

Template/Pro forma for Submission

NMHS-Himalayan Nature Learning Centre (NLC) Grant
NMHS-FINAL TECHNICAL REPORT (FTR)

NMHS Grant Ref. No.:	NMHS-2017/Him- NLC-02-Tripura/485 dated.22.12.2017
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Date of Submission:	1	2	0	5	2	0	2	3
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PROJECT TITLE (IN CAPITAL)**“NMHS HIM-NATURE LEARNING CENTRE (NLC)-TRIPURA”**

Project Duration: *from 01.01.2018 to 28.02.2023.*

Submitted to:

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NMHS-Final Technical Report (FTR) *template*

Nature Learning Centre (NLC)

DSL: Date of Sanction Letter

2	2	1	2	2	0	1	7
d	d	m	m	y	y	y	y

DPC: Date of Project Completion

2	8	0	2	2	0	2	3
d	d	m	m	y	y	y	y

Part A: Project Summary Report

1. NLC Description

i.	NMHS-Grant Ref. No.:	NMHS-2017/Him-NLC-02-Tripura/485 dated.22.12.2017
ii.	NLC Title:	“NMHS HIM-NATURE LEARNING CENTRE (NLC)-TRIPURA”
iii.	NLC Sites (State/UT) (Location Maps attached)	Sepahijala Wildlife Sanctuary, Tripura. Map of NLC Project location is attached in appendix.
iv.	Total Budget:	Rs 4,10,03,152/- (in Cr.), Out of total budget a sum of rupees 2,03,22,880.00 has been received & spent with interest rupees 2,14,39,210 in full.
v.	Lead Agency:	Forest Department, Government of Tripura
	Lead PI/ Proponent:	Pritam Bhattacharjee,IFS District Forest Officer, Sepahijala,Tripura
	Co-PI/ Proponent:	----
vi.	Implementing Partners:	Forest Department, Government of Tripura, Tripura University, Tripura Biodiversity Board, Directorate Biotechnology, Sepahijala Zoological Park, Directorate of Skill Development, Zoological Survey of India ,Botanical survey of India.
	Key Persons (Contact Details, Ph. No, E-mail):	Pritam Bhattacharjee,IFS, <i>Principal Investigator</i> District Forest Officer, Sepahijala,Tripura, [E-mail: districtforestsepahijala@gmail.com . Contact No.: 9436540259]

2. NLC Outcomes

2.1. Abstract/ Summary *(not more than 500 words)*

- **Background:-**The project NMHS Him-Nature Learning Centre(NLC)-Tripura is funded and supported by Ministry of Environment, Forest and Climate Change (MoEF & CC) and is implemented by Forest Department, Govt. of Tripura. The NLC-Tripura was established with a vision to aware the stake holders & conserve the Nature, more exploration of nature in a sustainable manner. education, awareness and skill development, capacity building and livelihood security, employment generation through eco-tourism.
- **Objectives/ Aims:-**
 1. It would be the state of art as Centre for dissemination of information about all aspect of nature & conservation of natural resources.
 2. To develop extension models for information and technology on natural resource management.
 3. To conceive, coordinate and monitor training programs relating to natural resource management, environment protection, technology extension and capacity building for all stake holders.
 4. To promote and facilitate forestry and the allied activities as means of livelihood for the masses on a sustainable basis and to develop bamboo and cane-based entrepreneurship amongst people.
 5. To impart training in tree farming, cultivation and management of bamboo and medicinal plants, appropriate technology for value addition of bamboo and cane for development and marketing of handicraft and also timber and non-timber forest produce.
 6. To take up capacity building for harnessing the rich bio-diversity of states and development of eco-tourism activities in the state to increase contribution of the natural resource sector to the GDP of the state.

- **Methodology:-**

The methodology of NLC-Tripura is both qualitative and quantitative. It is based on information collected during PRAs and focus group discussion as well as on the secondary data available with the implementing agency and Forest Dept. Govt. of Tripura. The deliverables were quantifiable with certain monitoring indicators and targets to be achieved.

- **Approach:-**

The NLC, Tripura objectives were accomplished by raising awareness through interactive learning programs, practical activity based learning, green technologies demonstration / exposure visits, audio-visual training materials, signages for awareness among masses, organizing various festivals for awareness generation, reading materials, promoting sustainable livelihood training programmes and development of interpretation centres/models, nature trails, orchidarium, bamboo setum, butterfly park, adventure park etc.

- **Results/ Outcomes:-**

1. Interpretation models such as Herbarium, photo gallery, Seed bank, Collection of different type of timbers and bamboos, Vermi-compost pit, Collection of stones, collection of different type of soils, Orchidarium and fernarium for awareness generation among school & college students.

2. Conservation of flora & fauna of Sepahijala Wildlife Sanctuary has been published for education as well as awareness generation among students & other stakeholders.
3. Organized 07 nos. of training/workshop for capacity building among the various stakeholders. The total nos. of participants attended are 640 nos.
4. Up-gradation of existing forest training academy into a forest museum with various display models to generate awareness among the masses particularly to the students.
5. Development of NLC Sub-centre at old training institute and vermin-compost unit along with a nature trail.
6. Publication of 10 nos. of knowledge products has been made for awareness generation.
7. Development of adventure park in Jibandeeep JFMC area to generate awareness.
8. Development of Ficus house of Sepahijala WLS. All together 12 nos of Ficus species of SWLS has been kept in the Ficus house.
9. Special awareness program & visit of various students of school & college has been conducted in the NLC. All together 36 nos. of school & college has attended the awareness program covering 2035 nos. of students.
10. Special training for livelihood generation like cultivation of mushroom, Bee keeping, sewing machine operation has been conducted among the EDC members. In this regards a total of 04 no of sewing machine and 10 no of bee box has been distributed among EDC members.

- **Conclusion:-**

The NLC-Tripura is able to achieve the target objectives besides identifying the various underlying issues of biodiversity conservation. The awareness and sensitization programme for school students/EDC members and other local people has been organized in remote areas/schools of Tripura has created large numbers of students, govt. officials and community as cadres for biodiversity conservation. The capacity buildings on various alternative livelihood sources like mushroom cultivation, beekeeping, nursery development, vermi-compost have created a sustainable source of income source that will not only reduce dependency on natural forest resources of Sepahijala Wildlife Sanctuary but also provide economic empowerment and gender equality. The facilitation of NLC Ex-situ site and sub centre would promote conservation of rare endemic and endangered species along with an outdoor learning system to students and other conservation stakeholders.

- **Recommendations:-**

1. Visit of school students and imparting training among EDC members for livelihood generation may continue following the mandates provided by NLC-Tripura.
2. More interpretation models in museums of NLC may be established for sensitization of community.
3. Key persons involved in similar projects implemented in different states may be provided a knowledge-platform to interact and share ideas.
4. Charging of entry-fee of rupees 5 may be kept per person for continuous up-gradation & maintenance of NLC.

2.2. Objective-wise Major Achievements

S. No.	Objectives	Major achievements (in bullets points)
1.	To develop interpretation models and upgrading and diversifying the botanical garden and NLC.	Interpretation models such as Herbarium, photo gallery, Seed bank, Collection of different type of timbers and bamboos, Vermi-compost pit, Collection of stones, collection of different type of soils, Orchidarium and fernarium, Ficus house, adventure park, butterfly park & up-gradation of existing botanical garden has been developed. Moreover vermi-compost training manual, books on important flora & fauna of Sepahijala Wildlife Sanctuary, Green activity book for nature learner, Annual report etc has been made both in English & Bengali.
2.	To form a strong and capable manpower for operation of the centre.	NLC has set up a team of trained Range officer, staffs, foresters & other EDC members (Vanmitra) for regular operations and activities of NLC center.
3.	To develop of ground linkage between partner institutions.	Collaboration with partner institutions like Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Dept. of School & Education and Archeological Survey of India has been made to achieve the various objectives of NLC Tripura by using their expertise.
4.	To select interested and natural resource-development user-groups from functional EDCs/JFMCs for trainings towards sustainable livelihoods	NLC Tripura has listed the names from the beneficiary groups of the local EDC's/JFMC's for their training towards sustainable livelihood.
5.	To develop a team of trainers amongst permanent staffs of the area/interested user groups for sustainability of NLC beyond the NLC duration.	Team of trainers and management staffs has been recruited and posted for the betterment of the project. Moreover the youth of EDC has been trained & at present even after the project completion the EDC members are engaged for running the centre.
6.	Annual feedback mechanism and subsequent modification.	Annual feedback mechanism and subsequent modification is in process & lots of visitors have appreciated our efforts.

2.3. Outputs in terms of Quantifiable Deliverables*

S. No.	Quantifiable Deliverables*	Monitoring Indicators*	Quantified Output/ Outcome achieved	Remarks
1.	NLC & Botanical garden to be maintained upgraded with proper and required Infrastructures relevant to meet the objectives and to reach the goal of the project.	Monitoring in comparison to the baseline information to be provided by the proponent:	(a) More than 500 nos. of green activity book for nature learners has been made & distributed among various stakeholders.	
2.	Development of an environmentally educated class in the society who may respond and react for environmental conservation in all respects (Annual target of students and other than student to be educated: minimum 1000 No.);	1. No. of Nature Learning and Awareness Curricula Developed;	(b) More than 300 nos. of copies has been made on broacher namely "know the bounty of nature" & distributed among various stakeholders.	
3.	The livelihood trainings & skill up-gradation to the natural resource dependant user group from functional EDCs/JFNCs (Annual target of EDC/JFMC members to be trained (200 no.);	2. No. of Crucial Nature Learning and Awareness Topics covered;	(c) One field guide namely "Important flora & fauna of Sepahijala Wildlife Sanctuary, Tripura" has been made & distributed among various stakeholders.	
4.	The committed team of expert trainers & educators will be able to run the centre in a regular routine and will help in extending the impact beyond its influence zone.	3. No. of Trainings organized with no. of stakeholders benefited in each segment;	(d) 3 nos. of annual reports for the year 2019-20, 2020-21 & 2021-22 has been made & distributed among various stakeholders.	
		4. No. of Dissemination and Awareness Publications (short/detailed) circulated;	(e) Capacity building & training for public representative- 90 nos., panchayetiraj training institute-190 nos., awareness program for govt. officials- 80 nos., school students & EDC members-	
		5. No. of Field/ Green Technologies Demonstrations/ Exposure Visits organized;		
		6. No. of Publication of Assessment and Findings Reports;		
		7. No. of Beneficiaries;		
		No. of Collaborations/ Connect with the Protected Areas/ Sanctuaries/		

		<p>Conservation Areas established;</p> <p>8. No. of Policy Guidelines and Legislative Mechanisms: Prepared and/ or Communicated.</p>	<p>2035 nos. has been conducted during the project duration.</p> <p>(f) A total of 1675 nos. of students from 32 nos. of schools of govt. of Tripura has visited on various awareness programs in NLC during the project duration.</p> <p>(g) 10 nos. of bee box & 4 nos. of sewing machine have been distributed among 14 nos. of beneficiaries.</p>	

(*) As stated in the Sanction Letter issued by the NMHS-PMU.

2.4. Strategic Steps with respect to Outcomes (in bullets)

S. No.	Particulars	No./Brief details	Remarks/ Attachment
1.	Demonstrations developed/New Methodology developed.	<p>(a) Lined up with BMC, JFMC and EDCs for creating awareness on importance on Biodiversity.</p> <p>(b) Capacity building & training for public representative- 90 nos., panchayetiraj training institute-190 nos., awareness program for govt. officials- 80 nos., school students & EDC members- 2035 nos. has been conducted during the project duration.</p>	<p>(a) To develop and promote conservation awareness and Sensitization on biodiversity and natural resources.</p> <p>(b) To create a cadre of trainers among the students, EDC members & other stakeholders who can lead the conservation actions and capacity building at various level.</p>

S. No.	Particulars	No./Brief details	Remarks/ Attachment
2.	New Facilities created/ New models/ Process/ Strategy developed	8 nos. of display gallery, 1 no. of orchidarium, 1 no. of butterfly garden, development of botanical garden- 1 no., installation of drinking water facilities has been developed.	Interpretation models such as Herbarium, photo gallery, Seed bank, Collection of different type of timbers and bamboos, Vermi-compost pit, Collection of stones, collection of different type of soils, Orchidarium and fernarium, ficus house, adventure park, butterfly park & up-gradation of existing botanical garden, development of existing children corner, development of drinking water facility etc has been developed. Moreover vermi-compost training manual, books on important flora & fauna of Sepahijala Wildlife Sanctuary, Green activity book for nature learner, Annual report etc has been made both in English & Bengali.
3.	Others (if any)	-----	-----

3. Demonstrative Skill Development and Capacity Building/ Manpower Trained

S. No.	Type of Activities	No. of Events (Details to be provided in Part-B in Section-4&5)	Beneficiary Category (Student/farmer/ Officials/ Others)	Participants/Trained			
				SC	ST	Woma n	Total
1.	Workshops	3 nos. workshop on “ Nature Education and Prospects of Conservation ” for the members of Panchayet Raj Training Institute Gomati, Sepahijal and South Tripura.	The addressed groups were made familiar with the options on alternative livelihood and reduce the dependence on forest resources.	20	180	80	280
2.	On Field Trainings	Various schools, EDC members & departmental staffs have been provided with basic training regarding biodiversity conservation.	3 nos. of such training has been done & exposure visits of Sepahijala Zoological Park & Sepahijala Wildlife Sanctuary has been made.	30	40	20	90
3.	Green Skill Development	1 day hands-on training on Honey Bee Keeping & mushroom cultivation has been done.	Mushroom cultivation & bee keeping is one of the important livelihood options for the EDC members. In collaboration with Agriculture dept. training has been imparted.	10	20	40	70

4.	Awareness building activities	11 nos. “Nature Awareness Programme” for the school students.	The dissemination of the knowledge products has a positive impact on the students and these initiatives have successfully inculcated a nature friendly temperament among the students of remote areas.	165	407	240	812
5	Others, if any	-	-	-	-	-	-

4. Linkages with Regional & National Priorities (SDGs, INDC, etc)/ Collaborations

S. No.	Linkages /collaborations	Detail of activities (No. of Events held)*	No. of Beneficiaries
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1.	Sustainable Development Goals (SDGs)/ Climate Change/INDC targets addressed	<p>NLC-Tripura covers 7 SDGs viz.</p> <p><u>Goal 1 : No Poverty</u> – Under NLC-Tripura sustainable livelihood training programmes, the community were sensitized to live more sustainably to reduce their forest dependency and avoid exhaustion of natural resources and climate-related extreme conditions.</p> <p><u>Goal 2 : Zero Hunger</u> – NLC-Tripura activities were implemented to ensure awareness for sustainable food production systems and resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.</p> <p><u>Goal 5 : Gender Equality</u> – NLC-Tripura ensure women’s full and effective participation in its sensitisation and capacity building activities.</p> <p><u>Goal 8 : Decent Work and Economic Growth</u> – NLC-Tripura encourages the unemployed youths to actively participate in its workshops and other programmes. NLC-Tripura had also engaged resource persons who could guide them through formalization of micro, small and medium enterprises.</p> <p><input type="checkbox"/> Goal 10 : Reduced Inequality</p>	<p>5 publications, training, workshop etc conducted.</p> <p><u>Beneficiaries:</u></p> <p>Students</p> <p>Women</p> <p>SHGs</p> <p>EDCs</p> <p>STs</p> <p>SCs</p> <p>Other community members</p> <p>Govt officials</p>
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		<p>micro-, small- and medium enterprises.</p> <p><u>Goal 10 : Reduced Inequality</u></p> <p>–</p> <p>NLC-Tripura intends to reduce inequality through its livelihood capacity building program and promote economic empowerment.</p> <p><u>Goal 13 : Climate action–</u></p> <p>Raising awareness on environment literacy, climate change mitigation and adaptation.</p> <p><u>Goal 15 : Life on earth</u> –NLC-Tripura promotes Sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase Afforestation and reforestation.</p> <p>NLC-Tripura in collaboration with other agencies enhancing various stakeholders through Education & Awareness on Climate Change to tackle climate change issues. This will allow climate proofing of vulnerable natural resources and help sustain the livelihoods of those dependent on climate sensitive sectors/natural resources.</p>	
2.	Any other		

*Further details to be provided in Part B-Section 5.4.

5. Financial Summary (Cumulative)

Enclosed as **Annexure I.**

6. Major Equipment/ Peripherals Procured/ Facilities under the Project* (if any)

S. No.	Name of Equipment/ Facilities/ Peripherals	Quantity	Total Sanctioned Cost	Actual Purchased Cost	Purchased Details
1.	GPS Machine	10	6420000	271875	For smooth running of the NLC- Tripura project
2.	Camera	1		98000	
3.	1KV APS UPS	3		26100	
4.	BINOCULAR (ARTOS)	4		91300	
5.	CCTV Camera with TV monitor	10		298300	
6.	Portable herbarium hall cum library cum training centre	1 unit		1654700	
7.	Rest Shed	3		399100	
8.	Drinking water filter/Water tank	3		278800	
9.	Portable lavatories			206385	
10.	Workshop cum computer laboratory			1378500	
11.	Computer/ Laptop	5		282400	
12.	Computer printer	5		192500	
13.	Scanner	2		25500	
14.	Wi-fi internet facility and installation	2		43542	
15.	photocopier	3		253400	
16.	Inverter	4		327200	
17.	Multimedia projector and screen	1		44032	
18.	65 Interactive flat panels U1-tra HD for smart class Digital virtual room (make view sonic, Model- Model-IFP6530, S/N-VSA19440009) (Public address system)	1		240720	
19.	Office furniture (Tables, chairs etc)	50		245696	

20	Godrej Almirah	5	61950
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*Details should be provided in details (ref. Annexure III &IV).

7. Knowledge Products and Publications:

S. No.	Publication/ Knowledge Products	Total	Enclosures
1.	Technical Reports/ Manuals (Skill Development/ Capacity Building)	5 nos.	Enclosed
2.	Information Dissemination Material	5 nos. (Important flora & fauna of Sepahijala Wildlife Sanctuary, Know the bounty of nature, Green activity book for nature learners 03 nos.	Enclosed
3.	Any other:	-----	-----

*Please mention or acknowledge the NMHS Support in all Knowledge Products/ Publications.

8. Recommendation on Utility of NLC Findings, Replicability and Exit Strategy

Particulars	Recommendations
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<p>Utility of the NLC Findings:</p>	<ul style="list-style-type: none"> • Out of training & various awareness program which were conducted to create a cadre of trainers among the students/officials which can lead the conservation actions and capacity building at various levels. • The learning methodologies and tools / techniques used garnered more attention and enthusiasm of the students. • Students/other stakeholders exposure visits to National Park, Zoological Park and Wildlife Sanctuaries located in Sepahijala which will have a positive impact on the students and these initiatives have successfully inculcated a nature friendly temperament among the students & other stakeholders. Outreach programmes were able to engage more community members in nature learning and nature conservation. • Training and Capacity Building on alternative livelihoods among EDC members & other stakeholders which will made familiar with the options on alternative livelihoods and reduce the dependence on forest resources and issues such as man-animal conflict threatening our biodiversity. • Training and capacity building programmes are also conducted with a vision to empower community economically and reduce gender gap and inequality. • The state of the art forest gallery and herbarium unit established under the project shall be beneficial for the community.
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<p>Replicability / Way Forward:</p>	<p>Due to a structured implementing framework the project is easily replicable since awareness and sensitization is a necessary tool in conservation. Additionally, building capacity for sustainable livelihood generation will aid in reducing pressure on forest resources. This way students as well as communities will be engaged and volunteer for conservation of biodiversity. It has also resulted in adapting sustainable economic activities which aided the community in generating income, in reducing gender disparity, economic empowerment of the tribal communities and youth empowerment. Collaborating with different stakeholders such as Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Govt. of Tripura, Dept. of Biotechnology, Govt. of Tripura, Directorate of Skill development, Govt. of Tripura, Archeological Survey of India was also a crucial part of the project. This helped in sharing ideas and resources and also creating a better impact on the community.</p>
<p>Exit Strategy:</p>	<ul style="list-style-type: none"> • NLC, Tripura has partnered with TBB and Forest Department, Tripura which has similar mandate given by the state government and biodiversity authority. • Over the tenure of the project, NLC, Tripura has been collaborated with numbers of Government organizations and agencies for implementing its various activities such as outreach programs, capacity building programs & awareness programs. • To ensure this, collaborative partners- Forest Dept., Govt. of Tripura may continue to replicate the activities of NLC, Tripura in other areas of the state. Forest Department may also continue to provide alternative training livelihood program which is in line with department's own mandates. • The interpretation galleries, nature trails and vermi-compost unit, Orchidarium, fernarium, ficus house, adventure park, butterfly park & up-gradation of existing botanical garden, development of existing children corner, development of drinking water facility etc are handed over to the respective authorities of the Forest Department. • The BMCs, EDCs and SHGs will also continue sensitization of the community.

(PROJECT PROPONENT/ COORDINATOR)

(Signed and Stamped)

(HEAD OF THE INSTITUTION)

(Signed and Stamped)

Place:

Date:/...../.....

PART B: DETAILED PROJECT REPORT – NLC Grant

1 EXECUTIVE SUMMARY:

The project NMHS Him-NLC, Tripura was implemented with a vision to aware the stake holders & conserve the Nature, more exploration of nature in a sustainable manner. education, awareness and skill development, capacity building and livelihood security, employment generation through eco-tourism. Tripura Forest Department is the implementing agency. During the term of the project NLC, Tripura also collaborated with several government and non-government organization such as Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Govt. of Tripura, Dept. of Biotechnology, Govt. of Tripura, Directorate of Skill development, Govt. of Tripura, Archeological Survey of India. Promoting networking with these organizations promoted sharing ideas and manpower, makes a stronger impact in sensitization and mobilization of the beneficiaries and aided in accelerating in implementation of several activities of NLC-Tripura.

2 INTRODUCTION:

2.1 Background:

The project NMHS Him-Nature Learning Centre(NLC)-Tripura is funded and supported by Ministry of Environment, Forest and Climate Change (MoEF & CC) and is implemented by Forest Department, Govt. of Tripura. The NLC-Tripura was established with a vision to aware the stake holders & conserve the Nature, more exploration of nature in a sustainable manner. education, awareness and skill development, capacity building and livelihood security, employment generation through eco-tourism.

The managerial and administrative centre of NLC-Tripura was set up at Old training academy at Sepahijala Wildlife Sanctuary. Its thrust as per the identified objectives is “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. With a motto to explore, experience and understand nature, NLC, Tripura devised certain activities in line with its objectives:

- a. Awareness and Sensitisation Programme
- b. Knowledge product development
- c. Create a cadre of trainers and conservation workers
- d. Alternative Livelihood Generation Programme
- e. Capacity Building of Government Officials

2.2 Overview of the NLC:

Though a range of different efforts have been taken by the state and central government, the government is not able to address all the stakeholders and build capacities for sustainably using the natural resources in general and bio-resources in particular. The initiatives taken so far have not reached every stakeholder and thus need a concentrated and focused effort through a dedicated entity like NLC, Tripura which primarily worked towards increased understanding of the nature, natural ecosystems, biological resources, their importance and conservation and so on. Another important aspect is that, though various interventions have been taken by various department towards creating and sensitizing people on these aspects. These are often isolated efforts and thus requires to be brought under a single umbrella. Efforts are made to mitigate the lack of coordination between different departmental interventions towards nature and biodiversity conservation. NLC, Tripura worked as vehicle to promote nature learning and biodiversity conservation within the state.

The major issues addressed under NLC-Tripura are as follows:-

<ul style="list-style-type: none"> • To develop interpretation models and upgrading and diversifying the botanical garden and NLC.
<ul style="list-style-type: none"> • To form a strong and capable manpower for operation of the centre.
<ul style="list-style-type: none"> • To develop of ground linkage between partner institutions.
<ul style="list-style-type: none"> • To select interested and natural resource-development user-groups from functional EDCs/JFMCs for trainings towards sustainable livelihoods
<ul style="list-style-type: none"> • To develop a team of trainers amongst permanent staffs of the area/interested user groups for sustainability of NLC beyond the NLC duration.
<ul style="list-style-type: none"> • Annual feedback mechanism and subsequent modification.

2.3 Baseline Data and NLC Scope:

Sl. No.	New Data Details	Status of Existing Baseline	Additionally and Utilisation New data
1	Conducting training on “Nature Education and Prospects of Conservation” for the stakeholders.	The concept of imparting nature knowledge and awareness training among stakeholders is a novel and unique attempt in Tripura.	To create a cadre of trainers among the students & other stakeholders which can lead the conservation actions and capacity building at various levels.
2	Sensitisation and capacity building of 1252 community Members/EDC members/other stakeholders residing in fringe area out of which 647 belonged to ST, 380 were women and 225 were SC.		Capacity Building on Honey Bee Keeping, Vermi-composting, Mushroom Development and Nursery Development were given to the forest fringe area community to reduce pressure on forests which shall aid in economic empowerment and gender disparity.

2.4 NLC Objectives and Target Deliverables:

Him-NLC Objectives	Target Deliverables
<ul style="list-style-type: none"> To develop interpretation models and upgrading and diversifying the botanical garden and NLC. 	<p>Interpretation models such as Herbarium, photo gallery, Seed bank, Collection of different type of timbers and bamboos, Vermi-compost pit, Collection of stones, collection of different type of soils, Orchidarium and fernarium, ficus house, adventure park, butterfly park & up-gradation of existing botanical garden has been developed. Moreover vermi-compost training manual, books on important flora & fauna of Sepahijala Wildlife Sanctuary, Green activity book for nature learner, Annual report etc has been made both in English & Bengali.</p>
<ul style="list-style-type: none"> To form a strong and capable manpower for operation of the centre. 	<p>NLC has set up a team of trained Range officer, staffs, foresters & other EDC members (Vanmitra) for regular operations and activities of NLC center.</p>
<ul style="list-style-type: none"> To develop of ground linkage between partner institutions. 	<p>Collaboration with partner institutions like Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Dept. of School & Education and Archeological Survey of India has been made to achieve the various objectives of NLC Tripura by using their expertise.</p>
<ul style="list-style-type: none"> To select interested and natural resource-development user-groups from functional EDCs/JFMCs for trainings towards sustainable livelihoods 	<p>NLC Tripura has listed the names from the beneficiary groups of the local EDC's/JFMC's for their training towards sustainable livelihood.</p>
<ul style="list-style-type: none"> To develop a team of trainers amongst permanent staffs of the area/interested user groups for sustainability of NLC beyond the NLC duration. 	<p>Team of trainers and management staffs has been recruited and posted for the betterment of the project. Moreover the youth of EDC has been trained & at present even after the project completion the EDC members are engaged for running the centre.</p>
<ul style="list-style-type: none"> Annual feedback mechanism and subsequent modification. 	<p>Annual feedback mechanism and subsequent modification is in process & lots of visitors have appreciated our efforts.</p>

3 DEMONSTRATION/ STRATEGY/ APPROACH –

3.1 Demonstrations/ Strategy used:

The NLC, Tripura objectives were accomplished by raising awareness through interactive learning programs, practical activity based learning, green technologies demonstration / exposure visits, audio-visual training materials, signages for awareness among masses, organizing various festivals for awareness generation, reading materials, promoting sustainable livelihood training programmes and development of interpretation centres/models, nature trails, orchidarium, bamboo setum, butterfly park, adventure park etc.

3.2 Data collected and Equipment utilized: NA

3.3 Details of Educational and Awareness Programmes, if any:

Special awareness program & visit of various students of school & college has been conducted in the NLC. All together 36 nos. of school & college has attended the awareness program/visited covering 2035 nos. of students. Besides this 11 nos. of “Nature Awareness Programme” for the school students has been organized comprising of 812 nos. of students.

3.4 Strategic Planning for each Event:

Awareness and Sensitization Program: The NLC, Tripura has conducted various awareness and sensitization programmes for both students and community members. For students around 11 numbers of programmes were organised at various government schools situated at forest fringe areas. The programmes were conducted mainly to increase awareness of the community members and students on various issues of biodiversity conservation including field exposure based learning.

Knowledge products development: The NLC, Tripura has created easy learning materials like leaflets, pamphlets, posters, standees, documentaries etc. to facilitate understanding of the nature and ecosystem as well as creation of awareness on conservation.

Creating a cadre of trainers and conservation workers: The NLC, Tripura created a cadre of nature enthusiasts, conservation workers and trainers within the state so that the concepts of conservation and nature learning reach out to each and every stakeholder. A series of training modules, short term learning courses, workshops etc. were prepared for students and other stakeholders.

Alternative Livelihood Programme: The NLC, Tripura has provided training programmes to the community members and women members of SHGs/EDCs on alternative livelihood like nursery development, mushroom cultivation, bee keeping etc. to reduce pressure on the forest resources near the protected areas.

4. MAJOR EVENT AND ACTIVITIES –

4.1 Major Events and Activities:

S. No.	Objectives	Major achievements (in bullets points)
1.	To develop interpretation models and upgrading and diversifying the botanical garden and NLC.	Interpretation models such as Herbarium, photo gallery, Seed bank, Collection of different type of timbers and bamboos, Vermi-compost pit, Collection of stones, collection of different type of soils, Orchidarium and fernarium, ficus house, adventure park, butterfly park & up-gradation of existing botanical garden has been developed. Moreover vermi-compost training manual, books on important flora & fauna of Sepahijala Wildlife Sanctuary, Green activity book for nature learner, Annual report etc has been made both in English & Bengali.
2.	To form a strong and capable manpower for operation of the centre.	NLC has set up a team of trained Range officer, staffs, foresters & other EDC members (Vanmitra) for regular operations and activities of NLC center.
3.	To develop of ground linkage between partner institutions.	Collaboration with partner institutions like Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Dept. of School & Education and Archeological Survey of India has been made to achieve the various objectives of NLC Tripura by using their expertise.
4.	To select interested and natural resource-development user-groups from functional EDCs/JFMCs for trainings towards sustainable livelihoods	NLC Tripura has listed the names from the beneficiary groups of the local EDC's/JFMC's for their training towards sustainable livelihood.
5.	To develop a team of trainers amongst permanent staffs of the area/interested user groups for sustainability of NLC beyond the NLC duration.	Team of trainers and management staffs has been recruited and posted for the betterment of the project. Moreover the youth of EDC has been trained & at present even after the project completion the EDC members are engaged for running the centre.
6.	Annual feedback mechanism and subsequent modification.	Annual feedback mechanism and subsequent modification is in process & lots of visitors have appreciated our efforts.

5 **OVERALL ACHIEVEMENTS –**

5.1 **Achievements on NLC Objectives/ Target Deliverables:**

S. No.	Quantifiable Deliverables*	Monitoring Indicators*	Quantified Output/ Outcome achieved
1.	NLC & Botanical garden to be maintained upgraded with proper and required Infrastructures relevant to meet the objectives and to reach the goal of the project.	Monitoring in comparison to the baseline information to be provided by the proponent:	(a) More than 500 nos. of green activity book for nature learners has been made & distributed among various stakeholders.
2.	Development of an environmentally educated class in the society who may respond and react for environmental conservation in all respects (Annual target of students and other than student to be educated: minimum 1000 No.);	1. No. of Nature Learning and Awareness Curricula Developed;	(b) More than 300 nos. of copies has been made on broacher namely “know the bounty of nature” & distributed among various stakeholders.
3.	The livelihood trainings & skill up-gradation to the natural resource dependant user group from functional EDCs/JFNCs (Annual target of EDC/JFMC members to be trained (200 no.);	2. No. of Crucial Nature Learning and Awareness Topics covered;	(c) One field guide namely “Important flora & fauna of Sepahijala Wildlife Sanctuary, Tripura” has been made & distributed among various stakeholders.
4.	The committed team of expert trainers & educators will be able to run the centre in a regular routine and will help in extending the impact beyond its influence zone.	3. No. of Trainings organized with no. of stakeholders benefited in each segment;	(d) 3 nos. of annual reports for the year 2019-20, 2020-21 & 2021-22 has been made & distributed among various stakeholders.
		4. No. of Dissemination and Awareness Publications (short/detailed) circulated;	(e) Capacity building & training for public representative- 90 nos., panchayetiraj training institute-190 nos., awareness program for govt. officials- 80 nos., school students & EDC members- 2035 nos. has been conducted during the project duration.
		5. No. of Field/ Green Technologies Demonstrations/ Exposure Visits organized;	(f) A total of 1675 nos. of students from 32 nos. of schools of govt. of Tripura has visited on various awareness programs in NLC
		6. No. of Publication of Assessment and Findings Reports;	
		7. No. of Beneficiaries;	
		No. of Collaborations/	

	Connect with the Protected Areas/ Sanctuaries/ Conservation Areas established; 8. No. of Policy Guidelines and Legislative Mechanisms: Prepared and/ or Communicated.	during the project duration. (g) 10 nos. of bee box & 4 nos. of sewing machine have been distributed among 14 nos. of beneficiaries.
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5.2 **Interventions:** Conducted several training/awareness program/workshop in order to change the mindset of the various target group of stakeholders towards conservation of biodiversity & nature.

5.3 **On-field Demonstration and Value-addition of Products, if any:**

NLC-Tripura besides field based awareness programme has also made the use of modern technological intervention to create sophisticated advance for nature based learning exposure.

- Development of various models for nature conservation awareness has been made. As a part of technical intervention, NLC has developed an herbarium & orchidarium.
- Vermicompost Unit: A concrete vermicompost unit was constructed in NLC project area. The unit was constructed following the scientific techniques for generation of vermicompost. This unit will help in generation of organic manure from dry and wet wastes. This unit may be beneficial for forestry plantations and nursery development.
 - The 1-day beekeeping program included 5 hours of theory and 3 hours practical. The beekeeping capturing techniques, process of collecting hygienic bees, wax collection from wild bees were demonstrated practically.
 - The 1-day vermicompost techniques focus on production technique of low cost vermicompost unit. The maintaining of the unit by using organic waste bio residual dungs were practically demonstrated on field. Preparation of vermicompost, selection of earth worms species and quantities of bio residuals were also demonstrated.
 - In nursery development programme there was a practical demonstration of nursery raising for flowers, ornamental plants and fruit bearing plants. The site selection priorities, water availability and selecting mother block plants species were made familiar.
 - Mushroom training: In 1-day mushroom cultivation training the handling of spawn, organic distillation of paddy straw (both boil and cold technique) mushroom cylinder preparation, installation techniques, pest and disease management, harvesting, marketing of mushroom in local market has been demonstrated.

Biodiversity conservation must go together with strategies that improve the livelihoods and well being of local communities and foster overall economic growth – all while managing/mitigating climate change. In this context, the participatory planning process will evaluate threats and propose solutions in the overall context of climate change. Through biodiversity conservation efforts, afforestation, nursery development can support climate change mitigation. This also help in the conservation of soil and improve ecosystem resilience in the face of extreme weather events such as heavy rainfall and floods.

Awareness and sensitization is crucial for gaining support towards implementing activities for the sustainable use and conservation of forest and biodiversity for future generations. NLC targets to bring all stakeholders together to collaborate towards common biodiversity goals. It recognizes that solid support for and alliances with traditional custodians of nature i.e. Vital for beneficial outcomes.

- Training and Capacity buildings on alternative livelihoods: Community engagement through livelihood enhancement tries to bring tangible benefits to people and communities. It focuses on generating income opportunities through sustainable use of natural resources, building capacities of the communities in livelihood-oriented skills, and diversifying livelihood assets with an overall aim to increase the financial capital and well-being of the communities. Diversification of livelihoods and introducing sustainability principles in traditional agriculture and alternative options like bee keeping, nursery development, mushroom cultivation, vermin-compost etc. would further reduce the dependency of the community on the forest resources and reduces their vulnerability in the face of climate change. Training and capacity building of the local community and governmental and institutional stakeholders will enable the integration of biodiversity conservation plans and management strategies and ensure the long-term sustainability of project interventions.

5.4 Green Skills developed in the State/ UT:

Mushroom cultivation, vermi-compost & bee keeping is one of the important livelihood options for the EDC members & other stakeholders. It has been done in collaboration with Agriculture Department.

5.5 Addressing Cross-cutting Issues:

The NLC, Tripura were accomplished by raising awareness through interactive learning programs, practical activity based learning, green technologies demonstration / exposure visits, audio-visual training materials, signages for awareness among masses, organizing various festivals for awareness generation, reading materials, promoting sustainable livelihood training programmes and development of interpretation centres/models, nature trails, orchidarium, bamboo setum, butterfly park, adventure park etc. These need to be continued even after completion of the project duration on sustainable basis.

6 NLC IMPACTS –

6.1 Socio-economic impact:

1. Rapid growth of population, largely associated with poverty, has adversely affected natural resources, particularly those that are renewable, such as forests, rivers and soils. Along with ecological and biospheric damage it also causes economic and social breakdown. Livelihood and socio-economic development are said to be the most important indices of development of a community.

2. In line with this, NLC, Tripura aims to achieve this objective through training of community member / SHGs/EDCs in and around protected areas on alternate livelihood options to reduce pressure on forest resources and promote efficient utilization of natural resources.
3. NLC, Tripura has provided trainings and workshops to the community members on the following alternate and sustainable organic livelihood sources throughout the state:
 - a. Honey Beekeeping
 - b. Nursery Development
 - c. Vermi-composting
 - d. Mushroom cultivation
4. NLC, Tripura intends on providing social equity and provide support and training to improve technical and management skill to its beneficiaries, especially to women and tribal community.
5. NLC, Tripura, has so far organised 03 Capacity Building Orientation or workshops and training programs all over Tripura in collaboration with Government regulated bodies.
6. Over 1252 numbers of community members were trained/sensitized through capacity building programs organised by NLC, Tripura.
7. NLC, Tripura aimed to provide diverse opportunities for economic development based on the place and community living in the area. To aid in its capacity building activities manuals on vermin-composting, mushroom cultivation and nursery development were also developed and distributed.

6.2 Impact on Natural Resources/ Environment:

1. NLC, Tripura promotes management of natural resources through community participation based conservation practices.
2. The stakeholders or participants involved were students, community members, BMC, EDCs members, Government Officials and women SHGs.
3. Various awareness programmes, exposure visits and sensitization programmes through webinars were organised by NLC, Tripura.
4. The awareness programmes of NLC, Tripura is primarily focused on awareness of the biogeography and biodiversity of Indian Himalayan region (IHR) and on how management or mismanagement of those natural resources directly and indirectly affects each and every being living on this planet.
5. NLC, Tripura aimed at creating a cadre of trainers and conservation workers by instilling the value of conservation among students at a young age.
6. NLC, Tripura organized awareness programs, exposure visits and different competitions for school children.
7. In the awareness programs, various topics related on nature conservation were discussed. School students were also informed about the project NLC, Tripura, its goals and objectives and various other initiatives taken up by NMHS and how it is aiding in generating awareness for conservation.
8. In the awareness programmes, audio-visual tools such as MS PowerPoint presentation, videos, activity booklets (in both Bengali and English) etc were used.
 - a. Preparation of Wall magazine
 - b. Gardening (flower/fruits/medicinal plants/vegetable)

- c. Collection of Nature related books/documents/journals etc. for school library.
 - d. Conducting awareness drives (rallies/meetings/campaigns etc. on local environmental issues).
9. Knowledge products and documentaries produced under NLC, Tripura were also disseminated.

6.3 Conservation of Biodiversity/ Land Rehabilitation in IHR:

1. NLC, Tripura took various steps for conservation of Biodiversity in Tripura:
 - a. Conducting awareness programmes among school students and community members.
 - b. Organising alternative livelihood capacity building and training programs.
 - c. Conducting various outreach programs and events such as various competitions for school and college students, plantation drives, cleanliness drive, webinars etc.
 - d. Students were also taken for excursion to Sepahijala Wildlife Sanctuary & Sepahijala Zoological Park
 - e. NLC, Tripura developed nature trails for nature enthusiasts.
 - f. Knowledge products such as training manuals, handbooks, activity booklets, nature related booklets, were published under NLC, Tripura for both community and school students.
 - g. Two Documentaries films documenting the biodiversity richness of Sepahijala Wildlife Sanctuary & Sepahijala Zoological Park were also produced for mass awareness and sensitization.
2. Students/EDC members organized activities such as procession to spread awareness to conserve our biodiversity, plantation drive, make nature related wall magazine etc.
3. Apart from generating awareness towards various facets of conservation NLC, Tripura also took a step towards mitigation of human-wildlife conflict through mushroom cultivation program funded by NLC, Tripura in collaboration with the organising partner Dept. of Agriculture, Tripura. In Tripura, cases of human-monkey conflict is quite frequent. Government, non-government organisations and environmental activists are constantly working with community for mitigation and prevention of such incidences. The NLC, Tripura funded mushroom cultivation program was implemented in Marak Para area of Sepahijala Wildlife Sanctuary. The beneficiaries of Mushroom cultivation capacity building program were 70 members of women SHG group.
4. As a result, the 70 beneficiaries of mushroom training program were able to use the skills learned and were able to generate a moderate amount of income. These 70 women were motivated and volunteered to mobilize other members of the community to adopt mushroom cultivation as an alternate source of income and also aid in mitigating conflict with scheduled species.

6.4 Developing Mountain Infrastructures:

1. The communities residing in the Tripura are most vulnerable to a changing climate, as high population density puts pressure on already-fragile ecosystems.
2. NLC- Tripura conducted orientation and workshop with the community members.
3. NLC, Tripura also conducted awareness programs and exposure visits for school students as a stepping stone towards understanding their ecosystem, natural resources and its conservation.
4. NLC, Tripura aimed at mobilizing these young cadres of school students towards biodiversity conservation and mass awareness.

6.5 Strengthening Networking in State:

1. The Indian Himalayan Region (IHR) is the most fragile and complex ecosystem in the world. Tripura along with other north eastern states is also facing the threats of Climate change.
2. As a mandate of NMHS - Him NLC- Tripura to mitigate climate change in the region, the NLC Tripura has mainly focused on its objective-
 - (i) Options for education, awareness and outreach program and
 - (ii) Human capacity building including promotion of green technologies through alternative livelihood options.
3. NLC-Tripura along with the local forest officials and community member is playing as a coordinating team to disseminate awareness on conservation and environment.
4. The NLC- Tripura has organized near about 11 awareness program. This has strengthened the network of conservation efforts among target beneficiaries.
5. Around 812 students were benefited by NLC- Tripura outreach program or through awareness programme.
6. Most of the communities living in forest fringe areas belongs to economically weaker section depending on natural resources for their livelihood. NLC- Tripura as a part of providing livelihood security and sustainable food production through efficient management of locally available natural resources provided capacity building trainings on nursery development, vermi-composting and beekeeping. Diversifying livelihood generating alternative source income through application of various technology interventions.
7. NLC- Tripura has organizes 7 such programs in remote forest fringe areas. About 440 beneficiaries (Woman SHGs, community members availed the benefits of such program.
8. To involve local youths in conservation efforts, NLC- Tripura Nature Interpretation Centre and Nature trails can provide a greater scope.

7 EXIT STRATEGY AND SUSTAINABILITY-

7.1 Utility of project findings:

- Out of training & various awareness program which were conducted to create a cadre of trainers among the students/officials which can lead the conservation actions and capacity building at various levels.
- The learning methodologies and tools / techniques used garnered more attention and enthusiasm of the students.
- Students/other stakeholders exposure visits to National Park, Zoological Park and Wildlife Sanctuaries located in Sepahijala which will have a positive impact on the students and these initiatives have successfully inculcated a nature friendly temperament among the students & other stakeholders. Outreach programmes were able to engage more community members in nature learning and nature conservation.
- Training and Capacity Building on alternative livelihoods among EDC members & other stakeholders which will made familiar with the options on alternative livelihoods and reduce the dependence on forest resources and issues such as man-animal conflict threatening our biodiversity.

- Training and capacity building programmes are also conducted with a vision to empower community economically and reduce gender gap and inequality. The state of the art forest gallery and herbarium unit established under the project shall be beneficial for the community.

7.2 **Other Gap Areas:** More training & livelihood opportunity may be explore in future to cater the need of the local community. More school students/NGOs may be involved in future.

7.3 **Major Recommendations/ Way Forward:**

Due to a structured implementing framework the project is easily replicable since awareness and sensitization is a necessary tool in conservation. Additionally, building capacity for sustainable livelihood generation will aid in reducing pressure on forest resources. This way students as well as communities will be engaged and volunteer for conservation of biodiversity. It has also resulted in adapting sustainable economic activities which aided the community in generating income, in reducing gender disparity, economic empowerment of the tribal communities and youth empowerment. Collaborating with different stakeholders such as Tripura Biodiversity Board, Tripura University, Dept. of Agriculture, Govt. of Tripura, Dept. of Biotechnology, Govt. of Tripura, Directorate of Skill development, Govt. of Tripura, Archeological Survey of India was also a crucial part of the project. This helped in sharing ideas and resources and also creating a better impact on the community.

7.4 **Replication/ Upscaling/ Post-Project Sustainability of Interventions:**

- NLC, Tripura has partnered with TBB and Forest Department, Tripura which has similar mandate given by the state government and biodiversity authority.
- Over the tenure of the project, NLC, Tripura has been collaborated with numbers of Government organizations and agencies for implementing its various activities such as outreach programs, capacity building programs & awareness programs.
- To ensure this, collaborative partners- Forest Dept., Govt. of Tripura may continue to replicate the activities of NLC, Tripura in other areas of the state. Forest Department may also continue to provide alternative training livelihood program which is in line with department's own mandates.
- The interpretation galleries, nature trails and vermi-compost unit, Orchidarium, fernarium, ficus house, adventure park, butterfly park & up-gradation of existing botanical garden, development of existing children corner, development of drinking water facility etc are handed over to the respective authorities of the Forest Department.
- The BMCs, EDCs and SHGs will also continue sensitization of the community.

8 REFERENCES/ BIBLIOGRAPHY: Nil

9 ACKNOWLEDGEMENTS:

The NMHS Him-NLC, Tripura would like to acknowledge the National Mission on Himalayan Studies, Ministry of Environment, Forest & Climate Change (MoEF & CC) and G.B. Pant "National Institute of Himalayan Environment"(NIHE) for financial and technical assistance in successfully accomplishing the project. We also extend our sincere thanks to the Tripura State Biodiversity Board (TBB), Department of Forest & Environment, Govt. of Tripura. NMHS Him-NLC, Tripura would also like to acknowledge the Chief Wildlife Warden, Tripura, Wildlife Warden, Sepahijala, Director, Sepahijala Zoo, Dept. of Agriculture, Dept. of Fisheries, Directorate of Biotechnology, Directorate of Skill Development for their assistance and encouragement in the completion of all activities. The organization acknowledges all the schools & other educational institutions that had facilitated in our activities.

APPENDIX(CES), if any

Appendix 1 – Details of Technical Activities:


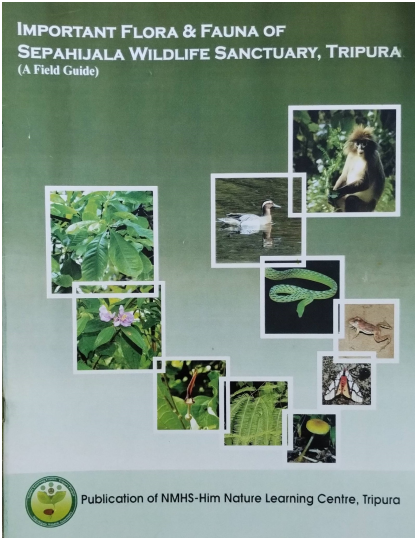
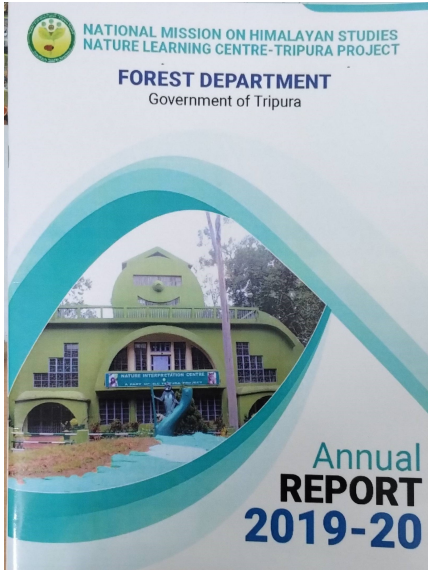
S. No.	Type of Activities	No. of Events (Details to be provided in Part-B in Section-4&5)	Beneficiary Category (Student/farmer/ Officials/ Others)	Participants/Trained			
				SC	ST	Woma n	Total
1.	Workshops	3 nos. workshop on “ Nature Education and Prospects of Conservation ” for the members of Panchayet Raj Training Institute Gomati, Sepahijal and South Tripura.	The addressed groups were made familiar with the options on alternative livelihood and reduce the dependence on forest resources.	20	180	80	280
2.	On Field Trainings	Various schools, EDC members & departmental staffs have been provided with basic training regarding biodiversity conservation.	3 nos. of such training has been done & exposure visits of Sepahijala Zoological Park & Sepahijala Wildlife Sanctuary has been made.	30	40	20	90

3.	Green Skill Development	1 day hands-on training on Honey Bee Keeping & mushroom cultivation has been done.	Mushroom cultivation & bee keeping is one of the important livelihood options for the EDC members. In collaboration with Agriculture dept. training has been imparted.	10	20	40	70
4.	Awareness building activities	11 nos. "Nature Awareness Programme" for the school students.	The dissemination of the knowledge products has a positive impact on the students and these initiatives have successfully inculcated a nature friendly temperament among the students of remote areas.	165	407	240	812
5	Others, if any	-----	-----	---	---	---	---

Appendix 2 – Copies of Publications/ SOPs/ Knowledge Products duly Acknowledging the Grant/ Fund Support of NMHS

Copies of publications are given as below:

Sl. No.	Name of publications	Remarks
1	Green activity book -1 for nature learners.	
2	Green activity book -2 for nature learners.	
3	Green activity book -3 for nature learners.	

4	Know the bounty of nature	
5	Important flora & fauna of Sepahijala Wildlife Sanctuary.	
6	Annual report 2019-20	

7	Annual report 2020-21	
8	Annual report 2021-22	

Appendix 3 – List of Trainings/ Workshops/ Seminars with details of trained resources and dissemination material and Proceedings:

S. No.	Type of Activities	No. of Events (Details to be provided in Part-B in Section-4&5)	Beneficiary Category (Student/ farmer/ Officials/ Others)	Participants/Trained			
				SC	ST	Woman	Total
1.	Workshops	3 nos. workshop on “ Nature Education and Prospects of Conservation ” of Panchayet Raj Training Institute Gomati, Sepahijal and South Tripura.	The addressed groups were made familiar with the options on alternative livelihood and reduce the dependence on forest resources.	20	180	80	280
2.	On Field Trainings	Various schools, EDC members & departmental staffs have been provided with basic training regarding biodiversity conservation.	3 nos. of such training has been done & exposure visits of Sepahijala Zoological Park & Sepahijala Wildlife Sanctuary has been made.	30	40	20	90
3.	Green Skill Development	1 day hands-on training on Honey Bee Keeping & mushroom cultivation has been done.	Mushroom cultivation & bee keeping is one of the important livelihood options for the EDC members. In collaboration with Agriculture dept. training has been imparted.	10	20	40	70
4.	Awareness building activities	11 nos. “Nature Awareness Programme” for the school students.	The dissemination of the knowledge products has a positive impact on the students and these initiatives have successfully inculcated a nature friendly temperament among the students of remote areas.	165	407	240	812
5	Others, if any	-----	-----	---	---	---	---

Appendix 4 – Any other (specify): List of inventory of asset created, list of equipments:

A: List of asset created-

S. No.	Name of Equipment/ Facilities/ Peripherals	Quantity	Total Sanctioned Cost	Actual Purchased Cost	Purchased Details
1.	GPS Machine	10	6420000	271875	For smooth running of the NLC- Tripura project
2.	Camera	1		98000	
3.	1KV APS UPS	3		26100	
4.	BINOCULAR (ARTOS)	4		91300	
5.	CCTV Camera with TV monitor	10		298300	
6.	Portable herbarium hall cum library cum training centre	1 unit		1654700	
7.	Rest Shed	3		399100	
8	Drinking water filter/Water tank	3		278800	
9	Portable lavatories			206385	
10	Workshop cum computer laboratory			1378500	
11	Computer/ Laptop	5		282400	
12	Computer printer	5		192500	
13	Scanner	2		25500	
14	Wi-fi internet facility and installation	2		43542	
15	photocopier	3		253400	
16	Inverter	4		327200	
17	Multimedia projector and screen	1		44032	
18	65 Interactive flat panels U1-tra HD for smart class Digital virtual room (make view sonic, Model- Model-IFP6530, S/N- VSA19440009) (Public address system)	1		240720	
19	Office furniture (Tables, chairs etc)	50		245696	
20	Godrej Almirah	5		61950	

B: List of equipments-

S. No.	Name of Equipment/ Facilities/ Peripherals	Quantity	Total Sanctioned Cost	Actual Purchased Cost	Purchased Details
1.	GPS Machine	10	6420000	271875	For smooth running of the NLC- Tripura project
2.	Camera	1		98000	
3.	1KV APS UPS	3		26100	
4.	BINOCULAR (ARTOS)	4		91300	
5.	CCTV Camera with TV monitor	10		298300	
6.	Portable herbarium hall cum library cum training centre	1 unit		1654700	
7.	Rest Shed	3		399100	
8	Drinking water filter/Water tank	3		278800	
9	Portable lavatories			206385	
10	Workshop cum computer laboratory			1378500	
11	Computer/ Laptop	5		282400	
12	Computer printer	5		192500	
13	Scanner	2		25500	
14	Wi-fi internet facility and installation	2		43542	
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16	Inverter	4		327200	
17	Multimedia projector and screen	1		44032	
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19	Office furniture (Tables, chairs etc)	50		245696	
20	Godrej Almira	5		61950	

**Consolidated and Audited
Utilization Certificate (UC) and Statement of Expenditure (SE)**

For the Period: 01-01-2018 to 31-12-2020

1.	Title of the project / Scheme / Programme :	“NMHS Him – Nature Learning Centre (NLC) – Tripura”
2.	Name of the Principle Investigator & Organization :	Pritam Bhattacharjee, IFS District Forest Officer Sepahijala Forest Department Government of Tripura
3.	NMHS-PMU, G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora, Uttarakhand Letter No. and Sanction Date of the Project :	NMHS-2017/HIM-NLC-02-Tripura/485/dated 22-12-2017
4.	Amount received from NMHS-PMU, G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora, Uttarakhand during the project period (Please give number and dates of Sanction Letter showing the amount paid):	Rs 2,03,22,880 /- (Rs Two crore three lakh twenty two thousand eight hundred and eighty only) NMHS-2017/HIM-NLC-02-Tripura/485/dated 22-12-2017
5.	Total amount that was available for expenditure (including commitments) incurred during the project period :	Rs 2,14,39,210 /- (Rs Two crore fourteen lakh thirty nine thousand two hundred and ten only)
6.	Actual expenditure (excluding commitments) incurred during the project period :	Rs 2,03,22,880 /- (Rs Two crore three lakh twenty two thousand eight hundred and eighty only)
7.	Unspent Balance amount refunded, if any (Please give details of Cheque no. etc.) :	Nil
8.	Balance amount available at the end of the project :	Nil
9.	Balance Amount :	Nil
10.	Accrued bank Interest :	Rs 11,16,330 /- (Rs Eleven lakh sixteen thousand three hundred and thirty only)

Certified that the expenditure of **Rs 2,03,22,880** /- (**Rs Two crore three lakh twenty two thousand eight hundred and eighty only**) mentioned against Sl. No. 6 was actually incurred on the project / scheme for the purpose it was sanctioned.

Date:

(Signature of Auditor)

(Signature of Finance Officer)

(Signature of Principal Investigator)

(Signature of Head of the Institution)

OUR REF. No.

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY
NATIONAL MISSION ON HIMALAYAN STUDIES (GBP NIHE)

Statement of Consolidated Expenditure

National Mission on Himalayan Studies

Statement showing the expenditure of the period from
Sanction No. and Date : 01-01-2018 to **28-02-2023**.
NMHS-2017/HIM-NLC-02-Tripura/485/dated
22-12-2017.

1. Total outlay of the project : Rs 4,10,03,152 /- (Rs Four crore ten lakh three thousand one hundred and fifty two only).
2. Date of Start of the Project : 01-01-2018.
3. Duration : 01-01-2018 to **28-02-2023**.
4. Date of Completion : **28-02-2023**.
- a) Amount received during the project period : Rs 2,03,22,880 /- (Rs Two crore three lakh twenty two thousand eight hundred and eighty only).
- b) Total amount available for Expenditure : Rs 2,14,39,210 /- (Rs Two crore fourteen lakh thirty nine thousand two hundred and ten only).

Sl. No.	Budget head	Amount received (in Rs)	Expenditure (in Rs)	Amount Balance / excess expenditure (in Rs)
1	Salary	15,02,880	15,02,880	0
2	Travel	4,00,000	4,52,900	(-) 52,900
3	Contingency	4,00,000	7,00,000	(-) 3,00,000
4	Activity and other Project Cost	1,16,00,000	1,23,63,430	(-) 7,63,430
5	State of Art Audio Visual Facilities for display (Modern Equipments)	64,20,000	64,20,000	0
6	Total	2,03,22,880	2,14,39,210	(-) 11,16,330
7	Accrued Bank Interest	11,16,330		

Certified that the expenditure of **Rs 2,14,39,210** /- (**Rs Two crore fourteen lakh thirty nine thousand two hundred and ten only**) mentioned against Sl. No. 6 was actually incurred on the project / scheme for the purpose it was sanctioned.

Date:

(Signature of Auditor)

(Signature of Finance Officer)

(Signature of Principal Investigator)

(Signature of Head of the Institution)

OUR REF. No.

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY
NATIONAL MISSION ON HIMALYAN STUDIES (GBP NIHE)

Consolidated Interest Earned Certificate

Please provide the detailed interest earned certificate on the letterhead of the grantee / Institution and duly signed.

Certified that the interest earned amounting to **Rs 11,16,330 /-** (**Rs Eleven lakh sixteen thousand three hundred and thirty only**) during the execution of “NMHS Him – Nature Learning Centre (NLC) – Tripura” Project had been utilized from this end for meeting the committed recurring expenditures incurred during the Project Period.

Date:

(Signature of Auditor)

(Signature of Finance Officer)

(Signature of Principal Investigator)

(Signature of Head of the Institution)

Consolidated Assets Certificate

Assets Acquired Wholly/ Substantially out of Government Grants

(Register to be maintained by Grantee Institution)

Name of the Sanctioning Authority: "National Mission on Himalayan Studies" G B. Pant National Institute of Himalayan Environment and Sustainable Development

1. Sl. No. NMHS-2017/Him-NLC-02-Tripura/485 dated.22.12.2017
2. Name of Grantee Institution: Sepahijala Wildlife Sanctuary, Tripura
3. No. & Date of sanction order: Him-NLC-02-Tripura/485 dated.22.12.2017
4. **Amount of the Sanctioned Grant: Rs. 6420000.00**
5. Brief Purpose of the Grant: State Biodiversity Boards should be involved to make the concept stronger and meet the envisaged outcome etc.
6. Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in the grant-in-aid Sanction Order: Yes
7. Particulars of assets actually credited/acquired list attached as handed over as Annexure iv.
8. Value of the assets as on Rs. 6420000 =00
9. Purpose for which utilized at present office Sepahijala Wildlife Sanctuary, Tripura
10. Encumbered or not ; Not
11. Reasons, if encumbered _____ Nill _____
12. Disposed of or not _____ Nill _____
13. Reasons and authority, if any, for disposal _____ Nill _____
14. Amount realised on disposal _____ Nill _____

(PROJECT INVESTIGATOR)

(FINANCE OFFICER)

(Signed and Stamped)

(Signed and Stamped)

(HEAD OF THE INSTITUTION)

(Signed and Stamped)

List or Inventory of Assets/ Equipment/ Peripherals

S. No.	Name of Equipment/ Facilities/ Peripherals	Quantity	Total Sanctioned Cost	Actual Purchased Cost	Purchased Details
1.	GPS Machine	10	6420000	271875	For smooth running of the NLC- Tripura project
2.	Camera	1		98000	
3.	1KV APS UPS	3		26100	
4.	BINOCULAR (ARTOS)	4		91300	
5.	CCTV Camera with TV monitor	10		298300	
6.	Portable herbarium hall cum library cum training centre	1 unit		1654700	
7.	Rest Shed	3		399100	
8.	Drinking water filter/Water tank	3		278800	
9.	Portable lavatories			206385	
10.	Workshop cum computer laboratory			1378500	
11.	Computer/ Laptop	5		282400	
12.	Computer printer	5		192500	
13.	Scanner	2		25500	
14.	Wi-fi internet facility and installation	2		43542	
15.	photocopier	3		253400	
16.	Inverter	4		327200	
17.	Multimedia projector and screen	1		44032	
18.	65 Interactive flat panels U1-tra HD for smart class Digital virtual room (make view sonic, Model- Model-IFP6530, S/N-VSA19440009) (Public address system)	1		240720	
19.	Office furniture (Tables, chairs etc)	50		245696	

20	Godrej Almirah	5	61950	
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(PROJECT INVESTIGATOR)

(Signed and Stamped)

(FINANCE OFFICER)

(Signed and Stamped)

(HEAD OF THE INSTITUTION)

(Signed and Stamped)

Letter of Head of Institution/Department confirming Transfer of Equipment Purchased under the Project to the Institution/Department

To,
The Convener, Mountain Division
Ministry of Environment, Forest & Climate Change (MoEF&CC)
Indira Paryavaran Bhawan
Jor Bagh, New Delhi-110003

Sub.: Transfer of Permanent Equipment purchased under Research Project titled “...” funded under the NMHS Scheme of MoEF&CC – reg.

Sir/ Madam,

This is hereby certified that the following permanent equipment purchased under the aforesaid project have been transferred to the Implementing Organization/ Nodal Institute after completion of the project:

Major Equipment/ Peripherals Procured/ Facilities under the Project* (if any)

S. No.	Name of Equipment/ Facilities/ Peripherals	Quantity	Total Sanctioned Cost	Actual Purchased Cost	Purchased Details
1.	GPS Machine	10	6420000	271875	For smooth running of the NLC- Tripura project
2.	Camera	1		98000	
3.	1KV APS UPS	3		26100	
4.	BINOCULAR (ARTOS)	4		91300	
5.	CCTV Camera with TV monitor	10		298300	
6.	Portable herbarium hall cum library cum training centre	1 unit		1654700	
7.	Rest Shed	3		399100	
8	Drinking water filter/Water tank	3		278800	
9	Portable lavatories			206385	
10	Workshop cum computer laboratory			1378500	
11	Computer/ Laptop	5		282400	

12	Computer printer	5	192500
13	Scanner	2	25500
14	Wi-fi internet facility and installation	2	43542
15	photocopier	3	253400
16	Inverter	4	327200
17	Multimedia projector and screen	1	44032
18	65 Interactive flat panels U1-tra HD for smart class Digital virtual room (make view sonic, Model- Model-IFP6530, S/N-VSA19440009) (Public address system)	1	240720
19	Office furniture (Tables, chairs etc)	50	245696
20	Godrej Almirah	5	61950

Head of Implementing Organization:
 Name of the Implementing Organization:
 Stamp/ Seal:
 Date:

Copy to:

1. The Nodal Officer, NMHS-PMU, National Mission on Himalayan Studies (NMHS), G.B. Pant National Institute of Himalayan Environment (NIHE), Kosi-Katarmal, Almora, Uttarakhand-263643

Details, Declaration and Refund of Any Unspent Balance

Implementing agency have no any unspent balance.

Please provide the details of refund of any unspent balance and transfer the balance amount through RTGS (Real-Time Gross System) in favor of **NMHS GIA General** and declaration on the official letterhead duly signed by the Head of the Institution.

Kindly note the further Bank A/c Details as follows:-

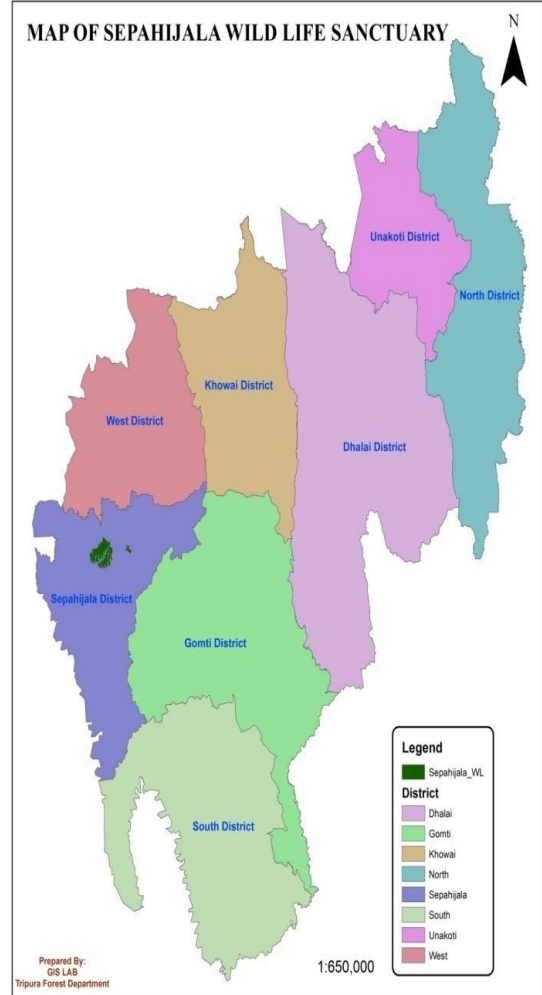
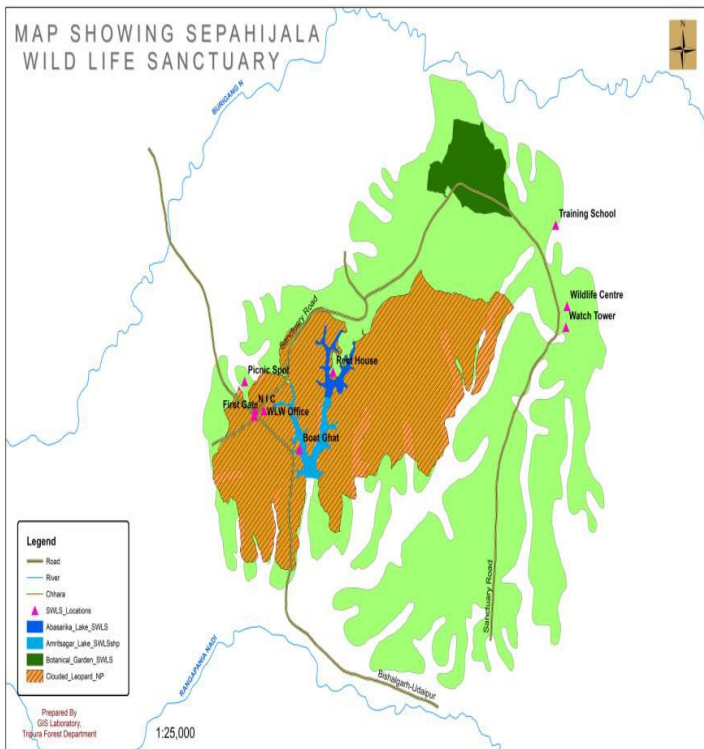
Name of NMHS A/c:- NMHS GIA General
Bank Name & Branch:- Central Bank of India (CBI), Kosi Bazar, Almora, Uttarakhand 263643
IFSC Code:- CBIN0281528
Account No.:- 3530505520 (Saving A/c)

In case of any queries/ clarifications, please contact the NMHS-PMU at e-mail: nmhspmu2016@gmail.com

NLC Location

Appendix -5

- State: Tripura
- District: Sepahijala Tripura
- P.O.- Bishalgarh - 799102



- NLC Site: Sepahijala WLS

Lat & long: N 23° 40' 30"
E 91° 20' 11"