

CHAPTER 1

Introduction to the NBSAP Process and to the National Plan

Humanity shares the earth with millions of other species. Many of our ancient spiritual and religious traditions have held that the earth was not made for human beings alone, but for all creatures. This moral tenet has been carried forward in today's times in various kinds of philosophical and activist work, such as the animal rights movement, or the concept of Gaia, the living earth. It is also the basis of modern conservation the fundamental (if often unstated) reason for the setting up of special protection measures for ecosystems and species.

But conservation of biodiversity is not just a moral imperative; it is also a selfish one from humanity's point of view. The well-being and survival of human populations is dependent on plants, animals and microbes. These include wildlife, as also species and varieties of crops and livestock. This biological diversity is part of our daily lives and livelihoods and constitutes the resources upon which families, communities, nations and future generations depend. Biodiversity is of great value in agriculture, medicine, food and industry. It maintains ecological balances and evolutionary processes, and also has cultural, aesthetic and recreational value. The ecosystem services rendered include hydrological balances, pollination, chemical cycling, nutrient cycling, soil maintenance and climate regulation.

The millions of species which constitute biodiversity have their own intrinsic value, as recognized by religions and faiths in India. Traditionally Indians have celebrated this diversity of life. Conservation and sustainable use of biodiversity is a concept ingrained in the Indian ethos and culture. Even today, millions of people derive their daily sustenance from forests, rivers, grasslands and seas. The practices and beliefs of forest-dwelling tribes, nomadic communities, fisherfolk and farmers remain closely intertwined with the biological diversity amidst which they live.

A number of factors, mostly related to human activity, have led to the severe loss of biological diversity. Proof of this loss is the extinction of some wild species like the Cheetah, and some domesticated plant varieties and animal breeds. This loss of biodiversity is resulting in greater water shortage, lack of fodder and fuel and other livelihood resources. And with this, there has been a serious erosion in the ecological knowledge base of people, especially local communities, and of the cultural values linking people with nature.

1.1 Background and Objective of the NBSAP

The National Biodiversity Strategy and Action Plan (NBSAP) process in India is an outcome of the widely felt need for a consolidated, comprehensive document on the direction that India should take for conservation and sustainable and equitable use of biodiversity and biological resources. It is also part of the country's commitments under the UN Convention on Biological Diversity. It is a project of Ministry of Environment and Forests (MoEF), Government of India, funded by the Global Environment Facility through the United Nations Development Programme (UNDP). A unique aspect of the project has been that the technical execution has been through a Technical and Policy Core Group (TPCG) coordinated by Kalpavriksh, a NGO. Administrative coordination of the project was done by Biotech Consortium India Ltd. (BCIL), a public limited company promoted by the Department of Biotechnology, Government of India.

India became a signatory to the Convention on Biological Diversity (CBD) in June 1992. The Convention came into force on December 29, 1993. Article 6 of the CBD requires parties to the Convention to prepare NBSAPs, including the integration of biodiversity conservation and sustainable use into various sectors, as the main instruments for implementation of the CBD at a national level. India's NBSAP has been prepared under this mandate.

In 1994, the Ministry of Environment and Forests (MoEF) initiated consultations with representatives from ministries, governmental agencies, NGOs and academicians for preparing a national action plan for biodiversity conservation. A core group, consisting of representatives from various governmental authorities and autonomous institutions under the Government of India, was constituted for this purpose.

Adopting a consultative process, the MoEF prepared a National Policy and Macrolevel Action Strategy on Biodiversity in 1999. This document is a macro-level assessment of gaps and a statement of policies and strategies needed for conservation and sustainable use of biological diversity. At this stage, a need was felt for a more detailed plan, including state-level strategies and actions. For this purpose, the MoEF accessed funds from the Global Environment Facility (GEF), through the United Nations Development Programme (UNDP), to start the process of preparing the NBSAP. In a unique move, the MoEF decided to request an independent, non-governmental body to carry out the technical coordination of the process. After examining proposals invited and received from a number of NGOs and institutions, MoEF assigned the technical execution of the project to Kalpavriksh. To aid in this, a 15-member Technical and Policy Core Group (TPCG) was set up. It consisted of professionals and activists from different parts of the country with expertise and experience in different fields related to biodiversity. The administrative execution was entrusted to BCIL.

In April 2002, while India's NBSAP was being prepared, the Strategic Plan of the Convention on Biological Diversity was finalised at the 6th Conference of the Parties at the Hague, as a vision for the implementation of the Conventions by 2010. Two operational goals of this Strategic Plan stated that:

- NBSAPs and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the Convention.
- There is a better understanding of the importance of biodiversity and the Convention, and this has led to broader engagement across society in implementation.

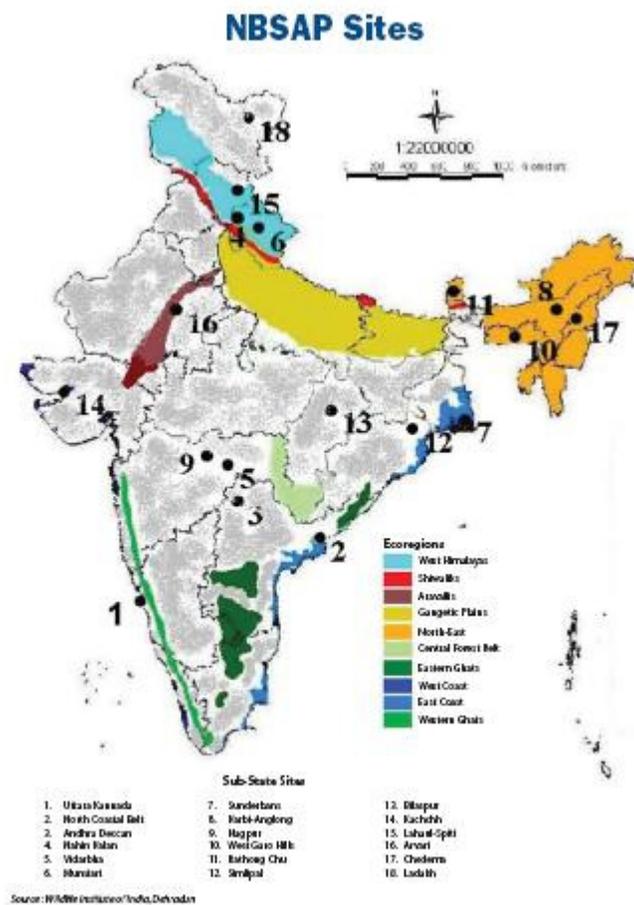
India's NBSAP had from the very beginning taken the integration of biodiversity concerns into various sectors as one of its main process goals. Raising awareness of the importance of biodiversity has been part of the process of preparing the NBSAP and is a major component of the plan itself.

The NBSAP Project Directorate was based at the MoEF, with the Joint Secretary, MoEF, as the National Project Director. A National Steering Committee consisting of the Additional Secretary, MoEF (Chairperson), and representatives from eight ministries, the Planning Commission, UNDP and four NGO experts provided overall guidance to the process.

1.2 Scope and Approach of the NBSAP

The broad purpose of the NBSAP process was to produce an implementable action plan that would help conserve India's vast biodiversity, orient utilisation of biological resources towards sustainable directions, and ensure that decisions regarding access to such resources and the benefits accruing from them are taken democratically and equitably. However, rather than prepare just one

national plan, it was decided to prepare plans for several sub-national sites and for various themes. The process envisaged the formulation of Biodiversity Strategy and Action Plans (BSAPs) at the following five levels: local and regional sub-state sites (18), almost all of India's states and Union Territories (33), inter-state ecoregions (10), and thematic plans for major topics related to biodiversity (13). In addition, 35 sub-thematic reviews were commissioned or voluntarily offered, for addressing certain specialised aspects of biodiversity (see below for full lists; note that not all BSAPs and sub-thematic reviews were submitted or completed, as pointed out below).



Sub-State Site BSAPs

1. Arvari (Rajasthan)
2. Bilaspur (Chhattisgarh)
3. Chedema (Nagaland)¹
4. Deccan Area (Andhra Pradesh)
5. Kachchh (Gujarat)
6. Karbi Anglong (Assam)
7. Ladakh (Jammu and Kashmir)
8. Lahaul-Spiti-Kinnaur (Himachal Pradesh)
9. Munsiri (Uttaranchal)
10. Nagpur (Maharashtra)
11. Nahin Kalan (Uttaranchal)
12. North Coastal Belt (Andhra Pradesh)
13. Rathong Chu (Sikkim)
14. Simlipal (Orissa)
15. Sundarbans (West Bengal)²
16. Uttara Kannada (Karnataka)
17. Vidarbha (Maharashtra)
18. West Garo Hills (Meghalaya)

State and Union Territory BSAPs

1. Andaman and Nicobar Islands
2. Andhra Pradesh
3. Arunachal Pradesh
4. Assam
5. Bihar³
6. Chandigarh
7. Chhattisgarh
8. Delhi
9. Goa
10. Gujarat
11. Haryana
12. Himachal Pradesh

13. Jammu and Kashmir
14. Jharkhand⁴
15. Karnataka
16. Kerala
17. Lakshadweep
18. Madhya Pradesh
19. Maharashtra⁵
20. Manipur
21. Meghalaya
22. Mizoram
23. Nagaland
24. Orissa
25. Pondicherry
26. Punjab
27. Rajasthan
28. Sikkim
29. Tamil Nadu⁶
30. Tripura⁷
31. Uttaranchal
32. Uttar Pradesh
33. West Bengal

Ecoregional BSAPs

1. Aravallis
2. Central Forest Belt
3. East Coast
4. Eastern Ghats
5. Gangetic Plains
6. North-East India
7. Shiwaliks
8. West Coast
9. Western Ghats

10. West Himalayas.

Thematic BSAPs

1. Access, Benefit-Sharing and Intellectual Property Rights
2. Culture and Biodiversity
3. Domesticated Biodiversity
4. Economics and Valuation of Biodiversity
5. Education, Awareness and Training
6. Health and Biodiversity
7. Livelihoods, Lifestyles and Biodiversity
8. Micro-Organic Diversity
9. Natural Aquatic Ecosystems
10. Natural Terrestrial Ecosystems
11. Policies, Laws, Institutions and Planning
12. Wild Animal Biodiversity
13. Wild Plant Biodiversity.

Sub-Thematic Reviews

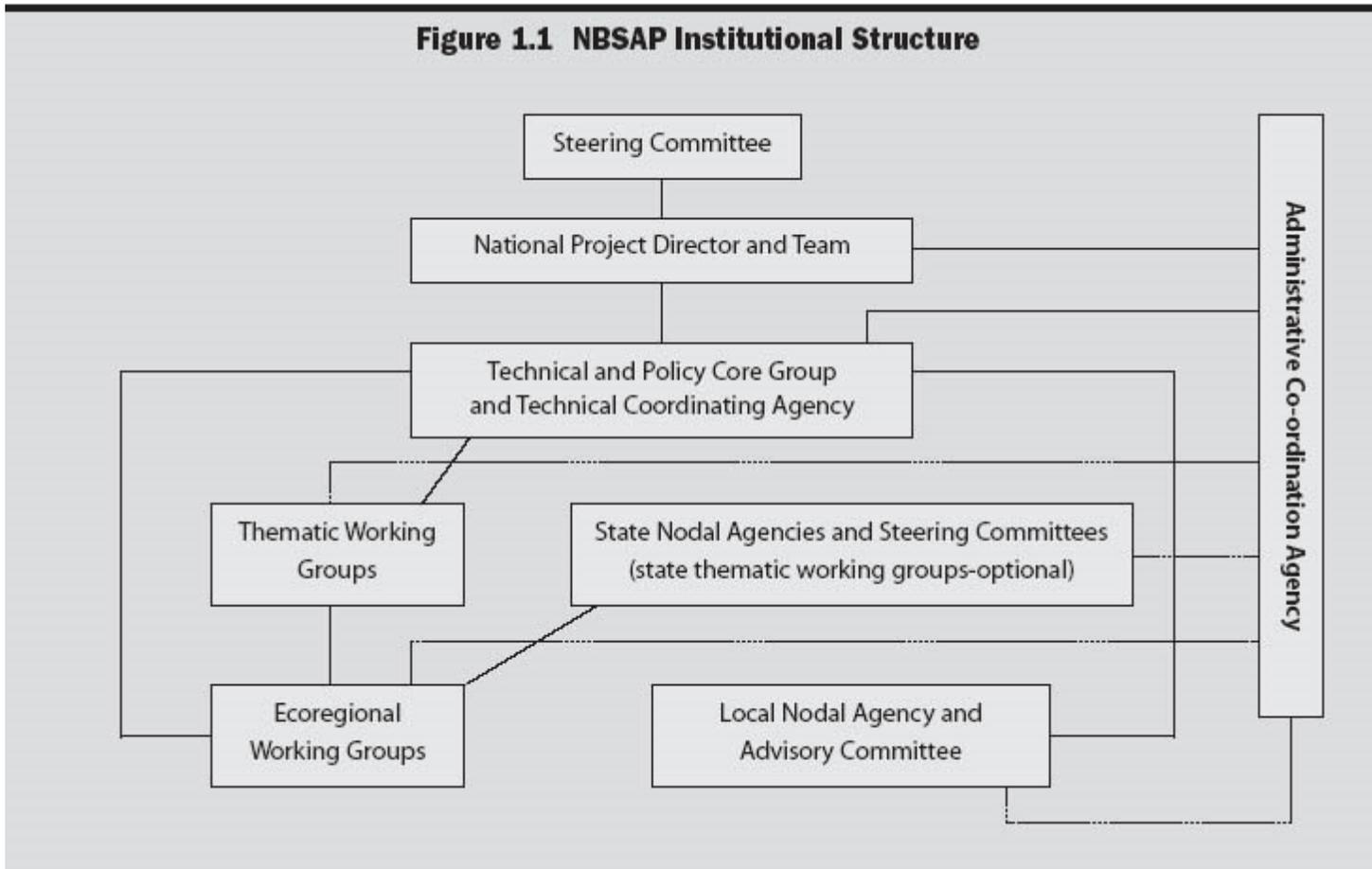
1. Agricultural Biotechnology and Globalisation
2. Biodiversity in EIAs
3. Biodiversity in the Media
4. Climate Change
5. Community Conserved Areas in Gujarat
6. Community-Based Monitoring
7. Conventional Technologies and Biodiversity⁸
8. Customary Laws and Biodiversity in North-east India
9. Dams and Biodiversity
10. Ecological Impacts of NTFP Collection in West Bengal
11. Environmental Education and Persons
12. Environmentally Friendly and Alternative With Disabilities Technologies

13. Home Gardens and Biodiversity
14. Humanised Natural Landscapes in the Eastern Himalaya
15. Important Bird Areas
16. Indigenous Knowledge and Biodiversity
17. Integrated Biodiversity Information System
18. Invasive Alien Species and Biodiversity
19. Living Marine Resource Drugs and Biodiversity
20. Mining And Biodiversity
21. Natural Dyes and Biodiversity
22. Nomadic Pastoralism and Biodiversity
23. Non-Pastoral Nomads
24. Non-Timber Forest Produce⁹
25. Non-Timber Forest Produce in the Western Ghats¹⁰
26. Paper Industry and Biodiversity
27. Pesticides/Toxics and Biodiversity
28. Public Distribution System and Biodiversity
29. Remote Sensing
30. Research on Agricultural Biodiversity
31. Thermal Power and Biodiversity
32. Tourism and Biodiversity
33. Tree Plantations and Biodiversity
34. Urban Biodiversity
35. Wildlife-Human Conflicts.

Attempts have been made to build elements from all the above action plans and sub-thematic reviews into the national-level plan (see *Box 1.1*).

Figure 1.1 NBSAP Institutional Structure

Figure 1.1 NBSAP Institutional Structure



1.3 Brief Description of the Methodology

These plans were prepared by multi-sectoral groups/committees, involving diverse people from both within and outside government. These groups/committees were in turn coordinated by an executing agency nominated either by the TPCG or by respective state governments, and appointed by the National Project Director and team, MoEF. A national-level Steering Committee was also constituted for the overall guidance and monitoring of the process (*see Figure 1.1*).

The process of developing the NBSAP has attempted to be highly participatory in nature, with complete transparency and openness to all points of view and interest groups, and reaching out to a large number of villagelevel organisations and movements, NGOs, academicians and scientists, government officers from various line agencies, the private sector, the armed forces, politicians and others who have a stake in biodiversity.

The NBSAP process was from the beginning designed to accommodate the use of flexible and innovative methodologies for preparing

the BSAP. This was primarily because it was felt that the process of the formulation is as important as the final product itself. The process has attempted to move away from the general trend of centralized planning, moving instead towards decentralizing the planning as far as possible and proceeding upwards from the grassroots level. Several thousand people, spread all over the country and from different walks of life and backgrounds, including women and men of local communities, have been involved through the use of various methodologies. Methodologies were also suggested to the participating agencies, at local, state, ecoregional and thematic levels, through the guidelines developed by the TPCG.

Apart from the conventional methods of workshops, formal meetings and data collection, many BSAP processes have used innovative methods for both outreach and feedback. To begin with, several states formed networks to help facilitate substantive inputs into their plans. Public hearings were held at almost all levels of the process. These hearings were organized for data collection, awareness generation, information dissemination and to obtain feedback on issues. Students were also involved at various stages and levels of the process. In some cases, students undertook projects on themes identified by a particular BSAP exercise.

Perhaps the most innovative methodology used was organizing biodiversity festivals. These were in the form of *melas*, cycle rallies, cultural programmes, bullock-cart rallies, *yatras* (foot marches) and even boat rallies. These festivals helped rekindle pride in the country's vast biodiversity. Discussions during the festivals also sent out the message that there is much biodiversity that has already been lost, and efforts need to be made to revive and retrieve this, while conserving what still exists.

Closer to the more commonly used methods of research was the deployment of questionnaires, formation of drafting committees and thematic working groups, commissioning academic papers and intersectoral and interdepartmental meetings aimed at seeking coordinated work. Some states already had or were in the process of drafting biodiversity/environment plans under initiatives other than NBSAP. In addition a number of action plan and policy processes relating to aspects of biodiversity had been held earlier in India. Instead of starting from scratch, the NBSAP process linked up with and built upon the work that had already been done in such cases.

Media outreach has also been one important component of the NBSAP process. The use of audio-visual and print media was encouraged. It was used by most executing agencies at sub-national levels, as well as at the national level.

As the process progressed, the need to ensure involvement of specialized target groups was recognized and addressed. Focused meetings with traditional healers, fisherfolk, snake charmers, specially-abled children, Buddhist monks, armed forces and nomadic pastoralists are a few examples.

1.4 A Critical Analysis of the Project

The project was critically analysed on the basis of the following 11 parameters by reading through progress reports, minutes of various meetings held by executing agencies, reports of visits to sites undertaken by members of the Technical Policy Core Group (TPCG), BSAPs submitted by the executing agencies, as well as an independent evaluation mission.

i. Were All Kinds of Biodiversity Covered?

All **kinds of biodiversity** (ecosystems, species, genes; wild and domesticated etc.) were covered in the process. However, one or more of these were weakly covered in some sites, and the inter-relations between them were weakly developed. At some sites issues related to domesticated biodiversity were given less coverage; and in most there was a paucity of information on micro-organisms. The latter, however, probably reflects a genuine lack of information rather than a weakness in the BSAPs' formulation.

ii. Were All Aspects of Biodiversity Covered?

Various **aspects of biodiversity** were dealt with in an integrated manner: conservation of biodiversity, sustainability in the use of biological resources, and equity in decisions regarding the access to and benefits derived from these resources; however, at many specific sites, one or more of these aspects were weakly developed or absent, most common amongst these being issues of equity. In addition, aspects such as the ecosystem services provided by biodiversity, and a clearer concept of 'sustainable use', were weakly developed.

iii. Were Guidance, Coordination and Communication Adequate?

A series of guidelines and concept notes were circulated to all executing agencies. These guidelines were used at many sites, but at others it was evident that some of the guidelines were not followed. Coordinating bodies at the centre constantly kept in touch with the executing agencies through over 100 letters and emails a day, telephone

calls, a bi-monthly newsletter, a website, and frequent circulars. However, communication was weak in some parts of the country, especially in terms of responses from executing agencies back to the project coordinators.

iv. Was the Process Participatory Enough?

The process has probably been the most participatory exercise on environment and development issues ever undertaken in India, involving literally tens of thousands of people, from various sectors including farmers, *adivasis*, and fisherfolk. However, certain sectors (armed forces, corporate houses, political and religious leaders) remained under-represented. In the local, state, ecoregional, and thematic groups, 32% of the membership was of scientists and academics, 24% of NGOs, and 15.5% of forest staff.

An innovative step was the publication of a brochure (in 16 languages), seeking involvement in the process, titled **Call for Participation**. This was subsequently translated into another 4 or 5 languages by executing agencies and evoked about 650 responses directly to the central coordinating team. It is known that about 60 of the respondents who responded directly to the central coordinating team were involved in some substantial way in the process to which they then were referred to, but in many cases it was not possible to track the level of involvement.

Unfortunately, only one-tenth of the people involved in the various state, local, ecoregional and thematic groups were women; also,

at some sites it is not clear if women were actually consulted, especially when making specific recommendations on their behalf.

v. Were the Stated Outputs Achieved?

The NBSAP process has yielded, by the end of the project, 31 state and union territory plans (of which 4 remained incomplete), 10 ecoregional plans, 16 local or sub-state plans, and 13 thematic plans. In addition 34 sub-thematic reviews have been received (of which 3 remained incomplete). Essential points from these action plans and reviews were built into the national-level plan.

vi. Were Cross-Cutting Issues Adequately Integrated?

Cross-cutting issues such as equity and people's empowerment, gender sensitivity, integration of biodiversity into all sectors of planning, integration of indigenous knowledge systems, and international issues were stressed in the planning phase and continuously reiterated throughout the process. Many of these were also incorporated at a number of sites and in various thematic working groups, and aspects such as globalisation, the integration of conservation and livelihoods and biopiracy received serious attention. However, at many sites issues of equity, empowerment and gender were weakly dealt with, as was that of sectoral integration of biodiversity.

vii. Was There Adequate Buy-in from the Government?

Governmental stake in the NBSAP process is high in some sections of the Government of India and in many states. News of the acceptance of BSAPs by top state- and district-level authorities were being received as this document went to print. However, governmental involvement remained weak or absent in other sections of the Government and in many states. Integration of the NBSAP in the 10th plan was not possible due to a slight difference in the respective time schedules of the finalisation of the NBSAP and the 10th Plan; however, the MoEF is confident that critical elements of the NBSAP can be incorporated into the annual plans within the ambit of the 10th Plan.

viii. Was the Process Adequately Built on Past and Existing Processes and Information?

Strong linkages with past and ongoing processes were built into the NBSAP process, including a review of several national plans and policies relating to natural resources. The MoEF's own Macro-Action Plan on Biodiversity was a base document; other documents built up on were the National Wildlife Action Plan, National Forestry Action Plan, National Environment Action Programme, National Conservation Strategy, Agenda 21 reports, and reports of the Biodiversity Conservation Prioritisation Project. At the level of each site, linkages were built to many earlier or ongoing sub-state-, state- or ecoregional-level plans. However, given the vastness of the

country, there are bound to be some processes and projects that were not linked to; links with projects of other central ministries and departments such as Health, Agriculture, and Biotechnology remained weak, despite repeated attempts.

In some states, lack of inter-departmental coordination and institutional memory were barriers in effective use of existing information and processes, resulting either in duplication of efforts or absence of synergy.

ix. What Were the Unanticipated Impacts?

Amongst the strongest points about NBSAP were the 'unanticipated' positive impacts: widespread awareness of biodiversity issues; fresh generation of field data on various aspects of biodiversity; capacity enhancement and empowerment of people, especially village communities, through participatory planning exercises; action being initiated even during the planning phase at many sites; and widespread networking.

A possible negative impact could be the generation of expectations, especially amongst local communities, which the NBSAP process may not be able to meet if implementation is not taken up in time.

x. Were the Resources Adequate?

While the financial resources within the NBSAP for such a widespread exercise were limited, the coordinating teams and executing agencies stretched what was available to the maximum possible, and tried to augment the resources through various innovative methods. Nevertheless, there remained a need for extra resources for activities such as the publication of the 75 local, state, ecoregional and thematic action plans.

xi. Was the Time Frame Followed?

The original time frame of 2 years stretched to 4 years, with delays caused by a number of factors, including considerable time taken in the process of appointment of the nodal agencies, by the coordinating agencies in conceiving the entire process, by state governments and other authorities in initiating their processes, and by the central government in approving the final documents.

In conclusion, it would hopefully not be an exaggeration to say that this has indeed been a unique process, one that in its scale and coverage has never before been tried in India in the context of natural resources and development. Both in its successes and failures, therefore, it has critical lessons for future planning processes in all sectors.

1.5 Format of the National Action Plan

There are 8 chapters in the Volume 1 of the National Action Plan:

Chapter 1 deals with the background, objectives, scope and approach of the NBSAP methodology and a critical analysis of the project.

Chapter 2 contains the statement of principles on which the analysis and recommendations are based.

Chapter 3 deals with the evolutionary, physical and, historical context of India's biodiversity.

Chapter 4 discusses the overall profile of India's biodiversity. It is sub-divided into sections dealing with the components, range, global position, and current status of biodiversity as well as the importance and uses of biodiversity.

Chapter 5 deals with some of the key proximate and root causes for the loss of biodiversity in India.

Chapter 6 discusses ongoing initiatives in conservation, sustainable use and equity, and the major actors involved. This chapter is divided into two sections: 1) natural ecosystems and wild taxa, and, 2) agricultural ecosystems and domesticated taxa; further subdivided into the following sections:

1. Understanding and information (including research and monitoring)
2. *In situ* conservation
3. *Ex situ* conservation
4. Sustainable use
5. Equitable access, use, and sharing of benefits
6. Capacity building
7. Inter-sectoral coordination
8. Policies and laws
9. Financial measures
10. Technological measures
11. International fora

Chapter 7 deals with the broad strategies and related actions for achieving conservation, sustainable use and equitable access/sharing of benefits. It too is divided into two broad parts: 1) natural ecosystem and wild taxa, and, 2) agricultural ecosystems and domesticated taxa, with each section divided into further sub-sections as listed above. It also contains an opening section on the overall strategies needed, and a closing section giving a list of prioritised strategies.

Chapter 8 deals with the overall implementation mechanism that would be needed for the strategies and actions presented in the earlier chapter.

Sections prior to or after these eight chapters also provide:

- Definitions of key terms used
- Glossary and List of Abbreviations

- An index of agencies and organisations identified as the lead agencies responsible for each action
- Annexures with lists of the Technical and Policy Core Group, the executing agencies and sub-thematic reviewers, and various people who contributed to or commented on the NAP.

Volume 2 of the NAP includes the summaries of each of the local, state, ecoregional, and thematic BSAPs, and of the sub-thematic reviews. In addition, it contains annexures relevant to various parts of Volume 1, such as listings of protected areas and threatened species, forest types, germplasm collections, and so on. It also includes, a chart showing the points of commonality between the strategies of the NAP and those recommended in the local, state, and ecoregional BSAPs

BOX 1.1 USE OF BSAPs AND SUB-THEMATIC REVIEWS IN THE NAP

Chapters 3 to 7 have drawn information from the BSAPs and sub-thematic reviews. Information has been incorporated in different ways, including:

1. Factual information on evolution and profile of biodiversity
2. Examples of threats, initiatives and implementation
3. Strategies and actions that could be adapted to the national level.

The information has usually been presented in the form of tables, boxes, and strategies, or referred to in the appropriate context within the chapter. An attempt has been made to cover all the BSAPs and sub-thematic reviews submitted as part of the NBSAP process. However, it has not been possible to build every aspect of each BSAP into the national plan.

While drafting various chapters, the TPCG members tried to extract portions from the various BSAPs. At a mid-way stage, it was felt that it would be useful if a special exercise to understand the 'points of commonality' specifically between the Strategies and Actions Plans (SAPs) at regional and national level were carried out. This would mean reading through the SAP chapters of all the BSAPs received to:

- a. Ensure that the priorities and recommendations, which have emerged after the 3-year consultative process, are reflected adequately in the national-level strategies; and;
- b. Incorporate new/innovative strategies presented in the BSAPs, which had not yet found a place in the national plan.

This too helped in incorporating information from BSAPs or subjects, which had inadvertently been missed out.

Notes

1. This BSAP was not submitted by the agency in charge.
2. This BSAP was not submitted by the person in charge.
3. This BSAP came in at the very end of the process, and is being considered an incomplete draft.
4. This BSAP was not submitted by the agency in charge. However, it was commissioned to an NGO who submitted a report

towards the end of the process.

5. This BSAP was not completed, but has been accepted subject to final revisions being incorporated.
6. This BSAP was not completed, but has been accepted subject to final revisions being incorporated.
7. This BSAP was not completed, but has been accepted subject to final revisions being incorporated.
8. This review was not completed, only a preliminary draft was submitted.
9. This review was not submitted by the person in charge.
10. This review was not completed, only a draft was submitted.