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# Effective Implementation of NBSAPs: Using a decentralized approach

Guidelines for Developing Sub-National Biodiversity Action Plans

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# Foreword

Article 6 of the Convention on Biological Diversity (CBD) requires Parties to develop a national biodiversity strategy and action plan (NBSAP) as a roadmap for each country's fulfilment of the objectives of the Convention. The NBSAP should provide the overall framework for national implementation of the three objectives of the Convention, through action for the conservation and sustainable use of biodiversity and the equitable sharing of benefits arising from the utilization of genetic resources. It should form part of the country's overall sustainable development strategy.

The Conference of the Parties (COP) provided initial guidance to Parties on the development and implementation of NBSAPs at its second meeting in 1995. The NBSAP process in each country should involve periodic review, to take account of the experience of implementation to date, and updating that incorporates additional guidance from COP, improved scientific understanding and socio-environmental assessment. The latter should derive in large measure from the increased participation of stakeholders in the NBSAP. Experience has shown that NBSAPs developed in isolation from other sectoral policies and programmes are ineffective in protecting biodiversity and the integrity of critical ecosystem functions. The NBSAP should serve as a key element in national and sub-national policy development and planning processes and should result in demonstrable mainstreaming of biodiversity concerns. Its implementation should be ensured through adequate and appropriate human and financial resources as well as agreed procedures and timetables for its periodic revision.

Despite their obligations under the CBD, which came into force in 1993, the most recent report (as reported by Secretariat to the Working Group on Review of Implementation) indicates that 147 Parties (77%) have finalized their NBSAPs or equivalent instruments. Twenty-four Parties have informed the secretariat that they are preparing their NBSAP. Nineteen Parties have not prepared an NBSAP or initiated the process to do so, or have not informed the Secretariat that they have done so.

Even amongst those countries that have developed and are implementing their NBSAP, there is unsatisfactory implementation. There are large, diverse countries for which a broad NBSAP has been unable to mobilize sub-national action. Stakeholder consultations have been a major part of NBSAPs preparation; however, the range of stakeholders involved is often inadequate to ensure effective ownership of NBSAPs or to ensure mainstreaming of biodiversity beyond the environment community or larger national institutions. Similarly, reference to the ecosystem approach is absent from most NBSAPs.

Of course, a comprehensive (global review) of NBSAPs implementation is now timely given that it has been 15 years since the CBD's obligations came into force. However until such global review is undertaken, regional reviews and national experiences provide some lessons which can guide further action. This publication advocates the development of sub-national biodiversity action plans (BSAPs) as a planning solution to the weaknesses of a large national planning and implementation process. Decentralized planning and management has been implemented in varying extent in South Africa, Ecuador, India and various large, geographically and culturally diverse countries. The experiences from these countries and reviews of their NBSAP implementation inform the guidelines that are proposed by the author on how to foster sub-national conservation action.

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# 1. Introduction

The Rio Summit of 1992 marked the beginning of a new era of environmental awareness and biodiversity conservation throughout the world. One hundred and fifty six nations signed the Convention on Biological Diversity (CBD) that was introduced during the Summit. Over the decade that followed, more than 180 countries ratified the convention, committing to abide by the convention in that each signatory (Contracting Party/ Country) would recognize its biological diversity as sovereign property, and strive to conserve, sustainably utilize and equitably share the benefits arising from such utilization.

In order to conserve, for future generations, the biological wealth that nature has bestowed upon earth, CBD (Article 6) requires that each Contracting Party *'develops national strategies, plans and programmes, or adapts existing plans, to address the provisions of the Convention; and to integrate biodiversity work into sectoral and cross-sectoral plans, programmes and policies'*.

Many countries have already prepared or are in the process of reviewing such National Biodiversity Strategy and Action Plans (NBSAPs). Whereas NBSAPs can never be the ultimate guide to biodiversity planning, they have opened a range of pathways to effectively deal with implementation of CBD provisions and decisions of COPs, they are a national umbrella framework to guide conservation action that is supported by sustainable use and sharing of resources and benefits. Some NBSAPs lead to a reduction in biodiversity loss. However, in large, culturally diverse countries where governance is decentralized (to sub-national authorities) the national frameworks appear to lead to little localized action.

## 2. Developing and implementing NBSAPs: lessons and future challenges

Years of experience gained throughout the world while developing forest conservation/management plans, protected area plans, wildlife protection laws/policies, hunting regulations, design and management of nature reserves, captive breeding and reintroduction of endangered species and others were synthesized into 'conservation strategies'. And until CBD finally brought to light the need to not only conserve biological resources but also sustainably utilize them, such that the benefits derived are fairly shared amongst the users and the local custodians, these conservation strategies served as the guidelines for nature conservation alone.

Conservation strategies evolved rapidly as the nations gained more experience from their own efforts as well as that of their neighbors. Regional concerns and issues were often similar underlining the need for regional cooperation and sharing of experiences. Attempts to help biodiversity conservation planners in sourcing and sharing information have resulted in compilations such as a '*Resource Kit for Biodiversity Planners*' (Balakrishna, et al, 2001). This publication provides summaries of the various strategies and action plans prepared by countries, global strategies and thematic strategies such as wetlands, endangered species, economic valuation, agrobiodiversity, etc. In addition it provides a comprehensive bibliography of biodiversity and addresses of institutions worldwide involved in various biodiversity related activities, research and services including web-links.

CBD in Article 6 gives countries the options of drafting fresh NBSAPs or adapting existing ones of wider scope including concerns of sustainable use (through integration of other sectors) and equitable sharing of benefits. Much before most nations started the process of preparation of NBSAPs, specific guidelines were prepared. Since these were based on early experiences of preparing conservation strategies and not all countries have had the same level of experience, the need for step-by-step guidance for preparing NBSAPs became inevitable (eg., Miller and Lanou, 1995).

To this end, the undated manual by Roy T, Hagen viz., '*A Guide for Countries preparing National Biodiversity Strategies and Action Plans*' is a significant contribution. And judging by the structure of the NBSAPs that have already been prepared, it is quite clear that Hagen's document has provided the framework for the process. In particular, it seeks to offer help in the following:

- Define the required versus optional content of NBSAPs;
- Define the options for how to organize for the preparation of a NBSAP and present advantages and disadvantages of each option;
- Provide guidance on the required versus optional studies that need to be conducted as part of the stocktaking and assessment phase along with model outlines and TORs for key studies;

- Provide guidance on methodologies for the identification, analysis and selection of options for strategy development with emphasis on stakeholder participation in the process;
- Provide guidance for the development of action plans for strategy implementation.

Earlier analyses of countries' NBSAPs reveal several important lessons. Jeremy Carew-Reid (2002) has summarized the challenges for NBSAPs development in Asia. Tanzania and Ecuador face similar challenges, both in process and in the final scope or quality of the strategy and action plan. These lessons include:

- Political instability leads to greater biodiversity loss;
- Land tenurial reforms and ownership/user rights are vital to community management of biodiversity;
- Decentralized biodiversity management should be supported with adequate capacity and mechanisms for conflict resolution and the equitable sharing of benefits;
- Decisions affecting people's economic and social well-being should be based on a transparent and participatory process which provides information for constructive debate;
- Cross-sectoral integration NBSAPs is necessary for long-term impact.

Assumptions are made when developing national biodiversity strategies and action plans. The development and implementation processes often challenge these assumptions. They include:

- Economic growth is good for biodiversity conservation;
- Biodiversity conservation reduces poverty;
- High population density is bad for biodiversity conservation;
- Protected areas are good for biodiversity conservation;
- Local communities hold the key to biodiversity conservation.

In addition to conceptual assumptions, practical challenges faced in the implementation of NBSAPs include:

- Translating the NBSAP into local level action;
- Integrating the various local level needs and demands within the broad priorities of the NBSAP;
- Ensuring state and local government continuous support for local initiatives;
- Sensitizing the development and industrial sectors on the NBSAPs concerns and incorporation of these concerns and possible responses into their business planning.



### 3. Summary of constraints and gaps based on assessments of sselect countries NBSPs

#### 3.1 Pakistan

Pakistan adopted its National Biodiversity Strategy and Action Plan in August 1999. Despite experiences of implementing conservation strategies at national and provincial levels, implementation of the NBSAP faces several challenges. These include:

- Lack of political will;
- Lack of coordination among government departments;
- Integrating biodiversity into sectoral policies and plans;
- Absence of legislative reforms;
- Lack of technical expertise;
- Insufficient finances;
- Lack of community-based initiatives.

The challenges of NBSAP implementation can be easily grouped as limitations of the development process itself and gaps identified by the process.

Limitations induced by the process	Major gaps identified by the process
<ul style="list-style-type: none"><li>• Lack of specific local actions;</li><li>• Non-representation of various stake-holders in the development process;</li><li>• No involvement at the grass roots level;</li><li>• Financial constraints (priorities).</li></ul>	<ul style="list-style-type: none"><li>• Insufficient information on the status of regional biodiversity resources;</li><li>• Low awareness about biodiversity;</li><li>• Lack of technical expertise;</li><li>• Weak knowledge base.</li></ul>

*The important lesson learnt from the NBSAP process is that there should be greater involvement of local authorities and people.*

A few essential elements to be included, *inter alia*, in the review process of implementation of NBSAP in the country could be:

- Developing provincial level biodiversity action plans (BAPs);
- Decentralizing biodiversity management decision-making;
- Promoting participatory integrated planning;
- Developing incentive measures to increase local communities involvement;
- Addressing access to genetic resources and benefit sharing, biosafety and traditional knowledge protection;
- Economic valuation of protected areas (PAs);
- Financial resource mobilization for implementation of NBSAP.

## 3.2 Vietnam

Shortly after approving the National Plan for Environment and Sustainable Development in 1991, the Ministry of Forestry and the State Committee of Science began the Biodiversity Strategy and Action Plan (BSAP) development process for Vietnam. Drafting began in 1993 and in 1995 the Plan was adopted.

*The long-term objective of the BSAP is to protect the rich and unique biodiversity resources within the sustainable development framework of Vietnam.*

Major limitations of the BSAP are (adopted from Jeremy Carew-Reid, 2002):

- The BSAP preparation involved a broad group of stake-holders, but international consultants and conservation community led the process; and
- The BSAP encourages relevant sectors to integrate biodiversity conservation into their planning process, but provides no direction on how this is to be done.

The BSAP review in October 1998 revealed several shortcomings. These include:

- Need to define institutional roles more clearly;
- Need to improve coordination among government agencies;
- Lack of equipment, training and administrative capacity;
- Lack of comprehensive policy and regulatory framework;
- Information contained in BSAP is outdated and needs revision;
- Need to review institutional arrangements for biodiversity conservation;
- Need to develop provincial BSAPs based on ecoregions;
- Need to develop thematic BSAPs for :
  - a) Marine pollution monitoring and control;
  - b) Investigation of status of offshore fisheries;
  - c) Forest product border controls;
  - d) Management, protection and conservation of various nature reserves and ecosystems.

Several areas require greater emphasis in the BSAP. These include:

- Education and awareness;
- Watershed management;
- Freshwater and marine biodiversity;
- Multiple use conservation areas;
- Collaborative management;
- The impacts of industry on biodiversity;
- Wildlife trade;
- Access to genetic resources;
- Benefit sharing;
- Impact of tourism on biodiversity;

- Impact of land tenure on biodiversity;
- Incorporation of biodiversity concerns in EIA;
- Effects of economic and other incentives on biodiversity;
- Ecosystem management approaches;
- Alien invasive species.

### 3.3 China

China's experience in implementing the NBSAP is well documented. Realising the constraints of implementing a single national NBSAP, authorities at provincial and municipal levels began developing provincial level BAPs. One of the first in this series is the Dujiangyan BAP developed in 2003. This action plan classifies the sub-region into 7 broad ecosystems including urban areas and mineral/industrial economy.

Assessment of this Provincial BAP indicates that the authorities considered the need to link/integrate sub-national BSAP with China's major Plans viz., China 21 Agenda, China's Biodiversity Conservation Action Plan, Agricultural Action Plan, National Ecosystem Construction Plan and other relevant development plans.

While outlining the general objectives, the provincial BAP stresses the need for developing proper conservation ethics which involves:

- Inheriting and carrying forward Chinese traditions of biodiversity conservation;
- Educating the public;
- Building scientific and technological capacity in biodiversity;
- Building capacity in information exchange.

It recommends the establishment of regulatory body/office/statutes and integration of biodiversity into government development plans, EIAs and local government/community projects.

The provincial BSAP stresses the need to improve *in situ* conservation of species and ecosystems, especially in Longxi-Hongkou Nature Reserve, through control of alien species, restoration of degraded natural habitats, captive breeding and reintroduction and a biodiversity sensitive community development.

It also highlights the need to strengthen research capabilities for ecosystem inventories and monitoring.

It emphasizes the need to conserve agricultural and forest genetic resources through the establishment of a genetic resource conservation base and popularizing the use of local agricultural resources.

The Action Plan further provides specific recommendations for:

- Longxi-Hongkou Nature Reserve;
- Riverine Ecological Region (wet Sezhwan Region);
- Qingcheng Mountain and surrounding forests;
- Agroecosystems;
- City and market town;
- Qingchengqiao industrial region, Puyang-jifung industrial region and Zipingpu irrigation project region.

### **3.4 Tanzania**

Tanzania initiated its NBSAP preparation in March 1998. The Plan seeks to:

- Ensure sustainability, security and equitable use of biological diversity to meet the basic needs of the present and future generations by developing and implementing a holistic NBSAP for the conservation of biological diversity and sustainable use of its components;
- Coordinate the planning and implementation of a biodiversity conservation program at all levels by ensuring that relevant activities harmonize with those of other government and non-governmental organizations, private sector, religious groups, communities and other civic organizations;
- Institutionalize the practice of biological conservation and the sustainable use of resources through legislative, administrative, fiscal and other regulatory measures at all levels;
- Promote public education and understanding of the values and benefits of biodiversity conservation and of the merits of sustainable development;
- Enhance capacity through formal and informal education, training, research and institutional facilitation and financing;
- Enhance and facilitate collaboration between national and international community for the sustainable utilization and conservation of biological resources.

*Tanzania's NBSAP is an important tool for setting priorities in future formulation of environmental policies.*

Tanzania's NBSAP's implementation in the two coastal districts of Pangani and Bagamoya yielded several important lessons. An assessment indicates that it is important to have harmonized information and appropriate guidelines to assist district authorities in development and implementation of sub-national BSAPs. There is the need to focus on broad thematic areas: aquatic biodiversity, agrobiodiversity and terrestrial biodiversity. Under these themes, it is easier to identify the biodiversity threats.

It has been recommended that district level BSAPs should be implemented within the context of the Local Government Reform Programme (LGRP). Key features of the LGRP that will increase the effectiveness of the BSAPs are:

- Decentralization of local government personnel by integrating them in the local council and administration;
- Streamlining of central government agencies and ministries by changing their roles to policy development, regulation, standards setting, compliance, monitoring and enforcement;
- Bringing service management and provisions closer to local communities;
- Facilitating public participation in planning and executing programmes and fostering partnership with civic groups.

### **Box 1: Decentralization: Tanzanian experience**

In Tanzania, districts constitute sub-national planning units with legal mandates in economic development and biological resources management as provided in the Local Government (District) Authorities Act, 1982 and the Local Government Miscellaneous (Amendments) Act, 1999. The Local Government Reform programme is part of the Public Sector Reform whose objectives are to improve the performance of the public sector, to increase accountability and enhance the delivery of services.

The existing Local Government Programme provides the framework for local community participation. This thus provides a strategic architecture with existing processes through which district level BSAPs can be implemented.

## **3.5 Ecuador**

Ecuador adopted its National Biodiversity Policy and Strategy in June 2001.

*The National Biodiversity Policy and Strategy acknowledges that biodiversity is vital to the good quality of life of present and future generations in Ecuador.*

The key biodiversity threats in Ecuador are:

- Alteration, fragmentation and destruction of habitats and ecosystems caused mainly by deforestation;
- The excessive exploitation of the wild fauna and flora and fish resources
- The introduction of exotic species;
- The contamination of water, soil and air caused mainly by the inappropriate use and disposal of garbage and waste water, fertilizers and pesticides, and toxic substances;
- Social and economic factors linked to the deep economic crisis that the country has been going through and which is manifested in the high levels of unemployment and poverty.

The challenges in implementation of the Policy and Strategy include:

- NBS is a technical and not a political document;
- Lack of definition of priorities;
- Poor diffusion of NBS;
- Absence of a unified vision of government;
- Absence of information about the impact of the actions of NBS on the economy of the country;
- Environmental issues are seen as opposing ideas in development concerns dealing with production, health and education;
- Conservation and management of biodiversity are not acknowledged as a need;
- Linkages between biodiversity/species richness and environmental degradation have not been highlighted;
- Decision-makers and key players do not have access to relevant information on biodiversity;
- Local concerns do not match with issues identified by technical investigators;
- Environment has not been projected as the starting point for discussion;
- People fail to see the urgency in conservation and management of biodiversity;
- Terms of office of administrators and policy-makers are short;
- Local governments do not give much value to biodiversity as it does not bring in political advantage;
- Political concern for biodiversity is limited to the extent that it brings revenue;
- Lack of clarity/competence among local environmental authority especially amongst those outside protected areas.

### **Box 2: Decentralization: Ecuadorian experience**

State decentralization processes were promoted in Ecuador since the end of the 1980s, and more concertedly with the passing of the '*Law of State Modernization, Privatization and Provision of Public Services on the part of Private Enterprise*' in 1993.

In October 1998 the "Law of State Decentralisation and Social Participation" was passed which proposed the "definitive transfer of functions, attributions, responsibilities and resources, especially financial from the Central Government entities to the Autonomous Regional Governments, for the purpose of sharing resources and services in accordance with the needs of the different territorial areas" (Article 3).

The "New Constitution of the Republic of Ecuador" passed in August 1998 fortified the process by creating a larger legal framework; and so Articles 225 and 226 of the Political Constitution of the Republic stipulates that the Central Government will progressively transfer functions,

attributions, competency, responsibilities and resources to the autonomous Regional Governments.

With regard to the municipalities, Article 9 of the Law of Decentralisation indicates that the following responsibilities will be transferred to the municipalities:

### **Environment**

- To control, preserve and protect the environment. The municipalities will insist on the necessary environmental impact studies for the execution of the infrastructure work that is carried out within their territorial division.

### **Natural reserves**

- To keep watch over and take action to protect the integrity of the designated natural areas such as conservation and ecological reserves;
- Prevent, avoid and resolve the negative environmental impacts that may arise or be caused by the execution of road works carried out within the respective provincial area.

The Law contains proposals for decentralizing the State administration but it requires secondary laws for implementation. To date, no regulations have been elaborated; however, various consultations are defining the real scope and procedures for decentralization.

The Ministry of Environment has promoted the decentralization process. It has signed the Framework Agreement for the Transfer of Competencies with the Confederation of Provincial Councils (CONCOPE) and on February 21, 2001, the Ministry signed agreements with 18 municipalities. These municipalities would take responsibility for the prevention and control of environmental contamination, a function that lay with the Central Government. Furthermore, the municipalities and provincial councils would establish the legal, technical, economic and sanctioning documents if they are not less strict than that stipulated in the Law of Environmental Management.

### **Local planning**

Since 1993, the Association of Municipalities of Ecuador (AME) developed their local planning processes. Initially there were training events on territorial ordinance to support local governments. This evolved into cantonal problem solving through the elaboration of local development plans.

Starting in 1996, AME proposed a pilot model for the Local Development Plan, which has been modified, at least twice. The methodological proposal of AME is called 'Local Participative

Planning', which provides plans for:

- Strategic planning - for the institutional and territorial area. The territorial areas include the priority areas of contamination, environmental risks and special areas. In this planning process the priority issues are defined beforehand;
- Social participation – for socio-cultural inclusion; and
- Sustainable development – for productive areas.

The elaboration of the Local Development Plans is the responsibility of consultants contracted by the AME and public participation is confined to the supply of information on issues, the causes and possible solutions.

Before 1996, the planning process was 2 years now it is 4 months. An improvement in the institutional capacity, increase in assessment experience and lack of financing for a lengthy process led to the reduction in time.

### **3.6 Summary of country experiences**

- Countries including Pakistan, China, Vietnam, Tanzania and Ecuador that have prepared NBSAPs have acknowledged the need for sub-national BSAPs.
- Sub-national BSAPs are particularly relevant to countries that are large and with diverse landscapes, ecosystems and cultures. Under such circumstances, the projected needs/priorities of the country are often not the best reflection of the felt needs of the local communities.
- Adoption of an overly technical process has led to the poor or weak representation of the local conditions and locale-specific needs in the NBSAPs.
- Countries that lack adequate capability/scientific manpower, have nominated too many bureaucrats in the steering committee/working group. There has been little scope for a fair and participatory peer review of the draft BSAP.
- NBSAPs have failed to facilitate the involvement of varied social systems, including systems of class, caste/ethnic differences and gender segregated cultural practices that predominate sub-national geo-political units.
- Such omission undermines CBD's mandate viz., equitable sharing of benefits that arise from the use of biodiversity.
- The limitations of the NBSAPs reviewed are mainly weaknesses of the NBSAP development process.



- NBSAPs are not ends in themselves. They are the beginning of a long-term process of participatory biodiversity conservation and planning. They are often meant to be state-of-the-art reports/reference materials of the country's biodiversity and relevant policies. Such a realization permits adapting/modifying national recommendations to suit specific sub-national geo-political units through a process of continuous dialogue with local communities and stakeholders.
- The need for step-by-step process guidelines for preparing BSAP and directions for integrating sub-national BSAPs with NBSAPs and other environmental and sectoral policies/programmes has been strongly felt/expressed.

## 4. Elaboration of key concerns/issues

Countries that have reviewed their NBSAPs have highlighted key issues that need to be translated into sub-national action plans and *vice versa*. These issues are elaborated in the section that follows providing ways for effectively incorporating them in the strategies and clues for stepwise implementation of the action plans at the geo-political unit of interest.

### 4.1 Decentralised management of biodiversity

Federal governments are in the process of devolution of powers to enable local level decision-making in a wide range of development issues in many countries. For instance, mining leases and auctioning of lakes and tanks for aquaculture may be controlled by the local village heads. Village Forest Committees can be established with the powers of deciding on the type of trees that are used in afforestation programmes in and around the villages. Government sponsored programmes for watershed development and management must initiate the process of training and empowering village-level Watershed Committees to sustainably manage watersheds in rural areas. Nominated or elected Community Biodiversity Authorities, with powers to regulate access to local genetic resources, and Community Biodiversity Monitoring Committees established throughout the country can immensely support decentralized management options. Not all governments have initiated the process of establishing local authorities that manage natural resources. However, lessons learnt from the experience of countries that are doing so can help the process of decentralization. See Boxes 1 and 2 for Ecuador and Tanzania's experiences in decentralized planning.

#### **Box 3: The case for decentralized planning and decision-making**

The case for establishing the planning capacity of local rural government is based on the following assumptions (adapted from South Africa Department of Land Affairs, 1997).

- With the tighter fiscal environment, there will be a need for better informed resource allocation, based on accurate district-level market and economy data;
- National government expenditure will continue to be apportioned between provinces and departments who will reallocate funds to province-level activities. It must be assumed that implementing departments will wish to see these allocations used rationally in order to achieve their particular policy objectives (eg. Metropolitan Drinking Water Supply, to facilitate the provision of water in sufficient quantity and quality for human needs; or the Department of Education, to provide equitable access to educational opportunities). Further, line departments must be prepared to consider constructive and well formulated proposals coming up from local government level;

- It can also be assumed that revenues raised by the local authorities will be allocated to services selected by the elected Councillors. And, again, that efficiency of resource allocation can be improved by, for example, better coordination of the work of national and provincial government and local authorities;
- It is reasonable to assume that NGOs and other non-statutory service providers will agree to some coordination and direction by local government, provided that it is in the interests of the people they aim to serve and in line with the conditions imposed on them by their funding agencies;
- Finally, community leaders can be assisted by officials of field departments in the improvement of living conditions, especially when they work together to solve particular problems at the community level.

### **Box 5: Issues in local level planning**

The degree to which decentralized planning will be feasible at local government level (primary or secondary level) in rural areas is not yet clear. There is, in any case, expected to be basic tension between the vertical organization of line departments and local government attempts at horizontal coordination. Vertical loyalties are much more powerful, particularly when a local government's coordinating efforts are not buttressed by adequate discretionary funding, i.e., taxes, levies and duties as well as other sources, including subventions from provincial and national government. Indeed, the scope for local level planning will be closely related to the discretionary resources available (adapted from The Department of Land Affairs, 1997).

The South African experience provided by The Department of Land Affairs (1997) raises a number of questions:

- To what extent will power over resource allocation, both between and within national and provincial departments, remain centered at national and provincial levels? To what extent will the municipal level be able to influence the budgetary process? Will the essence of the system be one of requests traveling up the system and decisions being transmitted downwards? Will feedback on requests that are passed up the system fail to flow back down to the local communities?
- Will the national and provincial government's expenditure estimates be disaggregated for district planning? Will districts have a clear understanding of what they can expect in terms of capital allocations channeled through national and provincial departments?
- Will municipalities have access to reliable data on development expenditure by NGOs and community groups for planning purposes?

- At what local government level would planning be most practicable – primary local government level or at secondary level (i.e., district)?
- Would the District Planning Unit (or any other appropriate for the sub-national geopolitical unit proposed) be funded by the provincial or district council budget? Who would appoint the staff?
- What will be the link with community level planning?

## **4.2 Government instability**

In federal governments, environmental concerns vary between provincial or state governments. This often renders trans-boundary conservation ineffective. Natural resource management officers are vulnerable to transfers with short notices. Rarely does an officer serve a continuous term of 3-5 years in the same department. The changing outlooks, priorities and capacities stress the implementation of long-term projects that are crucial to conservation and sustainable use of biodiversity.

The effects of the political instability of governments are not easily circumvented. There are countries constantly striving for economic growth through industrialization and others where the highest priority is defense research and development. The best officers and ministers are diverted to these priority areas. Statutory bodies such as ‘authorities’ and ‘boards’ where government officers are at best ‘ex-officio’ members are increasingly viewed as the viable alternative to manage biodiversity programmes.

## **4.3 Land tenure, ownership and community rights**

Land tenure, ownership and rights of use are important to the processes of local level participation in any land or water-based development programmes. Community meetings in many biodiversity rich landscapes have highlighted how sensitive these issues are. Local communities are unwilling to cooperate in any joint management plans unless they are the owners of the land or waters and that the benefits that arise out of the project will be shared.

Discussion meetings with local communities and the forest department officials on the issue of tenure, ownership and user rights in many countries have often suggested that participatory management of natural resources (including biodiversity) is best done in non-forest land and outside areas legally protected. A common response that is obtained from the officials of the forest departments is ‘forestry and wildlife are our concern; biodiversity is something that we are unable to comprehend’.

Joint Forest Management (JFM) efforts in India have provided a number of lessons on the extent to which communities can cooperate with forest departments. Over 20 states in India have formally adopted JFM as a model of participatory biodiversity conservation. However there are limitations. Communities are not content with user rights over forest-land. They want the land for themselves. The choice of trees is often biased towards fast-growing exotics. Biodiversity conservation is merely incidental. Conservationists are hence unable to accept JFM as a good model of biodiversity conservation, sustainable use and equitable sharing of benefits. Nevertheless, JFM has been one of the most widely accepted models of participatory forestry. It is seen as a means of diverting human pressure from natural forests in biodiversity rich areas by providing alternate livelihood options for the forest-dwellers and rural poor.

#### **4.4 Local capacity building**

Capacity to both document and monitor changes in biodiversity, locally, is crucial to planning and implementation of BSAPs. This is however a major constraint in many countries rich in biodiversity. Daniel Janzen's Costa Rican model of training 'para-taxonomists' is quite a well-known capacity building enterprise. Whereas most countries would like to have their taxonomic capabilities strengthened, the entire exercise is best seen as a long-term investment. It is virtually impossible to train resource persons within the short time that BSAPs are drafted. Local capacity building should therefore be a parallel initiative that should be integrated with the BSAP process. Capacity building exercises should focus on the following:

- Improving skills in identifying species and biological communities;
- Enabling a better understanding of ecosystems – boundaries, functions and services;
- Increasing capability to appreciate the value of biodiversity;
- Providing clues to recognize changes in the local environment, using biodiversity as a tool;
- Monitoring biodiversity loss.

Field experience throughout the world indicates that local communities are well aware of their surrounding biodiversity and often, the resources economic, cultural and ecological values. With the exception of some rare organisms (especially invertebrates), most species have specific local names. In the past, classical taxonomy failed to acknowledge this capacity in communities. The frequently projected 'lack of information on biodiversity' is just the reflection of the gap between the local communities and the scientifically trained systematists. Efforts to bridge this gap have taken many forms including encouraging local people to document the biodiversity in their neighborhood in their own language. Resource mapping exercises (when carefully carried out) involving local children, youth and hunters/farmers/fisherman have brought out surprisingly large amount of rather reliable information on the biodiversity in remote areas.

Local children, youth and elder men and women can easily be induced to talk about their surroundings through resource mapping and non-destructive field inventorying exercises. Wherever there are schools and colleges, the teachers can be guided into carrying out these simple biodiversity exercises. Models of 'community biodiversity registers' or 'people's biodiversity registers' is gaining popularity. These registers document in local languages (where there are written languages) simple maps of the neighborhood, seasons, availability of wild fruits, medicinal plants, etc. Although there are arguments that such registers can offer scope for intellectual property rights violation and biopiracy, especially when details of habitat, range and use of medicinal plants are documented, through the creation of awareness on these socio-political issues, local human communities can effectively guard their valuable biological resources. Wherever attempted, biodiversity registers have proved to be valuable tools in addressing all the issues listed above and those people who have participated in the exercise have simultaneously been trained.

#### **4.5 Transparency in local decisions and people's participation**

Adopting a transparent process of local decision-making and participation is vital to the formulation and implementation of any viable action plan. Transparency can be achieved through appropriate dialogues involving as many social groups and stakeholders that are likely to be affected by the conservation plan. The participatory process may begin at a group/public meeting where the scope of the intervention is introduced in the simplest possible way. This is where the role of community organizers, social workers, extension workers and sometimes interpreters and a generous use of posters/charts and other visual aids become inevitable. The process should provide opportunities to all the participants to ask questions and debate on the proposal. More than one such meeting may be required before consensus is reached on the need for the proposed intervention. In instances where the participants have alternate views, it is important that the process is sensitive to such ideas and suggestions. The proposal should be adaptive as it is less cumbersome and more economical to revise a proposal to suit local needs at the time of planning itself than modify it after it has been formally launched.

#### **4.6 Reviewing existing biodiversity and development policies**

Though the term biodiversity may be just a decade old, concern for dwindling natural resources and species have contributed to the drafting and adoption of scores of nature conservation plans and policies over the past century throughout the world. Alternately, there have also been development plans and policies that have completely ignored species, habitats, ecosystems and nature's services. Wherever such dichotomy exist, they have to be reviewed in the context of the geo-political unit that the BSAP targets.

Plans and policies in conflict with biodiversity are often those that concern agriculture and food production, animal husbandry and livestock productivity, waste disposal, trade and transport,

fisheries and aquaculture, plantation forestry, mining, tourism, industrial growth and employment generation and defense research and training. Even conservation plans and policies drafted in the past, at least those drafted before the 1972 Stockholm Conference, have largely ignored the need to sustainably utilize biodiversity and share the benefits equitably. In some parts of the world, intrinsic value of biodiversity and the concept of 'Deep Ecology' have had much more impact than others. In light of these issues, the biodiversity policies and plans should be carefully reviewed.

To start with, plans and policies may be classified as those that directly target biodiversity and those that do not. The latter set can be further classified as those that completely ignore biodiversity and those wherein biodiversity is addressed in one form or other eg., mandate to create a green belt, establish vegetation cover to buffer hydroelectric projects, manage landscapes adjacent airports and defense establishments, plant trees in open-cast mined areas to control soil erosion, wind belts along beaches, solid waste disposal and natural composting, golf courses, etc. Out of these sets, the policies and plans most relevant to the conservation area should be studied and analyzed.

Such an analysis will help in identifying and highlighting plans and policies that favor biodiversity but have been ignored/suppressed and those plans and actions that are detrimental to biodiversity yet likely to be implemented.

#### **4.7 Updating information and adapting local plans**

Information on any aspect of biodiversity can never be complete. Not only has it to be updated but also action plans based on such information need adaptations/revisions. However, considering the expense, time and manpower that are involved in reviewing such information and plans, it is important that some reasonable timetable is adopted.

Problems of outdated information not only hamper biodiversity planning but also the preparation of socio-political profiles of impacts of resource use. Considering the limitations in the availability of current and up-to-date information, it is important that the action plans are somewhat flexible. Further, the BSAP's implementation process should be adaptive to the local conditions as there may even be situations where the administrative boundaries of sub-national units are revised and the authorities changed (eg., a unit being shifted from the ministry of environment and forests to ministry of agriculture or vice versa) at very short notice. In this context, it is often more practical to plan short and medium-duration action plans that do not exceed 5 years, than long-term programmes. Long-term plans gain support from governments only if they are linked to their visions like 'poverty alleviation', 'safe drinking water', 'food for all', 'hill area development' and 'evergreen revolution' for the 21<sup>st</sup> century and sectoral mandates such as increasing the forest cover to 33% by 2015, increasing the coverage of Protected Areas to 10% by 2020, etc.

### Box 5: Typical sources of secondary data on conservation and development

General sources	Specific sources	Types of secondary data
Government agencies and institutions	Local councils, elected bodies, administrative offices	Voter lists, regional and local development plans
	Technical services (agriculture, fisheries, forestry, enterprise development, extension services)	Project reports, monitoring and evaluation reports, activity records, minutes of planning and coordination meetings, reports on enforcement activities
	Health and social services Enforcement agencies (police, coast guard, fisheries and environmental protection)	Population data, health reports Records of conflicts, legal action, enforcement activities
	Land registries	Land use surveys, records of auctions and leasing of government lands, land value assessments
	Statistical services	Census data, statistical survey data (livestock, etc)
	Archives and museums	Historical details, maps
Non-governmental organizations (eg. environmental organizations, fishers' cooperative, tourism development association)	NGO offices	Census data, statistical survey data
	Project offices	Project reports, appraisals, needs assessments, monitoring and evaluation reports
	Religious organizations	Lists of populations and congregations
Universities	Natural science departments	Maps, satellite images, research reports
	Social science departments	Research reports, social impact assessments
	Libraries	Historical documents, research reports
Private collections	Amateur collectors, retired officials of relevant departments	Maps, photographs, herbaria, insect collections, checklists of birds and other animals, geological material
Websites	Sites for the above organization	Maps, satellites, background information

(Source: Adapted from Bunce et al, 2000)



## **4.8 Trans-boundary cooperation**

Trans-boundary management plans and cooperation are important when dealing with sub-national units such as watersheds, protected areas and wildlife reserves. Major trans-boundary disputes on water sharing and conservation have often led to breakdown of mutually agreed conservation and development plans.

Several issues that are likely to affect biodiversity such as river pollution, wildlife trade, fire, wildlife diseases transmitted by free-ranging cattle and poaching, to list a few, call for committed trans-boundary cooperation and management. Cooperation does not readily take place in democracies and federal governments due to different political interests at sub-national level, their mandates and priorities. Trans-boundary issues can be effectively addressed only if they become national concerns. This does not rule out the need for adequate participation and dialogue during the BSAP planning process. What is implied is that having identified contentious yet critical trans-boundary issues, the intervention of the national government or authority should be sought if the implementation has to be effective. National programmes and policies targeting endangered species, animal trade, invasive species have to be appropriately highlighted while addressing trans-boundary issues in sub-national BSAPs.

## **4.9 Linkages between poverty and biodiversity**

Poverty is often cited as the root cause of biodiversity loss. Conversely, it is argued that by enhancing the biodiversity wealth of region, poverty can be alleviated. In reality however, there may be more situations where the linkages between poverty and biodiversity are far too complex and less clearly defined than imagined.

Poverty is itself a relative phrase and the kind of assets that qualify as wealth vary from place to place. Economic tools that are conventionally used to assess poverty are often biased towards material wealth and income levels that deprivation in the real sense is not reflected in the assessments. Several issues can be listed for starting a debate on the linkages between poverty and biodiversity such as:

- The poor do not destroy biodiversity since their needs are limited;
- The poor are used as agents of destruction by the rich;
- If biodiversity has to be conserved, some communities need to stay poor;
- Economic development cannot be achieved without an impact on biodiversity if not locally then elsewhere;
- The relative impact of poverty is felt more by women.

These are popular notions that have led to the planning and implementation of several programmes throughout the world, including designing of Poverty Reduction Strategy Papers

(PRSPs), the Millennium Development Goals (MDGs). There is however very little data that clearly establishes the linkages so that lessons learnt can be replicated in terms of how biodiversity corresponds to poverty reduction and sustainable development.

The greatest challenge in implementing NBSAPs is in reflecting the countries' local level development. The process should adopt a socio-ecological approach (with trained personnel) if the real issues that determine local poverty and its linkages to biodiversity have to be fully understood. Efforts must be made to identify the real pathways and address each as a specific issue in the NBSAP if it has to be effectively implemented.

South Africa, for instance, has developed a 'Framework for Rural Development' (The Department of Land Affairs, 1997). It acknowledges that a 'dynamic process of combined government action, with the participation of people in rural areas, must be set in motion to realize a rapid and sustained reduction in absolute poverty'. It outlines the following strategies that can help in achieving rural development:

- Helping rural people set the priorities for development in their own communities, through effective and democratic bodies, by providing access to discretionary funds, by building local capacity to plan and implement local economic development;
- The provision of physical infrastructure and social services (eg., water and sanitation, transport, health services and schools);
- Wider access to productive resources in the rural areas, especially through:
  - a) Land tenure reform, land redistribution and land restitution;
  - b) Extension of water supplies, and the reform of water laws to protect the rights of down-stream users;
  - c) Rural financial services for investment in rural livelihoods;
  - d) Periodic systems as the organizing and coordinating framework for rural activities (spatial and temporal) for investment in trade, service delivery, transport and information – thus raising incomes for rural men and women by providing opportunities for increasing farm and non-farm production in poor areas; and
- Ensuring the safety and security of the rural population.

## 5. Relationship between national and sub-national BSAP

Experiences in developing NBSAPs highlight the need for local or regions specific biodiversity strategies and action plans. However, how different can sub-national BSAPs be? National Biodiversity Strategies and Action Plans (NBSAPs) are prepared after 2-3 years of rather painstaking research, deliberation and documentation. To set these efforts aside and start all over again on a sub-national BSAP can be a great burden for any country. Moreover, such an effort would undermine the national effort by sending waves of mistrust amongst those who were involved in the preparation of the NBSAP as well as the public.

A sub-national BSAP should be a supplement to the NBSAP to be effective. Broader issues identified as national priorities can at best be thematic in sub-national plans. Similarly, thematic issues such as sustainable livelihoods perhaps addressed more theoretically, can be further defined and explored on the sub-national level. Mismatches between both plans are not necessarily contradictions however.

Experiences in Latin America highlight the clash of interests between national government and local communities on issues such as cocaine production and coca cultivation. The national governments are committed (often due to international pressure) to curb cultivation of coca and use of cocaine. However, this has hurt the sentiments and upset the daily life of many Amerindian communities. At a 1997 Biodiversity Forum in Colombia, representatives of Amerindian communities expressed concern over the government's anti-cocaine policies. The native culture entwines the plant and drug as painkiller and facilitator of spiritual communication.

Several countries acknowledge that NBSAP implementation places a heavy burden on national resources. The demand places an unrealistic expectation on the national budget allocations, which are already rationed. Sub-national plans can reduce this national budget burden if they develop in consultation and coordination through provincial/ district authorities on the premise that implementation will be decentralized. However, burden sharing can be effective only when the broad national concerns are translated into focused local action and where the broader concerns seem locally irrelevant sub-national plans should highlight the best or more appropriate alternatives.

The advantages of sub-national plans over broad national plans are:

- A national policy framework is a good process to highlight national priorities and action; however, it cannot specify and prioritise actions at local levels. Sub-national strategies can do this and can feed into the national policy framework;
- National implementation is a mammoth task of coordination and would require considerable human, institutional, administrative and financial resources. This action would tend to centralize and bureaucratize structures, be a heavy burden on resources at

the national level, not realistic of current budget allocations, and would be an unrealistic waste of scarce resource;

- Sub-national strategies can better involve the public at large for the sustainability, acceptance and ownership of conservation initiatives;
- Sub-national implementation would be a more effective and efficient means of coordination among and between government departments as well as between government and various stakeholders;
- Sub-national strategies tend to be better internalized among sub-national governments, as they are more reflective of local needs and realities. This helps clear impediments to implementation;
- Sub-national strategies can provide better exchange of knowledge and sharing experience, contributes to both individual and institutional capacity building;
- The task of reviewing sub-national strategies is not as cumbersome as national strategies, and hence the ease in identifying gaps, reprioritizing issues and monitoring progress.
- Sub-national strategies and governments are more aptly placed to involve local communities in the conservation effort;
- Sub-national strategies are better placed to provide a legal framework for conservation as well as integrate environmental concerns into development policies and plans.

### Box 6: Learning from NBSAPs

Phase	Step	Action	Suggestions/Clues
Getting organized	1	<ul style="list-style-type: none"> <li>• Establish steering committee</li> <li>• Identify coordinating agency</li> <li>• Identify consultant(s)</li> </ul>	<ul style="list-style-type: none"> <li>• The steering committee will oversee the process (civil servants, bureaucrats, senior scientists, community leaders)</li> <li>• The coordinating agency will actually initiate and coordinate the process of preparing/ drafting the BSAP (scientists, <b>*NGOs, managers, religious institutions,</b> *community organizations, etc)</li> <li>• Consultants are specialists/experts on the various ecosystems and thematic/cross-cutting issues identified</li> </ul>

	2	Seek funds	<ul style="list-style-type: none"> <li>• International agencies</li> <li>• National agencies</li> <li>• National government</li> <li>• State government</li> <li>• Private donors</li> <li>• Corporate sector</li> <li>• <i>Voluntary contributions (small scale)</i></li> </ul>
Stock-taking and assessment	3	Identify sub-national geographical/political unit	<ul style="list-style-type: none"> <li>• Eco-regions</li> <li>• Provinces</li> <li>• States</li> <li>• <i>Districts</i></li> <li>• <i>Watersheds</i></li> <li>• <i>Ecologically sensitive areas</i></li> <li>• <i>Protected areas</i></li> </ul>
	4	Prepare a geo-political profile of the unit	<ul style="list-style-type: none"> <li>• Biogeography</li> <li>• Ecological history</li> <li>• Demography</li> <li>• Broad land uses</li> <li>• Livestock assessment</li> </ul>
	5	Identify major ecosystems within the geo-political unit	<ul style="list-style-type: none"> <li>• High altitude/montane</li> <li>• Wetlands</li> <li>• Mangroves</li> <li>• Coral reefs</li> <li>• Deserts</li> <li>• Grasslands</li> <li>• Rainforests</li> <li>• Traditional agriculture</li> </ul>

6	Identify specific themes/cross-cutting issues of direct relevance to the geo-political unit	<ul style="list-style-type: none"> <li>• Endangered species</li> <li>• Endemic/rare species</li> <li>• Agrobiodiversity</li> <li>• Biotechnology</li> <li>• Bioprospecting</li> <li>• Introduced species/GMOs</li> <li>• <i>Gender roles</i></li> <li>• <i>Livelihoods</i></li> <li>• <b>Poverty alleviation</b></li> <li>• Population</li> <li>• <b>Communication &amp; education</b></li> <li>• Urban biodiversity &amp; sustainable cities</li> <li>• <b>Cultural heritage</b></li> <li>• <i>Governance</i></li> <li>• Capacity development</li> <li>• <b>Trade</b></li> <li>• <b>Tourism</b></li> <li>• <b>Economic valuation</b></li> <li>• Ecosystem services</li> <li>• <b>Trans-boundary conflicts</b></li> <li>• <i>Human animal conflicts</i></li> <li>• <i>Water-sharing</i></li> <li>• <i>Endemic human/livestock diseases</i></li> </ul>
7	Review the state-of-art information on the ecosystem & thematic/ cross-cutting issues within the geo-political unit identified	<ul style="list-style-type: none"> <li>• Published literature</li> <li>• Electronic databases</li> <li>• <b>Unpublished reports</b></li> <li>• <b>Thesis</b></li> <li>• Newspaper/popular articles</li> <li>• <i>Oral histories</i></li> </ul>
8	Prepare a comprehensive bibliography on the biodiversity of the geo-political unit	<ul style="list-style-type: none"> <li>• Published</li> <li>• Unpublished</li> </ul>

	9	Identify/review major biodiversity initiatives-completed/ongoing	<ul style="list-style-type: none"> <li>• National programmes</li> <li>• Provincial/state initiatives</li> <li>• Community forest management</li> <li>• International programmes (eg., Birdlife International, Ramsar, World Heritage Sites, MAB-Biosphere Reserves)</li> </ul>
	10	Review relevant sectoral programmes	<ul style="list-style-type: none"> <li>• Pollution control/solid waste management</li> <li>• Highways development</li> <li>• <i>Irrigation</i></li> <li>• <b>Hydroelectricity</b></li> <li>• <i>Pest control</i></li> <li>• <i>Health/family planning</i></li> <li>• <b>Animal husbandry</b></li> <li>• Exim policies</li> <li>• <b>Mining</b></li> <li>• Oil and natural gas</li> </ul>
	11	Review other relevant environmental policies	<ul style="list-style-type: none"> <li>• Environment Protection Act/Laws</li> <li>• CITES</li> <li>• Climate change</li> <li>• Animal welfare</li> </ul>
Definition of priorities and objectives	12	Organize brainstorming meetings (Note: all the people need not gather at the same time; parallel/separate meetings of various levels can be organized)	<ul style="list-style-type: none"> <li>• Scientists</li> <li>• Managers</li> <li>• Policy-makers</li> <li>• <b>Administrators (local)</b></li> <li>• <b>Line departments</b></li> <li>• Amateur naturalists</li> <li>• <i>Community organizations</i></li> <li>• <i>Religious groups/institutions</i></li> <li>• <i>Local people</i></li> </ul>
	13	Identify major gaps that emerge through Steps 4,5,7&8	<ul style="list-style-type: none"> <li>• Information/data</li> <li>• Capacity/expertise</li> <li>• <i>Implementation of earlier initiatives</i></li> <li>• <i>Sustainability of projects/research</i></li> <li>• <b>Adequacy of PAs/coverage</b></li> <li>• <b>Representativeness (PAs)</b></li> </ul>

	14	Prioritize actions (especially to fill gaps identified in Step 13)	<ul style="list-style-type: none"> <li>• Immediate</li> <li>• Short-term (5 years)</li> <li>• Long-term (10 years)</li> </ul>
Identification and analysis of options for achieving objectives	15	Identify linkages/ means of integration/ strengthening	<ul style="list-style-type: none"> <li>• Biodiversity initiatives</li> <li>• Other sectoral initiatives</li> </ul>
	16	Identify key actors/ players/stakeholders and seek their participation	<ul style="list-style-type: none"> <li>• Scientists</li> <li>• <b>NGOs</b></li> <li>• Traders</li> <li>• <i>Development organizations</i></li> <li>• <i>Local communities</i></li> <li>• <b>Religious groups</b></li> </ul>
Drafting strategy/ action plan	17	Outline a time frame/calendar of activity	<ul style="list-style-type: none"> <li>• Actual drafting</li> <li>• Peer review</li> <li>• Final draft</li> </ul>
	18	Suggest means for the effective implementation of action plan along with potential agencies/partners/ donors	<ul style="list-style-type: none"> <li>• R&amp;D institutions</li> <li>• Universities</li> <li>• <i>Local colleges/schools</i></li> <li>• <i>Research students</i></li> <li>• <i>Voluntary/religious organizations</i></li> <li>• <i>Women's groups</i></li> <li>• <i>NGOs</i></li> <li>• <i>Private sector</i></li> <li>• <i>Nature clubs</i></li> <li>• Naturalists'societies</li> </ul>
	19	Suggest a mechanism to coordinate the implementation and monitoring of the action plan's recommendations	<ul style="list-style-type: none"> <li>• <b>A permanent sub-national biodiversity authority/board with members including</b> <ul style="list-style-type: none"> <li>• Scientists</li> <li>• Managers</li> <li>• Administrators</li> <li>• <b>Local communities</b></li> <li>• <b>Religious institutions</b></li> <li>• Donor agencies</li> </ul> </li> </ul>



## 6. Guidelines for sub-national biodiversity strategies and action plans

There are several principles that should guide the development and implementation of sub-national BSAPs. These include:

- Sub-national BSAPs have a role to play in national and international efforts to ensure that biodiversity conservation, sustainable use and equitable sharing of benefits are together effectively implemented and that global environmental problems are solved;
- Conservation and sustainable use of biodiversity are essential to human well-being;
- Essential ecological processes and life-support systems must be maintained;
- Genetic and biological diversity of microorganisms, plants, animals and ecosystems must be conserved and promoted;
- Economic development and biodiversity conservation must be undertaken together;
- Community development organizations and the private sector are indispensable to finding practical solutions to the problem of conservation of biodiversity;
- Religious and cultural values must be respected and used as a resource in the design and implementation of BSAPs;
- Each citizen has a responsibility to the environment and can play a positive role in the conservation and sustainable use of biodiversity.

*(adapted from Anon. 1996)*

Stepwise guidance on developing the BSAP can be useful.

### Box 7: Guidelines for sub-national BSAPs

Step	Strategy/action	Suggestions
<i>Planning</i>		
1	Identify the sub-national geo-political unit for which the BSAP is being envisaged	This may be identified based on the priorities set in the NBSAP; it may focus on scales starting with ecoregions through states, districts or specific Protected Areas.
2	Suggest a time-frame over which the process of preparing the BSAP might take place	The preparation of a BSAP should not take a long time; it should be within a year or two. Longer duration of activities might distract from the primary focus and can lead to further delays or dilution of the purpose.

3	Identify appropriate source of funding for the BSAP	The funds may be derived from a single source or multiple sources: national or state governments, local administration, donors including major stakeholders, international agencies, etc. <b>Box 8</b> provides some tips for drafting funding requests.
4	Set out the goals and objectives	<p>Goal: conservation of biodiversity, sustainable use of biodiversity and equitable sharing of benefits that arise from the use of biodiversity.</p> <p>Objectives: maximize the area and representativeness of the ecosystem in focus; ensure such an action would benefit the local human communities. Protect the rare, endangered and endemic species of plants and animals; ensure such an action would not cause undue inconvenience or displacement of the local human communities but will instead recognize and involve them as guardians and beneficiaries of such biodiversity.</p> <p>Review earlier conservation initiatives – their successes and failures and develop workable models of biodiversity conservation, sustainable use and sharing of benefits based on experiences.</p>
5	Set out the time schedule for the process	Identification of stakeholders and partners (first quarter of the time frame). Brainstorming and participatory meetings to elicit reactions/response and commitments (second-third quarters). Drafting of the BSAP (final quarter). The quality of the BSAP will be greatly enhanced through a process of peer review. Set aside some time for this purpose before finalizing the BSAP.

**Process**

6	Stakeholder identification and participation	Stakeholders are often too many and subtle. It is only possible that the maximum number of stakeholders are involved in the process and implementation of the BSAP. An indicative set of stakeholders and their roles in biodiversity conservation and sustainable use is provided in <b>Box 3</b> . Stakeholders may be involved during the various stages of development of the BSAP. However, what is most effective is when they are involved throughout the planning, process and implementation of the BSAP.
7	Ensuring local-level participation in planning and implementation	Decentralized planning is necessary as <ul style="list-style-type: none"><li>• Data on local areas needed by national and provincial government planners is often unavailable or unrealistic;</li><li>• Significant ecological, ethnographic, demographic and historical variations exist within regions and districts;</li><li>• Local people have special knowledge about the development opportunities in their locality;</li><li>• Local-level involvement in planning can generate increased support and commitment, stimulate self-help, and mobilize local resources;</li><li>• Integration and overview are essential in development work;</li><li>• Establishing a planning capacity at the local government level and issues in local level planning are discussed in <b>Boxes 3 and 4</b>.</li></ul>
8	Identification of key issues for action	Key issues may be human-centered or biodiversity oriented. These issues need to be prioritized as those requiring immediate action, short-term action and long-term action. Long-term actions require greater commitment from stakeholders and should develop an inbuilt mechanism to monitor the implementation, progress and impact of the action (projects).

9	Evolving strategies to integrate biodiversity conservation and local development	<p>A participatory planning process (keeping in focus the key issues for action identified in <b>Step 8</b>) that involves local people needs assessment and prioritization.</p> <p>The use of an integrated biodiversity planning framework by local government and the coordinating committees that focuses on the requirements of users and makes a range of appropriate incentives available on a least cost basis.</p> <p>Integrating biodiversity planning with other local development initiatives such as land reform, residential development and capacity building.</p> <p>A capacity building programme at the community and local government levels, including biodiversity users, markets and middlemen, to empower people so that initiatives are need based and decisions rational and informed.</p> <p>Improved information on realistic options (adapted from The Department of Land Affairs, 1997).</p>
<b><i>Preparation of action plan</i></b>		
10	Review of secondary information	<p>Key issues identified in <b>Step 8</b> become most relevant when reviewed against historical background of biodiversity and development initiatives that addressed it directly or indirectly, their success and failures. Ideal sources of secondary data are provided in <b>Box 5</b>.</p>
11	Analysis of earlier management plans and legal instruments	<p>Establishes linkages with earlier plans (eg. NBSAP) and provides opportunities for cross-sectoral integration (eg., biodiversity conservation with forestry, with fishery, with animal husbandry or with integrated human/landscape development programmes).</p> <p>Assesses adequacy of legal instruments pertinent to the present BSAP.</p>

12	Drafting the action plan	<p>Organizing the entire material into broad sections in a clear and focused form adds credibility and appeal to the BSAP. Indicative sections are:</p> <ol style="list-style-type: none"> <li>1. Executive summary</li> <li>2. Acknowledgements</li> <li>3. Introduction</li> <li>4. Scope of the BSAP</li> <li>5. Goals and objectives</li> <li>6. Overview of the geo-political unit: biogeography, ecology (biodiversity profile), human demography, land use, agriculture and livestock</li> <li>7. Brief review of the process adopted in drafting the BSAP</li> <li>8. Review of ongoing initiatives</li> <li>9. Key issues/gaps identified</li> <li>10. Specific recommendations for actions on each of the issues/gaps identified including partnerships for implementation and possible sources of funding</li> <li>11. Recommendations for monitoring the implementation and impact</li> <li>12. Bibliography</li> <li>13. List of contributors</li> <li>14. Annexure: photos, maps, etc.</li> </ol>
13	Peer review of the draft action plan	This is an absolutely essential step and may be achieved through internet, circulation of draft and brainstorming.
14	Finalizing the BSAP	Consolidating the inputs of the peer review process and completing the BSAP. The BSAP is then placed before the national or state or local government for endorsement.

## 7. Implementing the sub-national BSAPs

Effective implementation of the Action Plan needs planning too. The following are tips for the coordination agencies in implementation of the sub-national BSAP. The table draws from Anon, 2002.

### Box 8: Suggestions for implementation of the sub-national BSAP

Step	Action	Suggestions
1	Spreading awareness on the Action Plan	<ul style="list-style-type: none"> <li>• Have the sub-national BSAP released by a popular person at a public meeting;</li> <li>• Circulate the plan (at least brief summaries) in local language amongst the masses;</li> <li>• Advertise the Plan through exhibitions, folk and popular media;</li> <li>• Integrate key elements of the sub-national BSAP into other ongoing education, literacy and awareness programmes;</li> <li>• Initiate a process of biodiversity training.</li> </ul>
2	Empower an institution or committee to oversee the implementation	<ul style="list-style-type: none"> <li>• The steering committee established for the coordination of the Action Plan can be empowered to play this role;</li> <li>• An exclusive local/district/state level Biodiversity Board may be established;</li> <li>• The existing local/village level administration such as the municipality may be entrusted with the responsibility;</li> <li>• An exclusive biodiversity department may be established in the lines of agriculture, forestry, fisheries, etc.</li> </ul>
3	Ensure integration of biodiversity into sectoral plans	<ul style="list-style-type: none"> <li>• Integration into annual or 5-yearly plans;</li> <li>• Integration with ongoing programmes that address issues of sustainable development;</li> <li>• Regular orientation courses for officials in line departments;</li> <li>• Periodic review of concerned line departments under the concerned minister or chief administrator;</li> <li>• Empowering the local administrative bodies implement those Actions relevant to the local level .</li> </ul>

4	Creating opportunities for political support	<ul style="list-style-type: none"> <li>• Endorse the sub-national BSAP by the concerned minister;</li> <li>• Create awareness amongst the local politicians;</li> <li>• Push biodiversity concerns as an election issue.</li> </ul>
5	Community actions	<ul style="list-style-type: none"> <li>• Commitment to continue livelihood measures and traditions that are ecologically friendly;</li> <li>• Organizing biodiversity fairs and festivals;</li> <li>• Self-empowerment to control and manage the natural resources around them.</li> </ul>
6	Develop project proposals for specific action	<ul style="list-style-type: none"> <li>• Indicate time-frame;</li> <li>• Implementing agency;</li> <li>• Indicative budget;</li> <li>• The proposal should justify the infrastructure requirement.</li> </ul>
7	Funding the implementation	<ul style="list-style-type: none"> <li>• Existing schemes of national or state governments;</li> <li>• Other national sources including the private sector;</li> <li>• International donors;</li> <li>• Creating an exclusive biodiversity budget line in state budgets;</li> <li>• Creating biodiversity budget heads in local level planning.</li> </ul>
8	Develop indicators for monitoring success/failure of project	<p><i>Positive indicators:</i></p> <ul style="list-style-type: none"> <li>• Improvement in people's perception, health and livelihood;</li> <li>• Improvement in biodiversity – species, habitats, communities;</li> <li>• Reduction in environmental degradation and pollution.</li> </ul> <p><i>Negative indicators:</i></p> <ul style="list-style-type: none"> <li>• Increased human-animal conflicts;</li> <li>• Resurgence of pests in agriculture and animal husbandry;</li> <li>• Reduction in livelihood opportunities;</li> <li>• An indifferent attitude to the project and lack of involvement of local communities.</li> </ul>

## 8. A road map for action

Given the broad scope of national biodiversity strategy and action plans, sub-national plans were proposed to energize sub-national action. Guidance was given to assist those countries that have prepared only national plans and are finding sub-national conservation ill-defined and the achievements immeasurable. The suggested framework for sub-national plans as outlined in the preceding chapters drew from the experiences of countries such as India. These experiences indicate that the relevance, design and scope of these plans should be based on each country's geography and planning structure. For large-scale (global or regional) action targeting multiple countries, a preliminary step would be a classification of countries into:

- Countries that have prepared their NBSAP;
- Countries preparing or updating their NBSAP;
- National Biodiversity Strategy and Action Plans that have included sub-national plans; and
- National plans without specific attention to sub-national plans or actions.

Multi-stakeholder inclusion and the ecological status of the target areas should both be heavily weighted in all sub-national biodiversity action plans.



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# Annex

## I: Analysis of obstacles

The country BSAPs that have been analysed while preparing the above guidelines have highlighted a number of obstacles faced in the preparation and implementation of the Plans. Earlier, Miller and Lanou (1995) have provided a list of obstacles that many countries had faced while preparing biodiversity strategies and action plans around the time CBD came into force. The following table reproduces the list provided by Miller and Lanou (1995) and comments on whether some of the obstacles faced about a decade ago still persist. This analysis becomes more relevant in the present context, as despite a lot of publicity and awareness on CBD, and the need to conserve and sustainably use biodiversity, through a number of instruments including scientific and popular books, television, public debates, round tables and international conferences (scientific and ministerial), biodiversity planners are faced with obstacles.

<b>Broad nature of obstacles</b>	<b>Specific obstacles (after Miller and Lanou, 1995)</b>	<b>Relevance to the present studies</b>
Institutional	Difficulty coordinating and integrating numerous stakeholders and their respective issues	High
	Poor coordination among government agencies and NGOs	Medium
	Lack of provincial and local perspectives in planning	High
	Lack of private sector involvement	High
	Difficulty in building interagency consensus	High
	Lack of trained scientific and managerial personnel	Medium
	Poor collaboration between the donor project team and in-country team	Low
	Lack of awareness of government agencies and local people	Medium
	Expense of ensuring broad-based, multi-stakeholder participation	Low
	Lack of communication between the scientific community and policy-makers	High
	Continual institutional change with economic restructuring	High

Scientific	Lack of research on biodiversity's role in ecosystems	High
	Lack of sufficient scientific and economic data	High
	Lack of trained biosystematics	Medium
	Lack of information management capacity	High
	Duplication of scientific effort	Low
Legal and policy	Lack of a strong policy framework and political commitment to its implementation	High
	Lack of data to support policy work	High
	Lack of capacity for policy analysis	Medium
	Lack of integration of environment and development in national planning	High
	Lack of well formulated environmental laws and regulations	Medium
	Need for economists' input	Medium
	Difficulty in determining the costs of biodiversity	High
	Lack of clear policies on land tenure	High
	Difficulty integrating indigenous land claims and interests into planning	High

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