



Sectoral Integration of Biodiversity in Botswana

Contents

1. Introduction	2
1. Level of integration of biodiversity into sectoral and cross-sectoral strategies and plans	2
Biodiversity Policy	2
Status of the National Biosafety Framework (NBF)	3
Biosafety Capacity in Botswana	4
2. Description of process used to integrate biodiversity into sectoral and cross-sectoral strategies and plans	5
3. Adoption of ecosystems approach	5

1. Introduction

Botswana reported¹ on level of integration of biodiversity into sectoral and cross-sectoral strategies and plans, including biodiversity policy, status of the National Biosafety Framework (NBF), biosafety capacity in Botswana; description of process used to integrate biodiversity into sectoral and cross-sectoral strategies and plans; adoption of ecosystems approach.

1. Level of integration of biodiversity into sectoral and cross-sectoral strategies and plans

Biodiversity Policy

Integration of biodiversity into sectoral and cross-sectoral strategies and plans is taking place but not in a consistent manner, as there is no over-arching policy or legislation to say that this should be done. The policies and strategies relating to fields under the jurisdiction of the Ministry of Environment, Wildlife and Tourism are more likely to include biodiversity considerations in their strategies and plans. The Department of Tourism, for example has made it its mission to ensure and promote sustainable tourism. This goal is now clearly outlined in the recently reviewed Tourism Act, and measures have been put in place to promote sustainable tourism (Modukanele, 2009)

Environmental legal structures can only be effective instruments for the conservation and protection of natural resources when political will and the necessary resources for implementation support them. This makes it extremely difficult to coordinate and enforce the requirements for the protection of habitat areas of biodiversity resources. This therefore calls for a more coordinated and single composite Biodiversity Policy.

Issues of biotechnology, GMOs and indigenous knowledge, require specific and detailed legislation to regulate them. There is need for a strong legislative framework to regulate access and ownership of biodiversity resources and the associated issues of *ex-situ* collections and bio piracy. An Access and Benefit Sharing strategy is needed to guide the use of biodiversity resources. In particular, there is need for precise definition and guidelines respecting biodiversity resources, identification of the various kinds and components of biodiversity that are to be protected, definition of the scope of coverage of biodiversity, and most significantly, the harmonization of Botswana national laws on environment generally and biodiversity in particular with international environmental normative standards. Thus

¹ Botswana (2009). Fourth National Report to the Convention of Biological Diversity, May 2009, 104 pp.

there is need for provision of strong and effective institutional framework for the conservation, management and protection of biodiversity resources and a need to make sure that environmental legislation is not lagging behind that of other countries in the region.

It is in this aspect that the Department of Environmental Affairs (DEA) in collaboration with the Environmental Support Programme (ESP) has scheduled formulation and development of a composite Biodiversity Policy for the 2009-2010 financial year. To date, an issues paper has been developed and the modalities on how this will be executed are still being worked out.

The CBNRM policy, which also falls under the Ministry of Environment, Wildlife and Tourism, was approved in 2007. The policy covers all natural resources including wildlife, forests and veld products. The CBNRM Policy is intended to guide and facilitate the strengthening of, and support to, existing and future CBNRM activities (DWNP, 2009). There are however some good examples of where cross-sectoral integration that have been practiced at project level. The development of the Okavango Delta Management Plan is probably the best example (See Box 1).

Status of the National Biosafety Framework (NBF)

Although biotechnology in general is a powerful tool towards sustainable development, with great potential benefits, there are uncertainties and possible risks associated particularly with the application of modern biotechnology. Issues of concern that have been associated with the application of modern biotechnology are on the safety of its products for human consumption, and the impact on the environment, as well as non-safety or social possible effects.

CBD refers to the regulation of Biotechnology in Articles 8(g) and 19. Article 19(3) calls for parties to consider modalities of a protocol setting out appropriate procedures including advance informed agreement in the field of safe transfer, handling and use of any Living Modified Organisms (LMOs) resulting from modern biotechnology. In response to Article 19(3) a decision was made during the fifth COP in 1995 to develop a protocol on biosafety. CBP was therefore a direct international legal response to the CBD, contributing towards the conservation and sustainable use of biological resources. The protocol was to specifically on transboundary movement of any biotechnology products resulting from modern biotechnology that may have adverse impact on the environment and human health.

The Botswana National Biosafety Framework is currently at a draft stage. The goal of the policy is to regulate and monitor the application; and promote the development of biotechnology by ensuring the

application of biosafety measures to guarantee the protection of biological resources, to ensure sustainable use of biological resources, protection of human health, and to minimize the adverse socio-economic impacts of biotechnology. Objectives have been set to achieve the goal and strategic target set to contribute to the realization of the set of objectives.

The framework consists of three components; the first component being an overview of the background that went into developing the NBF, the second being the Biosafety & Biotechnology Policy for Botswana and the third being the Biosafety Draft Bill. The policy articulates the position of Botswana regarding the different areas that can be impacted by biotechnology and biosafety activities, and these include the areas of agriculture, commerce and industry, education, environment, health and ethics.

The Biosafety Draft Bill expounds both the policy and the Cartagena Protocol on Biosafety (CPB) to practical measures and activities that can be implemented to achieve intended objectives of the policy and CPB. It contains all essential elements for biosafety legislation such as the objective, the subject matter of regulation, the measures to be taken for modern biotechnology application, risk assessment and management, monitoring and evaluation and the relevant institutional framework.

The framework recognizes and emphasizes the Precautionary Principle in the regulation of any undertaking for the import, contained use, release or placing in the market of Genetically Modified Organisms (GMOs) and their products.

Biosafety Capacity in Botswana

Three national workshops on Biosafety Clearing House were conducted between May and October 2008. The main objective of the three day workshops was to introduce the Biosafety Clearing House to relevant stakeholders, particularly those that will become National Authorized Users (NAU) with the procedure of registering information into the BCH. Institutions that participated in the workshops include Ministry of Health, Department of Plant Protection, Department of Environmental Affairs, Botswana Unified Revenue Services and the Department of Agricultural Research. About forty people from the above mentioned institutions participated in the workshops.

Through hands-on exercises and guidance by the facilitators to register information in Biosafety Clearing House website as National Authorized Users (NAU) and publish information as National Focal Point (NFP), participants were able to familiarize themselves with proper usage of the BCH mechanism so that they could implement it in their work related to biosafety.

A national awareness workshop was conducted in June 2008. The main objective of the one day workshop was to raise awareness at national level about biosafety information issues and to publicize the BCH. A total of about fifty people attended the workshop and included participants from media, university lecturers, scientists and researchers as well as delegates from non-governmental organizations.

2. Description of process used to integrate biodiversity into sectoral and cross-sectoral strategies and plans

There is currently no process in place to integrate biodiversity into sectoral and cross-sectoral strategies and plans apart from the National Development Planning framework, which include chapters on environmental concerns, but not specifically biodiversity concerns. A district State of the Environment Reporting system to link with local planning processes by providing specific indicator data and environmental trends has recently been developed, but it is not being implemented as of yet.

3. Adoption of ecosystems approach

The Ecosystem Approach has been adopted in theory in Botswana through Strategic Target number 2.3 of Botswana's Biodiversity Strategy an Action Plan, which clearly states that measures should be taken to put "effective ecosystem management practices in place".

In line with this, ecosystem management guidelines for land use planning in Botswana have been drafted. These operational guidelines focus on the following:

- Functional relationships and processes within ecosystems
- Enhanced benefit-sharing
- Use of adaptive management practices
- Scale appropriate management practices, with decentralization to lowest level as appropriate
- Intersectoral cooperation

The proposed steps to be included into the into the formal land use planning process in Botswana are shown in Figure 1.

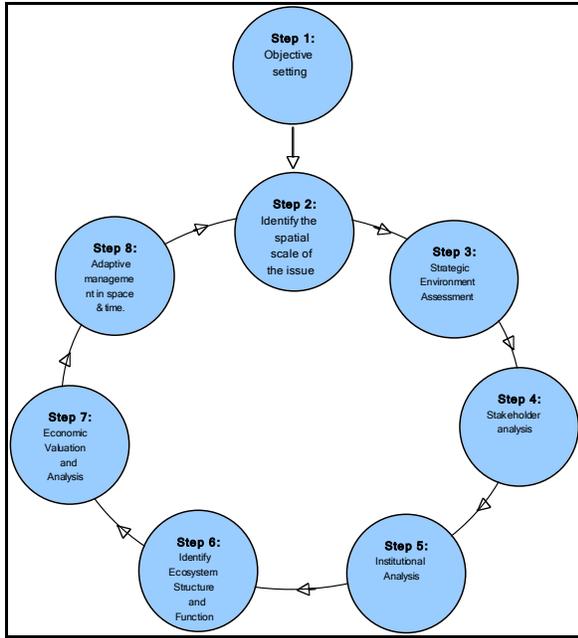


Figure 1: Steps in Applying Ecosystem Approach to a Planning Issue (DEA, 2009)

The guidelines should be used in accordance with relevant legislation such the EIA Act, Tribal Land Act, Agriculture Resources (Conservation) Act and others and in accordance with the Revised District Planning Handbook 2008. In order to effectively and rapidly mainstream the Ecosystem Approach into district land use planning there is urgent need to build and enhance knowledge, awareness and understanding of the ecosystem approach concept and how to apply it in terms of planning.

The coordination role will be taken by the Department of Environmental Affairs (DEA). Concrete examples of major conservation initiatives practicing the ecosystems approach include the recent development of the Okavango Delta Management Plan, the Biokavango Project and the ongoing development of the Makgadikgadi Management Plan.

Box 1: The Okavango Delta Management Plan

The Okavango Delta Management Plan

The Okavango Delta Management Plan (ODMP) was published in 2008. It is the result of a 5 year project aiming to “to integrate resource management for the Okavango Delta that will ensure its long-term conservation and that will provide benefits for the present and future well-being of the people, through sustainable use of its natural resources”

The ecosystem approach provided guidance in categorizing management interventions into three thematic areas or subsystems. This enables an integrated resource management planning approach in implementing management interventions.

Through the ODMP the Ministry of Environment, Wildlife and Tourism has demonstrated the possibility for integrated natural resource management and actual testing of the principles of ecosystem management of a key wetland system. The participatory planning and consultation principles embraced during the development of the ODMP have brought the broad environmental planning into some appreciable level and has enhanced cross-sectoral planning.