

## 10.4 Consolidated Action Plan Recommendations for Capacity Development

### Part I - Cross Cutting Capacity Development Needs

<p><b>1.0</b> <b>Formulate and institute national policies, as required, through a wide consultative process</b></p>
<p><b>Key tasks/actions:</b></p> <p>Aspects identified for policy development/ improvement: (a) Policy for access to genetic resources and benefit sharing, including traditional knowledge associated with genetic resources and benefit sharing with TK holders (Ref II 9.0 &amp; Section 6.6); (b) biotechnology using genetic resources within ABS regime (Ref II 10.0 &amp; Section 6.6); (c) data and information management (Ref I 7.0 &amp; Sections 6.6, 7.5 &amp; 8.6)); (d) on national network of protected areas (Ref II 8.0 &amp; Section 6.6); (e) on conservation and sustainable use of livestock biodiversity, in livestock development policy (Ref Section 6.4); (f) on agrobiodiversity, in agriculture policy (Ref Section 6.4); (g) emphasis on land degradation in land use policy (Ref Section 8.6); (h) on land alienation and regularisation of encroachments (Ref II 3.0); and (i) policy on climate change (Ref Section 7.5).</p> <ul style="list-style-type: none"><li>☞ Make policy makers aware of importance of conservation, the need to provide right policies, and their commitment to implement the policies effectively. Conduct awareness programmes at national, provincial and local levels.</li><li>☞ Institute a committee of relevant ministries with MOE (the relevant secretariat) as leader to formulate national policies. Engage all the key stakeholders (especially the (political) policy makers and senior staff in related ministries) in the process of policy formulation. Provide skills to identify needs, analyze issues and develop the policy in a wide and complex institutional setting.</li><li>☞ Review existing policies, identify revisions/ new requirements, develop and formulate/ reformulate them through a process of consulting all stakeholders and special authorities and the public. Obtain approval of the Cabinet.</li><li>☞ Institute measures to make implementing policy mandatory by all agencies related to conservation. Also institute measures in the legal and regulatory, administrative, financial and inter institutional systems to make such compulsion. Make those vested with authority accountable, and institute a conservation management audit system to assure the policies are effectively implemented.</li></ul> <p style="text-align: right;">(Sys/Inst)</p>

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Formulate and institute national policies, as required, through a wide consultative process	<p><u>Primary:</u>  <u>MOE (BDS/CCS/LRS)</u> with Ministries of Agric, Land, Plantations, S&amp;T, Livestock, Disaster Management and Health.</p> <p><u>Others:</u>  Ministries of Irrigation, Mahaweli, Fisheries, Industries, Education, Urban Dev., Ports, Prov. councils, Tourism Power &amp; Energy, Housing, Transport; Provincial Councils and all authorities under the ministries relevant to environment management; NGOs &amp; public interest groups</p>	Within one (01) year.	LKR 2.5 M	Govt + <b>External</b> (selectively)

## 2.0

### Enhance capacity for environmental communication, education and public awareness on conservation and sustainable use of natural resources

#### Key tasks/actions:

Prepare and implement a comprehensive communication, education and public awareness programme that needs to provide for:

- ☞ Training on **environmental** communication planning and delivery for conservation related govt. officers and conservation NGOs,
- ☞ Training for effective consultation of all relevant stakeholders in the process of preparing and implementing action programmes to build commitment and cultivate sense of ownership in stakeholders.
- ☞ Building in participatory methods of environment education into the teacher training curricula. Train teacher trainers in State training colleges.
- ☞ Enhancing capacity for non-formal education and generation of public awareness and ownership in government agencies and in NGOs and CBOs.
- ☞ Establishing a regular mechanism to develop awareness on issues concerning conservation and sustainable use of land related resources among policymakers (parliamentarians, provincial councilors), senior level officers of relevant ministries/ national bodies (eg, Presidential TF), business community and media (through customized initiatives and programmes).

<ul style="list-style-type: none"> <li>☞ Establish a mobile education and communication unit at the MOE for customized awareness programmes for different stakeholders.</li> <li>☞ <b>Training for effective communication in English, including language proficiency – both orally and in writing as applicable for office use</b></li> <li>☞ Capacity building of media personnel for effective and quality reporting and public education on environment. (Sys/Inst/Ind)</li> </ul>				
Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Enhance capacity for communication, education and public awareness on conservation and sustainable use of natural resources	<u>Primary:</u> <u>MOE (BDS, CCS and LCS)</u> With FD, DWLC, CEA, NZG, DM (CCCS), NIE. <u>Others:</u> DFAR DAPH, DOA, DEA, NSF, ID, Mass Media Orgs, Conservation NGOs, Chambers (Commerce & Industry).	Within one (01) year.	<b>LKR 15.0 M</b> (includes 10 M for vehicle fully equipped with AV & communication equipment)  Note this will need maintaining - funds	Govt + <b>External</b> (selectively)

<b>3.0</b> <b>Enhance capacity to integrate (mainstream) environment concerns into sectoral and cross-sectoral policies and programmes of public agencies.</b>
<b>Key tasks/actions:</b> <ul style="list-style-type: none"> <li>☞ Institute a holistic approach to national planning and budgeting and include in it other environmental concerns. Institute systems to mainstream environmental conservation into sectoral and cross sectoral policies and programmes, through stipulations for work programming and budgeting by related ministries and authorities.</li> <li>☞ Develop capacity for effective communication to support sectoral and inter sectoral integration. [Ref 2.0]</li> <li>☞ Adapt scheme recommended by the BDS Task Force on Institutional Aspects &amp; Capacity Building to enhance effectiveness of sectoral and cross-sectoral support and coordination necessary in formulating and implementing action programmes. (Ref. system developed by Task Force 11 of the BCAP/Addendum).</li> <li>☞ Re-establish mid-professional level networks to mainstream conservation needs into sectoral and cross-sectoral action. (esp. necessary for BD).</li> </ul>

☞ Improve overall management capacity (organization, system and HR) of the institutions for effective planning, implementation, and M and E. (Inst/Ind)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Enhance capacity to integrate (mainstream) environment concerns into sectoral and cross-sectoral policies and programmes of public agencies	<p><u>Primary:</u>  <u>MOE (BDS, CCS and LCS)</u>            With            Ministries of Finance and Planning, FD, DWLC, CEA, DFAR.  <u>Others:</u>            NZG, DAPH, DOA, DEA, M/Sc&amp;T, DM, M/Industries, Mass Media Orgs, ID, MASL, NSF, Conservation NGOs, Chambers (Comm &amp; Industry), and DSs, Provincial Councils &amp; Local Authorities.</p>	Within two (02) Years and continue.	LKR 4.0 M	Govt+ <b>External (GEF)</b>

#### 4.0

**Enhance capacity to obtain adequate national budgetary allocations (and external funds, as necessary) and capacity to use funds efficiently and effectively, and also mainstream key themes in sustainable environment development.**

##### **Key tasks/actions:**

- ☞ Enhance planning and budgeting skills in state agencies having main responsibility for conservation and sustainable use.
- ☞ Educate the budget and national planning authorities in M/F and P on the value of conserving and managing the environment for sustainability of the economic and production system and in policy and programmes followed. Also make them aware of need to integrate conservation with development and poverty eradication programmes. [Ref 2.0]
- ☞ Develop capacity for biodiversity valuation and economic modelling.
- ☞ Enhance capacity of conservation authorities for preparation of project proposals (i.e. to access both national and donor funding). Enhance their capacity to prepare programmes in a manner to convince budget authorities. Improve their communication skills and project proposal

preparation skills. ☞ Institute mechanisms to make stakeholder institutions accountable for conservation. Institute performance audit systems. ☞ Institute an audit system and mechanism to make all stakeholder organizations responsible and accountable for conservation.. (Sys/Inst/Ind)				
<b>Capacity Intervention</b>	<b>Responsible Agencies</b>	<b>Timeframe</b>	<b>Budget</b>	<b>Resource Mobilisation</b>
Enhance capacity to obtain adequate national budgetary allocations (and external funds, as necessary) and capacity to use funds efficiently	<u>Primary:</u> <u>MOE (BDS,CCS, LCS)</u> with All conservation related Govt authorities referred to in foregoing sections.	Within one (01) year and continue.	LKR 1.0 M	Govt.

<b>5.0</b> <b>Adopt measures to engage the business sector effectively in conservation and sus tainable use</b>				
<b>Key tasks/actions:</b> ☞ Provide for effective communication between the business sector and the conservation sector for collaborative ventures. ☞ Provide a regular forum for the private sector to interact with policy makers and scientists on conservation related issues rele vant to them ☞ Provide incentives to the business sector to encourage them to productively engage in conservation and sustainable use of natural resources. ☞ Institute system and forum for the business community to interact with researchers and scientists on conservation needs and possible business opportunities for sustainable use of bio-resources. [MOE(BDS) & NSF could conduct a regular programme with the assistance of M/ Sc &Tech, trade chambers and civil society organizations (e.g. EFL)]. ☞ Develop and provide fiscal incentives as tax concessions to encourage private sector adopt effective conservation measures. (Inst)				
<b>Capacity Intervention</b>	<b>Responsible Agencies</b>	<b>Timeframe</b>	<b>Budget</b>	<b>Resource Mobilisation</b>
Adopt measures to engage the business sector effectively in conservation and sustainable use	<u>Primary:</u> <u>MOE (BDS,CCS, LCS)</u> With Ministries of Finance and Planning,	Within one (01) year and continue.	LKR 1.0 M	Govt +Private Sector

	Industries; Chambers. Others: FD, DWLC, DOA, DEA, BOI, Plantation Companies.			
<p><b>6.0</b>  <b>Strengthen enforcement of laws and regulations to promote conservation and sustainable use.</b>  <b>Some of the recommendations are far too impractical to be of any use. It may be good to take the varied needs into consideration and give one or two good recommendations that will help address all the needs. Example:</b></p> <ol style="list-style-type: none"> <li><b>1. Setting up the mid level environmental professionals network and providing them with capacity strengthening, (similar to the BSEP project MFC/NOE/IUCN.</b></li> <li><b>2. Review and modify the training courses at the Police training college to enhance knowledge of environmental laws and court procedures.</b></li> </ol>				
<p><b>Key tasks/actions:</b></p> <ul style="list-style-type: none"> <li>✍ Provide routine training programmes for police officers through the Police Dept to enhance their knowledge and skills, especially on related laws, protected species, and concepts of conservation and sustainable use as relevant to enforce environmental laws, with the support of experts in the related fields.</li> <li>✍ Conduct routine training programmes on species identification for law enforcement officers as relevant for their work (Customs and Quarantine); and develop skills and methods to apply laws</li> <li>✍ Enhance understanding of technical and legal aspects governing environmental considerations to officials including of non-conservation oriented agencies (e.g. irrigation and mining engineers, geologists, financial planners, BOI officials and tourism planners).</li> <li>✍ Educate &amp; train public officers in concerned agencies in court work and develop competence in prosecution.</li> <li>✍ Review the broad legal framework and improve the relevant laws, regulations and the law enforcement system to effectively implement land degradation programmes. (systemic)</li> <li>✍ Establish special divisions within the regional Police Offices, with trained officials competent to enforce laws on environment as related to them. (institutional)</li> <li>✍ Provide required resources and conditions for law enforcement authorities. (Manpower, logistics, e.g. vehicles and fuel, non-political interference). (institutional)</li> <li>✍ Enact necessary amendments to the Soil Conservation Act to enable its effective implementation. <b>(systemic)</b></li> <li>✍ Provide legal officers to public authorities related to land degradation which lack that capacity. (individual)</li> </ul>				

Sys/Inst/Ind)				
Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Strengthen enforcement of laws and regulations to promote conservation and sustainable use	<u>Primary:</u> <u>MOE (BDS,CCS, LCS)</u> With Ministry of agric, FD,DWLC, CEA, Police, Customs, Plant Quarantine/DOA. <u>Others:</u> GSMB, DEA, Judicial Service Commission, D/Legal Draftsman, M/Plantations, Gem and Jewelry Authority, STC, & all related Ministries.	Within two (02) Years and continue.	LKR 2.0 M	Govt+ <b>External (GEF)</b>
<b>7.0</b> <b>Strengthen capacity for information management and information sharing.</b>				
<b>Key tasks/actions:</b> <ul style="list-style-type: none"> <li>☞ Institute a national policy on internal and external access to biodiversity information. Formulate necessary policies.(Ref 1.0)</li> <li>☞ Improve in-country capacity to access to biodiversity information from external sources through CBD Clearing House Mechanism.</li> <li>☞ Improve mechanism for the identified institutions to effectively network with regional/global data and information systems on climate change, and to acquire, adapt and develop technology to address LD.</li> <li>☞ Establish the institutional network to strengthen database management and information dissemination within and across custodial institutions.</li> <li>☞ Establish a steering committee within BDS/MOE for this purpose. Establish centres (Centres of Excellence) for biodiversity information.</li> <li>☞ They need to have capacity to serve as web portals/gateways for researchers/scientists to access biodiversity information, especially information not in the public domain.</li> <li>☞ Identify custodial institutions as centres for different types of data (e.g. FD, DWLC, CCD, PGRC, CEA, CARP, NSF; CEA). Link databases with a central biodiversity meta-database which should be established at the BDS/MOE. Provide required human resources for these.</li> <li>☞ Provide required expertise and resources for efficient and adequate systems for generation, storage, maintenance and operation of data on</li> </ul>				

climate change by the relevant institutions and at sectoral focal points (eg, DM, NRM(CDOA), M/Health, ID/WRB, CEA, CCD)

- ✍ Establish links between the 'Vidatha programme' and CEA Regional and Sub-regional centres to form a network to assist access to external (and internal) environment related information at remote regional levels. [This needs collaboration between the BDS/MOE, the M/Sc and Tech. and NSF].
- ✍ Train staff of custodial institutions in data collection techniques, developing questionnaires, and processing data. Provide data base managers with skills in public relations and communication, negotiation for benefit sharing, and in IPR and legal aspects of information (patent rights, disclosed and undisclosed information, etc.) and on special software operating systems for database management.
- ✍ Make inventory and use/adapt traditional/local knowledge and technology to control/mitigate LD, ensuring protection of owner rights.

(Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Strengthen capacity for information management and information sharing.	<u>Primary:</u> <u>BDS/MOE, CCCS/DM, NRM(CDOA),</u> With FD,DWLC, CEA, M/Sc. &Tech, DFA R,CCD, PGRC, CEA, CARP, NSF, DOA, DEA, DAPH, and related Ministries.	Within two (02) years and continue	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	.Govt+ <b>External (GEF)</b>

## 8.0

### Enhance capacity to negotiate effectively at COPs and other global forums to fulfill national needs and interests

#### Key tasks/actions:

- ✍ Enhance skills to advocate SL interests and negotiate most beneficial terms at COP meetings. Knowledge enhancement and skills development training for junior/ middle level staff on the processes, country information etc to assist in preparation for meetings and preparing project proposals; Knowledge enhancement and skills development for senior level staff (who really participate in negotiations) on negotiation, legal issues, conventions etc. Make pre- departure briefing compulsory in arrangement with the M/FA. [Obtain assistance of ILD /NSF to prepare the country delegation by pre-departure briefings by experts.]

- ☞ Enhance capacity of BDS, CCS & NRM/MOE to widely disseminate outcomes of COPs. Provide necessary funds to organize wider forums, and skilled staff to prepare communication material. The dissemination of the COP outcomes to relevant stakeholders can be organized by NSF/ILD with MOE. This method would help NSF to identify (any) subjects for research and communicate decisions of the COP to the scientific community and the public through SLAAS.
- ☞ Make all stakeholders aware of the value of the Clearing House Mechanism (CHM) established under CBD. Popularize and facilitate use of the CHM on the web. Make the scientific community and NGOs aware of special side events associated with COP meetings. (Inst/Ind)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Enhance capacity to negotiate effectively at COPs and other global forums to fulfill national needs and interests	<u>Primary:</u> <u>MOE (BDS, CCS, NRM)</u> With ILD/NSF. <u>Others:</u> All stakeholders.	Within one (01) year and continue.	LKR 1.0 M	Govt

**9.0**  
**Harmonize authority and responsibility for policy determination and implementation between the central and provincial authorities**

- Key tasks/actions:**
- ☞ Develop and establish apolitical systems and procedures for policy formulation, planning, implementing programmes by central and provincial govt authorities.
  - ☞ Institute systems and measures to bring in provincial authorities in to the process of policy development, planning and implementation. Make provincial/ divisional authorities centrally responsible for implementing programmes coordinated by central authorities.
  - ☞ Remove overlapping and conflicting policy and management situations between central and provincial authorities.
- (Sys/Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource
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				<b>Mobilisation</b>
Harmonize authority and responsibility for policy determination and implementation between the central and provincial authorities	<u>Primary: MOE (BDS, CCS, LCS)</u> With Ministries of Planning and Finance, Provincial Councils, Public Administration, and other Ministries concerned with aspects of environment.	Within one (01) year	LKR 0.3 M	Govt.

### 10..0

#### **Strengthen capacity of institutions to carry out research in relevant areas of biodiversity, climate change and land degradation.**

##### **Key tasks/actions:**

Develop sector based network of existing and new research centres for optimal use of research capacity and available resources, to facilitate research on sectorally agreed research agendas, and inter- research centre knowledge/ information sharing.

1. Identify national R&D needs and their priorities through a process of consultation of all research related institutes and community in areas vulnerable to land degradation and climate change impacts.
2. Establish research priorities and institutional and inter – institutional research agenda within the national R&D frame.
  - Research on processes leading to LD, and the control/mitigation of LD (*consider areas where pressure on natural resources is high, where there is pressure on scarce water resources, production systems related to LD, and where LD has high impact on poverty; respond to specific needs of the local population; take into account the relationship between poverty and LD; recognize needs to improve the living standard of the community in affected areas*).
  - The agenda for climate research should be based on long term research programmes for implementation by single institutions, inter – institutionally and at national level.
3. Establish national, sectoral and institutional focal points to coordinate and facilitate R&D. The national focal point (in collaboration with other national research institutes) to coordinate through sectoral research committees each led by a sectoral focal point.

4. Facilitate in-country and regional/global linkages required for collaborative research and research support.

(Sys/Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Strengthen capacity of institutions to carry out research in relevant areas of biodiversity, climate change and land degradation.	<p><u>Primary:</u>  <u>MOE (BDS, CCS, LCS).</u>            With            NSF, CARP, FD, DWLC, NZG, MPPA,            DFAR, DOA, CEA, DEA, CCD,            NARA, DAPH, DM, ID, WRB.</p>	Within two (02) years.	LKR 1.5 M	Govt

### 11.0

#### Establish an institutional structure for effective planning and implementation of work programmes

##### Key tasks/actions:

The overall organization for policy, planning and implementing programmes and the systems available for inter institutional coordination is complex/ low- efficient. Streamline them in a structure and system to facilitate realizing objectives effectively. The structure and system emerging from the thematic needs is in four tiers:

- (i) National Council for Env. Conservation (Inter- ministry committee at the highest level- May be an arm of the Presidential Secretariat. For national level policy. Ministers and secretaries of key ministries).
- (ii) Inter- Ministry Committee in the MOE. (Secretaries of key ministries with heads of agencies). BDS, CCS and LCS coordinated by S/MOE serve as the technical secretariat of National Council.
- (iii) BDS, CCS and LCS in the MOE serve as technical secretariats and national focal points in the three thematic sectors. They serve sectoral institutions (through the sectoral focal points), in the spirit of leader among equals.
- (iv) Sectoral focal points- Single institutions coordinated at sectoral focal points.

(Sys/inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Establish an institutional structure for effective planning and implementation of work programmes	<u>Primary:</u> <u>MOE (BDS, CCS, LCS).</u> With all Ministries concerned with aspects of environment, planning & finance.	Within one(01) year	LKR 1.0 M	Govt.

## Part II- Thematic Area Capacity Development Needs

<p><b>1.0</b> <b>Develop capacity of land users to benefit optimally from land while conserving.</b></p> <p><b>Key tasks/actions:</b></p> <ul style="list-style-type: none"> <li>✍ Train land users to conserve its quality, adopt new technology and also recommended land use practices/farming systems. Where appropriate provide land users with required inputs as planting material and soil testing services free to encourage adopting good practices to control LD.</li> <li>✍ Devise and implement incentive schemes to adopt suitable land use practices. (To motivate land users who might suffer loss of regular income by adopting such practices.)</li> <li>✍ Strengthen extension services.</li> </ul> <p style="text-align: right;">(Sys/Ins/Ind)</p>
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Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Develop capacity of land users to	<u>Primary:</u> <u>LRS/MOE, NRMC/DOA.</u>	Within five (5) years	LKR 1.0 M (for 1 <sup>st</sup> )	Govt. + NGO

benefit optimally from land while conserving.	With Ministries of Agric, Mahaweli, Irrigation, Plantations, and relevant agencies under their purview; Plantation Companies, Provincial Councils.	(Commence in year 1)	year; other years based on requirements)	
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<b>2.0</b>
<b>Enhance capacity to provide technology for conservation and sustainable use of land and water resources.</b>
<b>Key tasks/actions:</b>
<ul style="list-style-type: none"> <li>✍ Provide technology and training on (i) economical and environmentally favourable use of land and water (ii) maintaining quality of surface and ground water, and (iii) controlling soil erosion.</li> <li>✍ Institute systems and methods to develop and manage land, based on scientific land use principles.</li> <li>✍ Provide technology, disseminate information on available technology, facilitate obtaining them and train potential users. Establish/strengthen the network of regional centers to train scientific, technical and management personnel.</li> <li>✍ Develop efficient appropriate technology and farming systems.</li> <li>✍ Provide resources required for the institutions to develop technology.</li> </ul>
(Sys/Inst)

<b>Capacity Intervention</b>	<b>Responsible Agencies</b>	<b>Timeframe</b>	<b>Budget</b>	<b>Resource Mobilisation</b>
Enhance capacity to provide technology for conservation and sustainable use of land and water resources.	<u>Primary:</u> <u>LRS/MOE, NRM/DOA</u> With DEA, WRB, ID, Crop Research Institutes(Tea, Rubber, Coconut and	Within one (01) year and continue.	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	Govt. + <b>External</b>

	Sugar cane), Universities, FD, M/Sc & Tech, other related Ministries.			
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### 3.0

#### Adopt measures to promote use of renewable energy resources and means for alternative livelihoods, to reduce land degradation.

##### Key tasks/actions:

- ✍ Establish domestic and commercial fuel wood plantations in areas prone to land degradation.
- ✍ Make land available for fuel wood plantations. Provide planting and other material inputs, technology and incentives
- ✍ Provide and extend technology for use of organic residues for domestic and rural industrial energy
- ✍ Promote alternative livelihoods to desist community from engaging in livelihoods leading to exploitation of land.
- ✍ Develop off farm economic opportunities to take off pressure on land/ to control exploitation of land unsuitable for habitation and cultivation. Promote developing settlement/agricultural areas based on principles of regional zoning.
- ✍ Revise policy on land alienation and on regularization of encroachment on state land to discourage clearing and cultivation of land not suitable for settlement / agricultural activity.
- ✍ Develop and introduce agricultural systems to obtain optimum return per unit of land, while conserving the land, in the process.

(Sys/Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Adopt measures to promote use of renewable energy resources and means for alternative livelihood, to reduce LD.	<u>Primary:</u> <u>LRS/MOE, ECF/M-Power &amp; Energy.</u> With Ministries of gric, Mahaweli, Sc. & Tech, plantations, Samurdhi, Lands <i>with the relevant authorities under them:</i> DOA, FD, DEA, Land Commissioner's Dept, Research institutes (Tea, rubber,	Within five (05) years (Commence in year1)	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	Govt+CBO+NGO <b>+External assistance.</b> (to obtain experiences in the region in developing appropriate cropping and farming systems).

	Coconut, Sugar cane), Physical Planning Dept, MASL, UDA, Provincial Councils, CBOs and NGOs.			
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**4.0**  
**Improve capacity of authorities concerned to forecast and warn of adverse climatic situations.**

**Key tasks/actions:**

- ☞ Enhance the national climatological, meteorological and hydrological capability and means to provide early warning of drought by (i) using compatible standards and systems, (ii) encompassing a wide network of data stations, including remote areas, (iii) using modern technology for data collection, transmission and assessment, and (iv) using, as appropriate, local and traditional knowledge.
- ☞ Improve the intensity and efficiency of in- country network of observation points and integration with regional/ global data/ information network for systematic observation and for more reliable warning systems.
- ☞ Enhance the capacity of D/Met to function as the study centre (CCCS), in association with the national focal point (MOE-CCS). Provide resources required (expertise, in-country, regional and global linkages, regular budgetary provisions).

(Sys/Inst)

<b>Capacity Intervention</b>	<b>Responsible Agencies</b>	<b>Timeframe</b>	<b>Budget</b>	<b>Resource Mobilisation</b>
Improve capacity of authorities concerned with forecasting and in issuing warnings of adverse climatic situations.	<u>Primary:</u> LRS/MOE, CCCS/DM, NRMC/DOA. With ID, Research Institutes (Tea, Rubber, Coconut, Sugar cane), Plantation Companies.	Within two (02) years.	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	Govt + <b>External</b>

**5.0**  
**Enhance the capacity for vulnerability assessments and measures for adaptation to climate change (CC).**

**Key tasks/actions:**

- ⌘ Identify, map and demarcate areas vulnerable to sea level rise: As a priority requirement, Survey Department to prepare and issue maps with 50cm and 100 cm (a.s.l) contours, covering the coastal belt. Provide SD with system for inter institutional linkages and budgetary provisions.
- ⌘ Assess the effects of CC on ground water, especially in areas prone to drought and in areas subject to sea level rise: Enhance capacity of WRB and ID to (i) map and periodically update effect on ground water (extent of saline water intrusion) in vulnerable areas and (ii) periodically up date a common ground water data base. (increase the cadre of hydro- geologists and provide training, lab facilities, computer software for analysis of data and regular budgetary provisions)
- ⌘ Assess change in impact of waves on the coast: Enhance capacity to increase number of tide gauge stations and widen the data base on wave action. Provide resources required (equipment and funds regularly required to the D/Coast.C; Port Authority and NARA).
- ⌘ Assess effect of CC on flora and fauna: Enhance capacity to (i) implement an integrated long term programme for scientific observation of change, (ii) develop and work on an observation point net work of required density and (iii) provide observed data to research and other authorities concerned. (expertise, training, lab facilities and budgetary provisions)
- ⌘ Assess effect of CC on food and export/ plantation crops: Enhance capacity to follow action proposed in (d) above, as appropriate for export and plantation crops, and to present projections on crop changes to policy makers to plan for crop research, food supply and food security in the long run. Provide resources required for above (expertise, training, lab facilities, TA and budgetary provisions).
- ⌘ Assess effect of CC on health: Enhance capacity to (i) identify and map areas/ communities critically vulnerable to effects of CC, and to (ii) implement long term programmes to observe, collect data and test effect of changes to develop adaptive measures. Provide resources required for above (trained staff; lab services; regular budgetary provisions).
- ⌘ Assess effect of CC on hydro power generation potential: Enhance capacity to (i) expand the hydrological data bases operated and maintained by the authorities, (ii) periodically assess changes with reference to global climate/ weather change projections, (iii) assess micro- climatic changes resulting from local factors to enable any control measures, possible, (iv)develop use of alternative renewable energy resources and adopt measures for energy conservation. Provide resources required for above. (Expertise; training, regional/ linkages; and budgetary provisions).
- ⌘ Developing and transfer of technology to facilitate developing adaptive measures: Provide capacity and resources for institutions in the

public sector and incentives for the private sector to identify need, develop, acquire and transfer technology to adapt to CC and to inhibit situations accelerating CC e.g. machinery and equipment to reduce gas emissions, industrial practices, crops to suit CC etc.

Capacity enhancement required: expertise, training, linkages with external resource centres, and regular financial provisions for R and D and for payment of incentives and acquiring of technology.  
(Sys/Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
<p>Enhance the capacity for vulnerability assessments and measures for adaptation to climate change:</p> <p>(a) Identify, map and demarcate areas vulnerable to sea level rise</p> <p>(b) Assess effect of CC on ground water, especially in areas prone to drought and in areas subject to sea level rise</p> <p>(c) Assess change in impact of waves on the coast</p> <p>(d) Assess effect of CC on flora and fauna</p> <p>(e) Assess effect of CC on food and export/ plantation crops</p>	<p>(a) : MOE (CCS), Survey Dept., CCD, NARA, SLPA.</p> <p>(b) : MOE (CCS), ID, WRB. DOA, M/Industries, M/Health.</p> <p>(c): MOE (CCS), CCD, NARA, SLPA.</p> <p>(d) : M/En (CCS) With relevant ministries, FD, DWLC, DOA, DAPH, DFAR, Universities and Private sector.</p> <p>(e): MOE (CCS) with relevant ministries (agric, irrigation, Mahaweli, trade) and</p>	<p>Within two (02) years.</p> <p>Within two (02) years and then periodic checking and updating.</p> <p>Within two (02) years - and continue.</p> <p>Develop and institute the system and commence implementing within one year (01) and continue.</p> <p>Within one (01) year</p>	<p>MSP proposed for GEF funding</p>	<p>Govt.</p> <p>Govt+ <b>External assistance.</b></p> <p>Govt.</p> <p>Govt+ Private sector institutions+ <b>External Assistance</b></p> <p>Govt+ Private sector institutions+</p>

<p>(f) Assess effect of CC on health</p> <p>(g) Assess effect of CC on hydro power generation potential</p> <p>(h) Developing and transfer of technology to facilitate developing adaptive measures</p>	<p>Crop research institutes (DOA, Tea, Rubber, Coconut, Sugar cane), DEA, Universities.</p> <p>(f): M/Health (Health Ed. Bureau, Anti-malaria campaign, Epidemiology Division, Anti-filarial division, Dengue control unit, Nutrition Division), MOE (CCS).</p> <p>(g): CEB, CEA, ID, MASL, DM, M/Industries, BOI, Chambers (Commerce/Industrial), NCPC, NERD, ISB, MOE (CCS).</p> <p>(h): MOE (CCS), DM (CCCS) with All relevant ministries and institutions, Universities, Chambers of Industry.</p>	<p>and continue.</p> <p>Within one (01) year and continue.</p> <p>Within one (01) year and continue.</p> <p>Within one year (01) and continue.</p>		<p><b>External Assistance</b></p> <p>Govt + <b>External Assistance.</b></p> <p>Govt + <b>External Assistance</b> + Private sector institutions.</p> <p>Govt+ Private sector+ <b>External assistance</b></p>
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## 6.0

### Improve and extend the operation of CDM.

#### Key tasks/actions:

- ✍ Develop capacity of the DNA (Designated National Authority) based in the M/E (CCS) to evaluate CDM proposals and for central collection and dissemination of CDM data. (To replace the current CDM Expert Committee).
- ✍ Develop criteria for location of CDM centres. In this examine the rationale of the location of centres established and effect any improvements necessary... Establish new CDM centre/s in industrial environments, self financing, with strong participation of the private sector. Improve management of CDM centres to enable realizing objectives through cost effective methods...

☞ Improve the system and mechanism available to (a) determine emission factors appropriate to Sri Lanka, on basis of regions, (b) collect and compile data on GHG emissions.

(Sys/Inst)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Improve and extend the operation of CDM.	<p><u>Primary:</u>  <u>MOE(CCS), FCCISL</u>            With            Ministries of Industries, Agriculture (NRM/DOA), Plantations, Power &amp; Energy, Crop Research Institutes (Tea/Rubber/ Sugar Cane), Universities, plantation companies, CEA, BOI, Industrial Chambers, local govt. bodies.</p>	Within one year and continue.	LKR 2.5 M	Govt+ Private sector + <b>External (WB, JICA)</b>

## 7.0

### Enhance institutional capacity for multi stakeholder participation to promote conservation, management, recovery of threatened species and sustainable use of commercially important species.

- ☞ Promote *ex-situ* conservation of threatened species with multi-sectoral collaboration. Promote *ex-situ* conservation, captive breeding, rehabilitation and reintroduction in collaboration with the private sector. Establish a multi-species expert/advisory committee convened by the NZG. [Setting up this committee could be facilitated by a Task Force for in-situ and ex-situ conservation set up by the BDS to implement the BCAP].
- ☞ Provide for training courses on behavioural ecology for staff in the FD, DWLC and NZG at post graduate level and for undergraduates [the Open University could establish short term professional courses].
- ☞ Develop curriculum and train NZG and RBG staff as required by the species action plans on species conservation measures (with the help of species conservation experts in the DWLC and FD training institutes).

✍ Establishing collaborative ventures between *bona fide* private sector, state sector, communities and research institutions to promote captive breeding of threatened commercially important species.

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Enhance institutional capacity for multi stakeholder participation to promote conservation, management, recovery of threatened species and sustainable use of commercially important species.	<u>Primary:</u> <u>BDS/MOE.</u> With FD, DWLC, RBG, NZG, PGRC, VRI, NARA, Universities, NSF, CBO+NGO.	Within two (02) years and continue.	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	Govt+ <b>External (GEF)</b>

## 8.0

**Implement a multi-institutional coordinated programme to identify, design and establish a rational network of areas requiring protection in accordance with the ecosystem approach.**

### Key tasks/actions:

✍ Institute an institutional forum to identify a rational network of areas needing protection. That should formulate an overarching policy and process for selection and deciding on such areas. It needs to serve as a mechanism to facilitate and coordinate the entire process and should be able to draw in all categories of stakeholders. [BDS/MOE should be the coordinating body for this exercise, with assistance from the National MAB Committee to initiate the process].

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Implement a multi-institutional coordinated programme to identify,	<u>Primary:</u> <u>BDS/MOE, MAB/NSF.</u>	Within two (02) years and continue.	Formulate a project for external funding	Govt + <b>External (GEF)</b>

design and establish a rational network of areas needing protection in accordance with the ecosystem approach.	With FD,DWLC, CEA, DFAR, CCD, PGRC, CEA, CARP, DOA, DEA, DAPH and related Ministries.		[LKR 1.0 M for proposal preparation]	
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## 9.0

### Develop and institute an effective system to provide (i) access to genetic resources, and (ii) provide access ensuring fair and equitable benefits sharing

#### Key tasks/actions:

- ✍ Establish an ABS regime in Sri Lanka. It should coordinate institutions having the required mandate to regulate access to genetic resources (i.e. access determining authorities (ADAs)).
- ✍ Establish a focal point in the BDS and ABS units in ADAs (having authority to issue permits) and advisory networks to ensure access with required regulatory control. Enhance capacity of ADAs to support the ABS regime and to ensure in-country benefits through the benefit sharing provision of the CBD.
- ✍ Ensure fair and equitable benefits from traditional knowledge associated with genetic resources. Conduct a study to investigate (using expert networks) benefit sharing from traditional knowledge with the relevant knowledge holders, applicability of a *sui generis* system, and whether benefits could be channeled to local communities through the regional administrative systems (e.g. Divisional Secretaries). [The legal team which developed the legal position paper for the NCSA ABS workshop and other relevant persons could assist with this prior to preparation of a policy on ABS].
- ✍ Institute a policy and an institutional system to ensure fair and equitable benefit sharing with traditional knowledge holders. Document information available on TK holders and develop innovative means to promote the dissemination of traditional knowledge by practitioners to pupils of their choice. Study other methods available to protect traditional knowledge besides archiving them, and adopt those that are most suitable and acceptable to the knowledge holders,
- ✍ Make owners of traditional knowledge aware of the rights to information in the public domain, and about their rights and entitlements. Develop capacity of public, community and environmental NGOs to be alert and apprise knowledge owners about their rights within the ABS regime and provide assistance to them in IPR issues. Provide information and resources to conduct regular awareness programmes through a scheme of training of trainers to reach out the scattered knowledge owner population across the country.

[GEF funds could be sought for a major multi-institutional capacity building initiative for establishing an ABS regime in Sri Lanka].

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Develop and institute an effective system to provide (i) access to genetic resources, and (ii) provide access ensuring fair and equitable benefits sharing	<p><u>Primary:</u> <u>BDS/MOE</u> With FD,DWLC, CEA, Police, Customs , DOA-Plant Quarantine, DEA, DFAR, NARA, all related Ministries; M/Foreign Affairs, DSs, NSF, CBOs and NGOs.</p>	Within two (02) years and continue (ABS regime – Within one year).	MSP proposed for GEF funding	Govt + <b>External (esp. GEF)</b> +NGO.

## 10.0

### Develop and introduce measures to enhance national capacity for biotechnology using genetic resources.

#### Key tasks/actions:

- ✍ Institute national policy on biotechnology using genetic resources within the access and benefit sharing regime.
- ✍ Make business /industrial community in Sri Lanka aware of the scope for biotechnology. Make them aware of work done nationally and externally, of the expertise and resources available in state research institutes and universities, and of (any) government incentives available to encourage biotechnology development and application. Improve communication between the business community and the scientific community in this sphere..
- ✍ Establish bio-tech centres and develop existing centres as centres of excellence, to effectively serve client needs. Establish an apex body to coordinate and facilitate functioning of bio-tech centres.
- ✍ Make state-of-the-art facilities available at these centres. Set up testing facilities. Establish teams of biotechnologists (with different expertise) and lawyers in drafting MTAs, patents, IPR, etc and to provide legal advice. Develop and provide methods for other institutions and clients to obtain services of the centres.
- ✍ Make the biosafety database (prepared by the biosafety project) available online (by linking up with NSF biotechnology committee or the

AgBiotech to assist updating the website).

- ✍ Capacity should be built in the VRI to enable it to function as the central agency for storage of animal germplasm by providing the required infrastructure, equipment and staff training. (M/Sc&T with the M/ Livestock and DAPH)
- ✍ All institutions engaged in biotechnology using genetic resources should be provided with legal expertise on IPR issues, patents and benefit sharing to ensure national benefits, especially when there is foreign collaboration. Provide training on legal issues of biotechnology products relating to genetic resources and on drafting MTAs (to patent attorneys and legal officers). (The legal advisory panel of the centres of excellence could provide this expertise).
- ✍ Develop human resources in biotechnology at the centres of excellence in biotechnology to be established (e.g. at graduate/ post graduate to technician/lab attendant levels).
- ✍ Train relevant personnel on benefit sharing and negotiation skills. (MOE(BDS)/ Focal Point on ABS could collaborate with MS&T/NSF, EFL, individual experts on ABS).
- ✍ Scientists working in biotechnology using genetic resources should be provided with: (a) negotiation skills, (b) administrative skills, and (c) proposal writing skills and skills for conceptualizing the work at hand. (The Apex Body once set up could carry out the training with partner organizations).  
(Sys/Inst/Ind)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Develop and introduce measures to enhance national capacity for biotechnology using genetic resources.	<u>Primary:</u> <u>M/Sc. &amp;Tech (NSF)</u> With MOE (BDS), Chambers of Com. /Industry, DOA, D/APH, DEA, AgBiotech, Universities and research institutes , NGO-EFL, M/Higher Education.	Within two (02) years and continue.	Formulate a project for external funding [LKR 1.0 M for proposal preparation]	Govt + Private sector + <b>External</b>

## 11.0

**Establish an effective inter institutional mechanism to identify and monitor critical components of biodiversity and threats to biodiversity**

**Key tasks/actions:**

- ✍ Train Field and regional staff to assist in monitoring threats to biodiversity and in reporting such instances to DWLC, FD and DOA. (CCD/Coastguard division, regional and field staff; DFAR and MFAR (fisheries inspectors, fisheries coordinating committees), CEA Divisional Environmental Officers; UDA (regional staff); Department of Ayurveda and other relevant institutions as well as NGOs with field presence).
- ✍ Train field staff in FD, DWLC, CEA, and DOA, other relevant departments and national NGOs with field presence on identifying critical and threatened components of biodiversity and perceived threats; on identifying endemic and invasive plants by providing para taxonomic skills; on serving specimens to send to relevant institutions for further identification, on obtaining spatial information using the GPS, and on identifying alien species.
- ✍ Train relevant staff of FD, DWLC and the D/ National Museum in scientific field surveys, use of GPS, identification, data entry, database development, taxonomy, preservation of specimens, labeling, report writing, writing scientific papers, communication and education, proposal writing and monitoring and evaluation of activities and educational activities.

(Inst/Ind)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Establish an effective inter institutional mechanism to identify and monitor critical components of biodiversity and threats to biodiversity	<u>Primary:</u> <u>BDS/MOE</u> With FD, DWLC, MPPA,DFAR, DOA, CEA, DEA, D/Ayur, CCD, D/National Museum and related Ministries + NGOs (in training)	Within one (01) year. and continue.	LKR 1.0 M	Govt+ <b>External</b> (Training)

**12.0**

**Enhance capacity for participatory and integrated *in-situ* conservation and management of ecosystems with perspectives on poverty eradication**

**Key tasks/actions:**

- ☞ Train field officers in relevant institutions (e.g. DWLC, FD, CEA, CCD, DOA/HORDI, DFAR, NARA, and UDA) at sites covering different ecosystems in conservation and sustainable use of biodiversity. Use each site to train trainers to develop the required extension staff as done in the FD through a continuous programme. [The FD could extend the 5-module Training of Trainers programme pilot tested under the Sri Lanka Australia Natural Resources Management Project (SLANRMP). This requires funds for social mobilization at the various sites. FD could fund curriculum development].
- ☞ Incorporate community outreach training in the institutional training programmes. Offer special courses to site managers in the CCD, DFAR, NARA, and DOA by the FD and DWLC. [This could be carried out with existing institutional allocations].
- ☞ Provide overseas study tours on participation of integrated management of ecosystems to Divisional Secretaries and community members to generate required awareness and cooperation at operational levels.

(Inst/Ind)

Capacity Intervention	Responsible Agencies	Timeframe	Budget	Resource Mobilisation
Enhance capacity and institute systems for participatory and integrated <i>in-situ</i> conservation and management of ecosystems with perspectives on poverty eradication	<u>Primary:</u> <u>BDS/MOE, FD, DWLC, MAB/NSF.</u> <u>Others:</u> CCD, DFAR, CEA, Samurdhi Authority, DOA, DEA, NARA, Prov. Councils and DSs.	Within two (02) years and continue	LKR 5.0 M	.Govt + <b>External</b> (GEF, AUSAID) + CBO/NGO

### 13.0

#### Strengthen the legal frame work for biodiversity conservation and sustainable use

##### Key tasks/actions:

- ☞ Strengthen the policy and legal frame related to conservation and management of bio-diversity:
  - Make policy and law for conservation/management of wetlands more effective.
  - Make offences under the Mines and Minerals Act cognizable to facilitate enforcement.
  - Enlarge the EIA requirement under the NEA to include currently non prescribed projects.
  - Make Bio-diversity impact assessment (BIA) a requirement of EIA, and build technical capacity for conducting BIAs. Build in measures to monitor implementing EIA cleared projects and direct corrective action where required.

[A team of legal/environmental experts with inter institutional /sectoral senior administrators to study areas needing strengthening in the overall legal framework.]

(Sys/Inst)

<b>Capacity Intervention</b>	<b>Responsible Agencies</b>	<b>Timeframe</b>	<b>Budget</b>	<b>Resource Mobilisation</b>
Strengthen the legal framework for biodiversity conservation and sustainable use	<u>Primary:</u> <u>BDS/MOE, CEA.</u> With FD,DWLC, GSMB, SLLRDB, Police, Customs , DOA -Plant Quarantine, DEA, Judicial Service Commission, D/Legal Draftsman & all related Ministries.	Within two (02) Years and continue.	LKR 1.0 M	Government