIDs. All stakeholders need to mitigate these impacts through education and awareness raising and codes of conduct for communities, tour operators and tourists.

5.7 Natural resource management and ecotourism in FRs

The management of FRs has been inadequate to-date. Most recommendations from the 1993 FR Inventory and management plan have not yet been implemented (other than suspending timber logging). The 1993 recommendation for multiple uses of FRs is now being implemented, giving priority to ecotourism. Since the 1993 inventory, tourism has grown tremendously and

transboundary conservation initiatives are being developed (e.g. KAZA). Moreover, more emphasis is put on biodiversity conservation and utilisation. These recent trends need to be incorporated into the management of FRs and ecotourism. This requires increased management capacity and expertise.

FR management should be comprehensive and holistic based on the notions of the ecosystem approach and sustainable development. It should aim to utilise and conserve biodiversity of the FRs. Management of the FRs should be a continuous process with at least the following features:

- Focus on biodiversity conservation and maintenance, in particular conservation of tree and plant species, wildlife migratory routes, water and soil resources;
- Active participation of local stakeholders, i.e. communities, enterprises and NGOs;
- Have dedicated management plans and staff for each FR;
- Balance resource use and conservation;
- Fair sharing of the cost, benefits and responsibilities of resource use and conservation; and
- Adaptive management, with an emphasis on research and learning lessons from successes and failures.

In terms of land use zoning, several land zoning and resource management options exist and their suitability for each FRs needs to be assessed (Tables 21 and 22).

Table 21: Options for land zoning/ categorisation of FRs

| Option | Assessment | Feasible for: |
|---|---|------------------------------|
| FRs turned into NP or GR | Good option in remote FRs adjacent to NP. Limits ecotourism activities (e.g. no trails and horseback safaris). Little support during consultations. | Maikaelelo FR |
| FRs, WMA and tourism concessions/ CBNRM | Good option for FR with major wildlife resources and located along migratory routes. Some limited support during consultations. | Kazuma, Sibuyu and Chobe FRs |
| Degazetting of parts of FRs | Good option where settlements are nearby and settlement growth is curbed by FRs. Will reduce illegal use and encroachment. Supported during consultations for parts of the FRs | Kasane and Kasane Extension |
| FRs only (but for multiple use) | Good option, but requires considerable extra management efforts, particularly on wildlife issues. Risk that migratory routes are not adequately protected. Preferred option during consultation (with increased community access) | All |

Table 22: Options for institutional management models for FRs

| Option | Assessment | Possible in |
|---|---|--|
| Government management | Unsuitable option for State and Tribal Land | All FRs, except on Tribal Land |
| Community management | Popular and suitable option, but CBOs have limitations and require significant support. There is also need to ensure that the benefits trickle down to the communities. Only works with nearby settlements | Feasible in FR with nearby communities: Chobe, Kazuma, Sibuyu, Kasane and Kasane Extension FRs |
| Private sector management through leasing out of tourism concessions | Suitable option with the advantage of available expertise and development resources. Disadvantage is that local benefits may be limited and perception that FRs do not help the local population persists. | Probably most suitable in less accessible FRs without nearby settlements |
| Partnerships (private-public, private-community and public-community) | Most suitable option as it pools resources and holds the perspective of fair benefit sharing | All FRs, except on Tribal Land |

The emphasis of management needs to be on the following aspects:

- Identification and mitigation of major threats to the integrity of the ecosystems of the FRs;
- Resource and biodiversity monitoring;
- Controlling and monitoring of resource uses, their benefits and conflicts;
- Training, awareness raising and education about the importance and value of FRs and sustainable resource management;
- Research aimed to improve the understanding of the ecosystems functioning and its total value; and
- Reduction of conflicts between different FR uses (see sections 5.5 and 5.7.1).

5.7.1 General environmental management issues

Resource management in FRs requires an up-date of the 1993 FRs Inventory and the development of Management Plans for each FR. The latter plans need to inform and be informed by the District Land Use Plan (*to be developed*), the District Development Plan, the District Settlement Plan and the District Tourism Plan (*possibly to be developed*). Moreover, developments of KAZA and their implications and opportunities for the FRs need to be carefully followed.

Apart from plans, it is important that Reserve managers and staff have the right focus and orientation (Figure 16).

Figure 16 Focus of reserve managers and staff

| |
|--|
| <ul style="list-style-type: none">✓ Resource management (biodiversity, trees, plants and wildlife)✓ Operators and visitor management✓ Personal, legal and financial management✓ Awareness about and commitment to management plan/ strategy✓ Link management strategy and plan to annual performance assessment✓ Commitment to improving livelihood and living conditions outside the FRs |
|--|

Sources: modified from Eagles *et al*, 2001; Thomas and Middleton, 2003.

In order to maintain biodiversity, useful principles and guidelines for sustainable forest management have been developed by ITTO and IUCN (appendix 5).

Ecotourism activities must be fully integrated in the management of the FRs. The steps to be considered are presented in Figure 17. Clearly, some steps have already been taken, but the process needs to be completed.

Figure 17 Checklist for developing ecotourism in FRs

| | Issue | Current status for FRs |
|----|---|---|
| 1 | Formulate clear objectives for FRs and ecotourism | Government and stakeholders |
| 2 | Prepare an inventory of natural and cultural features and sites (existing and potential ecotourism uses) | Done by DFRR in cooperation with HATAB and communities DFRR list of 22 sites |
| 3 | Develop and implement with local stakeholder involvement and benefit, i.e. community, tourism operators and NGOs | Done and on-going |
| 4 | Zone and plan areas for tourism while avoiding ecologically sensitive and BD rich areas | <i>To be done</i> |
| 5 | Determine the LAC for tourism activities and capacity | <i>To be done</i> |
| 6 | Determine which other uses are permitted and identify possible synergies and conflicts | Views have been expressed; no final decision as yet |
| 7 | Zone and plan other use areas to minimize conflicts and avoid ecologically sensitive and important areas | To be done |
| 8 | Assess market potential for tourism in FRs and practice responsible marketing | Implicit assumption of existing potential <i>No formal assessment done</i> |
| 9 | Formulate general ecotourism opportunities and projects in FRs | <i>To be done</i> |
| 10 | Decide on allocation mechanisms (government set or tendering) and target groups (i.e. commercial enterprise, communities and/or joint ventures) | <i>For commercial; tendering For communities; allocation based on merit and plans</i> |
| 11 | EIA of projects | Required as per 2005 EIA Act |
| 12 | Commitment to sustainable uses | Required as per Botswana Ecotourism Best Practice Manual |
| 13 | Visitor information and education | Required as per Botswana Ecotourism Best Practice Manual |
| 14 | Visitor code of conduct | Required as per Botswana Ecotourism Best Practice Manual |
| 15 | Monitoring and evaluation of impacts of ecotourism | <i>To be done</i> |
| 16 | Assess resource needs and sources (financial and training) | <i>To be done</i> |

Source: modified from Eagles et al, 2001.

Several issues that deserve special attention for resource management are outlined below:

- ✓ Environmental education and awareness raising: see section 5. Management staff needs to be trained in biodiversity conservation and utilisation in order to appreciate the integrity of the ecosystem as a whole (instead of focusing on timber or wildlife).
- ✓ Multiple uses. DFRR wishes to develop the FRs for multiple uses and this is strongly supported by local communities. Ecotourism is designated as a major use of FRs but no formal decisions regarding other 'acceptable' uses have yet been taken. Communities and other stakeholders expressed the wish to collect veld products, engage in salvage logging, collection of building sand and livestock grazing. These uses are discussed in these guidelines but a policy/ management decision is required as to whether these are permitted. Resource management also needs to be based on a decision on timber logging. This position can only be adopted after an up-date has been carried out of the 1993 FR Inventory. Until then, no logging should take place.
- ✓ Prior resource rights and uses. Most FRs (State Land) were only gazetted in 1981. They were used for hunting gathering, crop production, livestock grazing and other purposes prior to their declaration of FR (DFRR, 2004 and 2006). Future management of FRs should acknowledge prior uses and rights and as much as possible incorporate such old uses in new management plans. For example, communities could be prioritized for resource and tourism

rights where evidence of past resources uses exists. For further ideas of handling indigenous and traditional people and protected areas, the reader is referred to Beltran, 2000.

- ✓ Spreading pressure and seasonality. Ecotourism in FRs has the potential to relieve tourism pressure on the Chobe River front and to stimulate tourism in under utilised parts of the CNP and the district. The FRs themselves have different attractions for tourists and differ in terms of accessibility. Management of the FRs needs to take into account the need to spread tourism pressure more evenly over the District and the seasonality of FR uses and accessibility.
- ✓ Adjustment of boundaries. The cluster of villages of Kasane, Kazungula and Lesoma is boxed in between Chobe National Park and Kasane and Kasane Extension Forest Reserves. The boundaries of FRs have been previously adjusted to accommodate village expansion and this is likely to happen again in future. The District Land Use and Settlement Plans should form the overall framework for land use in the district and therefore consider the need for boundary adjustments. Any future adjustment should avoid the ecologically sensitive and/or most valuable areas, and minimize the loss of biodiversity. The increased use of FRs for the benefit of local livelihoods is an important strategy to reduce the need to encroach into FRs for subsistence activities.

5.7.2 Damage control

Fire management

In 1994, 48% of the surface of FRs was affected by fire (Env. Stat. 2000). Because of the lack of benefits and the perception that FRs are owned by government, communities consider fire fighting inside FRs the responsibility of government. Literature shows that community participation in their management and increased local benefits could contribute towards reducing the incidence and extent of veld fires. Fires pose danger to buildings and human health. It is therefore imperative that guidelines for use of FRs minimise the risks of starting a fire (see e.g. Figure 18), include measures to fight fires and to protect property and human lives. The recent burning of Nata Lodge and damage to the Nata Bird Sanctuary are clear examples of the danger of fires.

Figure 18: Elephant damage compromises effectiveness of firebreak



Source: DFRR, 2009

The Department of Forest and Range Resources (DFRR) has developed a fire management policy whose vision it is to engender strong national support for minimising of fire occurrence and for control of fire when it does occur (Ecosurv and Working on Fire, 2008). The Forest Act discourages making fires in the forest and when fire is used to cook in the forest this must be put out at the end of cooking or whatever use. Currently, communities are reluctant to participate in extinguishing fires in the FRS as these are government areas and hence government is responsible. Increased community benefits and participation is necessary to reduce fire damage. Figure 19 lists examples of community participation leading to less fire damage.

Figure 19: Fires and communities

| |
|--|
| <p><i>Communities contribute to fires:</i></p> <ul style="list-style-type: none">❖ <i>In Budongo in Uganda a majority of forest fires were set by communities to facilitate regeneration of grazing in forests (Jane Goodall Institute, 2009).</i> <p><i>Community participation restricts the incidence and extent of fires:</i></p> <ul style="list-style-type: none">❖ <i>In Uganda people's involvement in forest biodiversity and support of the Chimpanzee project was responsible for bringing greater income in the area and people's participation in forest ecotourism development (Jane Goodall Institute 2009).</i>❖ <i>In Tanzania transfer of management of miombo woodlands to village communities transferred responsibility of the tropical forest from foresters to local people (Shepherd 1992) fires stopped.</i> |
|--|

Development of fire breaks can serve the forest but forests are better served by their owners. Good relationship between operators and local people will both safeguard the forest and property developed in the tourist sites. Fire management is about human involvement and management and empowering people to own and protect the forest. Tour operators will have to work positively with communities not only with creating employment but also with educating the public and designing methods of controlled accessing of resources from the forests. In particular promoting public participation in Chobe woodland enrichment will be an important partnership outside the forest to reduce a focus to accessing resources from within.

Guidelines

- ✓ Fully integrate the fire management strategy in the FR management plans and lease conditions for ecotourism activities;
- ✓ Create firebreaks and establish fire prevention measures around tourism facilities;
- ✓ Compulsory insurance for tour operators with facilities in the FRs;
- ✓ Education of tourists, operators, and communities about the risks of fires and fire prevention; and
- ✓ Full community participation in FR management with the obligation of fire prevention and combating fires.

Elephant management

The elephant population has been increasing in the last decades. Regeneration of most tree species is limited by browsing of elephants while larger trees are also debarked increasing disease incidences. Biodiversity is unlikely to be maintained with current or increasing population of elephant. Perhaps a potential solution will be to use transfrontier opportunities to offload some of Botswana's elephant to neighbouring SADC countries of Zambia and Zimbabwe and investigate the possibility of selling to countries with a small elephant population. In response to this growth and

the growing number of conflicts, a new Elephant Management Plan has been drafted. All FRs have all been designated as zones to 'maximise elephant benefit and reduce conflicts', in the case of FRs through eco-tourism. It requires that the damage done by elephants is mitigated through active NRM, compensation, replanting and protection of the most valuable wood resources.

Guidelines for elephant management in FRs:

- ✓ Integrate the elephant management plan in the proposed FR management plans;
- ✓ Do not build tourism facilities on major elephant routes;
- ✓ Possible use of hot peppers as deterrents around camps and lodges;
- ✓ Maintain elephant corridors and migration opportunities;
- ✓ Raise awareness among tourists and tour operator staff to minimise conflicts.

5.8 Institutional roles and responsibilities

5.8.1 Roles and responsibilities of institutions

Modifying Eagle *et. al.*'s (2001) description of institutional roles leads to the following general picture.

The *public sector* is the custodian of the environment, provides and maintains public infrastructure, provides security and enforcement capability, allocates resources on State Land, provides information and education and resolves conflicts within the society at large. The *private sector* provides and markets goods and services for sale and profit. This includes accommodation, food, tourism products and personal services. *Communities* focus on meeting their basic needs and improving their livelihoods through the available options. These include traditional agriculture, gathering of veld products and community based rural development and natural resource management. *NGOs* are watchdogs for special interests and/or vulnerable groups and provide technical support to communities and government.

Participatory and decentralised FR management implies the sharing of responsibilities among stakeholders and stronger local management. Government supports closer collaboration and networking between Government agencies, NGOs, Community Based Organisations (CBOs) and the private sector. It acknowledges that, without strong networks and an integration of strategic decision making and planning, management of forests for their range of benefits and values will be elusive. In accordance with the objective of integrated forest management, the institutional mandates are as summarised below. Long-term strong political commitment is required for sustainable forest ecotourism to be successful. All political leaders, including the Councillors, Members of Parliament, Cabinet Ministers and Party Activists, are required to be actively involved in all forest ecotourism programmes.

In general terms, the DFRR will retain a central role in the management of the biodiversity of the FRs. However, other government departments, parastatals, communities and tour operators will take up new responsibilities. These will vary from FR to FR depending on the status of the FR (FR, and/or WMA, tourism concession etc.) and the allocation of tourism rights (to operators or communities). The institutional structure and responsibilities need to be specified in the MP of each FR. In addition, a *FR Management Advisory Board* will be established with representatives of the main stakeholders. These should include representatives from research and educational institutions (e.g. UB).

Role and Responsibilities of Government Agencies

The public sector (government agencies) includes the central government, parastatals and local government.

Central government

The Central Government is the custodian and protector of people's rights, including their rights over natural resources, and as such it is responsible for the safety and security of the environment and the public. It will therefore continue to have the over-all control in the determination of acceptable uses and use levels. Currently, there are several Government institutions that deal with ecotourism issues, and therefore there is need for reorganisation to avoid unnecessary competing interests, and also for devolution of powers to the districts and communities to promote participatory management. Some institutions are mentioned herein below together with their respective roles.

| | |
|---|---|
| Department of Forest and Range Resources | <ul style="list-style-type: none"> ✓ Statutory responsibility for FR management, implementation of the Forest Act and Policy. ✓ Support to communities under the CBNRM policy ✓ Prevention and control of wild fires |
| Department of Tourism | <ul style="list-style-type: none"> ✓ Implementation of tourism policy and strategies ✓ Support to communities under the CBNRM policy ✓ Issuing of tourist licenses |
| Department of Wildlife and National Parks | <ul style="list-style-type: none"> ✓ Statutory responsibility for management of National Parks and Game Reserves ✓ Support for WMAs ✓ Support for communities under the CBNRM policy (e.g. training of community wildlife guides) ✓ Control of hunting and problem (wild) animals |
| Department of Environmental Affairs | <ul style="list-style-type: none"> ✓ Competent authority for EIA implementation ✓ Overall coordination of natural resource management |
| Department of Lands | <ul style="list-style-type: none"> ✓ Responsible for land use planning and administration, in part through Land Boards and DLUPUs at district level. ✓ Allocation of land rights and land management in State Land |
| Department of Arts and Culture | <ul style="list-style-type: none"> ✓ Responsible for the protection and development of national cultural and natural heritage sites |
| Department of Museum and National Heritage | <ul style="list-style-type: none"> ✓ Overseeing archaeological impact assessment process ✓ Protection of national heritage |
| Department of Waste Management and Sanitation | <ul style="list-style-type: none"> ✓ Issuing of permits for waste storage and disposal ✓ Issuing of permits for air pollution from incinerators |
| Department of Water Affairs | <ul style="list-style-type: none"> ✓ Allocation of water rights (ground and surface water) through the Water Apportionment Board |

Parastatal enterprises

This sector consists of quasi-governmental organisations and government agencies, normally created through Acts of Parliament to provide goods and services that Central Government is not well placed to provide, but would be represented in the Boards. Several parastatal enterprises exist that would make Government's initiatives in Forest Reserves ecotourism a reality, and some are mentioned herein below.

| | |
|----------------------------------|---|
| Botswana Tourism Board | <ul style="list-style-type: none"> ✓ Marketing the country as a preferred tourism destination including product development and packaging, promotions and distributions; ✓ Coordination of efforts and resources of public and private sector partners. |
| Local Enterprise Authority (LEA) | <ul style="list-style-type: none"> ✓ Development and support services to the local needs of SMMEs, including training, mentoring, business plan finalisation, market access facilitation, |

| | |
|--|---|
| | <ul style="list-style-type: none"> and facilitation of technology adaptation and adoption. ✓ Support for tour operators and small businesses to assess opportunities to increase local supplies and benefits. ✓ Support emerging SMMEs that engage in or supply ecotourism companies. |
| Citizen Entrepreneurial Development Agency | <ul style="list-style-type: none"> ✓ Support for the development of small, medium and large scale enterprises. ✓ Funding for capital expenditure, stock or working capital in new and existing business ventures. ✓ Training and mentoring for new and seasoned entrepreneurs. CEDA and LEA need to work closely together to ensure that support needs of small enterprises are met. |
| Air Botswana | <ul style="list-style-type: none"> ✓ Provision of adequate and economic flights between Kasane and national and regional hubs (currently Maun, Gaborone and Johannesburg) |

Local government

Local government includes the district administration, the tribal administration (including the traditional leaders), the district and town councils (local authorities), and the land boards. The District Administration is responsible for the local implementation of central government projects and programmes, whilst District and town councils are responsible for social welfare and most of the local public infrastructure. Tribal administrations are generally responsible for the administration of issues concerning their respective tribal areas, including presiding over customary courts and consultative meetings designed to inform the development process, as well as to elect village development committees. As such, Traditional leaders are important as they can influence and mobilize communities in their areas of jurisdiction to participate in forest ecotourism management. Retrospectively, traditional leaders played an important role in traditional management initiatives that helped preserve our natural resources. Traditional leadership should be actively involved in forest ecotourism, in particular, in reviving and tapping on indigenous knowledge for natural resource management.

| | |
|-------------------------------|--|
| Chobe District Council (ChDC) | <ul style="list-style-type: none"> ✓ Local political body that provides development leadership at the district level ✓ Issuing and enforcement of bye laws ✓ Provision of waste disposal sites and waste collection systems in settlements ✓ Issuing if trading and other permits ✓ Responsible for the development and implementation of various District Plans (Land use Plan, District development Plan, District Settlement Plan, District Tourism Plan and District Waste Management Plan). Some plans are developed jointly with the Land Board ✓ Collection of tourism concession royalties |
| District Administration | <ul style="list-style-type: none"> ✓ Responsible for social welfare and local implementation of central government projects and programmes, including most of the local public infrastructure. ✓ Some Ministries and departments (e.g. DFRR, DWNP and MoA0 have their own district staff |
| Traditional leadership | <ul style="list-style-type: none"> ✓ Head various tribes and customary courts. ✓ Assist in the identification and monitoring of subsistence uses in FRs; ✓ Stimulate the use of culture and traditional knowledge in ecotourism and the management of FRs; ✓ Contribute to conflict resolution, particularly within CBOs and between subsistence and commercial uses |
| Land Boards | <ul style="list-style-type: none"> ✓ Allocation of land rights and land management in Tribal Land ✓ Collection of tourism royalties (Tribal Land) |

The private sector

The private sector should become the engine for future economic growth. The Government recognizes the private sector as a role player and partner in the utilisation, conservation and sustainable management of forest resources. The private sector has the resources and skills to develop ecotourism and can act mentors to ecotourism SMMEs. In order to contribute to ecotourism and the development of communities and SMMEs, the private sector needs to operate in a secure policy environment with sufficiently long leases to warrant investment and sharing of skills.

Roles and responsibilities of the private sector

- ✓ Adherence to the code of conduct for tourist operators;
- ✓ Private investment in ecotourism activities, either directly or through a joint venture agreements with communities;
- ✓ Staff training and development;
- ✓ Stimulate and assist emerging SMMEs to increase local supplies and other business opportunities (together with LEA and CEDA); and
- ✓ Take the general responsibilities of a key partner in district development and ensure integration of the tourism sector in the society at large.

Communities and Community Based Organisations

Communities are the custodians of natural resources and have used the resources successfully. Ecotourism can benefit from indigenous knowledge systems to sustainably utilise the forest resources. Communities should be involved at all stages of project development from planning, selection of sights to be developed to marketing and monitoring of ecotourism and resource impacts. Community Based Organisations play an important and relevant role in the provision of social services at the local level and are not profit driven. The draft Forest Policy recognizes these roles and advocates for support to CBOs as it views them as important partners in community driven natural resources management initiatives.

Roles and responsibilities of local communities

- ✓ Utilisation and conservation of resources in areas where communities have been granted resources rights. This involves rights and responsibilities! Communities are guided by the CBNRM policy;
- ✓ Use of indigenous knowledge and cultural values to improve resource management and diversify tourism products;
- ✓ Benefit from opportunities to supply ecotourism sector.
- ✓ Supervise and monitor tour operators that have been granted sub-leases in community areas;
- ✓ Making sure that the community benefits are fairly distributed, reduce poverty and improve livelihoods.

Non Governmental Organizations / Civil Society

The role of NGOs include assisting government in environmental management, promoting natural resources entitlements of communities, being the voice of the voiceless and weak and in fostering sustainable natural resource management. NGOs also compliment and synergize government efforts in natural resource management and may help arbitrate contested resource claims. Civil societies have played a major role in the development of CBNRM in Botswana. They have also instrumental in conservation. All these roles should continue.

Role and responsibilities of NGOs

- ✓ Provide technical assistance, in particular to communities;
- ✓ Articulate and address social and environmental concerns such as biodiversity losses, poverty, gender issues and marginalisation of the vulnerable population groups;
- ✓ When necessary, represent the interest of workers in the tourism sector;
- ✓ Assist with representing the interests of ecotourism through HATAB;
- ✓ Lobby on behalf of special interest groups, communities and/or vulnerable groups (e.g. Ditshwanelo, HATAB, KCS and Thusano Lefatsheng).

5.8.2 Effective and constructive partnerships

Successful development of ecotourism in the FRs requires strong and effective partnerships between the private sector, government and communities. Partnerships are essential because of the different roles and responsibilities as well as the different strengths and weaknesses of stakeholders.

In order to have productive, effective and enduring partnerships, the following needs to be in place:

- ✓ Common purpose and understanding (despite possible different interest);
- ✓ Be built on strengths of partners and compensate weaknesses (Table 23);
- ✓ Sufficient interest security for all parties;
- ✓ Benefits to all partners and a fair distribution of costs and benefits;
- ✓ Commitment of all partners to make it work;
- ✓ Mutual respect and trust;
- ✓ Respect for Botswana's policies and laws and for its culture and people.

Table 23: Comparative strengths and weaknesses of potential partners

| | Strengths | Weaknesses |
|----------------|--|--|
| Communities | Local and traditional knowledge Cultural habits Strong on the ground presence Potentially large capacity (e.g. population numbers) CBNRM commitment and experience | Limited financial resources Limited management and tourism skills Divide resources over different livelihood sources depending on benefits derived. Lack of product diversification |
| Private sector | Capital for investment and recurrent expenditures Marketing expertise and networks Running of lodges and hunting operations | Lack of local knowledge about resources Perceived prejudice against communities |
| Government | Custodian of natural resources Capability and funds | Competition for funding and human resources with other sectors and public needs (e.g. HIV/AIDS) Lack of implementation capacity |

It is recommended that a FR Management Advisory Committee (FOREMAC) be established with representatives from the public/parastatal, private and civil society (communities and NGOs). Its tasks would be to monitor the implementation of the FR Management Plans and the stakeholder partnerships.

Private-community partnerships

Joint ventures between communities and tourism enterprises will be most common partnerships in FRs where tourism rights are 'awarded' to communities. In FRs allocated to commercial enterprises, private – community partnerships are also important in terms of generation of community benefits and managing subsistence uses.

Community-public partnerships

These are important for specific uses (e.g. subsistence uses) and for specific purposes (e.g. community participation in resource monitoring).

Public- private partnerships

These partnerships are important for specific purposes such as tourism marketing and provision of information and education.

5.8.3 Monitoring and evaluation

Monitoring and evaluation is essential to know the status of the natural resources and biodiversity of the FRs and to assess the impacts of human activities.

Who should be involved?

Current monitoring is done by government and it is considered inadequate. Participation of other stakeholders has the advantage of increasing the monitoring and evaluation (M & E) capacity and creating a sense of shared responsibility. Participatory monitoring often reduces enforcement problems (Figure 20).

Familiarisation of all stakeholders with relevant Conventions, Acts and policies and their role as users of the forests should be part of this development. It is this principle which will form the basis of monitoring the resources utilisation compliance with conventions, acts and that the ecotourism is within least acceptable change.

Figure 20 Communities and the monitoring and evaluation process

In Tanzania two systems are practiced both of which involve communities. The first is where communities own the particular forest and development plans are drawn up and approved at the district level. Then management is implemented by the villagers controlling access, timber logging and other uses and they have the power to impose sanctions on wrong doers. The second is that communities become joint managers with government after a joint management plan has been developed in return they have access to timber, honey and fuel wood. In the tourism development sustainable forest ecotourism plan can be drawn up with clear objectives for each forest reserve and interested parties enter agreement based of expectation.

Private sector currently dominates the tourism industry and this sector is well equipped with information and has resources to participate in forest ecotourism. It is, however, the private sector that needs to be monitored for good environmental practices because of their profit seeking behaviour. Currently the communities feel that tourism is not passing much of the benefits to them. However, they have the skills and experience to develop relevant business. As with community it should be avoided that the tour operators consider that forest reserve use is mainly to reduce pressure on the river front.

The private sector should use forest ecotourism for the benefit of the forest ecosystem and forests should be managed for that purpose. The private sector should be measured against their involvement of the public. This is important particularly as communities need to appreciate the role of the private sector and as part of making them participate in forest fires and this is often achieved when the public buy in development and see them as beneficial to them. Private sector should be required and monitored for their contribution to research, promotion of environmentally sound ecotourism, and contribution environmental education in the district.

On the government side, DFRR would monitor and evaluate vegetation resources, while DWNP would monitor wildlife resources. BTB would monitor ecotourism. DFRR would be overall responsible for coordination of M & E.

What should be monitored?

There is need to monitor overall resource conditions of the FRs (individual resources, biodiversity and the integral ecosystem) as well as the activities of resource managers, tourists, tour operators and communities. Key performance indicators should be developed to form the basis monitoring and evaluation. Community monitoring could be based on the management-oriented monitoring system (MOMS) that has been adopted by Namibia and DWNP in Botswana. Key performance indicators are suggested in Table 24. They need further discussion among stakeholders and should be finalised for each FRMP.

Table 24 Preliminary key performance indicators

| | Area | Type of Information | KPI |
|-----------------------------|-------------------------------------|--|---|
| Overall NRM managers | Resource use | List of FR uses and comparison with planned multiple uses | No unplanned use Greater variety of use, including cultural tourism |
| | | Annual record of different uses with amounts and values | No use in excess of carrying capacity or LAC |
| | | List of conflicts | Decline in conflicts |
| | | List of illegal/ unlicensed uses | Decline in illegal use |
| | Benefit generation and distribution | Estimated benefits for each use | Increase in benefits |
| | | Benefit distribution between private sector, communities and government | Fair distribution of benefits Community benefits from tourism exceed traditional agriculture |
| | | Local benefits through CBOs and individuals | Growing number of beneficiary CBOs and local people through employment etc. |
| | | Resource management costs | NRM budget and expenditures by private sector, government and communities |
| | | EIAs for projects | No project approval without EMP &/or EIA |
| Tour operators | | Compliance with lease conditions' non-compliance needs to be reported and recorded. Non-compliance will be made public through media Performance grading of tour operators in FRs | Reduction in violations of lease conditions Higher grades of tour operators |

| | | | |
|--------------------|--|---|---|
| Communities | | Compliance with lease conditions' non-compliance needs to be reported and recorded. Non-compliance will be made public through media Performance grading of communities in FRs | Reduction in violations of lease conditions Higher grades of communities |
| Tourists | | Compliance with code of conduct; non-compliance needs to be reported and recorded | Compliance percentages |

5.8.4 Compliance and enforcement

The DFRR is the primary agency responsible for forest protection and law enforcement and forest officers may:

- ✓ Issue licenses to individuals for use of forest products. (Section 15);
- ✓ Search anyone, premises or any item without a warrant if he believes an offence has been committed against the Act. (Section 25)
- ✓ Arrest any person without a warrant, if he believes that the person has committed an offence against the Act; or the person refuses to give his name and address; or the officer believes that the person has given false name and address; or he believes the person might abscond. (Section 26)
- ✓ Dispose charges immediately instead of taking the suspect to court, by informing the suspect of the nature of accusation, and the amount of fine the suspect is required to pay as long as it is not more than the prescribed amount (Section 28). Currently, the amount is P200 (Section 307(1) of the Criminal Procedure and Evidence act).
- ✓ Seize anything that is suspected to have been involved in the commission of any offence under the Act, which should be presented before the court at a later date. (Section 27)
- ✓ Dispose charges immediately by informing the suspect of the nature of accusation, and the amount of fine the suspect is required to pay as long as it is not more than P?, instead of taking the suspect to court. (Section 28)
- ✓ Require any able bodied person to assist in managing bush fire. (Section 30(3)(b))

The DFRR needs to enter into partnerships with other Government agencies, the local communities, the private sector, NGOs and other stakeholders, in monitoring and fighting illegal activities in FRs. Such partnerships will mobilise additional capacity such as wildlife officers, community guides/ members and staff of private enterprises.

5.9 Financing sustainable FR management and ecotourism

There is need to increase and diversify funding sources for FR. Currently, FR management entirely depends on public funding. Using an average funding requirement of some US\$ 200/km² of protected area, adequate management of the Forest Reserves would require over P 6 million per annum. This figure excludes investments in buildings and infrastructure. The required funds are largely determined by the staff ration and the wage levels. Most protected areas heavily depend on public funds. Fees are the second most important source of income, especially entrance fees (Eagle et al, 2001). Internationally, there is a trend towards increasing contributions from the private sector through tourism concessions and corporate programmes.

Sustainable management of Forest Reserves and their resources require sufficient financial and human resources for management. This requires an increase in funding and application of the user-pays-principle and that of the polluter-pays-principle. Participatory management (with private

sector, communities and NGOs) implies that more human and financial resources can be accessed, both for investments and for operation and maintenance.

Possible sources of funding are listed in Table 25.

Table 25: Possible sources of funding for FR management

| | National | International |
|--|--|--|
| Public & semi-public) funding | General tax revenues National Environmental Fund (e.g. for CBNRM): | Donors (GEF, multilateral and bilateral donors) CO ₂ credits for forest maintenance Debt-for-nature swaps (in this case; the Tropical Forest Conservation Fund) |
| Private funding | Investments in tourism infrastructure Recurrent costs of management of tourist activities Rentals for joint venture agreements Grants and donations | Foreign direct investment Financial institutions – donations for corporate responsibility programme |
| Users & tourists | Entrance fees User fees (e.g. tourists, salvage timber, veld products, grazing fees) Licenses and permits Taxation Lease and rental fees Voluntary donations and ‘friend’ schemes | User charges Voluntary contributions |
| Researchers & education | Research and filming fees | Research and filming fees |

The Tropical Forest Conservation Fund was established in 2007 as a debt for nature swap between Botswana and the USA. The purpose of the fund is to promote activities designed to conserve, maintain or restore forests within the existing policy environment. The fund could be used for funding of the following: activities in parks and reserves, improved natural resource management, training, sustainable use of diverse plant and animal species, medicinal research and support of livelihoods in vicinity of Forests. Grants are allocated by the Tropical Forest Conservation Board.

Visitors, especially overseas tourists, are often willing to make voluntary financial contributions as long as the money is earmarked for resource maintenance and development of the particular area (so-called ring fencing of charges). Two funds are recommended for the FRs:

- ✓ *Biodiversity assessment and enhancement fund* for the FRs. Specific activities could be funded under individual policies and strategies such as CBNRM, BDSAP, rural development and poverty reduction strategies.
- ✓ *FR Education and Research Fund* with in-kind inputs (e.g. students from UB and HOORC), establishment of a research station (e.g. tourism and forestry), and funding from national and international Forestry, tourism and climate change research programmes (e.g. ‘Miombo woodlands’ programme).

It is important that user charges are designed properly, are affordable and acceptable to tourists and other users. The affordability can be addressed by differential rates and exemptions. Public resistance to charges can be reduced by:

- Using revenues for quality improvements

- Making small increases rather than huge ones;
- Providing information to tourists as to how much income is generated and how it is used.

Proposed funding sources are presented in figure 21.

Figure 21: Proposed funding sources for FR management

- ✓ Public funding from DFRR, DWNP, BTB, Ministry of Transport, Local authorities
- ✓ Use of the Tropical Forest Conservation Fund and the National Environmental Fund (still to be established)
- ✓ Global funding:
 - GEF biodiversity
 - Carbon credits
- ✓ License fees for tour operators
- ✓ User charges:
 - Annual charges for tourist operators in FRs by category (mobile, on-site facilities)
 - Night charge per tourist;
 - Tourism concessions for high potential spots
 - Charges for research, filming and education;
 - Grazing, timber and gathering charges
- ✓ Voluntary contributions from tourists and enterprises and 'FR Friends'
- ✓ Private sector investment and other contributions: tourist

DFRR and NGOs need to assist communities with accessing funds.

5.10 Research and education in FR management and ecotourism

Research is needed to improve the understanding of the FR ecosystems, to show their importance and value for providing economic and ecological services and to monitor its conditions. Education is needed to further popular appreciation of FRs and the need for careful utilisation and conservation. Without research and education, the FRs have an uncertain future.

Research needs and guidelines:

- ✓ Use local knowledge and capacity in research;
- ✓ Regular resource inventories (flora and fauna);
- ✓ Trials with different management practices and techniques;
- ✓ Assessment of the economic value of the FRs;

Environmental awareness raising and education is needed through the establishment of environmental information and education centre, a research camp/ facility and information leaflets/ brochures and a FR booklet. The advantages of this strategy include:

- Provides information to tourists about the resource/ attraction;
- May alter behavior of tourists and local communities
- Explains community, organization and goals to tourists and residents;
- Offers orientation of visitors to the area;
- Reach out to the youth (e.g. primary and secondary school children)

In Botswana forest reserves are a habitat for a wide range of wildlife. Information on what species of flora and fauna is not readily available. A comprehensive data from research on both flora and fauna will form the basis for development of the tourism product. This should guide people on the flora and fauna found in the forest its sensitivity to visitor impact and best way to visit the sites while minimising the impacting on the resource. Species such as *Kgori bastard* and African skimmer which are shy but form the major part of birdlife are found in the forest reserves and attract people to the hotspots need controlled visit.

Information and education material should focus on:

- Flora and fauna unique to the specific sites
- Cultural assets and tradition
- Sensitivity of flora and fauna to visit and potential impact of visitation
- Best times to visit without causing alarm
- Appropriate trails to follow
- Responsibility to animals and tree care
- Danger of introducing alien species (especially plants) and
- Need to minimise fire hazards.

Local people should (trained to) work at the visitor and information centre because they have indigenous knowledge systems which can be enhanced with training on interpretation so they can give accurate but interesting information to the tourist. The visitor information and education centre should be located at Lesoma. Lesoma is easily accessible from the main entry points. It would also reduce pressure from the main gateway which is Kasane.

Figure 22: Need for proper signposting and information provision



Source: DFRR, 2009.

5.11 FR and ecotourism infrastructure

Infrastructure development needs to be carefully approached. EIAs are required to examine and mitigate adverse environmental impacts. Minimal impact on the reserves is desirable.

Educational centres are a critical part of ecotourism that minimize impact is achieved through providing detailed information on sensitivity of sites. Construction material should meet specification and where possible should use local material without degrading resource. Education materials should also emphasis species that are found in the forest the age they take to grow and conservation measures practiced by the operators and communities to preserve them.

Cultural based accommodation with minimal impact on the forest and which reflect the way communities live can also be encouraged in forest reserve to cater for adventurous visits. Infrastructure type should be linked with land tenure to avoid poor management of site which are likely to become unsightly. In Namibia, area such River Cannon have basic building landscaped to merge with the rock features which is the focus of tourism in the area. Buildings are constructed with thatch grass and gum poles with minimal use of local material as a door feature to highlight species of the area. Species such as *Adinsonia digitata* (Baobab-Mowana) provide an opportunity to landscape around, while *Baikiaea plurijuga*, can feature as building finish material and can be part of the plan to salvage logging plans.

The current forestry Act states that building should not be constructed on the land. Development rights should be conferred to private industry, individuals and to community based organizations. Such rights should have lease periods and should have conditions and type of building that can be constructed on a lease by lease basis. They require environmental responsibility to be defined and type of materials allowed for each situation. Prescribed material should be environmentally friendly and compatible with forest management and landscaping. Rights should also be associated with responsibility to contribute to enhancement of the ecosystem and responsibility to contribute to management of sites the developer is allocated to use. They should be associated with the need to comply with high conservation value that becomes the centre of tourism practice in the forest.

General guidelines for infrastructure:

- ✓ Fencing needs to be avoided as much as possible as it restricts wildlife mobility and affects the quality of the 'wilderness experience'.
- ✓ Moreover, the limited access to Kazuma and Sibuyu FRs during the wet season needs to be retained to protect the environment.
- ✓ Infrastructure location, capacity and design need to be based on the LAC and subject to EIAs.

5.11.1 Tourism facilities

The number, capacity and location of ecotourism facilities should be determined after the ecological, cultural and economic carrying capacities have been established for each FR (through LAC). LAC should first to determine the facilities to be developed, the size and nature and their location. Inaccessibility of parts of FRs is a 'natural protective barrier' that can be retained in areas to protect sensitive areas and wildlife migration routes.

Information centres should be developed to reduce pressure on the forests and also to provide education to the tourists. Permanent structures can be developed in some areas provided they conform to the ecotourism guidelines in that they use local materials and do not affect the aesthetic nature of the area. All developments should conform to the *ecotourism guidelines for certification* developed by the Botswana Tourism Board.

Botswana needs a broad variety of tourist accommodation facilities, including lodges (of different standards), self contained chalets/ accommodation and camping sites with support facilities. Botswana is targeting a variety of market segments with differing accommodation requirements. This therefore means that a variety of accommodation must be built to cater for different needs from fully serviced to self-catering accommodation. The check list (figure 18) fully complies with the recent (draft final) Botswana Ecotourism Certification Scheme, which should be used to certify the facility as *green, green plus or ecotourism* (reflecting an increasing order of ecotourism and environmental sophistication). Permanent structures can be permitted, but caution is required with their location, capacity and design. The checklist in Figure 23 and lease conditions need to be used to ensure appropriate facilities.

Figure 23 Checklist for development of infrastructure

| Activity | Considerations |
|-------------------------------------|--|
| EIAs | Compliance with EIA guidelines for tourism infrastructure |
| Landscaping and site design | Review and blend in entire surroundings and communities, incl. valued views and natural and cultural resources Develop a site management plan Active management of trees and use of indigenous species only |
| Built facilities | Size and height of buildings should fit into landscape Fit design into historical, cultural and environmental settings Maximise efficiency of energy and use of solar power through design and appliances Maximise water use efficiency through water demand management Reduce noise pollution in design (e.g. generator) Meet BTB certification and grading requirements Provision of relevant resource use and conservation and cultural information to tourists |
| Waste management & green practices | Reduce waste generation, waste separation and recycling and re-use Compliance with waste management regulations Reduce the carbon footprint of tourism services Use of environmentally friendly products and technologies (e.g. biodegradable products) |
| Materials | Preferred use of indigenous low maintenance material Use of material produced through sustainable production methods |
| Low impact technologies | Use of technologies with a low impact or foot print |
| Services | Develop service standards to satisfy all stakeholders |
| Quality control | Develop quality control checklists and standards Regular consultation-feedback from clients and other stakeholders |
| Relationship with local communities | Regular consultations and up-dates about new developments Maximise community benefits and encourage local sourcing policy Training and employment of local staff |

Source; modified from Eagle *et. al.*, 2001.

In addition to the above, an information and education centre needs to be established, which could initially be combined with a provision for research on tourism and FRs. Later on, the research facility could be expanded if there is sufficient demand.

Boreholes and water points: boreholes will be permitted at accommodation sites, and need to be provided by the tour operators. Tour operators will normally not be allowed to develop additional water points to avoid interference with wildlife movements.

Sections 5.4.3 and 5.4.4 elaborate on the tourism infrastructure that can be developed in each of the forest reserves. The Botswana Tourism Board has drafted the Botswana Ecotourism Best Practice Manual and the Ecotourism certification system which is at the stage of consultations with stakeholders. These guidelines need to comply with the manual and preferred tour operators need to have certified tourism facilities and tour activities.

The Ecotourism Best Practice Manual specifies the following in requirements in terms of the physical infrastructure development:

Design and architecture

- ✓ Ecotourism facilities physical design and operation should wholly be based on sustainability principles and in-depth understanding of the potential environmental impacts;
- ✓ Compulsory undertaking of EIA and development of environmental management plan;
- ✓ The architectural design should include the basic requirements of an efficient, comfortable and attractive accommodation but also reflect vernacular and traditional architecture of the region, including shape, colour and materials;
- ✓ The design and material selection should recognise the environmental impacts of the entire lifecycle of all architectural resources from extraction, manufacturing, procurement and eventually return to nature.
- ✓ Consideration should be given to the appropriate scale of development including mass, proportion, layout and composition.
- ✓ The sourcing of materials should be on the basis of sustainability and appropriateness.

Water conservation needs to be encouraged by:

- ✓ Required as per Botswana Ecotourism Best Practice Manual
- ✓ Install flow restrictors throughout the facility
- ✓ Developing water use profile and forecast
- ✓ Identify consumption levels by departments
- ✓ Install flow restrictors throughout the facility
- ✓ Monitor quality of potable water
- ✓ Prepare weekly recordings of total water consumption
- ✓ Implement rainwater capture techniques
- ✓ Leak avoidance and rapid fixing
- ✓ Develop water usage reduction targets
- ✓ Regularly monitor meters and sub-meters

Noise needs to be minimised and carefully management by:

- ✓ Noise abatement measures should achieve maximum increase in background levels of 3 dB (A)
- ✓ Noise should be prohibited between 8.p.m and 7.am.
- ✓ Noisy construction activities during day time if unavoidable;
- ✓ The use of certified operating noise emission equipment should be encouraged
- ✓ Construction contractors should consider employing noise consultants
- ✓ Safaris and wildlife watching activities should minimise noise generation

Waste management

- ✓ The operator should develop a wastewater reuse and recycling plan to reduce dependency on potable water

Hazardous materials should be properly handled by:

- ✓ Establish a hazards material handling program
- ✓ Provide a register of all hazards wastes
- ✓ Replace all hazards substances with non-hazards alternatives
- ✓ Use of only biodegradable pesticides, herbicides and fungicides
- ✓ Developing spill response plan

Waste and energy issues need to be managed in line with Figure 23.

5.11.2 Public ecotourism support infrastructure

Public infrastructure needs to facilitate and support ecotourism development in the FRs. It should be integral part of the FR management plans. The following needs to be considered:

Roads:

- ✓ Ensuring that the road network reaches the main tourism destinations;
- ✓ Roads will be developed and improved. Roads will remain gravel and sand to maintain the wilderness experience, restrict interference with wildlife mobility;
- ✓ Roads in areas that are impassable during the wet season will only be up-graded if it is critical for tourism development and if it does not have major environmental impacts;

FR management facilities:

- ✓ Firebreaks
- ✓ DFRR camps to monitor resource conditions and use and conduct/facilitate research

Waste generation, handling and disposal facilities:

- ✓ No public waste facilities are needed inside the FRs. It will be the responsibility of the tour operators to collect, handle and dispose waste in an appropriate way (e.g. similar to the Okavango camps).
- ✓ The use of fertilisers, pesticides and herbicides is prohibited without special permission of DFRR.

Figure 24: DFRR camp 171 in Sibuyu FR



Source: DFRR, 2009.

Figure 25: Maintenance of firebreaks



Source: DFRR, 2009.

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Appendix 1: Summary of local consultations

1.1 FGD

1.1.1 Pandamatenga

Communal Land area in the Chobe District is small and state land takes a large part of the district in the form of forest reserves and the park. There is shortage of land for grazing, residential and business purposes. The idea of opening up forest reserves for eco-tourism purposes is a good development or initiative that will help communities in the district. However, there are other urgent uses that are also a priority for communities, for example grazing land and arable agriculture.

During previous consultative workshops held in the district on the utilisation of forest reserves for eco-tourism activities, some stakeholders emphasized on the need to open up the forest reserve for other economic activities. The participants wanted to know what happened to the recommendation to consider other uses of forest reserves. According to the participants tourism in Chobe is dominated by foreigners and locals play an insignificant role in the industry. Therefore, there is need to empower local community so that they benefit from the opening up of forest reserves.

Pandamatenga community currently uses the forest reserves livestock grazing but they are not allowed to set up cattleposts within the forest reserves. The forest reserves are also sources of fuel wood and thatching grass. When asked to rank preferred uses of forest reserves the group mentioned the following:

1. Cattleposts (in the past Kazuma forest reserve was used as Pandamatenga community's cattleposts).
2. Harvesting Veld products e.g. thatch grass, wild fruits, medicinal plants, honey/bees

KALEPA uses Controlled hunting area 8 (CH 8) mainly for hunting safaris.

Role of communities in management of forest reserves

The community has a limited role in the management of forest reserves.

KALEPA plans

There is pan or well in Kazuma forest reserve that attracts wild animals and birds and KALEPA Trust plans to develop and manage a rest camp next to the well. The trust also plans to develop a sanctuary around the well and have undertaken feasibility studies with assistance from Department of Wildlife and National Parks (DWNP). According to the participants, the DWNP is of the view that it is feasible to develop a sanctuary at the proposed spot.

Forest reserves best uses

Kazuma forest reserve is ideal for photographic safaris while Sibuyu Forest Reserve is ideal for hunting safaris. CH4 is suitable for cattleposts.

1.1.2 Kazungula

Deputy Chief and VDC

M. Diane

D. Gwere

N. Masole-Simasiko

O. Sekole

M. Mwampole

The forest reserves are currently used for livestock grazing, harvesting of fuel wood and thatch grass.

The opening up of forest reserves for ecotourism activities will create benefits and opportunities such as creation of employment opportunities for the local community, as businesses will be developed and the community as groups or individuals may start ecotourism businesses. In the past, the community in general was not properly informed about upcoming development initiatives and this partly led to less participation of local community. Therefore, it is important to inform and update communities on the process of developing the guidelines and their eventual approval so that the locals could find ways or position themselves to benefit from the opening up of forest reserves.

There is shortage of communal land in the Chobe District and the community wants to use part of the forest reserves for cattleposts and arable fields. The community has identified an area locally known as Kandakariamola for arable farming. The area is on the eastern side of Nata-Pandamatenga Road and they are of the view that arable fields and camp sites can be undertaken adjacent to the other with no conflicts.

Some members of the Kazungula community have applied to utilize boreholes in Kasane Forest Reserve. These boreholes were drilling in the pre-independence era and were used by cattle in transit to Zambia through the ferry. Since these boreholes have not been used for many years, they should be cleaned before use.

CH8 is used by the community trust, KALEPA, on behalf of the community.

When asked who should manage the forest reserves, the participants stated that the community will be manage areas allocated or leased to the community and they will prevent veld fires and poaching. The DFRR can manage areas not leased to communities.

1.1.3 Lesoma VDC

Lesoma community are currently using forest reserves for grass harvesting, traditional medicines and for collecting fire wood even though there is need for a permit from the Department of Forestry. Kalepa Trust is also benefiting from CH8 as their hunting concession. Opening up of Forest Reserves will benefit Lesoma because of its proximity to Kasane Forest Reserve. Timber Companies used to provide employment opportunities during their operation period. They still hope that even the opening up of Forest Reserves for ecotourism activities will provide employment opportunities to the Lesoma community.

The VDC members reported that there is need to expand the village with part of the Forest Reserve. The VDC community in Lesoma is willing to venture into eco tourism when Forest Reserves are opened for use. Their main problem was that they lack capacity building but if they can be helped they would want to get into tourism to benefit the community at large.

Ecotourism activities in Forest reserves such as lodges and camping sites need electric fencing because elephants are so destructive and other animals like buffalos and lions are so dangerous to people. The animals migratory routes should also be considered when building eco tourism structures to avoid conflicts between the activities and animals.

In ranking of optional uses of Forest Reserves, the community preferred firewood than grass harvesting.

1.1.4 Chobe Enclave Conservation Trust

Concerns raised were that forests have taken over most of the land. Forest Reserves are not being utilised and they are destroyed by fires. However, the community have no grazing land and their livestock goes to Namibia which is not safe for their livestock. It appears that government prioritises conservation over people's livelihoods. Medicinal trees/plants are also not harvested. The CECT community's view was that DFRR representatives should have been present to explain the existing forestry laws to be in a position to evaluate them. The group felt that it was only after this process that they can comment and make suggestions on new regulations.

Communities are experiencing acute land shortage. Opening up the forests should result in some of the land being designated to the Chobe land board.

Currently Forest Reserves are used for livestock grazing because of their proximity to tribal land. Forests are encroaching on villages. The CECT community argued that Chobe Forest Reserves was already open for community use. They are already operating safaris and other tourism activities. They have two hunting

concessions which are CH1 and CH2. CH1 is used for hunting safaris and some photography whilst CH2 is strictly for photographic safaris. CECT already have the Management Plan in place for CH1 and CH2.

Other options beside ecotourism, the community want to be allowed grass harvesting and Forest Reserves should be degazetted to expand settlement land because the community is experiencing shortage of land, residential and grazing land. Research is also another way of using the forest reserves

CECT has proposed to build a lodge at Ngoma, they have already done Environmental Impact Assessment and at present they are working on the Management Plan. CECT also proposed to do salvage harvesting which is currently being destroyed by fire and must be preceded by a feasibility study. Opening up of forest reserves should result in communities be given priority in the allocation of land since they already have the expertise of running ecotourism activities. They would like the jurisdiction over the land rights falling on them rather than outsiders.

CH2 is on Land Board lease which ends in the next 6 years. CECT wants to continue managing their concession areas and also willing that the Land Board could stop the lease at all. The CECT Management Plan has identified the high potential areas suitable for ecotourism activities. Once Forest Reserves are being opened for Ecotourism activities CECT would like to expand their activities by undertaking nature walk and night photographing.

1.2 Interviews

1.2.1 District Administration (Mr Modimoopele)

Opening up the forest reserves for ecotourism activities is important because local communities will benefit through employment and business opportunities. It is important to consider other uses other than ecotourism but the district has a sensitive ecosystem. It is important to consider opening forest reserves for other uses that will not have irreversible impacts on the forests and these uses should add value to the national economy.

1.2.2 KALEPA Trust Kazungula. 26.02.09

Deputy Chairman, Mr Modise & Kalepa Trust member, Ms Tebelelo

There are high potential spots for eco tourism in Forest Reserves especially Sibuyu and Kazuma. The Kazuma forest is suitable for camp sites, two pans KALEPA Trust has already identified in Kazuma, one is perennial and it is able to attract variety of wild animals. Sibuyu has the potential also it is suitable for lodges. Other forest reserves are rich in *Mukwa (Pterocarpus angolensis)* and *Mukusi (Baikiaea plurijuga)*, they can be used for building poles and doors.

Other alternative uses of Forest Reserves besides ecotourism activities include grass harvesting, sand mining and collecting fire wood. Currently there is need for permit from DFRR in order to go and harvest grass or collect fire wood. Grass harvesters without a permit are charged an amount of P50 per person. Grass harvesters are only interested in *Mokamakama (Cymbogon excavatus)* and *Motsikiri (Eragrostis pallen)* grass and their harvesting should be monitored because they end up harvesting grass especially *Motsikiri (Eragrostis pallen)* before it becomes ready for harvesting. The early harvesting may deplete grass species. Other uses such as grass harvesting and collecting fire wood should be opened up also for the benefit of the community at large.

Forest Reserves are not suitable for communal and pastoral use. These kinds of uses may destroy the forests. Ecotourism is the best use for Forest Reserves because it does not harm the forest beauty. Kalepa has been given CH8 strictly for hunting and they are willing to do photographic and night walks. Since the Forest Reserves will be opened up, Kalepa Trust is proposing for such activities. Opportunities may arise such as training schools for escort guides. Kalepa said the management of Forest Reserves will be best done by the Department of Forestry and Range Resources with the help of Kalepa Trust.

There has been always a problem of fire outbreaks in forest reserves. They are usually caused by

- Zimbabweans and Namibians due to early burnings
- Careless drivers especially truck drivers who make fire on the road side.
- People who harvest bee honey, they usually burn tyres in the bush
- Those who burn cleared trees in their lands before ploughing; the fire will eventually catch grass.

In order to mitigate this problem, special technologies should be used to detect those who cause fire. During constructions of lodges in the Forest Reserve, the structure should be peaceful not fancy, it should not be designed such that it scare wild animals. The best way is to use thatching grass instead of corrugated iron when roofing because animals are usually chased away by the shiny colour of corrugated iron. There should be less or no noisy activities allowed in Forest Reserves. These activities should not destroy the forests because the aim is to conserve the forests at the same time benefiting from them.

There have been findings that there is one man staying in the forest reserve, and people are not aware of that camp. Department of Forestry is not doing anything about that man and his camp. Responsible organisation like Somarela Tikologo also is quiet about the issue. This shows a sign of a weak leadership and community representation.

1.2.3 CARACAL 26.02.09 (Mr Van de Wall)

According to CARACAL, developing guidelines for opening up of forest reserves for eco-tourism activities will help stop people from misusing the forest reserves. The guidelines should be well marketed so as to attract investors and more tourists. This will help reduce a lot of pressure from National Parks and tourists will start to visit the forest reserves as well. Opening up of forest reserves will also benefit the tourists because as of now, National Parks have strict rules which restrict other activities like such as no night or day walks. Forest reserves have no such rules, this is where tourists can now be offered such eco tourism activities.

Monitoring of these forests will help reduce and control veld fires that are affecting the forests. The fire is normally caused by hijackers who make fire along the road, road accidents and poachers with their guns especially in areas with taller grass. There is no enough fire breaking policy to respond to these fire outbreaks and there is need for that policy.

In terms community benefits, CARACAL's responsibilities is to help the community feel the benefits of the project, it also encourages the community to utilise the opportunities in their area. CARACAL believes that costs and benefits should all belong to the community. The community is encouraged to utilise the government finance opportunities such as CEDA, to venture into tourism. Some Batswana feels private companies steal business from them, but the reason being lack of marketing skills for most Batswana. Botswana Tourism Board should award certification for eco tourism activities to ensure quality services from tour operators.

1.2.4 Kasane Kgosi 24.02.09 (Mr Mwesi)

Forest reserves are currently used for conserving the forests. There are no activities taking place in forest reserves since 1992. forest reserves are very important, without forests the country may become arid which will result in drought. The arid country is more prone to the problem of soil erosion. In terms of infrastructural development there are no existing developments in the Forest reserves.

Mr Mwesi welcomes the opening up of forest reserves for ecotourism activities. He also wants the other part of Kasane Forest Reserve to be degazetted to extend residential land to cater for the growing population and development in the township, because there is already lack of residential land in their area. Plateau area in Kasane has been degazetted from Kasane Forest Reserve but the land is still not enough. Another option is to allow for livestock rearing in forest reserves so that the community is able to sustain their livelihoods.

All Forest Reserves in Chobe have high potential for eco tourism. Ecotourism is good for the Forest Reserves because it does not involve industries; there are no diggings and big machines that may cause harm to the forests.

There should be lodges, cultural villages, camp sites and other activities that are environmentally friendly but also quiet. However, this will not affect the forests and biodiversity hence no conflicts in the forest reserves. Ecotourism activities such as cultural villages could be used to exhibit baskets and carvings for the community. There are no archaeological activities in the forest reserves, in Kasane grave yards are all in the township.

Forest reserves are being used as migratory route for animals. Therefore, eco tourism activities in the forest reserve will not affect wild animals and the National Park has enough space to accommodate wild animals.

The extent to which Batswana participate in tourism industry is very high. Some are being affected by lack of market while some are being disadvantaged by lack of high quality marketing strategies. They are competing with others with website; where customs can do early bookings international which most of locals businesses do not have. Youth around Chobe prefer tertiary education which is tourism related and generally locals are showing interest in the tourism industry.

1.2.5 Panda Chief 23.03.09 (Ms R. Banika)

Forest reserves are currently not utilised, even for the traditional uses like grazing livestock or collecting fire wood. According to the chief, Forest Reserves are being destroyed by elephants and fires, without any positive benefit to the community. Currently there are no lawful uses of the forest reserves. Opening up of Forest Reserves should not be for ecotourism activities only, but also for other activities. These Forests Reserves are rich in wild fruits trees and people should be allowed access into Forest Reserves to collect these fruits such as Mogorogorwana, Mogwana, mmilo, Mokgomphatlha. They should also be allowed to dig traditional medicines for their health and harvest thatching grass from Forest Reserves. The chief added that, the community is still proposing to be given part of the forest reserves to use as their grazing land because most of the Forest Reserves have been their grazing areas before the Forest Act stopped the community from utilising the forests. The community around Chobe should also benefit from these opening up of Forest Reserves. It will open up business opportunities, create employment for the locals. This will also benefit the community in terms of providing the market for crafts. The community should be allowed to get raw materials from forest reserves like *Mokolwane* for basket making and wood for carving. It is a good idea to open up Forest Reserves for use because there is already illegal camping in forest reserves, especially near the pans. Signs of camping are usually seen, showing that people are using the area as a camp site. There are some people who fly into this country illegally, they land in air strips in these forests, and whatever they have come to take or destroy no one knows. The same area that is used for illegal camping has been proposed by Kalepa Trust Committee to set up a Game Sanctuary as it has the potential to attract tourists. The forests should be managed by the Department of Forestry and Range Resources, Botswana Tourism Board and Chobe Land Board.

Maikaelelo and Kazuma Forest Reserves have high potential areas for eco tourism activities. Most archaeological sites in Forest Reserves are found around the side of Kachikau, these are grave yards because people used to stay in Forest Reserves especially Basarwa and Basobeya. There are some other graves in Pandamatenga which cannot be identified even today. There are also boreholes that belonged to the Colonial Development Cooperation; they should be protected as well. The Chief noted that there is no enough archaeological research done in Chobe areas that can reveal other archaeological sites.

In ranking the Forest Reserves uses, ecotourism uses comes first and then it is followed by agricultural uses. Eco tourism is given is the first priorities because they believe it does destroy the forests, and the forests will still be there irrespective of these eco tourism activities. Timber logging was long suspended in Forest Reserves. Ms Banika does not consider it to be an alternative use of these forests. She gave an example of *Mukwa* tree which does not grow easily, and also justified that the forestry Department have also tried to replant *Mukwa* but they failed. *Mukwa* tree also catch fire easily, so during fire outbreaks in forest Reserves, a lot of *Mukwa* tree is affected. In this case *Mukwa* can be considered a rare species because it is not easy to replace it back.

1.2.6 Interview with Ditshwanelo

Ecotourism is one of the multiple uses of Forest Reserves but what happens to other uses?

Expansion of tribal lands is restricted because of proximity to the Forest Reserves and most of the land is occupied by Forest Reserves and National Parks. The communities are farmers so it is important to consider agricultural land when designating Forest Reserves. There is need for proper planning to ensure that the needs of poor people are taken on board. Ecotourism is a very good concept and the community will benefit from a lot from it. On the other side, ecotourism if not well implemented it will benefit those who have benefited before such as HATAB and Tour operators. There have been numerous consultations regarding opening up of forest reserves for ecotourism in Kasane.

Possible planning priorities

Community should be addressed on lands needs and their priorities. If not addressed well they are likely to have a negative impact on the sustainability of ecotourism. There is need for settlement expansion from Forest Reserves. Forest Reserves are also suitable for livestock production and can absorb livestock needs. E.g. cattle grazing and also arable land needs for agriculture including crop production. It is important that the opening up of Forest Reserve regulations does not resist people from accessing veld products e.g. wood harvesting, thatching grass, traditional medicine, traditional seasonal hunting (guinea fowls, bucks, etc). Traditional user rights should be protected.

Conflicts

Forest Reserves are encroaching on tribal land and there is already a land shortage in Chobe. There are also conflicts regarding cattle grazing rights. The Muchenje lodge is located next to the Forest Reserve near Mabele village. The communities are not allowed to graze their livestock next the lodge area because the lodge claims the livestock is tempering with their business. Another conflict rises between Elephant Valley Lodge and the livestock around Lesoma. Lodge owners do not allow livestock around the valley but the area have been the grazing area of Lesoma community before the lodge came into the valley. It is possible that this kind of conflicts do happen again for ecotourism in the Forest Reserves.

The Ditshwanelo questioned why promulgation of land policy into law has taken so long? There is need for land Policy to guide through the Forest Reserves and it would determine the usage of land in Botswana.

Capacity of community to manage ecotourism

At the present scenario, very few benefits trickle down to the communities. Capacity building should be based on capabilities and commitment of people. The Community Trusts gets into partnership with Safari Companies in which bulk benefits goes to them while the trust communities get smaller benefits. At the moment community are receivers of handouts from Safari Operators. These partners should be used for capacity building so that in the long run the community should be able to run the Trust for themselves. At the end of the lease, they still lack business skills to run business. Some ways of building capacity would include coming up with exit strategies whereby the agreement is clear on how communities are going to be prepared to take over running and management of the ecotourism business. The Trusts can manage their activities without partners because they have the necessary skills locally which include hunters, guides, cooks, drivers and they can still hire the marketing specialist locally. The running of such businesses would then be devolved to CECT or KALEPA Trusts. The Trust should sign a contract directly with the Land Board.

1.2.7 Mr. Kanyenvu (Physical Planner)

Mr Kanyenvu noted that the forests were designated as reserves in 1983. About 75% of Chobe District is state land in a form of forests reserves and the national park and the remaining small portion, 25%, is communal land shared between various uses such as the river and its floodplain, villages and this leaves less space for arable land and cattleposts. There are apparent conflicts resulting from shortages of arable land for crop farming and homesteads.

The Chobe District is not suitable for farming but is ideal for wildlife. Therefore, efforts should be made to sensitize people to move away from cattle to rearing small stock like goats because of shortages of grazing land. However, since most community members' emphasis is on cattle rearing a provision for cattleposts in the forest reserves could be made. Only temporary structures could be erected at the proposed cattleposts.

It was strongly felt that people of Chobe should be encouraged to concentrate on tourism since it has higher economic returns than other land use options. It is better to engage in businesses or activities that would utilize the wild animals than to engage in activities that create a conflict with wild animals.

It is however important to acknowledge that convincing a Motswana man, who associates cattle rearing with prestige, to concentrate on ecotourism and move away from cattle farming would be a challenge. However, with enough concrete benefits accruing from ecotourism and trickling down to the community at household level people's perceptions would change, especially where benefits from ecotourism activities outweigh benefits from cattle rearing.

Ways selling ecotourism as a viable livelihood option to communities

It has been suggested that Community Based Organisations or Trust should ensure that the substantial income from hunting safaris and other activities be utilised for concrete community development and in partnership with the community. For instance, using the proceeds to build houses for the needy members of the community and ensure that the benefit trickle down to the household level, for example, through payouts to the households. The trusts should invest proceeds from wildlife into business initiatives that would create employment opportunities that foster sustainable livelihoods for the local community. Engaging communities in meaningful activities reduces idle time that could lead to social ills such alcohol abuse.

Management of the Forest Reserves

A partnership between the community and DFRR would be a better management strategy where DFRR would provide technical expertise and the community undertakes day-to-day monitoring, policing and protection of the forest reserves. There are situations where the community refuses to help put out veld fires because they think the forest reserves belong to DFRR and it the responsibility of DFRR to put out the fires. Therefore, it is important to create a sense of ownership of forest reserves amongst communities. This community empowerment would eliminate problems of forest fires and poaching.

High potential areas

An area between Kazungula and Lesoma towards the Zimbabwean border is ideal for safari camps since part of animal corridor. Ngoma area through to Kachikao and towards Parakarungu area.

1.2.8 DFRR Kasane: Ms Neelo Sebele

There are several challenges in managing the forests reserves. There are only four forest guards stationed in Kasane not in the forests because of lack of accommodation and other facilities at the sites. The guards had come up with a patrol plan to visit and inspect the forest reserves but could not implement the plan because of lack of transport. The Forest Act governing the usage of forests does not give arresting powers to the forest guards in case they find a person contravening the Act or undertaking illegal activities within the forest reserves. The department therefore finds itself powerless regarding law enforcement and can only give a verbal warning. There are six forest reserves situated far apart, it is a challenge for four guards to man such vast of areas of land.

DFRR has two forest camps, Camp 171 in Sibuyu Forest Reserve and Kachikao Camp. There is one camp keeper stationed at Camp 171 with no basic facilities, with only one roomed house, making the camp inhabitable. The Kachikao Camp is not manned and the buildings are dilapidated and not habitable. The DFRR plan is to upgrade the facilities at the two camps and employ technical staff to manage and to be stationed at the forest reserves. The forest reserves are currently not managed.

Most of the forest reserves are not accessible especially during rainy season making it difficult to inspect. The forest reserves, as mentioned earlier, are covering a large area making it difficult to manage. There are some tourists who camp illegally in the forest reserves and some people harvest sand within the forest reserves without permission hence leaving open borrow pits. Some safari operators engage in illegal activities in the forest reserves as well.

Forest stakeholders and their demands

1. Safari operators

Safari tour operators want to develop camp sites within the forest reserve and undertake guided tours and photographic safaris.

2. Local Communities within the district and from other parts of the country

Local communities through their trusts want to develop camp sites and undertake ecotourism activities in the forest reserves. Communities would like to forest reserves to be open for arable farming and for livestock rearing (cattleposts) mainly because of shortage of land for such activities. Forest reserves are source of veld products such as thatching grass, medicinal plants, and edible fruits. Communities want to harvest these resources.

It is important to note that people do harvest grass and the grass harvesters converge into the district from different areas and have negative social impacts. For example, squatter camps mushrooming in the adjacent areas, illicit brews, prostitution and excessive drinking during grass harvesting season.

1.2.9 Land Board (Mrs Coetzie and Mr. Mpetu)

The role of the land board is to administer communal land and the forest reserves are on state land and state land is administered by the Department of Lands.

Possible other developments arising from opening up of FRs

Opening up the forest reserves for ecotourism will give communities the opportunity to benefit from the forest reserves. Community-based tourism is one way of empowering communities and improving their livelihoods and development of ecotourism can have multiplier effect on the local economy. There is likelihood of stimulating the growth of business linkages to support the industry, for example, local agricultural produce would support the hospitality sector.

The land board had allocated plots in Area 256 and 9 plots had been allocated for tourism development and agro-business. The land board is facing serious shortage of tribal land to allocate for settlements.

Other uses of Forest Reserves

The forest reserves are used by the local community for livestock grazing, fuel wood and grass harvesting. An informal settlement especially during thatching grass harvesting months and up to 800 people settle along the forests to harvest the grass.

Conflicts

There is shortage of land for residential and business purposes in the district. There is pressure by human settlements. If priority is going to be towards tourism at the expense of communities experiencing crowding and shortage of land ecotourism will not survive. Instead, there will mushrooming of squatter camps encroaching on forest reserves and destroying tourism. Consequently, destroying ecotourism that is supposed to benefit the community.

There is no more land available in Lesoma the land board is actually repossessing the arable fields and in Kazungula, the last land available will be allocated leaving no land available for future expansion of the settlements.

Recommendations

It is important to establish the amount of land needed for other uses residential, arable, business over a period of 20 years. Reserve that established piece of land for future expansion and the remainder is allocated to ecotourism. This will avoid future expansion into tourism areas. Ecotourism is important but as a sector it needs support services and support from the communities. Part of the forests should be degazetted as tribal lands to alleviate the problem of land shortage in the district.

1.2.10 Local Enterprise Authority (LEA)

Christopher Mogodu

Phineas Pheto

Chika Phuthago

Tsaone Masima

Ishmael Tlalanyaneng

Kefilwe Mabua

Director Mathebisi

There should be a deliberate strategy or policy that ensures that local communities and small to medium enterprises benefit from opening of forest reserves. The local communities and small to medium enterprises should be empowered to benefit from the forest reserves. If this is not done, well established enterprises and individuals will dominate and benefit most from the forest reserves. It is also important to clarify and teach the local community the application procedure for the utilisation of forest reserves.

Appendix 2: List of relevant policies and strategies

- ✓ Botswana Vision 2016
- ✓ NDPs 9 and 10
- ✓ CBNRM 2007
- ✓ Botswana National Settlement Policy
- ✓ National Policy on Rural Development
- ✓ National Master Plan for Agricultural Development
- ✓ Botswana National Ecotourism Strategy of 2002
- ✓ National Tourism Policy
- ✓ Tourism Master Plan
- ✓ National Policy on Youth
- ✓ Revised National Tourism Policy [Final Draft 2009]
- ✓ National Forest and Range Resources Policy Draft 2009
- ✓ Wild-land Fire Management Policy & Strategy [Draft 2008]
- ✓ Wildlife Conservation Policy
- ✓ Wildlife Policy Draft 2008
- ✓ Botswana Biodiversity Strategy and Action Plan. Revised 2007

List of Legislation Associated with Forestry Management

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| • Constitution | Protects individuals' rights, including right to property and compensation for loss of property, but subject to public interests. Link with Acquisition of Property Act Ch: 32:10. |
| • Agricultural Resources Conservation Act cap 35:06 | Agricultural resources include soils, waters, plant life/vegetation, and animal life/fauna (animals, birds, reptiles, fish & insects). |
| • Acquisition of Property Act cap 32:10 | It provides for acquisition of real property for public order, health, defence, development purposes for community & payment of compensation. Link to Constitution. |
| • Boreholes Act cap 34:02 | Person sinking hole in tribal territories to inform district council of the jurisdiction. |
| • Cruelty to Animals cap 37:02 | Animal means horse, mare, any domestic animal, fowl, bird and any wild animal in state of captivity, offences of cruelty to animals, destruction of animal, and slaughter of injured animal |
| • Deeds Registry Act cap 33:02 | Regulates recording and registering of land and ownership of land in the Deeds Registry |
| • Diseases of Animals Act cap 37:01 | It provides for prevention/control of diseases of animals (bull, cow, ox, etc, any wild carnivore tamed/kept as a pet) animals affected by disease to be separated from those not affected, areas declared infected, quarantine camps, stock free zones, permits for birds/poultry |
| • Environmental Impact Assessment Act 2005 • Guidelines | It requires for EIA to be used to assess the potential effects of planned developmental activities; to determine & provide mitigation measures for effects of such activities as may have significant adverse impact on the environment; and to establish monitoring and evaluation processes. |
| • Environment Management Bill | Provides for thorough environmental assessment studies and consultations with communities and relevant authorities before projects are undertaken. |
| • Forest Act cap 38:03 | It aims to provide better regulation & protection of forests/forest produce, declaration of forest reserves, prohibited acts on reserves/State land, private land. |
| • Herbage Preservation (Prevention | It seeks prevention & control of bush fires, vegetation (tree, shrub, brushwood, undergrowth, grass, and crops) |

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| of fires) Act cap 38:02 | |
| • Mines & Minerals Act cap 66:01 | Holder of mineral concession in PA shall obtain permission under section 10 of WCNPA and comply with environmental obligations of rehabilitation and reclamation |
| • Plant Protection Act No 21 of 2007 | prevention of introduction spread and establishment of plant pests, to facilitate trade in plants, to enable Botswana to comply with its international obligations of International Plant Protection Convention and the International Standards for Phytosanitary Measures |
| • State Land Act cap 32:01 | Defines "state land" an un-alienated or reacquired land. President disposes of state land |
| • Tourism Act cap 42:09 & Regulations | It provides for regulation of tourist enterprises which may require services licensed under the WCNPA such as professional guides/hunters |
| • Town & Country Planning Act cap 32:09 | Development plans includes allocation of land for game/bird sanctuaries & protection of marine life & protection of woods, shrubs, trees, plants |
| • Tribal Land Act cap 32:02 | Grant of land to state for public purposes; granting of leasehold rights through Land Boards; |
| • Water Act cap 34:01 | A water right granted for mining, forestry or industrial purposes shall not pollute animal life, fish crops or livestock- criminal offence. Water rights licensed through Water Apportionment Board and subject to conditions (e.g. max. use, required return flow and destination/ purpose). |
| <ul style="list-style-type: none"> • Wildlife Conservation and National Parks Ch: 38: 01 • Wildlife Act Draft Bill 2008 <ul style="list-style-type: none"> – Wildlife Areas Regulations Draft – Hunting Regulations Draft – Fish Conservation Draft | <p>It provides for conservation & management of wildlife, giving effect to CITES & other international conventions for the protection of fauna & flora; & for the establishment, control and management of national parks & game reserves. The following Statutory Instruments are made under the Act:</p> <ol style="list-style-type: none"> 1. Wildlife Conservation (Convention on International Trade in Endangered Species of Wild Fauna and Flora) (Amendment) Order, 1999 2. National Parks & Game Reserves (SI 28 of 2000) 3. Gemsbok National Parks (SI 79 of 2000) 4. Wildlife Conservation (Hunting & Licensing) SI 35 of 2001 |

Appendix 3: Definitions of terms

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| Agritourism: | It includes all 'rural enterprises which incorporate both a working farm environment and a commercial tourism component'. In other words, agritourism can take many forms, including farm stays, bed and breakfasts, pick-your-own produce, agricultural festivals, farm tours for children, or hayrides. |
| Alternative Dispute Resolution (ADR) | The process of settling disputes between parties outside the government judicial processes and techniques, which are more costly and time consuming. Instead arbitrators and mediators who are neutral are used. There are four categories of ADRs, namely negotiation , mediation (conciliation), collaborative law , and arbitration . [Wikipedia, Worldwide Legal Directories] |
| Animal | Includes any vertebrate or invertebrate animal species and the eggs and young thereof occurring within natural ecosystems and habitats (SADC Wildlife Protocol, WNNC Act & dictionary). |
| Adaptive management | The process by which research and learning is continually incorporated in management planning and practice. Specifically, it is the integration of design, management and monitoring to systematically test assumptions in order to adapt and learn (Guidelines for Forest Management ITTO/IUCN Forests Policy Development 17) |
| Biodiversity | Also referred to as biological diversity, is the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (UNCBD; ITTO/IUCN). |
| Biological resources | Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity. (UNCBD) |
| Biotechnology | means any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use (UNCBD). |
| Commercial resource use making. | Use of natural resources for the purpose of selling, trading and/or profit making. |
| Community based natural resource management (Botswana) | A 'development approach that incorporates natural resources conservation, the ultimate aim of which is to manage and protect the natural resource base'. CBNRM Policy) |
| Community-based organisation | With reference to resource management, a community based organisation is a representative, accountable and legal entity at the village level formed to manage community natural resource use rights. |
| Comparative advantage | A country or area that has a comparative advantage for a specific commodity or activity if it can produce at lower costs or higher returns than another commodity or activity, i.e. lower opportunity costs in terms of foregone produced other commodities or activities. (Adapted from SADC regional water policy) |
| Conservation | The protection, maintenance, rehabilitation, restoration and enhancement of wildlife and includes the management of the use of wildlife to ensure sustainable of such use (SADC Wildlife Protocol and SADC Regional Water Policy). |

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| Consumptive resource use | Use of individual game by its permanent removal, or removal of parts of it, from or within an area (game ranching policy). |
| Cultural tourism | Cultural aspects that are of interest to the visitor and can be marketed as such, including the customs and traditions of people, their heritage, history and way of life. |
| Desertification | Land degradation resulting from various factors, including climatic factors and human activities (adapted from UNCCD). |
| Ecosystem | A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (UNCBD). |
| Eco-tourism | Purposeful travel to natural areas to experience and understand the culture and natural history of the area taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people. |
| Environment | Includes natural, urban, human living and cultural environments. |
| Emerging SMMEs | Small, micro and medium-sized enterprises owned and/or operated by local citizens as defined by the Ministry of Trade and Industry. |
| Limits of acceptable change (LAC) | assesses the probable impact of an activity, decides in advance how much change will be tolerated, monitors what's happening systematically and regularly, and determines what actions are appropriate if agreed-upon quality standards are surpassed |
| Pro poor tourism | Pro-poor tourism means managing a tourism business so that it makes business sense for the operator and at the same time benefits the poor. |
| Responsible tourism | is treating others the way they wish to be treated. |
| Sustainable development | Development that meets the needs of the current generation without jeopardising the ability of future generations to meet their needs (WCED, 1987) |
| Sustainable tourism | Tourism development, management and any other tourism development activities that optimise the economic and other societal benefits available without jeopardising the potential for similar benefits in the future. |
| Stakeholders | Any individual or group directly or indirectly affected by, or interested in, a given resource (ITTO/IUCN Guidelines for Forest Management) |
| Technical Advisory the Committee | Means a district advisory committee charged with the responsibility to oversee implementation of CBNRM. |
| Threatened Species | Any species of fauna or flora which is considered critically endangered, endangered, or vulnerable, for which definitions are provided for by the Act in terms of CITES, and for which criteria may be adopted and from time to time reviewed by the Conference of the Parties and the Minister, taking into consideration the work of competent persons in this field. |

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| Tourism industry | All recipients of direct spend incurred by tourists. This includes pre-trip expenditure on travel and booking, travel and en-route expenditure, and all spending at the destination. |
| Tourist | A person who travels away from home, staying over for at least one night. A tourist can be a domestic, regional or overseas tourist. Tourists travel for different purposes including business, leisure, conferences and incentive. |
| Tourism | All travel for whatever purpose resulting in one or more nights being spent away from home. |
| Tourism value chain | is every sector that contributes to the production of the tourist experience, and their interconnections. |
| Trans-boundary | Populations, ecosystems, activities, measures and effects extend beyond the effective jurisdiction of a State Party (adapted from SADC Fish) |
| Trans-frontier Conservation Area | Area of component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas as well as multiple use areas (SADC wildlife protocol) |
| Trans-boundary | Populations, ecosystems, activities, measures and effects extend beyond the effective jurisdiction of a State Party (adapted from SADC Fish) |
| Trans-frontier Conservation Area | Area of component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas as well as multiple use areas (SADC wildlife protocol) |

Appendix 4: Limits of acceptable change

LAC focus

The Limited of acceptable change (LAC) method answers the question what resource and social conditions are appropriate (acceptable) and how do we attain those conditions?

Steps for LAC planning

1. Identify area special values, issues, and concerns. All stakeholders in the FRs (communities, government, scientists, tourism operators, etc) would meet to identify what special features and qualities within the area require attention, what management problems or concerns; the role the area plays in both regional and national context.
2. Identify and describe recreation opportunity classes or zones: this would also include other uses of the resources (traditional uses). This would also indicate the likely human impact and how this can be managed.
3. Select indicators of resource and social conditions: these are specific elements selected to represent the conditions deemed appropriate and acceptable in each resource.
4. Inventory existing resource and social conditions: e.g. identify location of flora fauna, burial sites, heritage remnants, location of various resources, conditions in which they are
5. Specify standards for resource and social conditions in each opportunity class: you then set standards, acceptable conditions i.e. limits of acceptable change that is allowed.
6. Identify alternative opportunity class allocation: you look at different ways that resources could be used.
7. Identify management actions for each alternative: this requires an analysis of the costs that will be imposed by each alternative. E.g. some alternative might be to zone one forest reserve for example not to be opened for ecotourism development. However, build into this step is the issue of high management costs which have proven to be a problem whereby government does not have the capacity to manage and enforce compliance.
8. Evaluation and selection of a preferred alternative:
9. Implement actions and monitor conditions: implementation plan must detail actions, costs, timetable and responsibilities to ensure timely implementation. The monitoring programme focuses on the indicators selected in step 3. And compares their condition with those identified in the standards. This information can be used to evaluate the success of actions.

Appendix 5: Principles of and guidelines for sustainable forest management

Forest management principles

Principle 1: Sovereignty and societal choice

The rights to and responsibilities for biodiversity lie primarily with the states and societies within whose territories are located. Therefore, the conservation and sustainable use of biodiversity are a matter of societal choice and should reflect national and local goals.

Principle 2: International commitments

Many countries have entered into legally and non-legally binding intergovernmental agreements to conserve biodiversity, with implications for arrangements for the management of production forest landscapes within their territories. The presence in or adjacent to tropical production forests of species, populations of species, or species' assemblages that are subject to international conservation agreements may signal the need for special management measures.

Principle 3: Political commitment, policies and laws

Strong commitment from decision-makers and adequate national policies, laws and regulations are needed to ensure that forest management addresses biodiversity issues at the scale of the forest management unit as well as at the landscape and national levels.

Principle 4: Land use and spatial planning

Achieving biodiversity objectives in production forests requires that land allocation to different sectors and spatial planning within and outside the forest sector take biodiversity objectives into account.

Principle 5: Decentralization, forest tenure and natural resource access rights

Decentralized management and improved institutional arrangements and governance can assist the achievement of biodiversity conservation and sustainable use goals in tropical production forests by improving both the large-scale allocation of land and the resource access and land tenure rights of local people.

Principle 6: Incentives

Society at large benefits from biodiversity conservation, but the costs of conservation fall mainly on local forest owners and managers. Incentives will often be required to encourage forest owners and managers to take special measures for biodiversity conservation and sustainable use.

Principle 7: Knowledge, learning, technology transfer and capacity building

Learning, experimentation, the dissemination of information and the transfer of technology are all important for the conservation and sustainable use of biodiversity in tropical production forests.

Principle 8: Managing tropical production forests at a landscape scale

Tropical production forests and other components of landscapes have complementary but differing roles in biodiversity conservation and sustainable use.

Principle 9: Biodiversity considerations at the forest management unit level

An effective forest management planning process, in which economic, social and environmental objectives are balanced in accordance with societal needs and priorities, is essential for setting and achieving biodiversity conservation and sustainable use goals.

Principle 10: Biodiversity conservation in planted forests

Planted forests should be managed in ways that benefit biodiversity, both within the planted forest itself and in areas of natural forest that are retained within the planted forest landscape.

Principle 11: Maintaining functioning forest ecosystems

A fundamental goal of SFM is to maintain ecosystem functions at both the stand and landscape scales. Biodiversity plays an important role in ecosystem functioning and its conservation and sustainable use contributes to maintaining yields of timber and other forest products and services over the long term.

Each of these principles is accompanied by a set of guidelines and each guideline by a set of priority actions that, when taken, will help uphold the principle and put the guideline into effect.

Forest management guidelines

- ✓ National, regional and local biodiversity strategies, plans and regulations that are based on national and local priorities should be reflected in the management of forests.
- ✓ International commitments for the conservation of genes, populations, species and assemblages of species or habitats should be reflected in the legal and regulatory frameworks guiding the allocation and use of land.
- ✓ Special measures will often be required when species and populations that are internationally recognised as rare, threatened or endangered occur in or adjacent to forest management areas.
- ✓ Appropriate policies, laws and regulations should be developed and implemented to ensure that biodiversity interests are adequately addressed in the management of forests.
- ✓ National land use planning processes and forest and environmental laws should explicitly address issues of biodiversity conservation and sustainable use in forests at all spatial scales.
- ✓ Contradictory land use policies and laws at national and sub-national levels that conflict with biodiversity conservation and sustainable use or do not support SFM in general should be identified, reviewed and modified.
- ✓ Local communities should have the right to use biodiversity to meet their economic and cultural needs and should be involved in its management and protection.
- ✓ Independent voluntary forest certification should be recognised as a way of encouraging biodiversity conservation in the forests.
- ✓ Government should make use of financial mechanisms to support and offset the incremental costs of conserving biodiversity values and use these as an incentive to encourage biodiversity conservation and sustainable use in forests.
- ✓ Governments, universities, research agencies and conservation NGO's should collaborate to produce manuals, guides and other material for communicating the underlying concepts, objectives and values of biodiversity in forests to forest managers and field personnel, key stakeholders and the media in language that is understandable, relevant and useful for all stakeholder groups.
- ✓ Private and community forest owners need technical support to ensure that their activities are consistent with biodiversity conservation objectives.
- ✓ All forest management activities affect biodiversity. Forest management must ensure that changes do not impact negatively on biodiversity features as having special value.
- ✓ Forest management plans should include information on the presence and conservation status of plants, animals, and habitats of special conservation concern to provide baseline information on the biodiversity resources of a forest.
- ✓ Actual, potential and emerging threats must be anticipated and contingency plans prepared to ensure that, when needed, technically sound responses can be put rapidly into place.
- ✓ Forestry operations can encourage the introduction and spread of invasive alien species and measures should be taken to minimise this risk.
- ✓ Particular sites and areas of forest and other habitats that provide important ecological functions should be identified and special measures taken to ensure their protection.
- ✓ The fire ecology and fire susceptibility of forests should be understood and biodiversity considerations included in the fire management measures.
- ✓ The application of reduced impact logging techniques should be used in forests.
- ✓ Measures should be taken to avoid unsustainable levels of hunting and the gathering of non timber forest products.
- ✓ Forest managers and other stakeholders should take special measures to mitigate increases in human-wildlife conflicts that might arise from logging activities.
- ✓ Special management consideration should be given to species that are strongly interactive or play a key role in the ecology of other species or have important influences on the overall ecology of a forest and the survival of other species.
- ✓ Planted forest areas should be managed in ways that benefit biodiversity, both within the planted forest itself and in areas of natural forest that are retained within the planted forest landscape.
- ✓ Planted forest establishment should focus on previously deforested or other degraded sites and not replace natural forest habitats of conservation concern.

Source: ITTO and IUCN, 2009.

Appendix 6: Some useful websites

<http://www.iucn.org>

- ✓ Guidelines for Tourism in Parks and Protected Areas of East Asia
- ✓ Guidelines for Applying Protected Area Management Categories
- ✓ Guidelines for Management Planning of Protected Areas
- ✓ Indigenous and Traditional Peoples and Protected Areas: Principle, Guidelines, and Case Studies
- ✓ Sustainable Tourism in Protected Areas
- ✓ Financing Protected Areas: Guidelines for Protected Area Managers
- ✓ Economic Values of Protected Areas: Guidelines for Protected Area Managers
- ✓ Sustainable Tourism in Protected Areas: Guidelines for planning and Management
- ✓ Transboundary Protected Areas for Peace and Cooperation

<http://www.unwto.org>

- ✓ Global code of ethics in tourism

<http://www.wwf.org>

- ✓ Guidelines for community-based ecotourism development

<http://www.itto.int>

- ✓ ITTO/IUCN Guidelines for the Conservation and Sustainable use of Biodiversity in tropical Timber Production Forests

<http://www.coastlearn.org>

- ✓ Ecotourism Guidelines

<http://www.botswanaturism.co.bw>

- ✓ Botswana ecotourism: best practices manual
- ✓ Technical report on best practices in ecotourism

<http://www.envirobots.gov.bw>

- ✓ Information about Botswana’s EIA process: preliminary environmental impact assessment and EIA guidelines

Appendix 7: The BTB ecotourism certification scheme (final draft; May 2009)

Ecotourism Certification System is managed by the Quality Assurance Department (QAD) of Botswana Tourism Board. The QAD is responsible for implementation, management, and on-going support and development of the ecotourism certification system. The system uses a 3-tiered structure which promotes progress and is designated to encourage operators to improve their performance towards achievement of the next level. The simplest level to obtain is Green, followed by Green Plus, and finally Ecotourism. There are 215 points identified for the Draft Standards, 89 are compulsory for the Green and Green Plus levels; level 3 of Ecotourism requires 50 compulsory points. There are other 76 points that are not compulsory; they used are to generate extra points for level 1 and 2. A certification logo is provided and can be used for marketing and differentiating the operation. The certification system is based on facilities and ecotour activities.

The ecotourism operator/applicant is responsible for the application fee, evaluation fee, and accommodation, meals and transport costs for ecotourism assessors. The standards will be applied to all current categories of tourism accommodation as defined by the Department of Tourism, all activities and ecotour (categories under the Department of tourism's License) will be assessed using the Ecotour standards. Refer to the main document for more details (Botswana Ecotourism Certification System, 2009: 22-63).

Duration: 2 years

Botswana Ecotourism Standards (BEST)

| |
|---|
| Headquarters / Off-site/ Pre-Assessment |
| |
| Principle 1: Operate a Sustainable Management Policy |
| 1. Legal compliance |
| 1.1. Compliance with relevant Laws and regulations of Botswana |
| |
| 2. Requirements of Environmental Management Plan |
| 2.1. On-site inventory (within developed plot/in boundaries of camp) |
| 2.2. Off-site inventory (away from developed plot/outside boundaries of camp) |
| 2.3. Impact assessment |
| 2.4. Energy conservation policy |
| 2.5. Preventative maintenance plan for electrical installations and equipment |
| 2.6. Fire prevention plan |
| 2.7. Water use and conservation policy |
| 2.8. Waste management policy |
| 2.9. Pre-cycling, purchasing and consumption plan |
| 2.10. Policy on using certified wood and products(from a sustainable forest) |
| 2.11. Wood and surface treatment |
| 2.12. Limited toxic or off-gassing materials and furniture |
| 2.13. Environmentally responsible supplies and services |
| 2.14. Botswana Associated services |
| 2.15. Departmental Environmental Handbook |
| |
| 3. Emergency response |
| 3.1. Health and safety |

| |
|--|
| 4. Business Plan , Market Analysis and financial viability |
| 4.1. Tourism Business Plan |
| 5. Office Working Policy |
| 5.1. Office operation |
| 6. Membership of Industry Associations |
| 6.1. Participation in regional and/ or social organisations and /or tourism organisation |
| 7. Botswana Links |
| 7.1. Registration and ownership of the company |
| Principle 2: Green and Responsible Marketing |
| 1. Responsible Marketing |
| 1.1. Target environmentally responsible markets and ecotourism |
| 1.2. Use of low impact marketing mechanisms |
| 2. Low carbon emissions |
| 2.1. Use of carbon offsets |
| On-site assessment |
| Principle 3: Minimise Negative impact on environment produced by physical design and operations |
| 1. Environmental Design and construction |
| 1.1. Screening + visual integration with landforms |
| 1.2. Facility location, layout and orientation |
| 1.3. Staff accommodation |
| 1.4. Mitigating landscape disturbance |
| 1.5. Use of indigenous and drought resistant landscape vegetation |
| 1.6. Minimise light pollution |
| 1.7. Environmentally friendly swimming pool |
| 2. Responsible Architectural Design |
| 2.1. Architectural motif |
| 2.2. Design staff and experience |
| 3. Building materials |
| 3.1. Use of recycled building materials |
| 3.2. Material Life-cycle Analysis |
| 3.3. Certified wood products (from a sustainable forest) |
| 4. Energy conservation |
| 4.1. Generation of environmental friendly electricity (‘ecotricity’) for facilities connected to municipal supplies (BPC) |
| 4.2. Generation of environmental friendly electricity (‘ecotricity’) for facilities that are not connected to municipal supplies (BPC), but generate their own power |
| 4.3. Use of solar water heating systems for facilities connected to municipal power supplies (BPC) |
| 4.4. Uses of solar water heating systems for facilities not connected to municipal power supplies and generate their own power supply. |
| 4.5. Use of low energy consumption appliances |
| 4.6. Light fixtures |
| 4.7. Occupancy sensors |

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| 4.8. Sub metering of electricity by department |
| 4.9. Hot water pipes insulated to prevent heat loss |
| 4.10. Sub metering of water by department |
| |
| 5. Bed night Energy/fuel use |
| 5.1. Fuel use in Generators for site |
| 5.2. Gas use on site |
| 5.3. Paraffin use on site |
| |
| 6. Water conservation and recycling |
| 6.1. Use of rain storage devices |
| 6.2. Garden watering practices |
| 6.3. Use of water saving Devices |
| 6.4. Towel and linen reuse program |
| 6.5. Drinking water |
| 6.6. Grey water treatment and recycling |
| 6.7. Low impact toilets |
| 6.8. Regular leakage assessment program+reporting |
| 6.9. Regular recording of total water consumption |
| |
| 7. Waste Management and Recycling |
| 7.1. Refillable amenity Dispensers, refillable/recyclable containers and no single packaging |
| 7.2. Composting of biodegradable waste |
| 7.3. Separation and recycling program |
| 7.4. Solid waste |
| 7.5. Liquid waste separation |
| 7.6. Use of biodegradable cleaners and certified pesticides |
| |
| 8. Hazardous Chemical use and storage |
| 8 Transportation |
| 8.1. Fuel-efficient boat motors and vehicles |
| |
| 9. Purchasing practices |
| 9.1. Life-cycle Audit or Assessment (LCA) for regularly purchased materials |
| |
| 10. Food and beverages |
| 10.1. Use of fresh organic foods and beverages |
| 10.2. Support to local producers |
| 10.3. Support to local suppliers |
| |
| 11. Air quality and noise reduction |
| 11.1. No-smoking rooms + guest areas |
| 11.2. Noise pollution |
| |
| 12. Health and safety |
| 12.1. Emergency response |
| 12.2. Hygiene |
| |
| 13. Employee Training |
| 13.1. On-going Employee Environmental Management Training and evaluation program |
| 13.2. Employee incentives and involvement in the Environmental program |
| 13.3. Site specific guide training programs |
| 13.4. Employees training program for chemical use and handling |
| 13.5. Employees training program for first aid awareness |

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| 13.6. | Staff energy-use awareness |
| 13.7. | Staff water-use awareness |
| Principle 4: Visitor, Experience, impact and Interpretation | |
| 1. | Visitor impact |
| 1.1. | Visitor code of conduct |
| 2. | Visitor Experience |
| 2.1. | Offers clients full day and/or half day ecotours |
| 2.2. | Guest Satisfaction survey |
| 2.3. | Visitor energy use awareness |
| 2.5 | Visitor Water Use Awareness |
| 2.6. | Inform guests of recycling program and in room waste separation |
| 3. | Visitor interpretation |
| 3.1. | Interpretation and information about the local environment (ecological and social) |
| 4. | Visitor Contribution |
| 4.1. | Visitor contribution towards local conservation and community projects |

Benefits –Assessed on site

Principle 5: Maximise Local (District) Community Benefits

1. Local (District) Community Relations
 - 1.1. Use of fair employment practices
 - 1.2. Proactive local hiring practices
 - 1.3. Local community involvement and awareness
 - 1.4. Financial or in-kind support
 - 1.5. Promotion of local cultural craft and performing arts

Principles 6: Contribution to conservation

1. Direct support for nature conservation projects
 - 1.1. Portion of profits to conservation projects
 - 1.2. Environmental Monitoring

Ecotour standards

Ecotourism facility must have achieved the required compulsory grading standards stated within the ecotourism accommodation standards, if the tours are conducted from such facilities. The standards can also be applied to all operators that do not have fixed site accommodation, but offer activities as part of their operation, such as mobiles, Mokoro trips.

| 1. Tour management and monitoring | Compulsory for Ecotour |
|--|------------------------|
| 1.1. The eco tour is planned with a logical sequence | |
| 1.2. The ecotour is planned to disseminate a particular message about ecology/conservation/archaeological, socio-cultural issues. | |
| 1.3. The eco tour explains the potential dangers involved with the tour | |
| 1.4. Tour quality is monitored regularly by the Company through guest feedback | ✓ |
| 1.5. The eco tour is lead by a full professional guide or the assistant in a NP, GR and WMA, otherwise by a specialist guide at an archaeological/socio-cultural site. | ✓ |
| 1.6. The tour offers the services of a specialised staff (i.e. ethno botanist, ornithologist, anthropologist) | |
| 1.7. The tour must meet all legal and regulatory requirements | ✓ |

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|---|---|
| 1.8. Groups are limited to 16 people, with a maximum of 8 guests per guide or vehicle. In the case of Mekoro trips there must be one professional guide for every 4 mekoro, with a qualified poler on the other 3 mekoro. | ✓ |
| 2. Available Interpretation Information | |
| 2.1. The accuracy of the information provided to tourists is checked by referenced sources including, reference books, specialised personnel, or NGO's | ✓ |
| 2.2. Information on the ecological and social interest of the local environment is available through at least two sources. | |
| 3. Staff Qualifications | |
| 3.1. All tour staff in contact with the guests has a basic knowledge of ecotourism principles, the natural and conservation values of the area visited. | ✓ |
| 4. Environmental Protection, Health & Safety and Security Measures | |
| 4.1. Assessed environmental impact of the tour, measures taken to minimise impacts using EMP | ✓ |
| 4.2. Fire prevention and action plan has been developed and available for all staff | ✓ |
| 4.3. All activities of the tour that take place in protected area are undertaken according to locally specific guidelines as dictated by the local area management plan. | ✓ |
| 4.4. No activities will be undertaken outside of designated/marked roads/trails unless approved by the manager of the natural area. | ✓ |
| 4.5. The tour should have and implement a road use and driver policy. The policy should ensure that there is limited loss of biodiversity and any negative influence on wildlife. | ✓ |
| 4.6. No solid waste will be disposed of in natural areas, not solid waste is burnt during the tour. | ✓ |
| 4.7. A water use and conservation policy should be in place | ✓ |
| 4.8. Health & safety and risk assessment of the tour has been undertaken and emergency procedures are in place | ✓ |
| 4.9. One of the operational staff and guide must be trained with first aid. All vehicle must carry first aid kit | ✓ |
| 5. Impact on wildlife | |
| 5.1. All activities that occur within the natural habitat of wild animals are carried out according to the natural area management plan | ✓ |
| 5.2. The tour does not include deliberate intrusions that may cause significant disturbance to wildlife | ✓ |
| 5.3. The tour does not detrimentally affects the habitat and wildlife activity | ✓ |
| 5.4. There is no feeding of wildlife | ✓ |
| 5.5. All flashlights used are fitted with a red filter to minimise disturbance | ✓ |
| 5.6. Rotation of routes is used to reduce the repeated impact on wildlife, soils, vegetation | |
| 6. Hiking and camping trips | |
| 6.1. Public toilets are used when available. Otherwise a hole of minimum 15cm deep is dug at least 20m away from the path and 50m away from the nearest water body where applicable. | |
| 6.2. The tour is encouraged to use gas stoves and reduce the use of wood fires for cooking | |
| 6.3. All evidence of fire must be buried after use. Fires should not be left unattended. | ✓ |
| 6.4. Camping is only permitted in designated areas, where applicable | ✓ |
| 6.5. All solid waste should be protected from wildlife during the complete tour | ✓ |
| 6.6. All efforts should be made with biodegradable waste to ensure exotic species are not introduced | ✓ |
| 6.7. No soil at the camp site should be disturbed apart from digging pit latrines and burying the fire | ✓ |

| | |
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| | |
| 7. Vehicles | |
| 7.1. At least 50% of the land/water vehicles used is considered among the most energy efficient in their class. | |
| 7.2. No driver will leave the motor running for more than 3 minutes when stationary | ✓ |
| 7.3. Vehicles will be maintained to minimise unnecessary emissions | ✓ |
| 7.4. Efforts are made to ensure there is no spillage and soil contamination while vehicles are refuelling or parked | |
| 7.5. All water crossing are avoided if possible to reduce water contamination | |
| 7.6. At least 50% of all transportation, in secure environments, will be by non-vehicular movements | |
| 7.7. All aircraft are operated under conditions | |
| | |
| 8. Contributions to Nature Conservation and Community Development | |
| 8.1. Agreements will be signed between the tour operator, local protected area managers, NGO's, or community organisations to ensure that the tour operator complies with the local nature management plan. | ✓ |
| | |
| 9. Community relations | |
| 9.1. The ecotourism operation must ensure that tourists are advised, either verbally, through a written statement on the code of behaviour to be adhered to within the visited communities. | ✓ |
| 9.2. Operators must name three modalities they have adopted to stimulate the local traditions, customs or culture | |
| 9.3. No activities will be undertaken in traditional communities unless approved by the local designated leader. | ✓ |

Annex 8: Summary of the Global Code of Ethics for Tourism (source: UNWTO)

Article 1: Tourism's contributing to mutual understanding and respect between peoples and societies

Tourism activities should be conducted in harmony with the attributes and traditions of the host regions and countries and in respect for their laws, practices and customs (Article 1.2).

Public authorities must provide protection for tourists and visitors and their belongings; they must pay particular attention to the safety of foreign tourists owing to the particular vulnerability they may have.

They should facilitate the introduction of specific means of information, prevention, security, insurance and assistance consistent with their needs, any attacks, assaults, kidnappings or threats against tourists or workers in the tourism industry, as well as the wilful destruction of tourism facilities or of elements of cultural or natural heritage should be severely condemned and punished in accordance with their respective national laws (Article 1.4).

Article 2: Tourism as a vehicle for individual and collective fulfilment

Tourism activities should respect the equality of men and women; they should promote human rights and more particularly the individual rights of the most vulnerable groups, notably children, the elderly, the handicapped, ethnic minorities and indigenous people (Article 2.2).

Article 3: Tourism, a factor of sustainable development

- ✓ All the stakeholders in tourism development should safeguard the natural environment with a view to achieving sound, continuous and sustainable economic growth geared to satisfying equitably the needs and aspirations of present and future generations (Articles 3.1).
- ✓ All forms of tourism development that are conducive to saving rare and precious resources, in particular water and energy, as well as avoiding so far as possible waste production, should be given priority and encouraged by national, regional and local public authorities (Article 3.2).
- ✓ Tourism infrastructure should be designed and tourism activities programmed in such a way as to protect the natural heritage composed of ecosystems and biodiversity and to preserve endangered species of wildlife, the stakeholders in tourism development, and especially professionals, should agree to the imposition of limitations or constraints on their activities when these are exercised in particularly sensitive areas; desert, polar or high mountain regions, coastal areas, tropical forests or wetlands, propitious to the creation of nature reserves or protected areas (Article 3.4).
- ✓ Nature tourism and ecotourism are recognised as being particularly conducive to enriching and enhancing the standing of tourism, provided they respect the natural heritage and local populations and are in keeping with the carrying capacity of the sites (Article 3.5).

Article 4: Tourism, a user of the cultural heritage of mankind and a contributor to its enhancement

- ✓ Tourism resources belong to the common heritage of mankind, the communities in whose territories they are situated have particular rights and obligations to them (Article 4.1).
- ✓ Financial resources derived from visits to cultural sites and monuments should, at least in part, be used for the upkeep, safe guard, and development and embellishment of this heritage (Article 4.3).
- ✓ Tourism activity should be planned in such a way as to allow traditional cultural products, crafts and folklore to survive and flourish, rather than causing them to degenerate and become standardised (Article 4.4).

Article 5: Tourism, a beneficial activity for host countries

- ✓ Tourism policies should be applied in such a way as to help to raise the standard of living of the populations of the regions visited and meet their needs, the planning and architectural approach to and operation of tourism resorts and accommodation should aim to integrate them, to the extent possible, in the local economic and social fabric, where skills are equal, priority should be given to local manpower (Article 5.2).

Article 6: Obligations of stakeholders in tourism development

- ✓ Tourism professionals have an obligation to provide tourists with objective and honest information on their places of destination and on the conditions of travel, hospitality and stays (Article 6.1).
- ✓ Tourism professionals, so far as this depends on them, should contribute to the cultural and spiritual fulfilment of tourists and allow them, during their travels, to practice religions (Article 6.3).
- ✓ The public authorities of the generating states and the host countries, in cooperation with the professionals concerned and their associations, should ensure that the necessary mechanisms are in place for the repatriation of tourists in the event of the bankruptcy of the enterprise that organised their travel (Article 6.4).

Article 7: Right to Tourism

- ✓ The universal right to tourism must be regarded as the corollary of the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pays guaranteed by Article 24 of the Universal Declaration of Human Rights and Article 7.d of the International Covenant on Economic, Social and cultural rights (Article 7.2).
- ✓ Family youth, student and senior tourism and tourism for people with disabilities, should be encouraged and facilitated (Article 7.4).

Article 8: Liberty of tourist movements

- ✓ Tourists and visitors should benefit, in compliance with international law and national legislation, from the liberty to move within their countries and from one state to another, in accordance with Article 13 of the Universal Declaration of Human Rights (Article 8.1).
- ✓ Tourists and visitors should have access to all available forms of communication. They should benefit from prompt and easy access to local administrative, legal and health services (Article 8.2).

Article 9: Rights of the workers and entrepreneurs in the tourism industry

- ✓ The fundamental rights of salaried and self employed workers in the tourism industry and related activities should be guaranteed under the supervision of the national and local administrations (Article 9.1).
- ✓ Salaried and self employed workers in the tourism industry and related activities have the right and duty to acquire appropriate initial and continuous training. They should be given adequate social protection; job security should be limited so far as possible (Article 9.2).

Article 10: Implementation of the Principles of the Global Code of Ethics for Tourism

- ✓ The public and private stakeholders in tourism development should cooperate in the implementation of these principles and monitor their effective application (Article 10.1).
- ✓ The same stakeholders should demonstrate their intention to refer any disputes concerning the application or interpretation of the Global Code of Ethics for Tourism for conciliation to an impartial third body known as the World Committee on Tourism Ethics (Article 10.3).

Appendix 9: Layman's draft ecotourism guidelines for Forest Reserves

PRINCIPLES AND GUIDELINES FOR SUSTAINABLE ECOTOURISM FOR FOREST RESERVES

ARRANGEMENT OF PARAGRAPHS

PARAGRAPHS

Preliminary

1. Citation
2. Definitions

PART II

Introduction

3. Aim and Purpose of Guidelines
4. Scope
5. Status of Botswana Natural Resources
6. Applicability of Guidelines
7. Objectives of Guidelines
8. The Target groups
9. Structure and Guiding Principles

PART III

Principles and Guidelines for Ecotourism in Forest Reserves

10. Principles and Guidelines

PART I

Preliminary

1. Citation

These Principles and Guidelines may be referred to as the Ecotourism Guidelines for Forest Reserves.

2. Definitions

For the purpose of these Guidelines, unless the situation otherwise requires:

Adaptive management means the process by which research and learning is continually incorporated in management planning and practice.

Biodiversity means biological diversity, which is the variability among living organisms from all sources including, among other things, earthly, marine and other water ecosystems, and the many sides of environment of which they are part. This includes variety within species, between species and of ecosystems.

Commercial resource use means the use of natural resources for the purpose of selling, trading and/or profit making.

Community based natural resource management (CBNRM) means a development approach that incorporates natural resources conservation, the resource management ultimate aim of which is to manage and protect the natural resource base.

Conservation means the protection, maintenance, rehabilitation, restoration and enhancement of natural resources and includes the management of the use of natural resources to ensure sustainable use.

Consumptive resource use means permanent removal, or removal of parts of natural resources.

Cultural tourism means cultural aspects that are of interest to the visitor and can be marketed as such, including the customs and traditions of people, their heritage, history and way of life.

Eco-system means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

Ecotourism means purposeful travel to natural areas to experience and understand the culture and natural history of the area taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people.

Forest Reserve means any area declared as a Forest Reserve by the President in terms of the Forest Act.

Limits of acceptable change (LAC) assesses the probable impact of an activity, decides in advance how much change will be tolerated, monitors what's happening systematically and regularly, and determines what actions are appropriate if agreed-upon quality standards are surpassed.

Sustainable development means development that meets the needs of the current generation without jeopardising the ability of future generations to meet their needs.

Sustainable ecotourism means tourism development, management and any other tourism development activities that optimise the economic and other societal benefits available without jeopardising the potential for similar benefits in the future.

PART II

Introduction

3. Aim and Purpose of the Guidelines

3.1 Management, utilisation, and conservation of Forest Reserves must be based on the principles of sustainable development and the ecosystem approach, both of which are the foundation of current environmental management policies in Botswana. There is therefore need for a balance to be pursued between conservation and use of biological diversity whilst recognising that change is inevitable due to climate change, human settlement expansion, and establishment of new projects.

3.2 Developing ecotourism activities in the Forest Reserves is meant to:

- a. Generate more economic benefits from the Forest Reserves;
- b. Spread tourism more evenly, in particular over the Chobe District to enhance its potential as prescribed by NDP 9, the National Ecotourism Strategy, and the Tourism Management Framework;
- c. Actively involve local communities in ecotourism in the Forest Reserves whilst increasing their benefits from them;
- d. Secure the long-term integration of the ecosystems of the Forest Reserves, including the miombo woodlands and the wildlife migratory routes; and
- e. Increase the awareness of the importance of the woodlands among tourists and Botswana.

3.3 The Guidelines will serve as a tool for the implementation of ecotourism activities in Forest Reserves and for safeguarding of the natural resources. Regular monitoring of changes, in both biodiversity and society's requirements for biodiversity is essential, and management of Forest Reserves needs to be adaptive.

4. Scope

4.1 The Guidelines represent a range of opportunities for all stakeholders to manage ecotourism activities in an ecological, economic and socially sustainable manner.

4.2 The Guidelines should be flexibly applied to suit different local conditions and ecosystems, and as such they are an evolving tool, whose development and further refinement should be an ongoing process.

4.3 The Guidelines will assist stakeholders at all levels, to develop and/or apply the national policies, strategies, and legislation governing management of Forest Reserves to the sustainable development and management of ecotourism projects and activities, and also to provide them with guidance for collaboration between stakeholders.

5. Status of the Natural Resources in Forest Reserves

5.1 The current Botswana natural resource status of Forest Reserves is largely unknown, and resource use and conservation is minimal. Development of sustainable ecotourism and multiple uses is a positive development, but care has to be taken that biodiversity and the forests' integrity is being maintained based on the pre-cautionary principle and limits of acceptable change (LAC).

6. Applicability of the Guidelines

6.1 These Guidelines are in line with the existing ecotourism framework, standards and best practices in Botswana, but they also make use of regional and global guidelines and best practices.

6.2 The Guidelines are meant to offer general guidance for ecotourism in the Forest Reserves. They do not provide all the detailed answers, or a recipe of one-size-fits-all answer to the challenge of ecotourism in forest areas. Instead, the Guidelines encourage a consistent approach to management of forest ecotourism in FRs, whilst assisting in the planning and management of FRs, visitor recreation and the ecotourism industry, so that ecotourism can develop in an environmentally and socially sustainable manner.

6.3 Bearing in mind that individual FRs may have different features and levels of ecological sensitivity and accessibility, each FR has to be developed in such a way that it projects its own uniqueness, while contributing to the common goal of sustainable conservation.

7. Objectives of the Guidelines

7.1 The Guidelines are intended for making ecotourism, other uses and biodiversity conservation in FRs mutually supportive, through engagement of all stakeholders, whilst promoting infrastructure and land-use planning based on the principles of conservation and sustainable use of biodiversity.

7.2 The objectives of the Guidelines are therefore to:

5. Improve the management of the ecosystem and resources of the Forest Reserves;
6. Promote better use of the reserves by promoting ecotourism and other multiple uses of resources within the Forest Reserves;
7. Minimise conflicts between different resource uses, in particular between ecotourism and other resource uses; and

8. Increase the benefits of Forest Reserves for the local communities, in particular the poor and vulnerable.

8. The Target Groups

8.1 The successful conservation and sustainable use of biodiversity in Forest Reserves require commitment and coordinated actions of all stakeholders. The main thrust of the Guidelines therefore is that ecotourism management should be based on a participatory process involving multiple stakeholders from the tourism sector, neighbouring communities and resource and biodiversity managers and decision-makers. Stakeholders must be drawn in from the public sector, the private sector, civil society and local communities.

8.2 Stakeholders in the tourism sector include companies, communities, individuals and tourists; resource managers include the Department of Forest and Range Resources, Department of Wildlife and National Parks, Department of Lands, Department of Tourism, Chobe District Council (ChDC), Technical Advisory Committee (TAC), Chobe Land Board, and Botswana Tourism Board (BTB).

9. Structure and Guiding Principles

9.1 The guiding principles are grouped under three specific key areas, namely:

1. Development and Benefit Sharing Principles
2. Resource Conservation and Management Principles
3. Participatory Principles

9.2 Each key area is comprised of principles of ecosystem approach adapted from the UN Convention of Biological Diversity principles of an ecosystem approach that set biodiversity conservation in the context of local developmental needs, and stress the importance of maintaining ecosystem functions, achieving sustainable economic benefits, making use of local and traditional knowledge, and looking at landscape-scale issues in managing natural systems, especially the sustainable forest management. The principles are also based on the existing Botswana strategies, policies, legislation, and plans, and therefore implementation of the Guidelines must be in compliance with them. Likewise, the Guidelines will have to incorporate any future changes to strategies, policies, legislation, and plans.

9.3 Each principle in turn consists of Guidelines that shall assist in the future development, management, and assessment of FRs and ecotourism in order to achieve more sustainable ecotourism development, whilst they further reflect the spirit of the international and regional instruments on forest biodiversity and ecotourism. Their application would be an important step for Botswana in implementing its obligations under the UN Convention of Biological Diversity and the Revised Botswana Biodiversity Strategy and Action Plan.

9.4 The Guidelines shall be the catalyst for the development and implementation of specific sustainable forest ecotourism strategies, management and action plans, as well as regulations for individual specific forest areas.

PART III

Principles and Guidelines for Ecotourism in Forest Reserves

10. The following Principles and Guidelines shall provide direction in the management, utilisation, and conservation of ecotourism forests according to the principles of sustainable development and the ecosystem approach.

Development and Benefit Sharing Principles and Guidelines

Principle 1: Forest Reserves are valuable ecosystems that must contribute to development of Chobe District and the country at large. Multiple uses of resources must therefore be promoted, and conflicts between different uses should be prevented and where they exist they should be minimised.

Guideline 1: A broader range of uses for Forest Reserves should be incorporated in the individual Forest Reserves Management Plans, while recognizing and reflecting the biodiversity values. The Plans should also clarify, secure and control subsistence user rights through the following measures:

- ✓ Mining, hunting and livestock production is not encouraged inside FRs due to the conflicts that arise with ecotourism and biodiversity. These resources uses are only permitted under exceptional circumstances.
- ✓ Identify in consultation with the local authorities and communities, current subsistence use rights and their details like location, seasonality and purpose.
- ✓ Identify possible conflicts with ecotourism activities and identify mitigation measures such as:
 - Zoning the land between different uses in the Forest Reserves Management Plan.
 - Timing of activities so as to avoid conflicts.
 - Spatial spreading of activities.
 - Minimizing environmental disturbance like litter and waste.
 - Developing and enforcing code of conduct for subsistence users and eco-tourist operators.
- ✓ Establish a registry on different subsistence uses, and land-use zones.
- ✓ Define control mechanisms for subsistence use, like who has the right to use forest products, restriction of species, seasonal uses, and use of Identity Cards as a method for identification.
- ✓ Monitor subsistence use by various interested parties, like eco-tourism operators, and local communities.
- ✓ Educate and inform local communities and eco-tourist operators of the existing rights, obligations, and controls.
- ✓ Develop mechanisms for regular reviews of ecotourism operations and update stakeholders about the results and possible changes.

Guideline 2: Conflict prevention is better than mitigating the impacts of conflicts, and therefore pre-empt conflicts where possible, but where they still occur minimise and mitigate them through the following measures:

- ✓ Developing and implementing of holistic District Development and Land Use Plans that address subsistence and commercial land and resource needs, to ensure that:
 - Human activities are promoted at the most suitable locations;
 - Incompatible land uses are separated through buffers;
 - Compatible land uses are permitted simultaneously; and
 - Plans take into account seasonality of use and 'fall-back' functions of land areas during droughts and other extreme events.
- ✓ Develop Resource and Land Use Plans for individual Forest Reserves to minimise and/or mitigate conflicts.
- ✓ Fencing is an effective way of conflict management, but it interferes with wildlife mobility and the tourists' wilderness perception. It is also costly. Therefore, fencing should be avoided as much as possible, and it should not be permitted in wildlife abundant and wildlife migratory areas.
- ✓ Adherence to lease conditions of the allocated ecotourism rights and the code of conduct for good management practices.

- ✓ Establishing and enforcing periods for commercial harvesting of thatching grass and salvage timber to minimise conflicts with ecotourism.
- ✓ Basing on good faith and mutual respect and through adaptive resource management, discussions and agreements between the affected parties to resolve conflicts should be encouraged.
- ✓ Promoting in neighbouring communities of the planting of indigenous species which play an important role in community household economy such as fruits and medicinal plants, which can go a long way in off-setting public interest in forest resources as well as empowering communities in regenerating the biodiversity of the area. It can also promote indigenous tree planting as part of ecotourism in the Forest Reserves.

Principle 2: Local benefits from Forest Reserves, in particular ecotourism, must be tangible to the local population and should exceed the benefits from traditional agriculture and other rural livelihood sources in order to reduce encroachment into Forest Reserves.

Guideline 3: Local communities should, where possible, be encouraged to participate in natural resources management by granting them user and development rights in high potential spots through establishment of community based organisations (CBOs), in accordance with the CBNRM Policy. To be granted exclusive rights, communities should:

- ✓ Form legal entities;
- ✓ Develop resource management plans for their respective areas;
- ✓ Apply for resource rights from the relevant authorities; and
- ✓ Submit annual reports.

Communities should also be encouraged to establish Small, Micro and Medium Enterprises (SMMEs) to operate tourism activities like craft making, guide tours, cultural events, and transport services. Both CBOs and SMMEs may seek support and mentoring from Local Enterprise Authority (LEA) and Citizen Entrepreneurial Development Agency (CEDA), in the development of plans, their management and financing.

Guideline 4: Local communities and their individual members have the option to exploit the resource rights themselves or engage in joint venture partnerships with commercial partners. Joint venture partnerships are encouraged as the strengths of companies and local communities are pooled together and they have the potential to generate more benefits. The partnership must however:

- ✓ Be based on trust and mutual respect; and must
- ✓ Make sure that both parties benefit while they carry corresponding responsibilities; and that
- ✓ Offer security for each partner to ensure investment;
- ✓ Ensure that local partners learn skills and experiences from companies, like marketing and tourism facilities' operations, and similarly, companies take an interest in the traditional knowledge and culture, craft skills, and in advancing capacity of the local communities as long term partners.

Guideline 5: Where user and development rights have to be directly granted to commercial companies, it must be done with the condition that they guarantee significant benefits for local communities, such as:

- ✓ Employment generation;
- ✓ Tourism related community activities like cultural villages, traditional dances, cultural crafts;
- ✓ Participating in the supply of goods and services;
- ✓ Use of local produce, and products; and
- ✓ Training and skills development.

Principle 3: Leakages of economic benefits from the Forest Reserves should be reduced to ensure more local benefits, by making better use and improvement of local supplies and services.

Guideline 6: Involve local communities in all areas of the development of ecotourism, since many local communities have a strong tradition of respect for wildlife and natural environments.

Guideline 7: Ecotourism's main pillars are community involvement in all areas of the development of the ecotourism product. Local communities should therefore be advised on the importance of appreciating and maintaining the authenticity of local natural and cultural heritage. This can be achieved by:

- ✓ Using their respective traditional knowledge systems to explain to the tourists the natural and cultural heritage and history behind them.
- ✓ Being involved in product development and marketing strategies because they are better placed to decide what an acceptable portrayal of their community is.
- ✓ Interacting with tourists at formal settings, but opportunities should be created for tourists to interact with the local community in unstructured way.
- ✓ Assessing community strengths and weaknesses and designing strategies to overcome weaknesses and maximise strengths.
- ✓ Using Information Centres for tourists to provide feedback on community owned tourism products.
- ✓ Developing local community participation plans for effective implementation.
- ✓ Develop education and awareness raising programmes, as well as Codes of Conduct for communities, operators and tourists.

Resource Conservation and Management Principles and Guidelines

Principle 4: Forest Reserves must be managed to conserve and utilise their biodiversity, vegetation and fauna.

Guideline 9: Forest Reserves management for ecotourism should be comprehensive and holistic based on the notions of the ecosystem approach and sustainable development. It should aim for multi-utilisation and conservation of biodiversity of the Forest Reserves. Their management should be a continuous process with at least the following features:

- ✓ Focus on biodiversity conservation and maintenance, in particular conservation of tree and plant species, wildlife migratory routes, water and soil resources;
- ✓ Active participation of local stakeholders, that is communities, enterprises and NGOs;
- ✓ Have constructive management plans and staff for each Forest Reserves;
- ✓ Balance resource use and conservation;
- ✓ Ensure fair sharing of the cost, benefits and responsibilities of resource use and conservation; and
- ✓ Apply adaptive management, with an emphasis on research and learning lessons from successes and failures.

Guideline 10: Appropriate measures should be put in place to increase the FR management capacity and expertise.

Guideline 11: Measures should be put in place for FR research in order to improve the understanding of the Forest Reserves ecosystems, to show their importance and value for providing economic and ecological services and to monitor its conditions.

Guideline 12: Measures should be put in place to carry-out education programmes, including an information and educational centre, to further popular appreciation of Forest Reserves and the need for their careful utilisation and conservation for ecotourism.

Guideline 13: Sufficient financial resources must be mobilised to ensure biodiversity conservation and utilization and ecotourism activities. Therefore, a funding strategy needs to be developed to seek greater contributions from the private sector, resource users and/or the global community (e.g. through GEF).

Principle 5: Consumptive use of natural resources, such as harvesting of veld products and timber, must be controlled and remain below the level of natural regeneration.

Guideline 14: Resource Management Plans need to be developed and implemented. These Management Plans must comply with all District Plans (e.g. land use, development, settlement Plans and tourism) and with all relevant national policies, strategies and legislation.

Guideline 15: Ecotourism activities and infrastructure in FRs will be developed in accordance with the Limits of Acceptable Change (LAC) and the precautionary principle.

Guideline 16: Reserve managers and staff should address and cover a broad range of areas, particularly:

- ✓ Resource management (biodiversity, trees, plants and wildlife)
- ✓ Operators and visitor management
- ✓ Personal, legal and financial management
- ✓ Awareness about and commitment to management plan/ strategy
- ✓ Link management strategy and plan to annual performance assessment
- ✓ Commitment to improving livelihood and living conditions outside the Forest Reserves

Guideline 17: Ecotourism activities must be fully integrated in the management of Forest Reserves. The management of different types of forest products within the ecotourism Forest Reserve has a major influence on biodiversity in the area. It is important to ensure that multi-uses result in patterns of natural resources that provide conditions suitable for biodiversity conservation.

Principle 6: Forest Reserves must be managed within the broader context of land use planning in Chobe district and neighbouring countries to recognise and protect their regional importance, in particular wildlife migration.

Guideline 18: Trans-boundary conservation initiatives should be incorporated into the management of the Forest Reserves and ecotourism. Similarly, ecotourism development in FRs shall be included in trans-boundary conservation initiatives such as KAZA.

Guideline 19: International commitments for the conservation of genes, populations, species and groupings of species and habitats should be reflected in the legal and regulatory frameworks guiding the allocation and use of land for Forest Reserves for ecotourism.

Guideline 20: Special measures must be put in place for species and populations that are nationally or internationally recognized as rare, threatened or endangered occur in or adjacent to forest management areas.

Principle 7: FR ecosystems must be managed within the limits of their functioning under long-term management objectives.

Guideline 21: Clear objectives for Forest Reserves and ecotourism should be formulated in consultation with all stakeholders.

Guideline 22: An inventory of natural and cultural features and sites should be established in consultation with all stakeholders.

Participatory Principles

Principle 8: Resource management should be participatory between government, the private sector, and communities; multi-disciplinary; and decentralised to district government, local authorities, local communities, and Forest Reserves.

Guideline 23: Strong networks and an integration of strategic decision making and planning for management of forests for their range of benefits and values should be established. The institutional structure and responsibilities should be specified in the Management Plans of each Forest Reserve, and Forest Reserves Management Advisory Boards should be established with representation from the main stakeholders, including representation from research and educational institutions, with following attributes in mind:

- ✓ The Department of Forestry and Range Resources should retain a central role in the management of the biodiversity of the Forest Reserves for ecotourism. Other stakeholders should take up responsibilities depending on the status of the Forest Reserves.

- ✓ Long-term strong political commitment is however required for sustainable forest ecotourism to be successful. All political leaders, including the Councillors, Members of Parliament, Cabinet Ministers and Party Activists, should be actively involved in all forest ecotourism programmes.
- ✓ Traditional leadership should also be actively involved in forest ecotourism, in particular, in reviving and tapping on indigenous knowledge for natural resource management, because historically, they played an important role in traditional management initiatives that helped preserve natural resources.
- ✓ The private sector should become the engine for future economic growth because it has the resources and skills to develop ecotourism and can act as mentors to ecotourism CBOs and SMMEs. In order to contribute to ecotourism and the development of communities, the private sector needs to operate in a secure policy environment to warrant investment and sharing of skills. The private operators should therefore be granted sufficiently long leases.
- ✓ Communities should be involved at all stages of project development from planning, selection of sights to be developed to marketing and monitoring of ecotourism and resource impacts, since they are the custodians of natural resources and have used the resources successfully. Ecotourism can benefit from indigenous knowledge systems to sustainably utilise the forest resources.
- ✓ NGOs and the Civil Society should be encouraged to continue in assisting government, in environmental management, and fostering sustainable natural resource management, and also may help arbitrate contested resource claims.

Guideline 24: Strong and effective partnerships between the private sector, government and communities should be encouraged for successful development of ecotourism in the Forest Reserves, since they are essential because of the different roles and responsibilities as well as the different strengths and weaknesses of stakeholders.

Guideline 25: A Forest Reserve Management Advisory Committee (FOREMAC) should be established with representatives from the public/parastatal, private, and civil society (communities and NGOs), with the task to monitor the implementation of the Forest Reserve Management Plans and the stakeholder partnerships.

Principle 9: The objectives of management of land, water and living resources are a matter of societal priorities and choices, including affordability.

Guideline 26: Local communities should, in the management and protection of natural resources in Forest Reserves ecotourism, be actively involved in decision making in particular with regard to their local needs and priorities.

Guideline 27: Local communities should also have access rights to natural resources and other benefits subject to sustainable conservation of natural resources and environment.

Principle 10: The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

Guideline 28: There is need to monitor overall resource conditions of the Forest Reserves for ecotourism, including individual resources, biodiversity, and the integral ecosystem, as well as the activities of resource managers, tourists, tour operators and communities. Key performance indicators should be developed to form the basis for monitoring and evaluation.

Guideline 29: All stakeholders should participate in the monitoring and evaluation in order to create a sense of shared responsibility. Where required, there should be capacity building, since participatory monitoring often reduces enforcement problems.

Guideline 30: Familiarisation of all stakeholders with relevant Conventions, national legislation and policies, and local regulations as well as their respective roles as users of the forests should be part of the monitoring exercise. This forms the basis of monitoring of compliance of the conventions, national legislation, and local regulations governing resources utilisation, and ensures that ecotourism is within least acceptable change.

- ✓ Private sector is well equipped with information and has resources to contribute to research, promotion of environmentally sound ecotourism, and environmental education in the district. It should therefore use forest ecotourism for the benefit of the forest ecosystem and forests should be managed for that purpose. Communities would measure the private sector against their involvement with the public, and would appreciate of making them participate in forest fires management.
- ✓ Department of Forestry and Range Resources should coordinate monitoring and evaluation of vegetation resources, while Department of Wildlife and National Parks should coordinate monitoring and evaluation of wildlife resources. Botswana Tourism Board should coordinate monitoring and evaluation of ecotourism. Department of Forestry and Range Resources should however be overall responsible for coordination of monitoring and evaluation for Forest Reserves ecotourism.

Guideline 31: Department of Forestry and Range Resources should enter into partnerships with other Government agencies, the local communities, the private sector, NGOs and other stakeholders, in monitoring compliance of governing rules and fighting illegal activities in Forest Reserves. Such partnerships will mobilise additional capacity.