BDS
BIODIVERSITY SECRETARIAT

ADDENDUM TO THE BIODIVERSITY CONSERVATION IN SRI LANKA

A Framework for Action

CHAPTER REPORT - 12





INSTITUTIONAL ASPECTS AND CAPACITY BUILDING

Biodiversity Secretariat
Ministry of Environment

ENV BD 19

CHAPTER REPORT ON INSTITUTIONAL ASPECTS AND CAPACITY BUILDING
(TASK FORCE NO-11)

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Abbreviations

BCAP	Biodiversity Conservation Action Plan
BDS	Biodiversity Secretariat
BMARI	Bandaranaike Memorial Ayurvedic Research Institute
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CCD	Coast Conservation Department
CEA	Central Environmental Authority
CEPOM	Committee on Environmental and Policy Management
CIEDP	Committee on Integrating Environment and Development
CoP	Conference of Parties
CRI	Coconut Research Institute
CTB	Ceylon Tourist Board
CZMP	Coastal Zone Management Plan
DAP&H	Department of Animal Production and Health
DFAR	Department of Fisheries and Aquatic Resources
DoA	Department of Agriculture
DWLC	Department of Wildlife Conservation
EA1P	Environmental Action 1 Project
EIA	Environmental Impact Assessment
EPL	Environmental Protection Licence
FCRDI	Field Crops Research and Development Institute
FD	Forest Department
GBF	Global Biodiversity Forum
GSMB	Geological Survey & Mining Bureau
HORDI	Horticultural Crops Research and Development Institute
ICTAD	Institute for Construction, Training and Development
IUCN	International Union for the Conservation of Nature and Natural Resources/The World Conservation Union
IDB	Industrial Development Board
ITI	Industrial Technology Institute
LMOs	Living Modified Organisms
LRC	Land Reform Commission
ME	Ministry dealing with Environment
MoE&NR	Ministry of Environment and Natural Resources
MoFE	Ministry of Forestry and Environment
MFOR	Ministry of Fisheries and Ocean Resources
NARA	National Aquatic Resources Research and Development Agency
NAQDA	National Aquaculture Development Authority of Sri Lanka
NASCAG	National Species Conservation Advisory Group
NASTEC	National Science and Technology Commission
NBRO	National Building Research Organisation
NBSAP	National Biodiversity Strategy and Action Plan
NCR	National Conservation Review
NEC	National Experts' Committee on Biodiversity
NEAP	National Environmental Action Plan
NGO	Non Governmental Organisation
NSC	National Steering Committee on Biodiversity
NSF	National Science Foundation
NWSC	National Wetland Steering Committee

PA	Protected Area
PAM & WLC	Protected Area Management and Wildlife Conservation
PGRC	Plant Genetic Resources Centre
RARDC	Regional Agricultural Research and Development Centre
RRDI	Rice Research and Development Institute
RRI	Rubber Research Institute
SAM	Special Area Management (SAM)
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
TF	Task Force
TRI	Tea Research Institute
TWG	Technical Working Group
UDA	Urban Development Authority
VRI	Veterinary Research Institute

Executive Summary

Institutional analysis is considered as a critical first step in the implementation of National Biodiversity Strategies and Action Plans (NBSAPs) to identify institutional impediments, requirements and capacity enhancement. In most biodiversity rich developing countries, resource constraints in institutions play a major role in holding back the necessary action for biodiversity conservation, and the most convenient remedy has been to establish yet other institutions to do so. This itself often requires major commitments by governments or a flow of international money to support this process - often received as loans. Consequently this detracts from the main issue: implementing the actions in the NBSAPs identified through widely consultative processes involving much time, effort and funds, the latter often from external monetary sources. This perpetuates a vicious cycle that progresssively delays the implementation of actions that promote biodiversity conservation, sustainable use, and equitable sharing of benefits where they are most required - in the field or at the policy level as it may be.

It is now generally accepted the world over that implementation of NBSAPs should not be dependent on external funding only, or taking refuge behind the façade of needing new institutions or mechanisms. What is considered more important is that existing institutions are reviewed and helped to reshape so that they can take on their biodiversity related responsibilities more effectively, while taking care not to set over-ambitious targets beyond realistic and practicable goals. Task Force 11 endorsed the current thought that NBSAPs should not promote dependency or be designed only to fulfill agendas for donor assistance; and that institutional capacity should be built with this in mind. The Task Force also recognized the fact that institutional aspects for implementing NBSAPs should also consider arrangements that will help integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies; they should promote institutional coordination between the numerous players including government, business sector, communities and Non Governmental Organisations; and help establish mechanisms that can deal with devolution of biodiversity conservation responsibilities to the regional and local levels.

The present review is made by the Task Force on **Institutional Aspects and Capacity Building Needs**, one of 15 Task Forces appointed by the Ministry dealing with Environment to prepare the addendum to the Biodiversity Conservation Action Plan (BCAP). The Task Force directed its focus on four main areas:

- Review the overall coordination mechanism for implementation of BCAP proposals and identify mechanisms to facilitate this process and to integrate biodiversity into cross-sectoral plans and programmes.
- Review the present status of BCAP recommendations to identify institutional aspects and capacity building required to implement individual actions.
- Propose institutional mechanisms and capacity building for implementation of recommended actions i.e. both actions in the BCAP and new actions recommended through this review.
- Identify and prioritize key institutional needs at BCAP+4 to implement the Plan.

To facilitate this review, an assessment tool was used to address the specific institutional and other concerns of the different thematic areas. In addition, joint workshops with the *in-situ* and *ex-situ* conservation Task forces, and individual meetings were held with relevant personnel.

Results of the Review

A. Broad Strategy Proposed

- The Biodiversity Secretariat should :

  1. facilitate, coordinate and monitor implementation of actions that are ongoing or expected to commence under existing institutional plans and programmes by instituting:
     - a **Strategic Implementation Programme** (SIP) having time frame for progress of each recommended action, institutions responsible for implementation and support.
     - a **Strategic Coordinating & Monitoring Mechanism** through cabinet appointed Task Forces backed with a mandate to facilitate and enable implementing BCAP recommendations.
  2. directly implement some of the actions needed for implementing the BCAP recommendations.
  3. integrate biodiversity conservation considerations into sectoral and institutional programmes.
  4. enhance capacity of institutions that have to implement the BCAP recommendations.

- Institutions responsible for implementing the BCAP recommendations would be entrusted to:
  5. take the lead role in *coordinating* implementation of individual BCAP recommendations and reporting progress to the Biodiversity Secretariat, and or
  6. take the lead role in *directly implementing* BCAP recommendations and report progress to the Biodiversity Secretariat.

There has been some concern that the Biodiversity Secretariat may not have adequate institutional mandate to coordinate activities of other agencies to take on the responsibilities of the central mechanism driving the implementation of the BCAP, and that a new structure/institution **with specific legal mandate** may have to be put in place. The review, however, found considerable backing for the opinion that the Biodiversity Secretariat is in fact adequately empowered by the legal mandate derived from the Ministry of Environment within which it is nested; a specially and legally constituted government institution (e.g. an Authority) cannot **compel** another government department to carry out certain actions or collaborate with it; and a specially constituted Authority or Board has less mandate for BCAP implementation than a Ministry or government department.

B. Recommendations for Institutional Action:

1. Coordination and monitoring:

- The present Biodiversity Secretariat, with enhanced capacity building, should be used to facilitate implementation of the recommendations of the BCAP.
- The Biodiversity Secretariat should be strengthened to deal effectively with the implementation of the BCAP and preparation of a Strategic Implementation Programme by the establishment of a separate unit within the Secretariat.
- A Strategic Coordinating and Monitoring Mechanism for effective implementation of the Strategic Implementation Programme of the BCAP should be set up within the Biodiversity Secretariat assisted by:
  - **Task Forces** with representatives of lead agencies that have to carry out/ coordinate/ integrate into sectoral plans and programmes the recommendations of the BCAP, and report progress. Task Forces should be serviced by a coordinator from the Biodiversity Secretariat for operational support, and a subject specialist/s to provide technical support as and when required. Task Forces should assist in the preparation of the SIP, monitor the progress of actions that fall within their purview, facilitate implementation and organize assistance to the implementing agencies where required though formation of Technical Working Groups.

    The Task Forces should be practical in meeting the objectives of the BCAP and should be identified through a consultative process. However, it is suggested that the Task Forces be appointed for the following: *In situ* and *Ex situ* conservation; Research and Information Management; Legal concerns; Access and Biotechnology; Education, Awareness and Communication; Cross sectoral Integration and Devolution; Monitoring impact of cross sectoral policies and major development efforts on biodiversity conservation; Conserving traditional knowledge and cultural practices related to biodiversity use and conservation.

  - **Short-term activity driven small Technical Working Groups** to assist each Task Force to carry out specific functions/activities that require high time inputs or specific technical expertise. Working Group shall comprise relevant member/s from the Task Force under which the respective Working Group operates, other experts/administrators co-opted to carry out this activity, coordinator of the Task Force, and a subject specialist/s if so required.

- **The National Experts Committee (NEC)** should continue to provide technical advice to the Biodiversity Secretariat, and where required to guide the Task Forces through the Secretariat.

- **The National Steering Committee (NSC)** on Biodiversity should be reconvened to provide high level policy support and direction to institutions under their purview for implementation of BCAP recommendations and to facilitate the Task Force representation and responsibilities of reporting progress.

- **A Biodiversity Network** comprising middle level officers in implementing agencies in provincial and central agencies should be reconstituted to facilitate the Biodiversity Secretariat and other implementing agencies to obtain necessary information whenever required for BCAP implementation.

2. Implementing individual BCAP recommendations

- The Biodiversity Secretariat should directly implement the following:

  1. Establish a biodiversity meta database.
  2. Build capacity of NGOs to play an important role in biodiversity conservation.
  3. Review biodiversity legislation and examine legislation that would impinge on biodiversity though legal Task Force

4. Address, as required, the prevailing and emerging issues on access, biosafety, alien species etc through participatory processes and voice concerns at international fora and help safeguard national interests.
5. Integrate biodiversity into other sectoral plans and programmes.
6. Integrate biodiversity concerns into Environmental Impact Assessments.

- The Biodiversity Secretariat should facilitate the enhancement of capacity/coordination/mandate of lead institutions that have to directly implement BCAP actions and help them towards greater self-reliance by addressing specific institutional requirements that impede biodiversity conservation with help from Task Forces, Technical Working Groups, NEC, NSC and the Biodiversity Network.

  Among 87 BCAP recommendations under *in situ* and *ex situ* conservation, 26 are critically hampered due to inadequate institutional capacity or mandate to continue ongoing actions, and nine have not commenced at all for the same reason. Details of institutional capacity building required for implementing the individual recommendations of the BCAP are given in Annex 4).

- The Biodiversity Secretariat should urgently address eight key institutional requirements that were identified for *in-situ* conservation in Forests, wetlands, coastal & marine and agricultural systems, and *ex situ* conservation:

***In - situ* conservation**

Forests

1. establishment of a coordination mechanism that will enable better coordination between the DWLC and FD for:
   - establishing an optimal protected area network of forests
   - continual updating of the biodiversity database on forests and wild species through the establishment of a joint database and forest survey mechanism, including GIS data and photographic material.
   - conducting joint programmes for staff capacity enhancement and training in selected areas

2. Enhancement of institutional capacity building for research on forests and wildlife in the_Forestry Research Institute at Kumbalpola under the FD and the Research division at Head Office DWLC, with a view to establishing a joint research institute for Forestry and Wildlife research in the long-term.

Aquatic systems: wetlands and coastal and marine

3. Establishment of a special unit within the CEA to take the lead role in wetland conservation with the collaboration of the FD and DWLC to implement BCAP actions
4. Establishment of a unit within NARA to take lead role in regular monitoring, research and study of marine and freshwater biodiversity.
5. Facilitate the strengthening of the coordinating and monitoring role of the CCD in managing coastal habitats and bioresources and track progress.

Agriculture (including livestock)

6. Establishment of a central mechanism at the Ministries dealing with Agriculture and livestock for specific emphasis to be given to conservation of agrobiodiverity.

***Ex-situ* conservation**

7. Establishment of an experts committee to advise on *ex situ* collections/conservation for captive breeding/rearing and rehabilitation of illegally held captive animals in association with the National Zoological Gardens.
8. Establishment of a special unit for the VRI (or as a separate institution) to address conservation of the indigenous animal genetic resources with lab facilities for genetic characterization and infrastructure facilities on par with the PGRC

3. Adopting broad strategies by the Biodiversity Secretariat to facilitate and promote actions in the BCAP

- Prepare a SIP and assign responsibilities and time frames for BCAP action and integration of biodiversity conservation into cross sectoral plans etc, and specify mechanisms to track, monitor and facilitate progress.

- Promote biodiversity conservation holistically by establishing a joint Task Force for *in situ* and *ex situ* conservation.
- Promote BCAP actions in coastal and marine and agricultural systems by ensuring the integration of these recommendations into the work plans, work programmes and research plans of ministries and departments mandated to deal with agriculture and livestock development, coast conservation and fisheries with the assistance of the Task Force on *in situ* and *ex situ* conservation, NSC, CEPOMs and CEIDP.
- Establish a Task Force on Integration that will help integrate and facilitate biodiversity conservation concerns into sustainable use, benefit sharing and technology transfer into the private sector, NGO activities and community actions and to make these stakeholders partners in biodiversity conservation.
- Facilitate the establishment of a technical committee within the Ministry dealing with environment to provide guidance for the private sector on biodiversity related ventures and on other matters such as better design standards that will reduce use of wood, and other resources negatively affecting biodiversity.
- Establish a Task Force to critically examine impacts of all new cross sectoral laws/policies/trade and access agreements and major development efforts on biodiversity conservation; guide formulation of new policies to address *in situ* conservation outside forests; integrate biodiversity concerns into land policy and wetland policy, and to bring in legislation for wetland conservation.
- Raise the profile of and funds allocated for biodiversity conservation within government by creating awareness of the BCAP and benefits of biodiversity conservation for national development among policy makers through the Task Force on Integration and the Task Force on Education, Awareness and Communication.

4. Devolution of biodiversity actions in the BCAP to regional and local levels

- The Biodiversity Secretariat should establish a Task Force to promote devolution of biodiversity conservation (either jointly, with integration or separately) with representation an regional/local levels to facilitate this process.
- The Biodiversity Secretariat should facilitate training and awareness programmes jointly with the Task Force an Education, Awareness and Communication to facilitate devolution of biodiversity conservation responsibility.

C. ORGANISATION OF THE REPORT:

The report is organized into ten main sections. Sections 1 - 4 provide an introduction to the review, background, the reasons for undertaking the review and the methodology respectively. Section five details out the analysis of the existing mechanism for overall coordination and identifies broad institutional capacity needs. Section six provides key recommendations for institutional aspects and capacity building. It recommends action for the Biodiversity Secretariat and for institutions directly implementing BCAP recommendations. Section seven describes importance for decentralizing activities for biodiversity conservation, while section eight and nine recommends action for the involvement of the community, NGOs and the private sector in biodiversity conservation, The report concludes with section ten providing additional comments.

1.0 INTRODUCTION

National efforts for biodiversity conservation and their integration into the development agenda were promoted in 1998 with the finalisation of the Biodiversity Conservation Action Plan (BCAP) titled *Biodiversity Conservation in Sri Lanka: A Framework for Action* prepared by the then Ministry of Forestry and Environment. Formulation of the BCAP fulfilled the country's first obligation towards implementing the Convention on Biological Diversity (CBD) which Sri Lanka ratified in 1994. Article six of the Convention requires States to develop measures for the conservation and sustainable use of the country's biological wealth and to integrate conservation activities with development. The completion of the BCAP was reported to the CoP4 of the CBD in 1998. The Plan was approved by the Cabinet in 1998, and was published in 1999.

In 2003, the Ministry of Environment and Natural Resources decided to prepare an addendum to the BCAP that would (a) take into account the recommendations which had been acted upon up to that time, (b) recognize the recommendations that still maintained their validity while also noting new issues and priorities, and (c) draw up a strategy for a purposeful and holistic implementation of the BCAP. For this purpose, the Ministry has, on the advice of the National Experts Committee on Biodiversity, appointed 15 Task Forces (Annex 1), each assigned with a key thematic area, to review the current status of BCAP recommendations, identify new issues that require to be addressed and recommend future action for successful implementation of the BCAP. The present report is made by the Task Force on **Institutional Aspects and Capacity Building** (see Annex 2 for Terms of Reference).

Box 1: **The importance of institutional analysis in implementing National Biodiversity Strategies and Action Plans (NBSAPs)**

Institutional analysis is considered a critical first step in the implementation of National Biodiversity Strategies and Action Plans in an analysis of lessons on biodiversity planning in Asia. It goes on to state "A key function of the NBSAP process is helping sectors and local government understand their own limitations and the capacities required for making a genuine contribution to biodiversity management. There are many questions that have to be worked through with implementing agencies, because they are those best situated to identify the needs and reforms required. An institutional analysis also serves to guide implementing institutions and "provide impetus to change, particularly if followed up by targeted and well-financed capacity-building programs." Institutions can be reshaped to take on its biodiversity responsibilities, but the NBSAP process should take care not to set over-ambitious targets or go beyond realistic goals.

Source: Carew - Reid (2002)

The need to build institutional self-reliance

It is now generally accepted that implementation of NBSAPs should not be dependent on external funding only. Operational requirements and budgets too vary considerably with time. The BCAP of 1999 has been deliberate in not providing detailed proposals for action with financial budgets, resource needs, operational details or timeframes. It was expected that institutions responsible for implementation of recommended actions would be the most suited to prepare detailed implementation proposals with operational details and budgets. Also, many of the actions recommended by the BCAP were ongoing, or had the potential of being accommodated in the future under institutional programmes with existing

institutional budgets. Hence, it is urged that, where possible, actions that do not require further resource needs and separate budgets are identified and carried out using available funds. This view is now endorsed by biodiversity planners elsewhere (see Box 2).

BOX 2: **NBSAPS and funds for implementation**

Over the past decade, NBSAPs have bred dependency. They have been designed in part as agendas for donor assistance. By default, governments have adopted the stance that biodiversity is a matter for external funding, while domestic resources go to development or "productive" sectors. If a proposed project does not attract international support, then the chances are it will not be implemented. Action plans are regarded as an add-on to existing budgets. This is true for most developing countries of Asia, to a greater or lesser extent.

The concept of NBSAPs as vehicles for external funding is not good for biodiversity or government. *It impedes agencies from making the necessary adjustments to play a proactive role in the new economy in which biodiversity is capital to be maintained, enhanced and marketed. Greater flows of international money are required to support countries in the transition. This is not the issue. What is important is that biodiversity planners must always encourage and promote financial self reliance in government agencies. There are three questions that the target agency needs to ask, in this order:*

1. What can be achieved within existing budgets and capacity? (this is where we start);
2. What will require budget adjustments and/or modest additions from central government? (we will set this in motion);
3. What will require significant additional budget contributions from external sources? (we will seek external financing only if high-priority actions cannot be achieved with domestic budgets).

The bulk of the action plan should be built around what an agency can do with the resources at its disposal, with little or no addition from government sources; the potential for biodiversity "retrofitting" needs to be fully explored before shifting to higher levels of support. If external aid is deemed necessary then there are a number of guidelines to be followed:

- *it should use a form of funding that enhances rather than undermines self-reliance;*
- *it should be integrated into programs which were defined on the basis of existing budgets;*
- *It should provide consistent, low-level and long-term support.*

Source: Carew - Reid (2002)

The need to integrate biodiversity concerns

While implementing the BCAP, it is also vital to focus attention on Article 6b of the CBD which requires states to "*integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies*". Consequently, integrating biodiversity concerns into the various programmes implemented by different institutions is critically important to ensure the overall conservation of biodiversity in the country. The BCAP identifies 148 recommendations for the conservation and sustainable use of biodiversity, and it is not possible that this enormous task be undertaken by a single or even a handful of organizations. For instance the BCAP has, with the consensus of relevant institutions, listed approximately 40 institutions to be a party to implementing the actions prescribed by the BCAP. This requires that institutions should not only be encouraged and supported for mere implementation of the recommendations, but also be encouraged to integrate actions for conservation and sustainable use of biological diversity into their relevant sectoral or cross-sectoral development plans, programmes and polices. It is very important, however, that there is sufficient Institutional and other capacity requirements to complete this exercise successfully.

The need for coordination of BCAP implementation

While action for the conservation and sustainable use of biological diversity would have to be taken by many different institutions, it is vital that there should be a specifically identified institution assigned to oversee implementation of the BCAP. Biodiversity Action Plans are being formulated by many countries, while several are already implementing these. For instance, the United Kingdom, in implementing its Biodiversity Action Plan of 1994, had established a Biodiversity Action Plan Steering Group and a UK Biodiversity Secretariat to oversee this. This Biodiversity Secretariat is supported by Biodiversity Secretariats at the country level (e.g. Scotland, Wales etc). A five year review was carried out in 2000 to evaluate the implementation of the Biodiversity Action Plan (at both national and country levels), and it has recommended further action to increase the efficacy of the implementation process concerning specific conservation objectives. Among developing countries, Bangladesh has embarked on implementing a National Biodiversity Strategy and Action Plan through a National Biodiversity Secretariat.

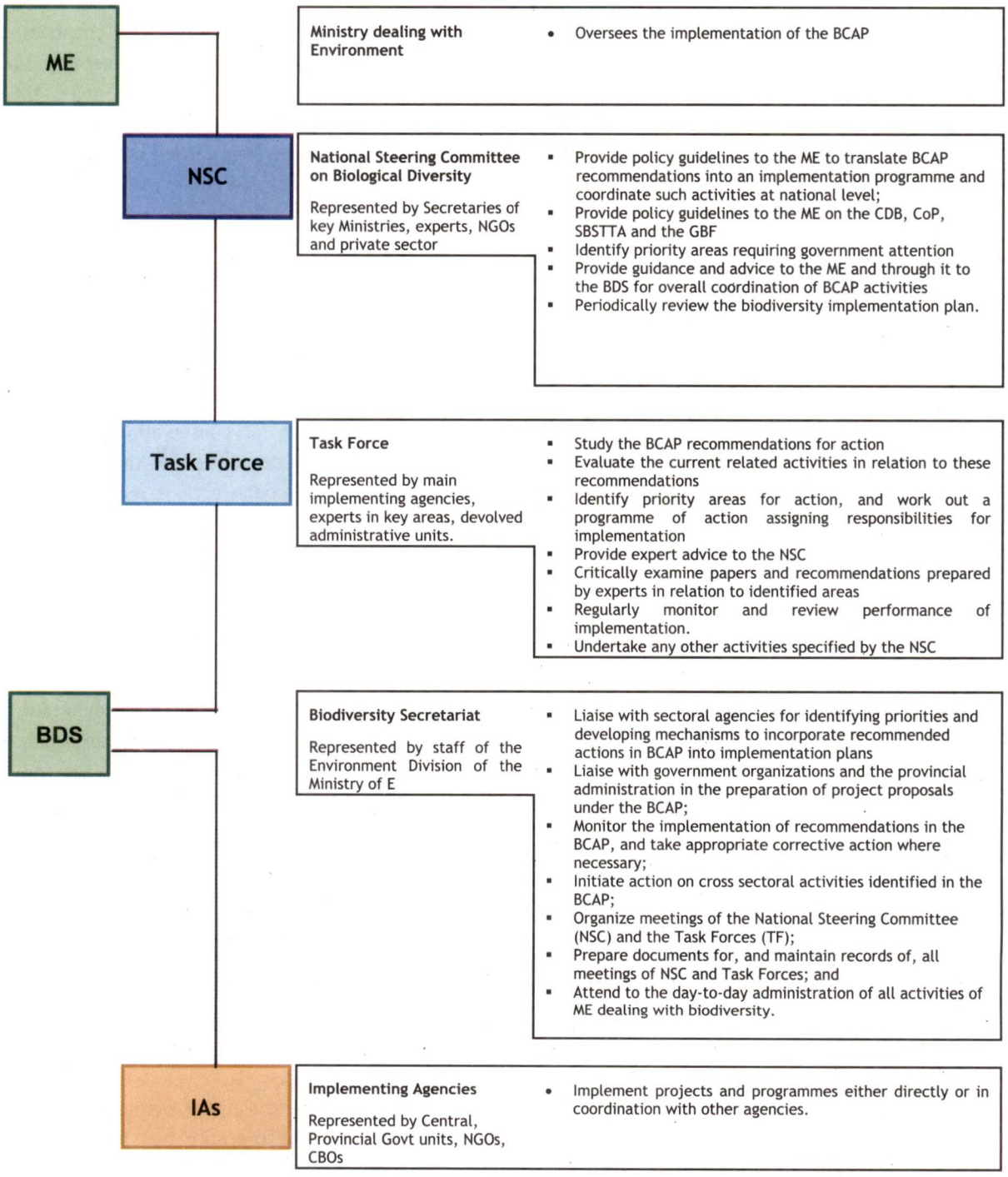
2.0 BACKGROUND

The BCAP functions both as a policy instrument and a working document for conservation action. A significant feature is that it brings together within a single framework a description of the status of national biodiversity, along with perceived issues and threats, and the remedial actions required. The biodiversity related actions identified in a host of other plans, programmes and national policy instruments and the mandates and ongoing programmes of the many government institutions directly responsible for biodiversity conservation have also been included. These include plans and programmes of the Forest Department (FD), Coast Conservation Department (CCD), Department of Wildlife Conservation (DWLC), Central Environmental Authority (CEA), Department of Agriculture (DoA), Botanical Gardens and Zoological Gardens. Consequently some of the recommended activities in the BCAP were already earmarked for action, or were in progress; but are nevertheless included in the Plan as it constitutes the most important policy instrument for biodiversity conservation at the national level. This approach has also served to integrate the BCAP with biodiversity concerns addressed by other existing policy documents, plans and programmes. The BCAP also shows how different state and non-governmental organizations can fit into the framework for biodiversity conservation and how the private sector and other social groups can contribute to this process. It identifies broad actions for biodiversity conservation, but deliberately does not provide operational details, financial budgets or rigid time frames for implementing the recommended actions.

The BCAP has evolved through an exhaustive analytical and consultative process that resulted in 148 recommended actions to ensure that the biological diversity in the country is conserved and used sustainably, and that development activities pursued by different sectors do not seriously harm the indigenous biodiversity.

Overseeing the implementation of the BCAP has been made the charge of the Ministry dealing with the subject of Environment, which is also the national focal point for the CBD. To ensure that this overall responsibility is effectively discharged, the BCAP had proposed an institutional structure that comprises: a) a **Biodiversity Secretariat** within the confines of the Ministry to coordinate and promote the implementation of all programmes and projects under the BCAP; b) an apex body in the form of a **National Steering Committee on Biodiversity** (NSC) for high level coordination and policy formulation at the national level; c) several **Task Forces** to provide expert guidance to the Biodiversity Secretariat in translating policy guidelines into viable implementation programmes; and d) **Implementing Agencies** assigned with the implementation of programmes and projects (Fig.1).

Fig.1: Institutional Structure for Implementation as Proposed by the BCAP (1999)



Source: BCAP (1999)

3.0 NEED FOR A REVIEW

Although the BCAP was approved by the Cabinet in 1998 and published in 1999, and mechanisms and mandates to oversee the implementation of the BCAP had been approved by the Cabinet in 1998, the Plan has not been implemented in a holistic manner. Action taken by a number of institutions to conserve biodiversity has not had any far reaching effect for want of a coordinated holistic approach. In the period since BCAP preparation the country had also experienced varied changes in the economic and political front, and with these have emerged new priorities, plans and programmes that have impacted on biodiversity. The importance of conserving the country's biodiversity as a critical and urgent measure had been stressed by the BCAP in 1999, and now four years on, in the midst of new issues, it has become an even greater need. It is thus feasible to examine at this point how relevant the BCAP proposals are in the present context; whether they reflect the current national needs; what new issues have emerged; whether the proposals are adequate to address these new issues; what action is needed; how they may be adapted to suit future implementation etc.

The BCAP recommends that a review of Plan implementation be undertaken three years after the commencement of the first stage of the BCAP implementation phase. The current National Environmental Action Plan (Caring for the Environment 2003-2007) also recommends an independent review of the actions so far implemented in accordance with the BCAP, in order to assess and evaluate progress, identify the problems and bottlenecks and take corrective action.

Hence the present review has sought to:

- Review the overall coordination mechanism for implementation of BCAP proposals and identify mechanisms to facilitate this process and to integrate biodiversity into cross-sectoral plans and programmes
- Review the present status of BCAP recommendations to identify institutional aspects and capacity building required to implement individual actions.
- Propose institutional mechanisms and capacity building for implementation of recommended actions.
- Identify and prioritize key institutional needs at BCAP+4 to implement the Plan.

(Please see Annex 2 for Terms of Reference of the present Task Force)

4.0 METHOD OF REVIEW

The Task Force on Institutional Aspects and Capacity Building reviewed the overall coordination mechanism for implementing proposals in the BCAP. We also recognized that the theme Institutional Aspects and Capacity Building, although assigned to a single Task Force, should nevertheless be an important consideration for all fifteen Task Forces. An instance of this is where many recommendations made for *in-situ* conservation cannot be implemented due to constraining institutional issues. Hence, in order to form a realistic picture of institutional and capacity building requirements for implementing the BCAP, we felt it necessary to seek the participation of the other Task Forces.

To facilitate this assessment, an assessment tool (Tracking Schedule) was used to address the specific concerns of the different thematic areas (*Dela, 2003*). This has been circulated among Dr J A Mc Neely, Chief Scientist of IUCN, Dr Scott Perkin former Head Regional Biodiversity Programme Asia, and Dr Seema Batt, member of the team which is preparing the National Biodiversity Action Plan for India, for endorsement on its suitability for assessing NBSAP implementation. This tracking schedule was fine-tuned through several meetings of Task Force 11 to suit the purposes of this review. The tracking schedule is

designed to elicit information on each of the recommendations in the BCAP as to its current relevance, its status regarding implementation, adequacy of resources for implementation, capacity constraints hindering implementation (lack of human skills, institutional shortcomings, etc.), and monitoring mechanism.

We carried out a study of the BCAP (1999) recommendations in relation to the thematic areas assigned to the 15 Task Forces and identified recommendations relevant 11 Task Forces. The numbers are presented in Table 1. The outcome of this study did not include the Task Forces whose thematic areas are so wide as to have a bearing on nearly all of the recommendations.

Table 1: Summary of BCAP recommendations relevant to each thematic Task Force as identified by Task Force 11

TASK FORCE	*In-situ*	*Ex-situ*	Access	Traditional knowledge & life styles	Sustainable use	Biosafety	Valuation	Legal and ethical	E&A	R, D and TT	IM
# of recommendations in BCAP 1999 under a distinct heading	F =24 W =16 C&M= 28 AG =6	13					3	12	16	7	13
# of cross cutting recommendations in BCAP	4	2	16	18	31	6		13	14	41	1

F - Forest; W - Wetlands; C&M - Coastal & Marine; AG - Agriculture; Su - Sustainable Use; E&A - Education & Awareness; R, D & TT - Research, Development and Technology Transfer, IM - Information Management

Note: Some recommendations impinge on more than one thematic area and this has been recognised in the above classification.

With the BCAP recommendations relevant to their thematic area inserted in column 1, the Tracking Schedule was distributed among the 11 Task Forces listed in Table 1 (see Annex 3). Without waiting for written responses Task Force 11 decided to hold workshops to review the recommendations on *in situ* and *ex situ* conservation.

Two joint workshops were organised by Task Force 11, focusing on the BCAP recommendations covering *in situ* (in the chapters dealing with forests, wetlands, coastal and marine areas and agricultural systems) and *ex situ* conservation The objective was to review the recommended actions (following *the modus operandi* proposed by the tracking schedule) in relation to institutional aspects and capacity building which was Task Force 11's thematic area, as well as to identify any new issues and propose suitable action. The workshops were attended, among others, by members of the *in situ* and *ex situ* Task Forces, heads of relevant institutions or their representatives, and some members of the Legal Task Force and the Task Force on Access to Genetic Resources. One to one meetings were also held with chairpersons and members of the other Task Forces, heads of state institutions, and with the Head of the IUCN Regional IUCN Biodiversity Programme for Asia.

At both workshops, out of the total 148 recommendations from the 1999 BCAP, 87 were looked at. Six additional recommendations pertaining to *in-situ* and *ex-situ* conservation from sections other than 6.1, 6.2, 6.3, 6.4, and 6.6 were also considered. Eighty one recommendations were deemed valid with no modifications; four were modified; and two were deemed not relevant in the current context and deleted. Several new recommendations were identified. The details are given in Annex 5.

Our review mainly focused on institutional needs for *in-situ* and *ex-situ* conservation as well as mechanisms for overall implementation of the BCAP, and hence may not fully cover the very broad recommendations relating to research, education, legal mechanisms, policies and sustainable use, etc. for which completed tracking schedules were not received by Task Force 11. It is expected that other Task Forces will make their institutional recommendations directly through their groups.

5.0 REVIEW OF INSTITUTIONAL ASPECTS AND CAPACITY BUILDING NEEDS

The number of BCAP 1999 recommendations pertaining to each of the 11 Task Forces and the number of cross cutting recommendations were identified by the Task Force and are listed below:

The recommendations in the 1999 BCAP in respect of institutional building and capacity needs were considered from the two dimensions stated below:

1. Do Institutions have capacity for direct implementation of recommendations assigned to them by the BCAP?
2. Does an effective mechanism exist to:
   - Coordinate and monitor the implementation of the individual recommendations?
   - Enhance capacity of implementing institutions where required ?, and
   - Integrate biodiversity considerations and actions into the various sectoral plans and programmes of all institutions at both national and regional level?

5.1 Analysis of existing mechanism for overall coordination

The institutional structures proposed by the BCAP for the implementation of its recommendations were: a Biodiversity Secretariat in the Ministry in charge of the Environment, a National Steering Committee, Task Forces (not to be confused with the 15 Task Forces that have been set up to prepare an Addendum to the BCAP), and a range of government and non-government implementing agencies (Fig. 1).

The Biodiversity Secretariat, NSC, and Task Forces

The BCAP envisages that the Biodiversity Secretariat would become fully operational within the first six months of the two-year inception phase. It was further expected that the Secretariat would initiate action leading to the early establishment of the NSC and the Task Forces.

The mission and objectives of the Biodiversity Secretariat were appropriately formulated by the Ministry to facilitate the achievement of the main functions entrusted to it by the BCAP (see Fig.1). The stated mission of the Biodiversity Secretariat is *to provide leadership for the nation in the conservation of country's biodiversity without depleting natural stock and the environment while ensuring the national commitments to sustainable development.* In order to achieve the mission, a set of objectives has been set out for the Biodiversity Secretariat, of which objectives six and ten relate to the implementation of the BCAP. These are:

- Objective 10 : Implement, coordinate, promote and monitor the progress of the BCAP.
- Objective 6: Collect, store, update, process and disseminate data and information relevant to the biodiversity sector.

What has been achieved:

- The Biodiversity Secretariat was established in 1998 and provided for a cadre strength of 19. Majority of these positions, however, are yet to be fully occupied.

Approved Cadre	Existing Cadre
Director - 01	Director - 01
Deputy Directors - 02	Deputy Director - 01
Assistant Directors - 04	
Environmental Management Officers (Gr I) - 04	Environmental Management Officers (Gr I) - 03
Environmental Management Officers (Gr II) - 08	Environmental Management Officers (Gr II) - 04

The Secretariat was required to complete certain activities on a priority basis within the first year of the BCAP's implementation. The expectations and performance are set out in Table 2.

Table 2: Review of Actions assigned to the Biodiversity Secretariat in the BCAP and Action taken so far

Action to be taken by the Biodiversity Secretariat within first year of operation	Action to date by the Biodiversity Secretariat
• set up a biodiversity information management system, including conditions for access and exchange; • complete the setting up of the meta-database on biodiversity; • draw up terms and conditions for access to genetic resources; • develop modalities for scientific and technical cooperation including terms and conditions for sharing results of research and development in a fair and equitable manner; and • develop modalities for effective participation in biotechnological research including establishment of national guidelines and regulations for safe transfer, handling and use of LMOs.	• a directory on Biodiversity Information Management has been prepared. • a Code of ethics for researchers prepared and circulated among scientists (as at October 2003, Sinhala and Tamil versions were being completed). • a Statistical Compendium on biodiversity under preparation as at October 2003. • subject specific databases on (a) national wetland fauna and flora, (b) urban biodiversity, (c) traditional names related to names of fauna and flora, are being compiled (Oct. 2003). • an action plan for conservation of endangered species is envisaged through the National Species Conservation Advisory Group (NASCAG) set up in 2002 • a draft act for access to genetic resources and benefit sharing has been prepared. • draft Material Transfer Agreement or use in collaborative research has been prepared by a sub committee in 2003.

As regards the other institutional arrangements proposed by the BCAP, the position is as follows:

- The establishment of the NSC to function as an apex body to formulate policy and direct the implementation of the BCAP has not occurred as envisaged by the BCAP. The NSC was set up in 1998 with the Secretary of the Ministry of Environment as its Chair, but ceased to function after just one sitting. The National Experts Committee (NEC) on Biological Diversity instead continues its role of advising the Ministry on matters relating to conservation of biodiversity.

- The establishment of Task Forces for BCAP implementation (except for a Legal Task Force on Access to Genetic Resources) too has not materialized as anticipated.

These factors have played a major role in the non-performance of the main functions of the BCAP including liaising with sectoral agencies to identify priorities, developing mechanisms to incorporate the

recommended BCAP actions into the implementation plans of sectoral agencies, preparation of project proposals under BCAP by liaising with governmental organizations and the provincial administration, monitoring the implementation of recommendations in BCAP and taking appropriate corrective action where necessary, and, initiating action on cross-sectoral activities identified in the BCAP.

Committees on Environmental Policy and Management (CEPOMs) were set up by the Ministry following a recommendation in the National Environmental Action Plan (NEAP) 1998-2001. One of the CEPOMs was to cover biodiversity. However, this CEPOM made no significant impact on the implementation of the BCAP (see Box 3).

Box 3: **Committees on Environment Policy and Management (CEPOMs)**

The National Environmental Action Plan (NEAP) 1998-2001 recommended the setting up of CEPOMs to cover natural resources (e.g. land, biodiversity) and economic development sectors (e.g. industry, health). The CEPOMs dealing with economic development sectors functioned fairly well, while those dealing with natural resources failed to make any significant impact. When the new environmental action plan was prepared (Caring for the Environment 2003-2007 (CFE) - Path to Sustainable Development), the CEPOMs were reconstituted to cover economic development sectors only, and, in so doing, sought to ensure that environmental concerns are integrated to economic development. This is precisely what Article 6b of the CBD encourages countries to do in respect of the conservation and sustainable use of biological diversity. It must be noted that many activities related to the conservation of biological diversity will not come within the purview of the CEPOMs, particularly those that are not directly related to economic development activities. Hence, there is a distinct role for the National Steering Committee to provide policy direction and oversee the implementation of the BCAP.

Direct Implementing Agencies

A large number of agencies impact on biodiversity conservation in some form or another. The State, as the custodian and trustee of over 70% of the land area of the country and nearly all of the water resources in and around Sri Lanka, has to play a dominant role in conserving the nation's biological diversity for the benefit of future generations. In addition, numerous NGOs continue to play a significant role in biodiversity conservation, as well as several community based organizations (CBOs) that have been increasingly involved in conservation related activities in partnership with or facilitated by the State. The private sector too has the potential to become actively involved in biodiversity conservation.

Role of Government

The following ministerial functions are of vital importance in relation to the conservation of biological diversity:

- Environment and natural resources
- Fisheries and Ocean Resources
- Agriculture and Livestock
- Health, Nutrition and Welfare
- Human Resources, Education and Culture
- Irrigation & Water Management
- Land
- Science and Technology

The Ministry in charge of environment has to play the key role in promoting biodiversity conservation, while also serving as the national focal point for the CBD in Sri Lanka. Availability of adequate institutional capacity for biological diversity conservation (as appropriate to their functions) in the ministries handling the aforesaid subjects, as well as in the institutions under them, is critical for the successful implementation of the BCAP recommendations.

There are also several other ministries and agencies, which although not directly concerned with biodiversity conservation, are involved in implementing policies, programmes and plans which have significant implications for biodiversity conservation.

- Ministry dealing with Policy Development and Implementation
- Ministry dealing with Tourism
- Ministry dealing with Transport
- Ministry dealing with Industries

Profile of Institutions dealing with forestry, wildlife, coastal and marine, and agriculture

Forest Department

The Forest Department deals with part of the land under natural forest, and its main responsibility is the implementation of the Forest Ordinance. It is also bound to enforce the National Heritage Wilderness Area Act of 1988 and is responsible for reforestation, management of forest plantations, silvicultural research, forest protection, forestry education, implementation of community forestry projects and forest extension services. This department manages the Forest Reserves and Proposed Forest Reserves, Conservation Forests, National Heritage Sites, and the Man and Biosphere (MAB) Reserves located within its jurisdiction. There has been considerable re-orientation in policy adopted by the Forest Department over the years, with forest policy increasingly moving towards conserving the nation's forest biodiversity. This is evident in many of the department's recent initiatives, including the creation of Conservation Forests to conserve biodiversity rich wet zone forests, and the trend to link the management of Conservation Forests with development activities in the buffer zone

Department of Wild Life Conservation (DWLC)

The DWLC is responsible for the management of protected wildlife parks and reserves, and bears primary responsibility for implementation of the Fauna and Flora Protection Ordinance. The protective function of the Department was limited by inadequate funding, insufficient staff and frequent programme disruptions up to the early 1990s, but the situation has been partly remedied since then with the influx of funding for capacity building and management initiatives. One such initiative was the five-year Global Environmental Facility Funded investment project to enhance capacity and capability of the Department. However, despite the modest capacity enhancement that occurred through this project, institutional capability of the DWLC requires considerable strengthening. The required capacity building in the DWLC is expected to be achieved under the proposed investment project for the Wildlife Department with financial support received from the Asian Development Bank (ADB,) the Global Environmental Facility (GEF) and the Netherlands Government termed the Protected Area Management and Wildlife Conservation (PAM&WLC) Project. An important function of the PAM&WLC is that in addition to institutional strengthening and human resource development, it facilitates management of seven Pilot Protected Areas. PAM&WLC is also expected to develop institutional potential for ecotourism, community participation in protected area management and wildlife conservation and better management of marine protected areas.

Central Environmental Authority (CEA)

Although there is no special unit to service wetland biodiversity needs, the CEA has institutional programmes for implementing BCAP recommendations for wetland conservation. However, additional funds and staff and very specific resources are required to continue implementing these programmes. Coordination of the CEA wetland the activities is at present through the National Wetland Steering Committee (NWSC) and through its Task Forces on Wetland Policy, Education & Awareness, Research & Development, and Monitoring & Evaluation.

The CEA also has an important role to play as a regulatory authority and in standard setting. It provides for stringent legal provisions to control environmental pollution and to mitigate the adverse impacts of development activities. This is made possible through the introduction of legally binding Environmental Impact Assessments (EIA) and by making it mandatory for all industries to obtain an Environmental Protection Licence (EPL) from the CEA to ensure that environmental pollution through industrial activity remained within acceptable levels. As such, it is mandated to monitor industrial discharge of effluents into waterways, air emissions and noise pollution, and to respond directly to public complaints on pollution and nuisance arising from industries and other miscellaneous sources. It may also direct such complaints to the respective Local Government Authorities or other institutions for investigation. The CEA is also mandated to advise the Minister on the management and conservation of the country's natural resources.

Coast Conservation Department (CCD) and the fisheries sector

The CCD has a mandate for conservation and management of the coastal environment that lies within the Coastal Zone, and is the prime agency responsible for coastal issues in Sri Lanka. The requisite regulations for the CCD to commence operations under the Coast Conservation Act were gazetted in 1983. The Coast Conservation Act of 1981 also conferred a legal responsibility upon the Director of Coast Conservation to prepare a national Coastal Zone Management Plan (CZMP) which should be revised and updated periodically. The CZMP of 2004 will address many issues relevant to managing coastal biodiversity.

The mandate for fisheries and aquaculture development, management and research in Sri Lanka lies with agencies such as Department of Fisheries & Aquatic Resources (DFAR), National Aquaculture Development Agency (NAQDA) and National Aquatic Resources Research and Development Agency (NARA). Optimising the outcome of fishing operations and practices is the responsibility of MFOR/DFAR (CZMP, draft 2002).

National Aquatic Resources Research and Development Agency (NARA)

NARA has ongoing programmes in implementing many of the BCAP recommendations in the coastal and marine sector. Its mandate includes: ensuring the utilization of scientific expertise for development of aquatic resources; coordination of activities of institutions engaged in the exploitation, planning, research, development, control and management of aquatic resources; advising any Ministry or institution on the conservation and utilization of aquatic resources: and formulation of policies relating to development and management of national aquatic resources.

This institution needs strengthening to take a lead role in supporting the conservation of biodiversity in the coastal and marine systems.

Department of Agriculture (DoA)

Agricultural development, including extension and support, are under the purview of the DoA. The DoA has aimed at breeding new varieties and developing crop protection methods and sustaining production systems to achieve self sufficiency in staple food crops without adversely affecting the environment. To achieve these aims, new technologies such as drip irrigation, crop production under protected environments (plant houses) and biotechnological methods have all been experimented with. The Rice Research and Development Institute (RRDI), the Field Crops Research and Development Institute (FCRDI), the Horticultural Crops Research and Development Institute (HORDI) and the Plant Genetic Resources Centre (PGRC) are under the DoA. In addition, under it are six Regional Agricultural Research and Development Centres (RARDCs) and a further network (60 stations) of research sub-stations island-wide, the National Plant Quarantine Service and the Seed Certification and Plant Protection Centre to address plant quarantine and seed health.

Department of Animal Production and Health (DAP&H)

The DAP&H is concerned with development of the livestock sub-sector as well as research and conservation of important indigenous livestock species. The latter activity is, however, constrained due to insufficient funds and infrastructure.

Role of the Private Sector

The contribution by the private sector towards biodiversity conservation has not been at a significant level in the past. The private sector, however, has a major part to play in sustainable use of biodiversity, for instance in development of nature based tourism, export of ornamental aquatic plants, bioprospecting, establishment of forest plantations etc. It is important, therefore, that their potential in making a major contribution to conservation of biodiversity is identified and that they are made aware that making such a contribution is also in their long term interest.

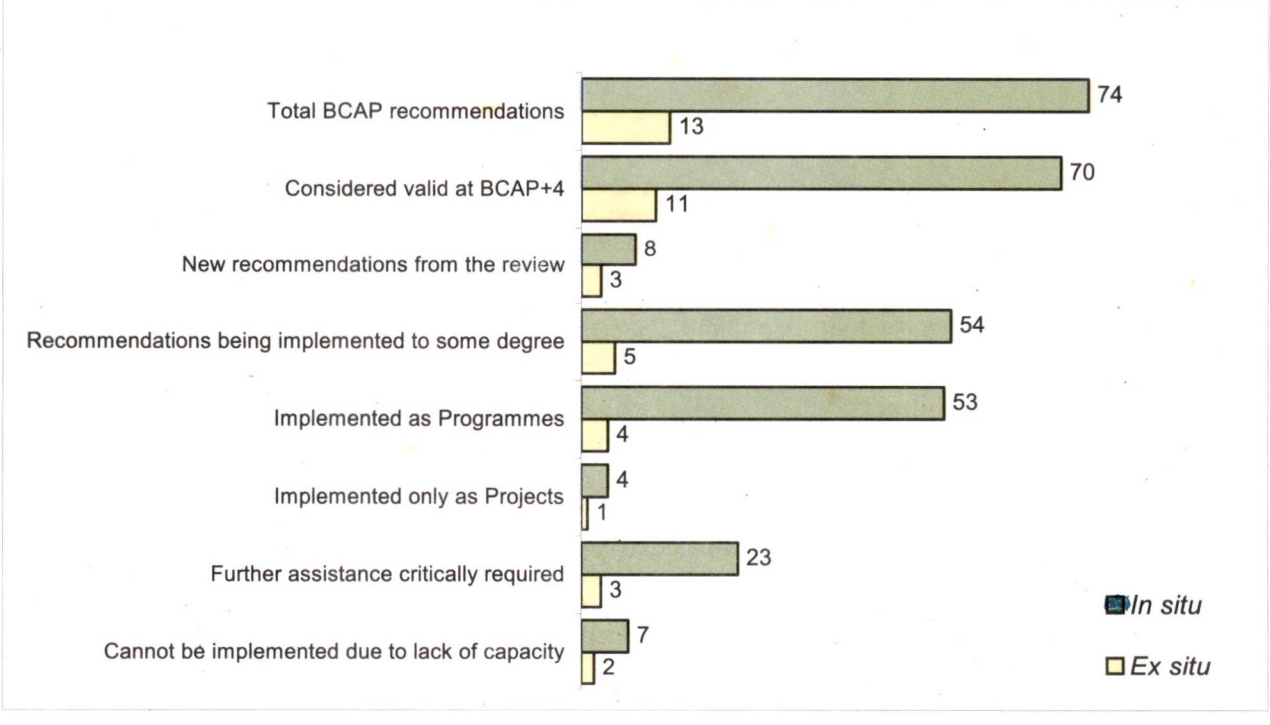
Role of the NGOs

As representatives of direct users of biodiversity and firm advocates of conservation and sustainable use of biodiversity, Community Based Organisations (CBOs) and Non Governmental Organisations (NGOs) have a key role to play in conservation. CBOs have been increasingly engaged in conservation and related activities in partnership with and facilitated by the State during the past five years. Over 300 NGOs engaged in environmental programmes are registered with the CEA, of which about half is involved in biodiversity conservation activities in the various districts in the country.

5.2 BROAD INSTITUTIONAL CAPACITY NEEDS IDENTIFIED THROUGH THE PRESENT REVIEW

The Task Force on Institutional Capacity Needs had identified several aspects relevant to implementing the BCAP recommendations through joint workshops, meetings and by using the Tracking Schedule (Annex 3). Many of the recommendations are being implemented, but some are constrained due to inadequate institutional capacity. A few have never got off the ground due to severe capacity constraints. The details are given below in Fig. 2.

Fig 2. Status of the implementation of *in situ* and *ex situ* recommendations in the BCAP



New recommendations that emanated from the workshops, existing recommendations amended and some that were deemed not relevant are given in Annex 5.

The Ministries and relevant agencies that were identified by the Task Force as the key agencies that should take a lead role in implementing the BCAP recommendations are given below:

Table 3: Institutions identified to take lead in implementing the BCAP

	SECTOR	AGENCY
In situ	Forest	MoE&NR, FD, DWLC, LRC, CEA, NSF, Divisional Administration, DoA, IDB, NBRO, Ministry of Industries, Ministry of Plantations, Dept of Ayurveda, CBOs, NGOs, private sector
	Wetlands	NARA, CEA, FD, DWLC, MoE&NR, CTB, DFAR, NAQDA, Divisional Administration, Local Authorities, Task Force NWSC.
	Coastal & Marine	MoE&NR, NARA, CCD, DFAR, DWLC, FD, CEA, UDA, Ministry of Industries, CTB, Divisional Administration, Local Authorities, Irrigation Department, NSF, ITI, NBRO, ICTAD, NASTEC, GSMB, Police Dept, NAQDA, MPPA, Universities CBOs, NGOs
	Agriculture	MoE&NR, Ministry of Plantation Industries, Ministry of Lands, DoA, Ministry of Agriculture, DAP&H, CRI, RRI, TRI, VRI
Ex situ		RARDCs, RRDI, FCRDI, HORDI, DoA, Ministry of Indigenous Medicine, NARA, Dept of Ayurveda, Zoological Gardens, PGRC, DWLC, DAP&H, BMARI, VRI, NASTEC, Botanical Gardens, UDA

Detailed institutional and policy needs for capacity building to improve the BCAP recommendations are given in Annex 4.

6.0 KEY RECOMMENDATIONS FOR INSTITUTIONAL ASPECTS AND CAPACITY BUILDING

- **We recommend that the present Biodiversity Secretariat, with enhanced capacity building, is utilized to facilitate implementation of the recommendations of the BCAP**

Two options practiced in other countries:

The Task Force has examined two types of institutional structures for facilitating BCAP implementation in other countries; the Biodiversity Secretariats (as established in Bangladesh, UK etc) and the Biodiversity Authority to be established in India. In the latter case, the Biodiversity Authority will be enforced by a Biodiversity Act, and it has taken India about 10 years to produce the desired document (P. Balasrkishna, personal communication). Legislation that specifically addresses biodiversity concerns at the central level has been necessitated in India due to the very strong and independent state laws so that a national law can prevail and bring uniformity on certain critical biodiversity related action.

The National Biodiversity Strategy and Action Plan of India is also a framework which pulls together the national needs that have been culled from the many state NBSAPs that were produced before, and are the more detailed with specific recommendations at the state level. The National Plan is based on the

particular needs of the state NBSAPs which were produced first. Hence, the Biodiversity Authority will only have to address the key national action while more specific action is carried out by the state institutions. In Sri Lanka, however, there is a different situation where the national BCAP has recommended very specific actions, and where some of the actions are already in progress as observed during the workshops conducted by Task Force 11.

A suitable mechanism to drive the BCAP implementation process: Authority, Department or Secretariat?

During discussions on the type of mechanism required to coordinate and facilitate BCAP implementation, some Task Force members expressed the view that the institutional mandate of the existing Biodiversity Secretariat is inadequate to coordinate activities of other agencies and that a new structure/institution with a specific legal mandate may have to be put in place. This was looked into and the legal implications were discussed, including a discussion with a member of the Legal Task Force (Jagath Gunawardena, personal communication). Some factors that emerged are:

- the Biodiversity Secretariat is in fact empowered by the legal mandate derived from the Ministry of Environment within which it is nested to carry out its work of coordination, facilitation and monitoring of the BCAP.
- a specially constituted government institution (e.g. an Authority or Board) backed by a law cannot compel another government department to carry out certain actions or collaborate with it. It has less mandate to make other institutions comply with its requirements than a ministry or government department.

  A case in point is the fact that Coast Conservation Act No. 57 of 1981 vests the administration, control and custody of the coastal zone in the Republic of Sri Lanka and has appointed a Director of Coast Conservation Department responsible for administration and implementation of the provisions in the Act, including the survey and inventorization of coastal resources. Management of the coastal zone is based on a legally backed CZMP which is prepared and updated by the CCD periodically. Despite this, the CCD recognizes: a) that it is one of many institutions that have jurisdiction over management of coastal resources; (b) that the proposed management measures have to be socially and politically acceptable; and that (c) planning has to be based on a realistic assessment of the CCD's capacity to directly manage the development activities affecting coastal resources, and its ability to influence coastal management activities of other organisations.

- The most effective way to promote coordination between state institutions is to constitute a mechanism at ministry level (e.g. through a National Steering Committee comprising Ministry Secretaries). These Secretaries can then issue directives to institutions under their ministries to collaborate with the Task Forces set up and functioning under the aegis of the Biodiversity Secretariat. If the Task Forces are appointed by the Cabinet, coordination will be more effective.

6.1 Main types of Institutional needs

The present review identified six main types of institutional needs for implementation of recommendations for *in-situ* conservation in forests, wetlands, coastal and marine ecosystems and agricultural systems. These six types of needs were further classified on the basis of how they would be fulfilled. Accordingly, it was proposed that the Biodiversity Secretariat would be responsible for achievement of four of the institutional needs, while the implementing agencies would be directly responsible for the remaining two.

- Thus, the Biodiversity Secretariat would be expected to:

    1. facilitate, coordinate and monitor implementation of actions that are ongoing or expected to commence under existing institutional plans and programmes as required (see 6.2.1).
    2. directly implement some of the actions needed for implementing the BCAP recommendations.
    3. integrate biodiversity conservation considerations into sectoral and institutional programmes (This could be facilitated by the Biodiversity Secretariat, working in collaboration with the CEPOMs).
    4. promote and facilitate capacity enhancement of institutions that have to implement the BCAP recommendations.

- Institutions responsible for implementing the BCAP recommendations would be expected to:

    5. take the lead role in *coordinating* implementation of individual BCAP recommendations and report progress to the Biodiversity Secretariat, and or
    6. take the lead role in *directly implementing* BCAP recommendations and report progress to the Biodiversity Secretariat.

6.2 Actions recommended

6.2.1. THE BIODIVERSITY SECRETARIAT

To facilitate the Biodiversity Secretariat to carry out the first four actions above, we propose several broad institutional recommendations.

a. Strengthen the Biodiversity Secretariat
b. Institute a **Strategic Implementation Programme (SIP)** having time frame for progress of each recommended action, institutions responsible for implementation and support
c. Institute a **Strategic Coordinating & Monitoring Mechanism** through Task Forces backed by a mandate that would ensure a commitment on the part of Task Force members to report back progress in respect of the recommendations for which they are responsible.

Strengthening the capacity of the Biodiversity Secretariat

- **We propose that the Biodiversity Secretariat should be strengthened to deal effectively with the implementation of the BCAP as well as to fulfil national obligations in relation to the CBD. As this includes a wide range of functions, we propose that special capacity is built in the Secretariat, preferably, through the establishment of a separate unit within the Secretariat.**

We recommend that the following activities be undertaken for this purpose:

- Develop a strategic plan for the work of the Secretariat taking in to consideration, the needs of the BCAP implementation (coordination/monitoring/implementing some actions).

This exercise could be undertaken with the assistance of a consultant who will, amongst others, assess the skills requirements and organizational aspects of the Secretariat to facilitate implementation of the BCAP in the context of its many functions, and recommend a strategic plan of action to address any gaps that may exist for the following actions.

Some Key functions proposed for the Biodiversity Secretariat

1. Facilitate BCAP implementation by establishing a Strategic Coordinating & Monitoring Mechanism (Task Forces).
2. Establish the NSC and revive the biodiversity network established during BCAP preparation.
3. Establish a biodiversity meta database.
4. Build capacity of NGOs to play an important role in biodiversity conservation.
5. Review biodiversity legislation and examine legislation that would impinge on biodiversity through the proposed legal Task Force.
6. Address prevailing and emerging issues on access, biosafety, alien species etc through participatory processes and voice concerns at the necessary forum and help safeguard national interests.
7. Establish a National Experts Committee on *ex-situ* conservation with those with proven expertise on threatened species and *ex-situ* breeding/rearing to help with *ex-situ* conservation.
8. Promote the establishment of mechanisms for coordination between FD and DWLC, a special unit for wetland biodiversity within CEA and a special unit for aquatic biodiversity research at NARA.
9. Work with the CEPOMs to ensure that biodiversity conservation is integrated with economic development.
10. Integrate biodiversity concerns into Environmental Impact Assessments.
11. Involve private sector in conservation activities.
12. Continuously monitor and review BCAP implementation progress, and produce periodic progress/review reports.
13. Conduct annual or bi-annual independent review and evaluation of BCAP implementation after it commences as a "total exercise".
14. Prepare and implement a Strategic Implementation Programme that identifies the role of communication during BCAP implementation to facilitate the entire process and ensure stakeholder commitment.

Preparing a Strategic Implementation Programme (SIP) for implementing the BCAP

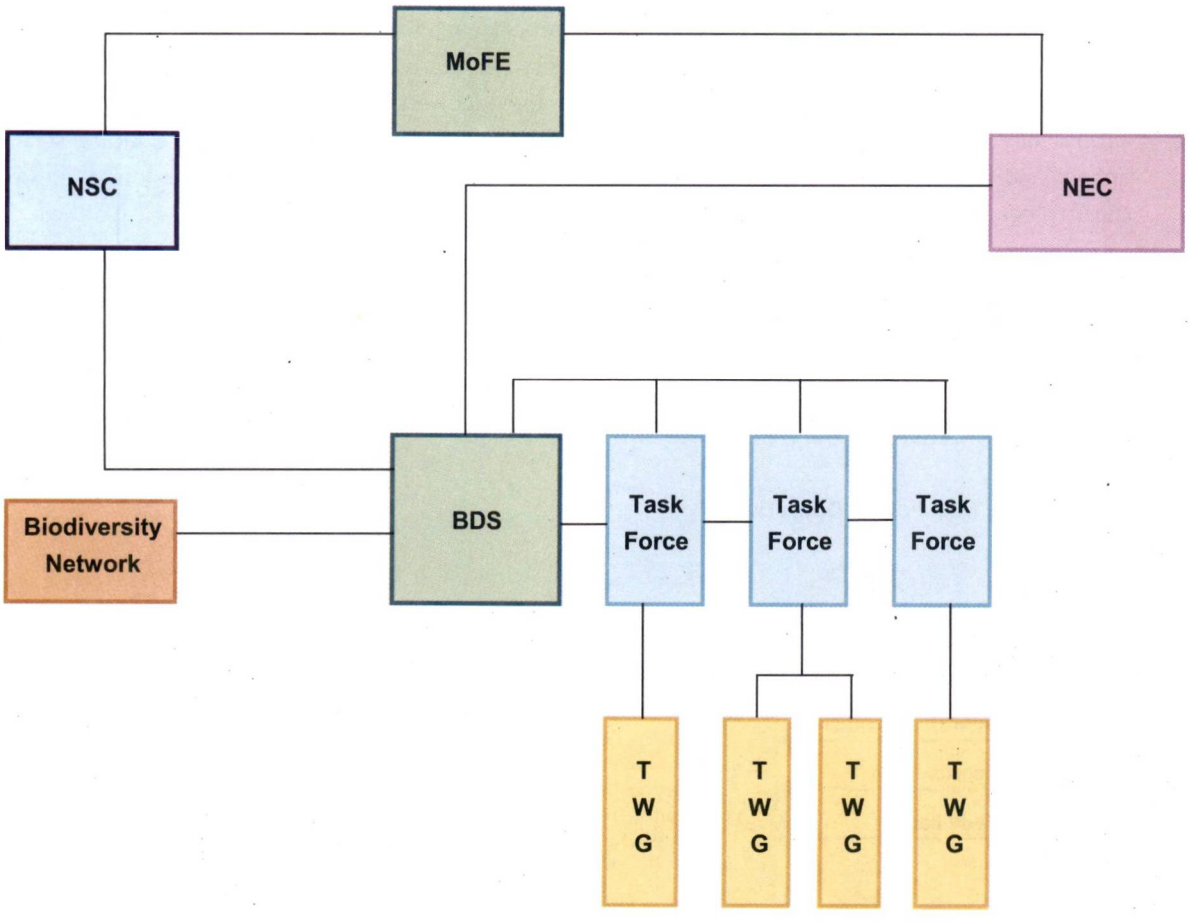
- **We propose that this should involve the preparation of a detailed implementation plan for the BCAP (+addendum) recommendations. Such a detailed implementation programme should:**
  - list the specific institutions identified for specific tasks/actions and corresponding timeframes to achieve progress and the end result envisaged (targets for monitoring), and
  - specify mechanisms to monitor, track and coordinate the implementation of the recommendations given in the BCAP 1999 and the addendum to be prepared by the Biodiversity Secretariat.

The preparation of the Strategic Implementation Programme should involve the participation of all relevant Heads of agencies through the Task Forces (see below) so that a realistic commitment for implementation of the individual recommendations can be expected. Such an exercise will require considerable time, coordination and full time personnel as well as a coordination mechanism to involve the participation of relevant sectors and institutions. As such, this remains outside the purview of this present Task Force.

Preparing a Strategic Coordinating and Monitoring Mechanism

- **We propose that the Strategic Coordinating and Monitoring Mechanism required for effective implementation purposes be executed by the Biodiversity Secretariat assisted by Task Forces (Fig 3).**

Fig 3. Institutional Structure for implementing the BCAP as proposed by Task Force 11



Establishing Task Forces

This has been recommended in the BCAP, but certain modifications in the actions proposed for the Task Forces would be necessary to suit the current situation as stated below:

- Lead agencies required to carry out the individual recommendations of the BCAP should be represented as members of the relevant Task Forces. They will also be responsible for reporting back on progress of actions to be carried out by their respective institutions.
- Other institutions responsible for actions monitored by the Task Force will also have to report back to the Task Force.
- The Task Force should also monitor the progress of actions that fall within their purview so that there is peer review of action taken.
- Facilitate the implementation and organize assistance to the implementing agencies where required though formation of Working Groups.

Making the Task Forces Operative

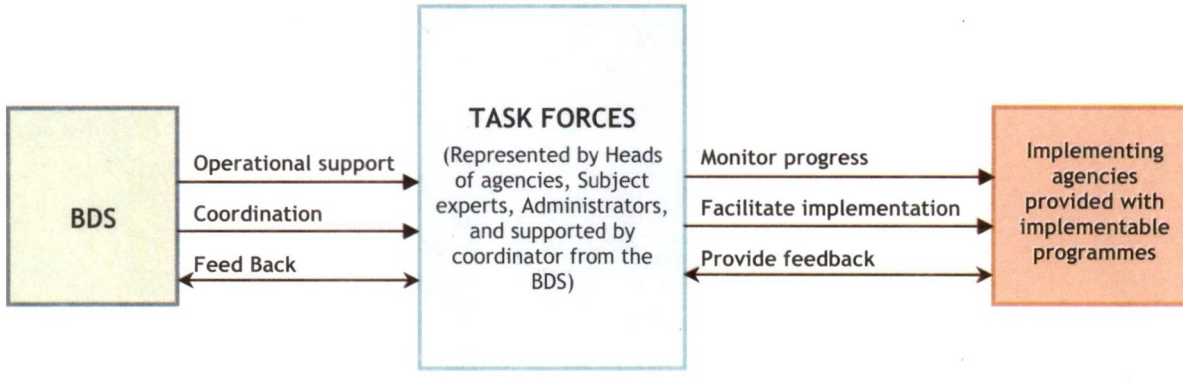
- To ensure the coordination required for implementation, we are of the opinion that each Task Force should consist of Heads (or high level representatives) of main implementing agencies responsible for implementing the recommendations monitored by the respective Task Force and other experts in the respective field. The representatives of decentralized and devolved agencies can be co-opted when required.

- Each Task Force should be serviced by an official (coordinator) from the Biodiversity Secretariat **who will provide operational support** to facilitate the process, monitor implementation and coordinate with the CEPOMS, NEC and MoENR via the Biodiversity Secretariat, organize meetings and reviews, coordinate the preparation of reports etc. Where the Biodiversity Secretariat has to implement actions directly, the coordinator for the respective Task Force will responsible to facilitate such actions and to report back to the relevant Task Forces within the specified time frame identified in the Strategic Implementation Programme.

- Each Task Force should also draw on *Subject Specialist/s* for specific technical support as and when required on a consultancy basis.

- Each Task Force would be guided where relevant by the NEC through the Biodiversity Secretariat, and would be constituted with the concurrence of the NSC.

Fig 4. Making the Task Forces Operative



The number of Task Forces required, and the activity areas and membership to be covered by each should be identified through an adequately representative consultative process. However, we would like to suggest the following as possible themes for the proposed Task Forces.

1. *In-situ* and *ex-situ* conservation of biodiversity
2. Research and information management (including meta database development)
3. Legal issues pertaining to strengthening sectoral laws, access, biosafety, alien invasive species, biodiversity and trade and foreign policy
4. Access and biotechnology: to deal with access issues, ethics, bio-technological development and bio- technology transfer (policy and actions of the area)
5. Education, awareness and communication to promote the BCAP and biodiversity conservation among the different segments of Sri Lanka including policy makers, planners, heads of departments etc., and specifically to raise the profile of and funds allocated for biodiversity conservation within government by creating awareness of the BCAP and benefits of biodiversity conservation for national development among policy makers.
6. Integration and devolution: Integrating biodiversity concerns into cross-sectoral issues, the private sector, NGO activities and community actions (chapter 7) and devolution of biodiversity conservation. (this could be divided into two if desired)
7. Task Force to critically examine impacts of all new cross-sectoral laws/policies/trade and access agreements and major development efforts on biodiversity conservation; guide formulation of new policies to address *in situ* conservation outside forests; integrate biodiversity concerns into land policy and wetland policy, and to bring in legislation for wetland conservation.

8. Traditional knowledge and cultural practices related to biodiversity conservation (should have representation from legal / policy Task Forces).

Establishing small Technical Working Groups

Technical Working Groups should be established to carry out specific functions/activities that require high time inputs (e.g preparation of implementation proposals, setting up of inter-sectoral or inter-institutional coordination mechanisms etc) or to provide specific technical expertise. Technical Working Groups will be short-term based and established under a Task Force only for the duration of a specific task to be undertaken. These tasks may not require inputs of the entire Task Force, but for instance, may only need to involve one member directly related to the activity from the Task Force. Hence each Technical Working Group will include the relevant member/s from the Task Force, others co-opted to form the working group and a representative from the Biodiversity Secretariat who will act as the Coordinator. These small Working Groups could thus help to co-opt people who are not represented in the Task Forces into the implementation process. Such persons may include researchers, and administrators with the required technical and organisational expertise and even regional or local level administrators.

The Technical Working Groups would be monitored by the relevant Task Force it falls under and would report back to it. These Working Groups can be supported by the Subject Specialist of the relevant Task Force, who would liaise with the relevant state agencies, provincial administration and others to develop fully fledged technical and financial proposals, with implementation mechanisms and partners clearly identified, for nationally prioritised BCAP recommendations.

Fig 5. Making the Technical Working Groups Operative



Box 4: **Recommended role of the Task Forces in coordination, monitoring and implementation**

- ***Prioritising BCAP recommendations and identifying time frames for institutions assigned to implement such action***

  The Task Forces will be required to facilitate the Biodiversity Secretariat by providing guidance and assistance to translate BCAP recommendations into implementation programmes. Each Task Force will, with the support of the Subject Specialist and by coordinating with relevant parties, review BCAP recommendations and provide the following inputs:

  (a) prepare the section relevant for the overall Strategic Implementation Programme of the Biodiversity Secretariat

  (b) translate actions that require special projects into project proposals - with operational details to obtain additional funding and resources for implementation.

  (c) present a list of prioritised recommendations to the Biodiversity Secretariat in their thematic areas for immediate action.

  (d) Guide the Technical Working Groups to achieve Task Force objectives and actions.

  (e) Monitor the implementation of the BCAP recommendations periodically as required and prepare review reports for the Biodiversity Secretariat, NSC and NEC on progress.

Advice and policy direction

- The **National Experts Committee on Biodiversity** should continue to provide technical expertise to the Biodiversity Secretariat, and to the Task Forces through the Biodiversity Secretariat.

- The **National Steering Committee on Biodiversity** should be reconvened with top level representation to provide policy direction to institutions under their purview for implementation of BCAP recommendations and for facilitating the Task Force representation. Its regular involvement will also facilitate top level support for BCAP implementation, provide for coordination and cross sectoral collaborative action, and setting up of institutional mechanisms. The Secretaries in the NSC can issue policy directions to institutions under their purview in the form of circulars so that the necessary action to implement BCAP recommendations and to report progress is complied with.

We also propose that the Biodiversity Secretariat (through reports from Task Force coordinators assisted by Subject Specialists) should periodically update and inform members of the NSC on the status of BCAP implementation. Prompt feedbacks and briefings in between and prior to NSC meetings should be undertaken by the Secretariat as a major communication exercise. The NSC needs to be urged to convene at least twice a year.

Assisting with networking

- A **Biodiversity Network** comprising middle level officers in implementing agencies in provincial and central agencies should be reconstituted to facilitate the Biodiversity Secretariat and other implementing agencies to obtain necessary information whenever it is required during BCAP implementation.

6.2.2 FACILITATING INSTITUTIONS RESPONSIBLE FOR IMPLEMENTING THE BCAP RECOMMENDATIONS

Among 87 BCAP recommendations that have been assigned to various institutions for individual action under *in situ* and *ex situ* conservation, **26** have been identified by the Task Force where institutional capacity or mandate is critically required to continue ongoing programmes, while **nine** have been found where any action could not be commenced. To facilitate individual institutions implementing BCAP recommendations, the Task Force has identified:

- details of institutional capacity building required for implementing the individual recommendations of the BCAP which are given in Annex 4.
- Eight key specific recommendations on a sectoral basis under five headings: Forests, Wetlands, Coastal & Marine, Agriculture and *Ex situ* conservation:

The eight key institutional needs for enhancing ability to directly implement BCAP actions for in-situ and ex-situ conservation are given below.

Forests

1. We recommend the establishment of a coordination mechanism that will enable better coordination between the DWLC and FD for:
   - Establishing an optimal protected area network of forests
   - Continual updating of the biodiversity database on forests and wild species through the establishment of a joint database and forest survey mechanism, including pooling of GIS data and photographic material.
   - Conducting joint programmes for staff capacity enhancement and training in selected areas (e.g. biodiversity assessments, community participation in protected area management, mapping etc).
   (ref BCAP 6.1 (8)., 6.1 (11), 6.1 (6) and new recommendation)

   Strategy for Biodiversity Secretariat: We recommend that the Biodiversity Secretariat takes the initiative in establishing this FD/DWLC coordinating monitoring mechanism through the NSC and Task Forces with the help of a Technical Working Group if required.

2. Enhance institutional capacity for research on forests and wildlife in the Forestry Research Institute at Kumbalpola under the FD and the Research division at Head Office DWLC for the present. However, in the long-term, establishing a joint research institute for Forestry and Wildlife research should be seriously considered.

Wetlands

3. We recommend that a special unit be established within the CEA to take the lead role in wetland conservation and to take action with the assistance of FD and DWLC to implement BCAP actions 6.2(2), (1)(3)(4)(7). The CEA is selected as it has been involved with wetland issues in the past and the National Wetland Steering Committee serviced by the CEA is currently addressing overall wetland conservation action.

   Strategy for Biodiversity Secretariat:
   The Biodiversity Secretariat should take initiatives to establish the unit within the CEA (or other relevant organization) to take the lead role in wetland conservation action and to report back to the relevant Task Force within a specified time frame.

The Secretariat should also promote a link between this unit and the National Expert's Committee for *ex situ* conservation [see rec.6.6 (4)] to ensure that breeding stock is adequate for commercially bred freshwater species.

Coastal and Marine

4. Establish a unit within NARA with capacity to take lead role in regular monitoring, research and study of marine and freshwater biodiversity and report back to the relevant Task Force within a specified time frame.
5. Facilitate the strengthening of the coordination and monitoring role of the CCD in managing coastal habitats and bioresources, and track progress.

Strategy for Biodiversity Secretariat: The Secretariat should initiate and facilitate the establishment of a special unit within NARA to take a lead role in regular monitoring, research and study of freshwater aquatic bio-diversity and report back to a relevant Task Force within specified time frame in a strategic implementation programme. The unit should however have adequate resources and a mandate to carry out the relevant functions. If required, the Biodiversity Secretariat could help formulate proposals for funding etc, through a working group convened for this purpose.

The overall strategy for the Biodiversity Secretariat in the coastal and marine sector should be to promote the integration of biodiversity actions in the coastal and marine sector into the CZMP and the Fishery development plans through appropriate coordination (i.e. via the NSC/Task Force) as there are very specific institutions that are mandated to oversee coast conservation and fishery (e.g. CCD, DFAR)

Agriculture

6. Establish a central mechanism at the Ministries dealing with Agriculture and livestock for implementing the recommendations to conserve agrobiodiverity and to report back progress to the Biodiversity Secretariat and the relevant Task Force dealing with agro-biodiversity (Task Force dealing with *in-situ* and *ex-situ* conservation).

Strategy for Biodiversity Secretariat: The Secretariat shall promote the establishment of central mechanisms at the Ministries dealing with agriculture and livestock to address biodiversity issues in these sub sectors.

The overall strategy of the Biodiversity Secretariat in this sector should also be to take necessary steps to promote integration of biodiversity actions into the ministries and departments dealing with agriculture and livestock development in their work programmes, and research plans as there are specific institutions that are mandated with the *in situ* and *ex situ* conservation of agro-biodiversity.

Ex-situ conservation

7. Establish an experts committee to advise on *ex situ* collections for captive breeding/rearing and rehabilitation of illegally held captive animals in association with the National Zoological Gardens This could also assist with identifying whether animals bred in captivity for export are in reality captive bred or collected from the wild.

This committee of experts could thus advice the Customs Department and other state institutions providing licenses for export of captive bred species, including aquaculture, and for regulating and monitoring *ex situ* collections.

The expert's committee should have a pool of people with proven experience on captive breeding/behaviour/ecology of threatened species.

8. Set up a special unit for the VRI or separate institution to address conservation of the indigenous animal genetic resources with lab facilities for genetic characterization and infrastructure facilities on par with the PGRC

   Strategy for Biodiversity Secretariat: The Secretariat should facilitate the establishment of Captive Breeding Expert's committee in the National Zoological Gardens.

7.0 DECENTRALIZING BCAP IMPLEMENTATION

The following activities are recommended for decentralizing BCAP implementation:

- The aspect of decentralization should be addressed by the proposed Task Force on national integration and devolution. This Task Force should be established to promote decentralization of biodiversity conservation activities (either jointly or with integration or separately) with representation at regional/local levels to facilitate this process.
- The Biodiversity Secretariat should through this Task Force facilitate training and awareness programmes jointly with the Task Force on education, awareness and communication.

In view of the trend for devolved activities and responsibilities to the regions, it is required that capacity for environmental planning, management, implementation of activities, monitoring and evaluation are strengthened at the provincial, district, divisional and local levels. This is especially important for enhancement of self reliance and greater group and community participation in dealing with issues connected with use of land, water and other natural resources, as well as with conservation and in dealing with economic development, to bring sustainable benefits to the rural poor.

Importance of devolving and decentralising responsibility for implementing the BCAP

The 13th Amendment to the Constitution has devolved powers to Provincial Councils in respect of certain aspects of biodiversity. The following subjects have been fully devolved to the Provincial Councils.

- Establishment and maintenance of herbaria for Ayurveda, Siddha and Unani medicine.
- Preservation, protection and improvement of stock and prevention of animal diseases.
- Fees under the Fauna & Flora Protection Ordinance.
- Protection of environment within the province to the extent permitted by or under any law made by Parliament.

Among the subjects which are in the concurrent list in regard to which the Provincial Councils can exercise power are the following:

1. Agricultural and Agrarian Services

- Establishment and promotion of agro-linked industries, the establishment and maintenance of farms and supervision of private nurseries

- Soil conservation
- Plant pests

2. Social Forestry and protection of wild animals and birds.
3. Fisheries - Other than fishing beyond territorial waters.
4. Animal breeding, care and health.
5. Tourism - development and control of the Tourist Industry in the Province.
6. Protection of the environment.
7. Prevention of the extension from one Province to another of infectious or contagious diseases or pests affecting human beings, animals or plants.

Box 5: **Importance of devolving responsibility for biodiversity conservation**

Devolution in many forms is shifting attention to local levels in many countries that are implementing national biodiversity Action Plans and strategies (NBSAPs). This is a significant political trend. Indonesia, the Philippines, China, Vietnam, India, Pakistan and Australia have running NBSAP processes which have a strong influence on the overall shift in development and biodiversity planning from national to local levels of government. In some countries, such as Pakistan, Australia and Malaysia, state or provincial governments already have primary control over the management of natural resources.

Over the past ten years, Vietnam, which has a constitution recognising only national-level government, has embraced "doi moi" or a process of innovation with three key areas of government reform affecting planning as democratisation, decentralisation and the rule of law. These principles are also promoted in the Vietnamese BAP.

A number of innovative approaches to biodiversity planning at the regional level are being undertaken in Asia. Their primary objective is to plan and manage biodiversity use according to natural rather than political boundaries. Regional biodiversity planning arises from an appreciation of landscapes. It provides those communities involved with a greater sense of place.

Making biodiversity regions or bioregions a focus of planning and involvement for those working and living at the regional level can promote devolution. Bioregions are defined as areas large enough that the habitats and ecosystem functions within them can remain viable in the long term, if they are managed appropriately. Regions at the subnational level are widely acknowledged in Asia, but few countries have regional political structures or formally recognise regions as a level of government. Many countries are also now preparing economic development plans for regions of various kinds, most defined by natural system boundaries (such as river basins and mountain areas) but modified by administrative realities. Some have established regional authorities for this purpose. NBSAPs are encouraging this concept of regions and need to incorporate it into the planning process.

Source: Carew - Reid, 2002

Sri Lanka's devolution process can take into account the terrestrial bioregions that are identified in the BCAP.

8.0 COMMUNITY MANAGEMENT AND NGO PARTICIPATION

The following activities are recommended for community management and NGO participation:

- Establish a Task Force on Integration and devolution that will help integrate and facilitate biodiversity conservation concerns into sustainable use, and benefit sharing in relation to NGO activities and community actions.
- Establish a Task Force on traditional knowledge and cultural aspects related to biodiversity conservation that will safeguard community knowledge and enable benefit sharing by communities in the event of using such knowledge.

Box 6: **Community management**

Community control and management of local natural resources has become a fundamental principle of biodiversity planning in Asia despite some drawbacks that have been identified. For instance, communities under environmental and economic stress can, and do, knowingly act against their long-term economic interests. Also, powerful individuals or groups who control a resource can over-exploit it for short-term gain in the knowledge that they can move on to other resources later.

However, biodiversity planning engages people in seeking strategies to expose and confront situations of apparent conflict between conservation and development. This is why community management, which is a central theme in all Asian NBSAPs, will not take effect unless it is accompanied by a commitment to equity, benefit-sharing and wide participation in the planning process. Each of those attributes, promoted through NBSAPs, has deep political implications for the way a society functions.

Source: Carew - Reid (2002)

9.0 INVOLVING THE PRIVATE SECTOR IN BIODIVERSITY CONSERVATION

The following activities are recommended for involving the private sector in biodiversity conservation:

- Address policy and technical guidance for initiatives with the private sector for conservation or sustainable use of biodiversity.
  There was general consensus at the workshops held for institutional aspects that Sri Lanka was not ready for the private sector to be given the responsibility of managing biodiversity or for *in situ* or *ex situ* conservation. Among the reasons given are that:
  (a) the private sector is profit motivated and may not always adopt practices required for conserving national biodiversity; and
  (b) at present, they have low technical capacity unlike the trained staff in relevant state institutions who manage biodiversity.
  (c) private sector accountability has to be strengthened in relation to biodiversity conservation.

- MoENR to establish a technical committee to give technical guidance for the private sector on biodiversity related ventures and on other matters such as better design standards that will reduce the use of wood, and other resources negatively affecting biodiversity conservation.

- The recommended Task Force on Integration and devolution will help integrate biodiversity conservation concerns into sustainable use, benefit sharing and technology transfer in the private sector.

10.0 ADDITIONAL COMMENTS

We would expect that Task Force 9 on Policies, Strategies and Action Plan would have identified all national policies that have a bearing on biodiversity - either positive or negative - and their institutional needs to facilitate biodiversity conservation. As these recommendations are not available to us, and as it would also be a duplication of tasks, we have not dealt with that aspect in this report.

Further, we have not received the relevant information from Task Forces other than those for *insitu* and *exsitu* conservation as responses to the Tracking Schedule sent to them to enable us to make specific institutional recommendations on the cross cutting requirements for biodiversity related research, education etc. Hence, the institutional capacity required for implementing the BCAP recommendations as well as any new recommendations proposed by these Task Forces could not be fully assessed. It is expected that the relevant Task Forces will be making the institutional recommendations directly through their groups.

References

1. Carew - Reid, J. (2002) Analysis of lessons. In: *Biodiversity Planning in Asia*, Jeremy Carew - Reid (ed). IUCN, Sri Lanka.
2. Entec (2000). *Millennium Biodiversity Report - Independent Evaluation of Progress.* Entec, Leamington Spa.
3. Dela, J (2003) Tracking Schedule for Institutional Analysis for Biodiversity Conservation (unpublished).
4. MOFE (2002). State of the Environment in Sri Lanka: a national report prepared for the South Asian Association for Regional Cooperation. Ministry of Forestry & Environment, Colombo, Sri Lanka.
5. MoENR (2003) Caring for the Environment 2003-2007. Ministry of Environment & Natural Resources, Colombo, Sri Lanka.
6. CZMP

List of Persons consulted (including workshop participants)

1. Mr U K D G Jayasinghe	- CEA
2. Dr P P G S N Siriwardene	- Director General, NARA
3. Mr R A D B Samaranayake	- Director, CCD
4. Dr U K G R Padmalal	- Open University of Sri Lanka
5. Dr Channa Bambaradeniya	- IUCN
6. Dr Siril Wijesundera	- Director, National Botanical Gardens
7. Brig. H A N T Perera	- Director, National Zoological Gardens
8. Ms Srimathie Dissanayake	- PGRC
9. Mr Asoka de Silva	- Freelance Consultant
10. Dr Kumudu Fernando	- Director, Seed Certification & Plant Protection Centre, DoA
11. Dr R Wickramasinghe	- Director, VRI
12. Mr Sanjiv de Silva	- IUCN
13. Mr Arjan Rajasuriya	- NARA
14. Dr P Balakrishna	- Head, IUCN Asia Biodiversity Programme
15. Prof. Ajit Abeysekera	- University of Sri Jayewardenepura
16. Mr Jagath Gunawardene	- Attorney-at-Law

Annex 1

Task Forces appointed for the Preparation of the Addendum to the Biodiversity Conservation Action Plan

1. *In-situ* Conservation
2. *Ex-situ* Conservation
3. Access to Genetic Resources
4. Traditional Knowledge & Lifestyle
5. Impacts on Biodiversity
6. Sustainable Use
7. Biosafety
8. Economic Aspects of Biodiversity Valuation and Mainstreaming
9. Policies, Strategies & Action Planning
10. Monitoring & Coordination
11. Institutional Aspects & Capacity Building
12. Legal & Ethical aspects
13. Education, Awareness & Training
14. Research Development & Technology Transfer
15. Information Management

Annex 2

TOR FOR TASK FORCE 11

1. Review the present status of the given thematic area considering the outcomes of the gap analysis of BCAP and SBCAP.
2. Identify the important missing areas of and areas which should be improved in present BCAP related to given theme area
3. Prepare a outline of review process and identify the structure of addendum specific to given thematic area
4. Collect and compile systematically available information. All statements must be based on substantial reference material. Provide clear technical deifications and ensure to avoid narrow conceptual definitions.
5. Prepare concept/position papers on the important sections under given thematic area
6. Design and finalize a baseline (Information) on given thematic area including a comprehensive bibliography of all relevant documents and handover those information to the Biodiversity Secretariat.
7. Coordinate as much as possible with other task Forces to avoid duplication and clear priority setting.
8. Identify clear recommendations and proposed modalities for the implementation and operationalising the recommended action with respect to the given thematic area.
9. Set priorities for identified recommended actions with future scenario vision for the given thematic area. This in term for the agreed national Biodiversity Policy for Sri Lanka
10. Establish the clear relationship between prioritized recommended actions and eco system approach
11. Prepare the report on a addendum of given thematic area for BAP and finalise with all stakeholders
12. Submit the above report with all relevant material to the Biodiversity Secretariat.

TRACKING STATUS OF NBSAP ACTIONS FOR INSTITUTIONAL ASPECTS AND CAPACITY

NBSAP+X=x years after NBSAP was developed

(1) NBSAP Recommendations		(2) Regarding NBSAP recommended action:		(3) Institution/s for action +4:		(4) Mandate for implementation		(5) If mandate present, status of action of NBSAP recommendations:										(6) Mechanism/ institutional structure required to monitor/ track/facilitate NBSAP implementation		
								Capacity *adequate to commence* action Of NBSAP actions							*Cannot commence/ implement* due to lack of:			Exists		Establish
								(a) Ongoing through:		(b) Needs action	Assistance vital to continue implementation under (a) and (b):									
Section and rec. no:	Section	Relevant at NBSAP +X	Not relevant at NBSAP+X	Individual action possible	Coordinated action required	Requires Mandate/policy	Has mandate/policy /ies	Institutional programme	Special project	Expected to commence with no assistance	Funds	Human resources	Coordination	Other	Funds	Human resources and skills	Coordination	Adequate	Enhance	New mechanism
	SPECIFIC RECOMMENDATION:																			

Source: J D S Dela (2003)

Annex 3

SUMMARY SCHEDULES

IN SITU CONSERVATION

Forests

Objectives:

1. To ensure that threatened forest ecosystems and species are given adequate protection.
2. To put in place a system for monitoring forest biodiversity and taking corrective action when necessary.
3. To promote conservation of indigenous forest species both within and outside protected areas.
4. To involve communities living on the fringes of forests in participatory activities for the conservation and sustainable use of biodiversity.
5. To promote mixed cropping with indigenous species in private lands and state lands leased for agroforestry.
6. To increase timber supplies through forest plantations, which will have the effect of reducing the pressure on natural forests for producing timber.
7. To promote public awareness of the environmental benefits of conserving forest biodiversity.

WETLANDS

Objectives: In-situ Wetlands

1. To ensure that both natural and man-made wetlands are properly managed and to conserve and sustainably use wetland biodiversity.
2. To promote the restoration of ecologically important degraded wetlands.
3. To build public awareness of the importance of wetlands and the need for their conservation.

COASTAL & MARINE SYSTEMS

Objectives: Coastal and marine systems

1. To promote the conservation of coastal and marine habitats of the country such as the coral reefs, sea grass beds, mangroves, lagoons, estuaries, salt marshes.
2. To promote the conservation of threatened marine species (e.g. marine mammals) as well as other species which are subject to exploitation for food, for the aquarium trade, etc.
3. To promote sustainability in the use of coastal and marine bioresources in the fisheries and tourist industries.
4. To strengthen current government initiatives to increase stakeholder participation in the conservation of coastal and marine resources.
5. To increase collaborative participation among stakeholders with regard to policies and programmes that affect coastal and marine biodiversity and initiatives that support conservation, such as research.

AGRICULTURE SYSTEMS

Objectives:

1. To adopt policies and programmes for the conservation of Sri Lanka's agricultural biodiversity.
2. To adopt agricultural and crop plantation practices that will enhance the conservation of biodiversity, including traditional varieties and agricultural landscapes.
3. To promote among farmers and other land owners practices for the conservation of biodiversity, including traditional farming practices.

Note : **For more information about Institutions for action and recommendations for implementation & Mechanism for coordinating/monitoring BCAP implementation refer** *In-Situ* Conservation Chapter Report **(Chapter Report 2)**

EX SITU CONSERVATION

Objectives: Ex-situ Conservation

1 To develop a national policy on *ex situ* germplasm conservation.

2 To develop and implement programmes for the *ex situ* preservation of the germplasm of the indigenous species of useful plants, animals and microorganisms, and identified species under several severe threat.

Recommendation and status at BCAP +4 and 1999 BCAP objective met	Institutions for action and recommendations for implementation	Mechanism for coordinating/monitoring BCAP implementation
Objectives met: To develop national policy on *ex situ* germplasm conservation **BCAP recommendation** 6.6.1) Formulate and implement a national policy for germplasm conservation(conservation outside the natural habitat) is considered important due to the loss in the wild therefore *ex situ* collections turns out to be the only surviving germplasm of the species.	**Institutions for action:** FD and DWLC - lead role NASTC NARA DAPH **Needs - Scientifically managed captive breeding programmers for threatened species** **Other institutions:** **(Authorizing agencies)** DOA and DWLC Department of Indigenous Medicine **Needs- To conserve traditional medicinal plants**	

Objective met: To developand implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animals and microorganisms, and identified species under severe threat. **BCAP recommendation:** 6.6.2)Strengthern the capacity and scope of the Plant Genetic Resource Center at Peradeniya is the only institution with facilities for the cryopreservation of germplasm	**Institutions for action:** PGRC- Expanded Needs – Funds and human resources **Needs- better coordination with PGRC/ Agricultural Department**	
Objectives met : To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat. **BCAP recommendation:** 6.6.3)Strengthen the facilities of the three botanic gardens to enable them to expand their *ex situ* conservation activities.	**Institutions for action:** Individual action 1.Establish new botanical gardens in dry zone 2. Expand the geographical distribution of botanical gardens **Needs- mandate, policy, institutional programmers, fund, human resources and coordination**	
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat. **BCAP recommendation:** 6.6.4) improve the facilities available at the National Zoological Gardens so that it will serve as a repository of genetic material for all indigenous wild animal species.	**Institutions for action:** NASCA-Provide fuels for the conservation on endangered species to carry out the *ex situ* conservation effect with the coordination with DWLC NARA Universities Research institutions **Needs- Funds required to enhance national zoological legislation, human resources, coordination and special projects.** Sudden situations : 1. What to do with the animals when zoos have to be closed down and also with sick animals? 2. When animals are imported without permits? 3. Animals are being managed well (private Zoos) and the guarantee of these animal being well managed?	Regulate private bird collection from other animal dealers. Establishment of *ex situ* animal collection said to be controlled or monitered.

Objectives met : 1.To develop national policy on *ex situ* germplasm conservation. 2.To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat **BCAP recommendation:** 6.6.5)Improve facilities at NARA for the exsitu conservation of indigenous ornamental fish species.	**Institutions for action:** NARA- Has recently commenced scientific research on captive breeding on two threatened species of Brackish water fish Needs - Funds and human resources	Monitoring mechanism for captive breeding programmer that is link to the national committee is required for the fulfillment of the loss of several indigenous species those have gone out of the country
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat BCAP recommendation : 6.6.6) Establish a gene bank for all indigenous domesticated animal species at the vetnary research institute	**Institutions for action :** Department of animal production and health- activities are going on as small research projects Vetnary research institute /RGRC- Activities are going on as small research projects Needs- funds, human resources, and coordination Needs- Infrastructure facilities - special unit for VRI	**Develop lab facilities for generic characterization**
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat **BCAP recommendation:** 6.6.7) Initiate Scientifically managed captive breeding programmer for endemic and threatened animal species	**Institutions for action:** Dept of Ayurveda - Carries out *ex situ* conservation of some species of medicinal plants. Provincial councils affiliated to Ayurvedic hospitals - maintain herb gardens Department of town and country planning - Under urban park development project maintain medicinal plant garden NGO Ritgala community based development and environment management foundation - Cultivates medicinal plants Needs – Funds and good research proposal	
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat BCAP recommendation :	**Institutions for action:** HORDI -Fruit plants BMARL - medicinal plants **Needs** - Institutional programmes and new mechanism	

6.6.8) Survey and collect germplasm of local fruit trees and medicinal plants and establish arboreta		
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat BCAP recommendation : 6.6.9) Compile a directory of all institutionally and privately held collection of species	**Institutions for action** NSF - Can commence under the normal programmer CARP Ministry of Environment - Collect information with the assistance from NSF **Needs - legislation for registration**	
Objectives met: To develop a national policy on *ex situ* germplasm conservation. BCAP recommendation : 6.6.10) Monitor and support the effect of private establishment to propagate commercially important indigenous threatened plant species utilizing biotechnology.	**Institutions for action:** NARA DOA FD DWLC	**Needs monitoring programmer in NARA**
Objectives met: To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat **BCAP recommendation:** 6.6.11) Identify suitable centers and provide adequate resources for the conservation of microbial germplasm	**Institutions for action:** DOA RI NARA-aquatic sections **Other institutions** Kelaniya University and Ruhunu University - Lead role **Needs** - trained microbiologists	
Objectives met : To develop and implement programmers for the *ex situ* preservation of the germplasm of indigenous species of useful plants, animal and microorganisms, and identified species under severe threat **BCAP recommendation** 6.6.12) Establish urban and rural parks and field gene bank of selected species and where possible, develop these as centers for promoting education and creating awareness among the public	**Institutions for action** UDA DOA/HORDI **Needs - Funds and human resources** **LA in collaboration with FD/DWLC, PC and UDA**	

New recommendations

In-situ conservation

Forests

- Identify critically important biodiversity hot spots in the country outside forests and bring under a relevant protected area category.
- Study the status/trends in wildlife areas and identify the needs for wildlife corridors and linkages as an option for species conservation
- Prepare and implement recovery plans for threatened species that need special conservation action (both *in-situ* and *ex-situ*) in addition to habitat conservation

Coastal and marine

- Give priority for funding of research projects that focus on conservation and management of areas in SAM sites
- Prepare integrated zonal plans for expansion of aquaculture in a manner that is environmentally compatible and identify areas suitable for aquaculture expansion

Agriculture

- Address the question of addressing agricultural pollutants entering soil and water ways which has serious impacts on terrestrial as well as aquatic biodiversity in both coastal and marine systems.
- Make arrangements to address the sawn timber requirements of communities living within the two km radius of protected forests where private timber depots are not permitted in a manner that will not promote timber felling from the protected area by the establishments of state run timber depots.
- Establish critical biodiversity areas in plantations and other agriculturally important landscapes

Ex-situ conservation

- Strengthen in relevant ways the existing network of botanic gardens by expanding the geographical coverage of such facilities with special emphasis on the dry zone and lowland wet zone.
- Expand the network of national zoological gardens using stringent criteria to be developed and used to set up such facilities which will include criteria to promote conservation of biological diversity and address the concern of the accidental release of captive animals.
- Set up facilities for the regulation and monitoring of captive animals and rehabilitation centre which promote the conservation of endangered animal species.

Wording amended (in italics)

BCAP 1999 recommendation

6.2(2) Strengthen and enhance current efforts to identify critically important wetlands in terms of biodiversity, *give priority attention for their conservation* and prepare site reports and management plans where necessary.

Wording amended through amalgamation of recommendations (in italics)

6.4.(1) Promote the leasing of suitable state land for agroforestry and mixed cropping on the traditional home garden pattern, and *extend the leasing period and tenurial rights of the land for farmers and leaseholders who demonstrate their commitment to conservation of biodiversity in their land holdings, and facilitate access to planting material and other resources to sustain traditional home gardens.*

6.4.(3) Facilitate access (by farmers) to seed material *and germplasm* of indigenous varieties *crops and livestock*.

6.6.(5) Improve facilities at NARA for the *ex situ* conservation of indigenous [ornamental fish] *aquatic* species.

Deleted recommendations

Agriculture

6.4.(4) Secure ownership of the land for farmers and leaseholders who demonstrate their commitment to conservation of biodiversity in their landholdings (modified and incorporated into a new recommendation)

Ex-situ conservation

6.6.(10) Monitor and support local community and NGO efforts to establish and maintain seed banks.

Cross sectoral - under role of private sector section 7.4 chapter 7 on national integration, pertaining to *in-situ* conservation

Integration Chapter 7 on Private sector

7.4.(4) Provide enabling policy and legislative mechanisms to support leasehold forestry systems.

7.4.(5) Provide tenurial rights, planting material and other resources to sustain home gardens
(added to 6.6.(1))

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