

Concept Note on Nature Learning Centre, Assam

NLC Site:

Head Quarter- Aranya Bhawan, Panjabari, Guwahati;

Ex-situ conservation centre: Assam State Zoo cum Botanical Garden

Field Units - Offices of Biodiversity Management Committees at Different Districts

Implementation agency: *Assam State Biodiversity Board (ASBB), Aranya Bhawan, Panjabari, Guwahati-781037*

Implementing partners:

Environment & Forest Department, Govt. of Assam - The state forest department's existing infrastructure at its divisional offices as well as the protected areas will be used as the field study and research sites for the proposed Nature Learning Centres. Further, the department's manpower will also be used for facilitating on-site trainings and exposure visits as per requirement. The department can also partner with the NLC in establishing the ex-situ conservation site under the NLC's intervention.

Apart from that, the department can play a significant role towards ensuring sustainability of the NLC after the external funding is over.

Biodiversity Management Committees (BMC) – The BMC's are constituted at *Anchalik Panchayat* Level with a purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity. The offices of the BMC's can act as field units for the NLC's which will contribute as a local outreach and focal contact centre at the community level. They will be the community level partners of NLC to facilitate experience and activity based nature learning. Further, the BMC's also have their own revenue generation option, which can be an added advantage to ensure the sustainability of the interventions under the NLC.

Authorized representatives from Implementing Agency:

Name: Shri Abhay Kumar Johari, IFS

Designation: PCCF (Biodiversity & Climate Change) & Member Secretary, Assam State Biodiversity Board, Aranya Bhawan, Panjabari, Guwahati

Brief Background of the organisation:

Assam State Biodiversity Board is an autonomous and statutory body created by the Government of Assam in exercise of powers conferred under sub-section (I) of Section 22 of the Biological Diversity Act, 2002 (Act 18 of 2003). The Board was notified on 29th September, 2010, to promote biodiversity conservation, sustainable use of its components and equitable sharing of benefits arising out of commercial use of biological resources or associated traditional knowledge. The primary mandate of the Board is to collaborate with a range of partners to ensure biodiversity conservation, sustainable use and fair and equitable sharing of benefits arising out of the use of bio-resources. The activities taken up by the

board include –

- Constitution of Biodiversity Management Committees (BMC) at Anchalik Panchayat Level
- Preparation of People’s Biodiversity Register (PBR) at Block level
- Different awareness and educational programme on Biodiversity conservation across the state

Layout of the existing Botanical gardens/ ex-situ conservation site, if any

Provide brief detail of existing Botanical gardens/ ex-situ conservation site (area, layout, map, etc.)

Assam State Zoo cum Botanical Garden: Established in 1957, Assam State Zoo cum Botanical Garden is the existing ex-situ conservation centre run by the state Department of Environment & Forest. The area is situated in the heart of Guwahati city, at Hengerabari Hillocks, at an elevation of 60-200 MSL and is within the Hengerabari Reserve Forest area. It occupies an area of 1.75 sq.km of which 110 ha is natural forest. The species diversity of the campus are as follows –

- species of plants Flora : 345
- species (inclusive of free-ranging species) Mammals : 17
- species Birds : 154
- 30 species Herpetofauna :
- 105 species Butterflies :
- > 100 species Other insects :

It harbours many indigenous, rare and endangered species of flora and fauna, apart from many exotic species.

NLC Description

Thrust area (as per identified objective mentioned above): *Building capacities of various stakeholders on nature conservation through a holistic and coordinated effort to create an enabled environment for nature based learning and sustainable developmental action.*

Objective(s):

- To develop and promote conservation awareness and sensitization on biodiversity and natural resources
- To create a cadre of trainers among the various stakeholders , which can lead the conservation actions and capacity building at various levels
- To promote participatory conservation action and management of wetland

- resources for livelihood generation
- iv. To promote conservation of endemic, rare, threatened and endangered species
 - v. To facilitate alternate livelihood generation capacities in order to reduce pressure on forest resources and promote efficient utilization of natural resource base

Methodology : The project proposal has been developed based on secondary data available with the implementing agency as well as through consultation with the key informants.

The NLC will work on the basis of Interactive Learning Programmes, Practical activity based learning, exposure visit, audio-visual training material, reading materials etc.

Expected deliverables :

Activity	Deliverables
Awareness and Sensitization Programmes	<ol style="list-style-type: none"> 1. Awareness Programme on Biodiversity and Ecological Conservation for Students 2. Sensitization Programme on Biodiversity Conservation for Communities 3. Preparation, Publication and Dissemination of Knowledge Products for awareness generation 4. Events like street play, exhibition, puppetry for information dissemination
Creation of a cadre of trainers and conservation workers	<ol style="list-style-type: none"> 1. Training modules on Biodiversity and Nature Conservation for different stakeholders 2. Easy to understand learning materials on Climate Change, Biodiversity and Climate Resilience for students 3. Conservation clubs for students at school and college level 4. Internship programmes for students of biological sciences 5. Short-term learning courses on nature and biodiversity conservation
Wetland Restoration and Management	Pilot scale participatory Wetland Conservation and Management Programme for Livelihood Generation – at least 2 wetland ecosystems
Capacity Building of Government Stakeholders	Workshops for various sectoral stakeholders, government officials and panchayat leaders on mainstreaming conservation aspects in development actions.
Alternative Livelihood Generation	Training of community members/SHGs in and around protected areas on alternative livelihood options, eco-tourism
Conservation of sensitive flora and fauna	<ol style="list-style-type: none"> a. Study conducted to identify conservation issues and threats for selected species and their habitats b. Interventions identified and implemented c. Setting up of conservation centres for sensitive species

8.2 **Beneficiaries:** Who are the beneficiaries (identify who and specify numbers) or what are the improvements to the ecosystem?

Sl. No.	Beneficiary	Approx. Number of Direct Beneficiary
1	Students	3000
2	Community Members	5000
3	BMC Officials	1500
4	Government Officials	200
5	Women SHG	300

A narrative on activities to support the Results, Outcomes and Impacts: What are the 'changes' sought out by the NLC? Briefly outline the outcomes (benefits to the stakeholders/participants) and Impacts (when the benefits to the stakeholders/participants are achieved, what changes in organizations, communities or coastal ecosystems might be expected to occur).

Proposed activities under the NLC, Assam:

- a. **Awareness and Sensitization Programmes** : The proposed NLC will conduct various awareness and sensitization programmes for both students as well as community members. The programmes will be organised at NLC Head Quarter as well as NLC field units and divisional units of the implementation partner. The programmes will focus on increasing awareness of the community members and students on various issues of biodiversity conservation, including field exposure based learning opportunities. Towards the latter part of the project, NLC will also organise various effective modes of mass communication like street plays, radio talks and drama to sensitize people on nature conservation.
- b. **Knowledge product development:** The NLC will create a group of easy learning materials like leaflet, booklet, pamphlet, posters and so on to facilitate understanding of the nature and ecosystem as well as creation of awareness on conservation.
- c. **Creating a cadre of trainers and conservation workers** – The proposed NLC will thrive for creating a cadre of nature enthusiasts, conservation workers as well as trainers within the state, so that the concepts of conservation and nature learning

reaches each and every stakeholder. To achieve the same, NLC will work towards development of a series of training modules on related concepts and issues, which will be available in public domain as well as at the NLC. Further, the NLC will also conduct short term learning course, workshops, training and internship programmes, which will help the students from biological sciences and conservation sector to further work for creating awareness on biodiversity conservation. Under the banner of NLC, we are also proposing to open conservation clubs at schools and colleges of districts, which will work at their own for nature learning and conservation. The members of conservation clubs can earn hands on practical learning opportunities with the help of BMCs.

d. Alternative Livelihood Generation Programme: The NLC will also provide training to the community members and members of women SHGs on alternative livelihoods, so as to reduce the pressure on the forest resources near the protected areas. Further, the NLC will also take up pilot scale work on wetland restoration and community partnership based management for conservation of wetland and its biodiversity and livelihood generation.

e. Capacity Building of Government officials: NLC will also provide capacity building trainings and learning opportunities for the government officials of various departments, so that the concepts of ecosystem resilience, climate change adaptation and eco-sensitivity can be mainstreamed within the policies, plans and actions of the sectors.

f. Ex-situ conservation of Sensitive Species - The NLC will also develop an ex-situ conservation site for some of the selected species with higher degree of vulnerability towards extinction.

Activity-wise Output, Outcome and Impacts: The table below summarises the possible results, outcomes and impacts of the proposed activities:

Activity	Output	Outcome	Impact
Awareness & Sensitization Programme	1. No. of programmes conducted 2. No. of students/institutes being covered 3. Exposure Visits	1. Students getting engaged in conservation action 2. Community mobilization for eco-sensitive development 3. Changing	1. Conservation of biological diversity 2. Sustainable use of bio-resources

		behaviour towards nature, natural and biological resources	
Knowledge product Development	<ol style="list-style-type: none"> 1. No. and type of easy learning materials developed 2. No of people/ students using the materials 	<ol style="list-style-type: none"> 1. Increased understanding of concepts on nature, natural ecosystem, biodiversity and its conservation 2. Facilitation of self-motivated awareness programmes by other organisations 	Conservation of species, Increased learning and behavioural changes, Development of an academic discourse on conservation action
Creating a cadre of conservation workers and trainers	<ol style="list-style-type: none"> 1. Training modules on Biodiversity and Nature Learning 2. Training module on CC and biodiversity conservation 3. Training manual of biodiversity conservation 4. No of workshops conducted 5. No of schools and colleges covered under conservation club scheme 6. Increased availability of volunteers for conservation and nature protection 	<ol style="list-style-type: none"> 1. Dissemination of information and awareness to each and every stakeholders at every level 2. Mobilization of people for actions on nature conservation 	First paced conservation initiatives across the state, reduced exploitation of bio-resources, Sustainability of NLC interventions
Alternative Livelihood Initiatives	<ol style="list-style-type: none"> 1. Wetlands being restored for community based management 2. Communities trained on alternative livelihoods 	<ol style="list-style-type: none"> 1. Mobilization of communities across the state for community based restoration of wetlands 2. Livelihood security 	<ol style="list-style-type: none"> 1. Conservation of wetland ecosystem 2. Reduced pressure on forest resources 3. Food security 4. Boost in eco-tourism interventions
Capacity Building of Government Officials	<ol style="list-style-type: none"> 1. No of workshops conducted at district and state level 2. No of officials trained 	<ol style="list-style-type: none"> 1. Increased understanding of the concepts of biodiversity and eco-sensitive 	Concepts of ecosystem resilience and green development being integrated in to

	3. Skill development	development	policies and actions
Ex-situ Conservation Site	1. No of species being protected 2. Revenue generation 3. Learning options	Mobilization of other stakeholders to take up such initiatives	Protection and conservation of sensitive species, Sustainability of NLC