

**Tripura Rural Economic Growth and Service  
Delivery Project (TRESP)**

**Biodiversity Management Plan (BMP)**

June 2024

**Tribal Welfare Department  
Government of Tripura**

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## ABBREVIATIONS

<b>ARDD</b>	:	Animal Resource Development Department
<b>BMP</b>	:	Biodiversity Management Plan
<b>CtE</b>	:	Consent to Establish
<b>CLF</b>	:	Cluster Level Federation
<b>CPCB</b>	:	Central Pollution Control Board
<b>CtO</b>	:	Consent to Operate
<b>DFO</b>	:	Divisional Forest Officer
<b>DLC</b>	:	District Level Committee
<b>DoF</b>	:	Department of Fisheries
<b>EIA</b>	:	Environmental Impact Assessment
<b>EPA</b>	:	Environmental Protection Act
<b>ESSs</b>	:	Environmental Social Standards
<b>ESF</b>	:	Environmental Social Framework
<b>ESMF</b>	:	Environmental and Social Management Framework
<b>FC</b>	:	Forest Conservation (Act)
<b>FRA</b>	:	Forest Right Act
<b>GoI</b>	:	Government of India
<b>GoT</b>	:	Government of Tripura
<b>MoEF&amp;CC</b>	:	Ministry of Environment, Forests and Climate Change
<b>MDR</b>	:	Major District Road
<b>NBWL</b>	:	National Board for Wildlife
<b>NP</b>	:	National Park
<b>NOC</b>	:	No Objection Certificate
<b>ODR</b>	:	Other District Roads
<b>PCCF</b>	:	Principal Chief Conservator of. Forests
<b>PF</b>	:	Preserved Forest
<b>PG</b>	:	Producer Groups
<b>PIU</b>	:	Project Implementation Unit
<b>PMGSY</b>	:	Pradhan Mantri Gram Sadak Yojna
<b>PMU</b>	:	Project Management Unit
<b>PO</b>	:	Producer Organizations
<b>PoP</b>	:	Package of Practices
<b>PPR</b>	:	Preliminary Project Report
<b>RD</b>	:	Rural Development
<b>RF</b>	:	Reserved Forest
<b>TRESP</b>	:	Tripura Rural Economic Growth and Service Delivery Project
<b>VC</b>	:	Village Council
<b>WHO</b>	:	World Health Organisation
<b>WLS</b>	:	Wildlife Sanctuary

## 1. Biological Environment

1. The State of Tripura lies within the Indomalayan realm. According to the Biogeographic classification of India, Tripura falls in North-East biogeographic zone. Sixty (60) % of the geographical area of the state is covered with forests and is mainly tropical evergreen, semi-evergreen and moist deciduous forest types. Tripura hosts three different types of ecosystems as mountain, forest and freshwater. Tripura hosts three different types of ecosystems as mountain, forest and freshwater.
2. Major forest of the project region is moist deciduous mixed forest. The project region has the impression of all three types of forest. The evergreen forests on the hill slopes and the sandy river banks are dominated by species such as Dipterocarpus, Artocarpus, Amoora, Elaeocarpus, Syzygium and Eugenia. Two types of moist deciduous forests comprise the majority of the vegetation as moist deciduous mixed forest and Sal predominant forest. The interspersion of bamboo and cane forests with deciduous and evergreen flora is a peculiarity of Tripura's vegetation. Grasslands and swamps are also present, particularly in the plains. Herbaceous plants, shrubs, and trees such as Albizia, Barringtonia, Lagerstroemia and Macaranga flourish in the swamps of Tripura. There are currently **41 Reserved** Forests in Tripura along with **45 proposed** Reserved Forests. Communities are allowed to reside and access the resources in these villages.
3. There are **6 protected** areas (4 Wildlife sanctuaries and 2 National Parks) in the state covering 5 districts. These protected areas occupy about 9.59% of the forest area in the state with about 603.65 km<sup>2</sup>. As such the protected areas are Sepahijala WLS, Trishna WLS, Gomati WLS, Trishna WLS, Rowa WLS, Clouded Leopard National Park and Bison National Park. These protected areas are represented with Deciduous to semi evergreen forests
4. As a part of project intervention, the upgradation of earthen road (7-10%) of total scope may require few of the tree felling alongside of the road, thus prior permission for tree felling shall be taken from the forest department in terms of RF /PF affected (as per FC act 1980), and for non-forest trees (Guidelines for extraction of trees from non-forest areas" 2010). FRA 2006 shall be applied for diversion of forest below 1 hectare and having max. 75 nos. of tree felling, the approval shall be from respective DFO via Village Committees under Tripura Tribal Area Autonomous District Council. The compensatory afforestation (1:3 in lieu of each tree cut) shall be done under the project. The major trees of the project road are ***Dipterocarpus sturbinatus, Albiziaprocera, Melia azadirach, Acacia mangium, Shorearobusta, Tectonagrandis, Cassia siamea and Rubber plantation along the roads.***
5. Notified elephant corridor has been noticed in the project blocks of Tulashikhar and Mungiakami under Khowai district. Movement of elephant near the few of the village habitation (Ramkrishnapur VC, Maharaniapur VC) has been reported during site visit and also from PCCF Office (Agartala). **No sub project interventions are falling in the Eco sensitive area, Wild life sanctuary, and notified elephant corridors, Ramsar Sites etc.** Nevertheless, sensitization amongst contractor, worker and all staff shall be done by the respective PIU TRESP official and Forest department as part of Training/workshop under the project.

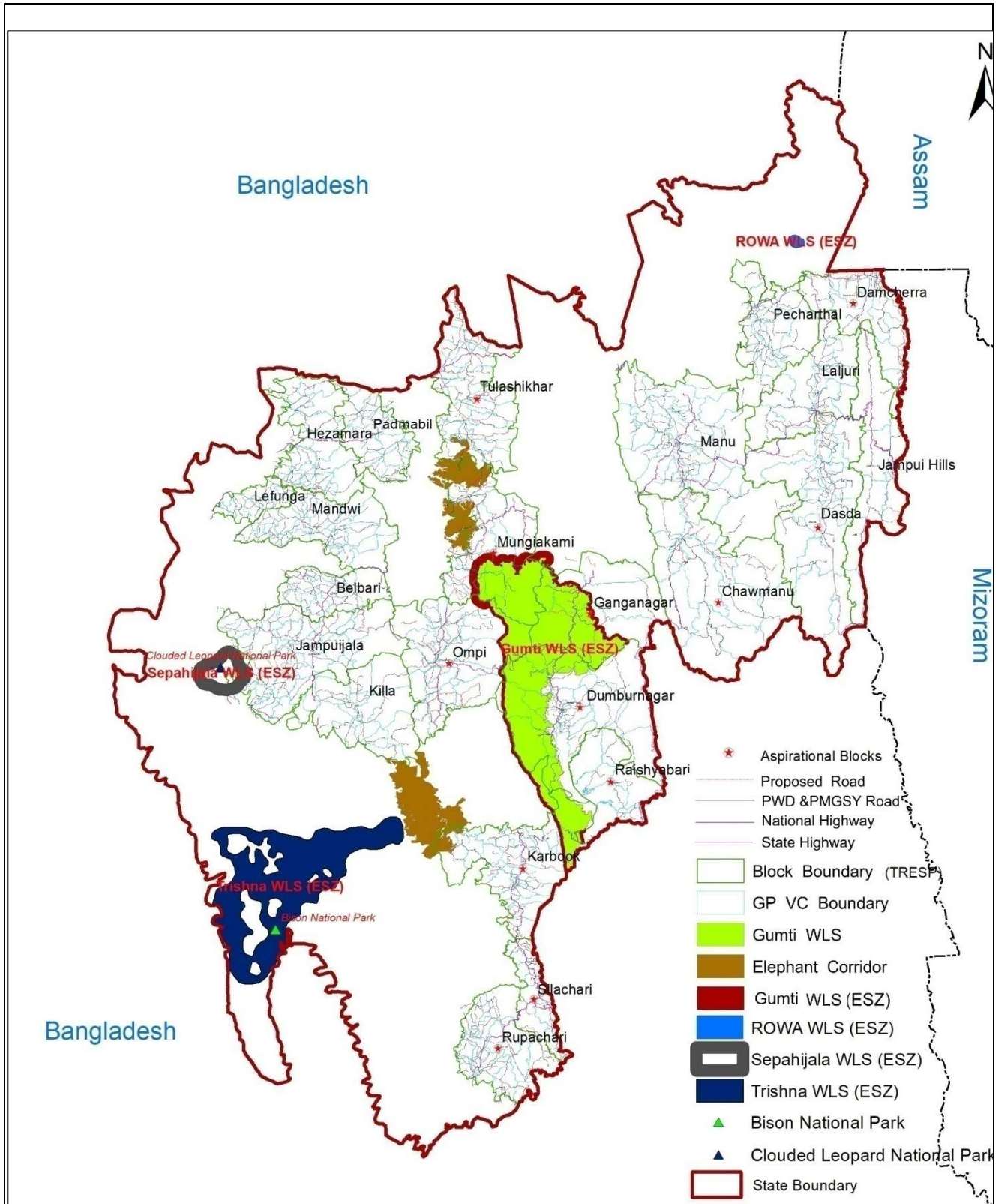


Figure 1-1: Map showing Natural Protected are Tripura and in project reference

6. The 6 protected areas of the state cover 5 districts namely; Dhalai, Gomati, (Khowai), North Tripura, Sepahijala and South Tripura districts. Sepahijala district is touched by 2 WLSs – Sepahijala WLS and Trishna WLS. Gomati district is also touched by 2 WLSs – Gomati WLS and Trishna WLS. Dhalai

district being part in the Gomati WLS as well. North Tripura and South Tripura being parts in Trishna and Rowa WLSs respectively.

**Table 1-1: List of Wild Life Sanctuary**

Protected Area name	Location/ Districts covered	Area (sq.km)	Major Floral Species	Other floral Species	Major Faunal Species	Other Faunal Species
Sepahijala WLS	Sepahijala district	13.46	Artocarpuschaplasa, Albizziaprocera, Caryeaarborea, Gmelinaarborea, Lagerstroemia sp, Mangiferaindica, Schema wallichii, Bombaxceiba etc.	Bamboos species, Climbers, Medicinal herbs and shrubs	Primates (including Spectacle Langur, Capped Langur, Pig-tailed Macaque, Slow Loris), Barking Deer, Clouded Leopard, Wild Boar	Civets (4 species), small cats, crab eating Mongoose, Flying Squirrel, Porcupine, birds including migratory terrestrial and water birds
Trishna WLS	South Tripura Gomti and Sepahijala district	163.08	Artocarpuschaplasa, Albizziaprocera, Caryeaarborea Gmelinaarborea, Lagerstroemia sp, Mangiferaindica, Schema wallichii, DipterocarpusTurbinatus, Termeneliabelarica, Termeneliachebula, Embelica officinalis, Bombaxceiba etc.	Bamboos species, Climber, Medicinal herbs and shrubs, Sabanah woodland. Kalai Bamboo	Bison (gaba), Hollock gibbon, Leopard cat, Primates (including Spectacle Langur, Capped langur, Pig tailed Macaque, Slow Loris), Barking Deer, Clouded Leopard, Wild Boar, Pangolin	--do--
Gomati LS	<b>Gomati and Dhalai districts (Likely possibility of Khowai (in Mungikami)</b>	389.54	Artocarpuschaplasa, Albizziaprocera, Caryeaarborea, Gmelinaarborea, Lagerstroemia sp, Mangiferaindica, Schema wallichii, Bombaxceiba etc.	--do--	Primates (including spectacle langur, capped langur, pig-tailed macaque, Slow Loris), Barking deer, Clouded Leopard, Wild Boar, Hillock Gibbon, Leopard cat.	--do--
Rowa WLS	North Tripura district	0.86	Artocarpuschaplasa, Albizziaprocera, Caryeaarborea, Gmelinaarborea, Lagerstroemia sp, Mangiferaindica, Schema wallichii, Bombaxceiba etc.	--do--	Primates Barking deer, Wild boar	--do--
Clouded Leopard National Park	Within the Sepahijala WLS	5.08	--do--	-- do--	Clouded Leopard	Primates, Barking deer, Clouded Leopard, Wild boar

Protected Area name	Location/ Districts covered	Area (sq.km)	Major Floral Species	Other floral Species	Major Faunal Species	Other Faunal Species
Bison National Park	Within the Trishna WLS	31.63	--do--	--do--	Bison	Civets (4 species), small cats, crab eating Mongoose, Flying squirrel, Porcupine, birds including migratory terrestrial and water birds
Total PA		603.65				

(Source: adapted from <https://forest.tripura.gov.in/forest-of-tripura>)

7. Additionally, the following Bio-diversity Heritage Sites (Table 1-2) have also been identified by the Government in recent months. Current governmental laws are unclear about Bio-diversity Heritage Sites' development rules as per discussions with concerned department officials.

**Table 1-2: Bio-diversity Heritage Sites**

Name	Block/District	Area
Baramura Waterfall	Teliamura RD Block/Khowai District	150 ha
Unakoti	Gouranagar RD Block/ Unakoti District	40 ha
Silachari Caves	Karbook RD block/ Gomati District	100 ha
Debbari or Chabimura	Amarpur RD block/ Gomati District	215 ha

8. Even though there are 5 (6) districts being parts in the WLSs in the state as well as the TRESP areas of project intervention, 3 WLSs are not part of the TRESP intervention blocks. Preliminary observation reveals major part of 3 blocks under Dhalai district namely- **Ganganagar, Dumbunagar and Raishyabari** are majorly part of the **Gomati WLS**. And also, a small part of **Gomati district in Karbook block is part of Gomati WLS**. (There is likely possibility that a small part of **Khowai district at Mungikami block is part in the Gomati WLS**). Apart from the Gomati WLS, no other WLS is having its area coverage in any of the project intervention sites.

9. In order to avoid the sensitive location, natural protected areas, the above listed natural protected areas and ecosensitive zones are no go zones under the project.

## Wildlife Protected Areas in Tripura

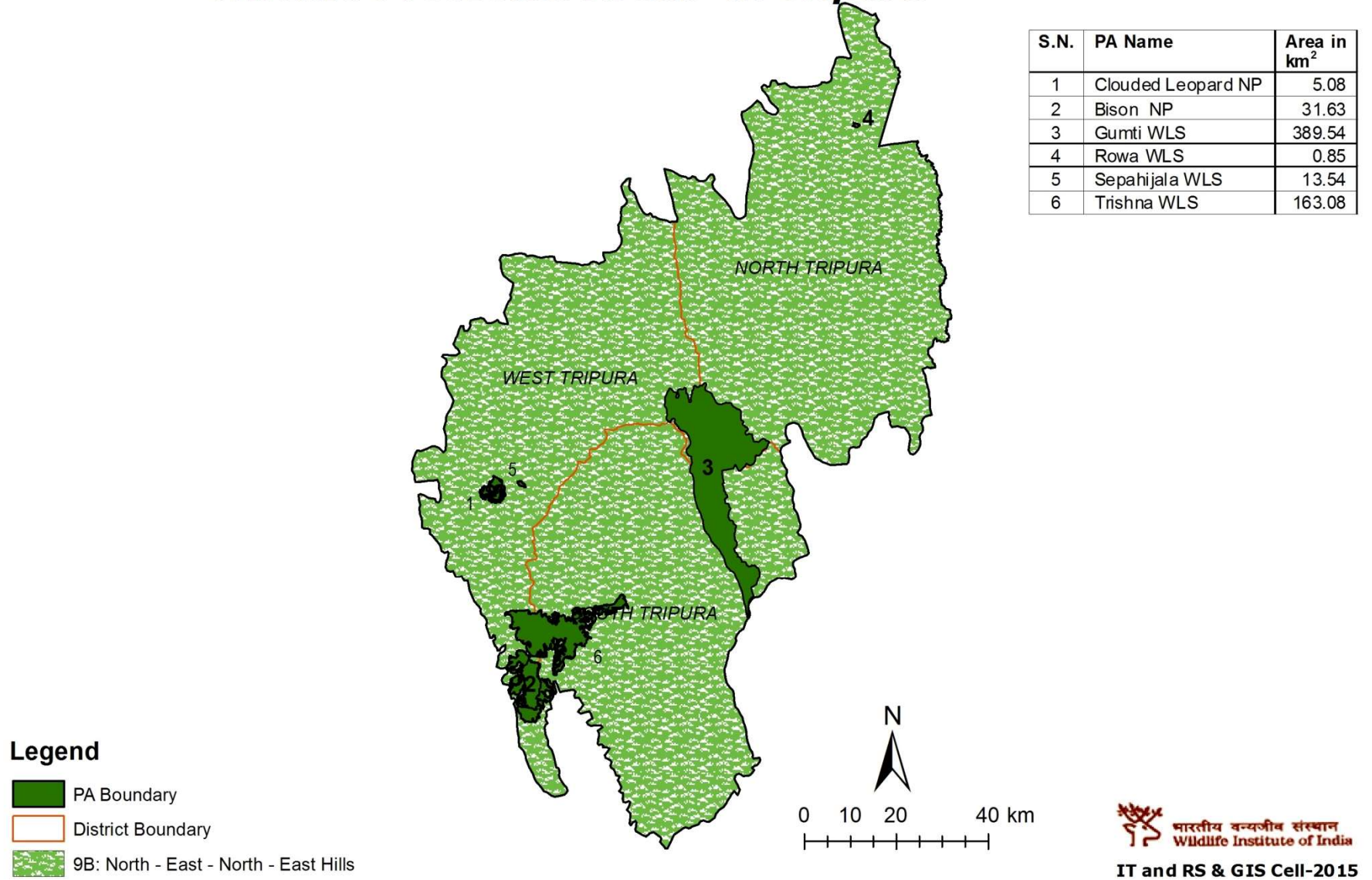


Figure 1-2: Map showing Wildlife Protected Areas of Tripura



## 2. Biodiversity – Floral and Faunal Resources

10. The State lies within the Indomalayan realm. According to the Biogeographic classification of India; Tripura falls in North-East biogeographic zone. Local flora and fauna bear a very close affinity and resemblance with floral and faunal components of Indo-Malayan and Indo-Chinese sub-regions.

11. Tripura hosts three different types of ecosystems as mountain, forest and freshwater. The evergreen forests on the hill slopes and the sandy river banks are dominated by species such as Dipterocarpus, Artocarpus, Amoora, Elaeocarpus, Syzygium and Eugenia. Two types of moist deciduous forests comprise the majority of the vegetation as moist deciduous mixed forest and Sal predominant forest. The interspersed bamboo and cane forests with deciduous and evergreen flora is a peculiarity of Tripura's vegetation. Grasslands and swamps are also present, particularly in the plains. Herbaceous plants, shrubs, and trees such as Albizia, Barringtonia, Lagerstroemia and Macaranga flourish in the swamps of Tripura.

### Flora

12. Studies on status of flora reported identification of 379 species of trees, 320 shrubs, 581 herbs, 165 climbers, 16 climbing shrubs, 35 ferns, 45 epiphytes and 4 parasites reveal that there are 50 plants species restricted to Tripura and its neighboring States. Out of species, 7 are endemic and 18 are rare plants, along with 266 species of medicinal plants in the State. Angiopteris evecta, a fern and Gnetum montanum, a giant climber belonging to Gymnosperm are two rare species but occur profusely in Trishna Sanctuary. Tree ferns (Cyathia spp.), which are also primitive and endangered, are found in South Tripura. There are 24 species of orchids of which Dendrobium has the highest species diversity (14 species). Endangered orchids like Blue vanda (*Vanda caerulea*) and Red vanda (*Renanthera imschootiana*) are found in the state. There are 266 species of medicinal plants in the State (68 trees, 39 shrubs, 71 herbs and 88 climbers). Maximum value of Plant-Diversity Index (Shannon-Weiner) reported is 5.23, which generally ranges from 3-4, indicating presence of a variety of species uniformly (floral information-excerpts from <https://forest.tripura.gov.in/forest-of-tripura>)

**Table 2-1: List of some tree/plants species having importance to the local community**

Sl. No.	High timber value		Fast Growing edible value		Fuel wood value	
	Botanical name	Common name	Botanical name	Common name	Botanical name	Common name
1	<i>Pterocarpus marsupium</i>	Andaman padack	<i>Moringaoleifera</i>	Drum stick	<i>Ailanthus excelsa</i>	Indian tree of heaven
2	<i>Artocarpus chaplasi</i>	Chamol	<i>Perkajavonica</i>	Tree bean	<i>Cassia nodosa</i>	Pink shower Cassia
3	<i>Diospiros ebonum</i>	Ebony	<i>Sesbania grandiflora</i>	Bakphool	<i>Cassia siamea</i>	Chakhunda
4	<i>Gmelinaarborea</i>	Gamar	<i>Artocarpusheterophylla</i>	Kathal	<i>Lucaenaleucocephala</i>	Ubabul
5	<i>Dipterocarpus turbinatus</i>	Garjan	<i>Averrhoa carambola</i>	Kamranga	<i>Acacia auriculiformis</i>	Akashmami
6	<i>Albizia procera</i>	Koroi	<i>Emblica officinalis</i>	Amla	<i>Melia azadirach</i>	Ghora neem
7	<i>Swietenia mahogany</i>	Mahogany	<i>Tamarindus indica</i>	Tetul	<i>Peltoforum spp</i>	Radhachura
8	<i>Dalbergialatifolia</i>	Rose wood	<i>Dioscorea alata</i>	Ban Alu	<i>Acacia mangium</i>	Mangium tree
9	<i>Pterocarpussantalinus</i>	Red sanders	<i>Asparagus racemosus</i>	Satmuli		
10	<i>Michelia Montana</i>	Sundi	<i>Cassia fistula</i>	Sonal		

11	<i>Shorea robusta</i>	Sal	<i>Cinnamomum obtusifolium</i>	Ban-tejpata		
12	<i>Tectonagrandis</i>	Teak				

Source: adapted from <https://forest.tripura.gov.in/forest-of-tripura>)

**Table 2-2: List of plants endangered and threatened**

Sl	Botanical name	Common name	Botanical name	Common name	
Life form-Tree			Life form-Climber		
1	<i>Duabanga grandiflora</i>	Ramdala	1	<i>Dischidiaraflosiana</i>	Lantana kalasi
2	<i>Adina sessifolia</i>	Haludehaki	2	<i>Entadaphaseolides</i>	Gila
3	<i>Michelia montana</i>	Champasundi			
4	<i>Magnolia pterocarpam</i>	Dulichampa	Life form-Fern		
5	<i>Lochio spermum</i>	Haldesimul	1	<i>Angiopterisevecta</i>	
6	<i>Canarium Stricum</i>	Dhup	2	<i>Holmiathostachyszeylanica</i>	
7	<i>Aquiloria melacensnis</i>	Agar			
Life form-Herb					
8	<i>Pterocarpus santalinus</i>	Raktachandan			
9	<i>Santalum album</i>	Chandan	1	<i>Droseraburmanni</i>	Surjasisir
10	<i>Elaocarpus prunifolia</i>	Ban jalpai	2	<i>Rauwolfiaserpentina</i>	Sarpgandha
11	<i>Mangifera sylvatica</i>	Laxmiam			
12	<i>Podocarpusaerlifolius</i>				
13	<i>Xantolisassamica</i>				
14	<i>Cyatheagigantea</i>				

(Source: adapted from <https://forest.tripura.gov.in/forest-of-tripura>)

## Fauna

13. According to estimates from studies, there are 90 mammal species in Tripura from 65 genera and 10 orders. Some species include elephant (*Elephas maximus*), bear (*Melursus ursinus*), binturong (*Arctictis binturong*), wild dog (*Cuon alpinus*), porcupine (*Artherurus assamensis*), barking deer (*Muntiacus muntjak*), sambar (*Cervus unicolor*), wild boar (*Sus scrofa*), gaur (*Bos gaurus*), leopard (*Panthera pardus*), clouded leopard (*Neofelis nebulosa*), and many species of small cats and primates. Seven primate species have been reported in Tripura out of a total 15 found in India. Of these primates, Slow Loris and Stumped tailed Macaques is reported to be rare. Phayre's langur (locally known as 'Chashma Banar'), has a very restricted distribution in India, and is found in Tripura. Hoolock Gibbon is the only ape and found in India and is also reported in Tripura.

14. In the state, 342 bird species are reported, of which about 58 are migratory species. There is high diversity of birds of prey, frugivorous birds, marsh birds and flower peckers. In the aquatic ecosystem 14 (fourteen) species of fish have been recorded, of which 2 are endangered (*Anguilla bengalensis* and *Pseudoeutroptus alterinoides*) and 12 vulnerable. Due to silting of river beds and filling up of wetlands, different species of marsh birds and fishes are reported to be declining faunal information.<sup>1</sup>

15. **Aquatic life:** freshwater ecosystem of the State harbours a rich biodiversity at different hierarchical level including important food-species of fin fish and shell fish. Recent investigation reveal a number of fish species

<sup>1</sup>(excerpts from <https://forest.tripura.gov.in/forest-of-tripura>)

have become endangered including common species viz. *Chana striatus*, *C. marulius*, *labeo bata*, *L. pangasia*, *L. dero*, *Mystus seengala*, *M. aor*, *Ompak pabda*, *O. bimaculatus*, *O. paba*, *Wallago attu*, *Natopterus chitala*, *Macroganthurus aculeatus*, *Mastacembelus armatus*, *enentodon concila*, *Rita rita*, *Bagarius bagarius pangusius pangusius* and *Danio debario* due to changing water quality and heavy silt load. **Of all the species, Mahaseer, comprising of *Tor tor* and *Tor putitora* fish appear to be most endangered in the State.** (Source: Tripura Envis).

**Table 2-3: Vulnerable, Endangered and Rare Fish fauna in the State**

Sl. No.	Scientific Name
<b>A.</b>	<b>Vulnerable Species</b>
1.	<i>Natopterus natopterus</i> (Pallas)
2.	<i>Cyprinion semiplotus</i> (McClelland)
3.	<i>Schismatorhynchus nukta</i> (Sykes)
4.	<i>Labeo pangusia</i> (Hamilton)
5.	<i>Chagunius chagunio</i> (Hamilton)
6.	<i>Bitia almoreae</i> Gray
7.	<i>Rita rita</i> (Hamilton)
8.	<i>Aorichthys aor</i> (Hamilton)
9.	<i>Aorichthys seenghala</i> (Sykes)
10.	<i>Pangasius pangasius</i> (Hamilton)
11.	<i>Bagarius bagarius</i> (Hamilton)
<b>B.</b>	<b>Endangered Species</b>
12.	<i>Raiamas bola</i> (Hamilton)
13.	<i>Tor putitora</i> (Hamilton)
14.	<i>Tor tor</i> (Hamilton)
<b>C.</b>	<b>Rare Species</b>
15.	<i>Barilius nelsoni</i>
16.	<i>Puntius clavatus clavatus</i> (Hamilton)
17.	<i>Puntius gelius</i> (Hamilton)

### 3. Relevant Laws, Policies, Standards and Institutions

#### 3.1 APPLICABLE RULE AND REGULATIONS OF GOI AND GOT

16. Compliance requirement of the project with the relevant legislations of GoI (MoEF&CC), State and local level and policies of World Bank have been ascertained. A review of the legislations of Government of India (GoI) and Government of Tripura pertaining to Forest and wildlife management in consideration with project interventions under TRESP is presented in Table 3-1.

**Table 3-1: Relevant Environment Rules and Regulations under GOI and GOT**

Name of relevant Act/Policies/Rules	Objective	Relevance to Subproject Interventions
The Indian Wildlife (Protection) Act, 1972	Applicable for protection to listed species of flora and fauna and establishes a network of ecologically-important Protected Areas (PAs)	<b>Not Applicable, As of now</b> , no sub project components and related activities are proposed within Protected areas (national park, Wild life sanctuaries, eco-sensitive zones), such activities are under exclusion list under the project.  However in case of any modification in planning under the project takes place in future (in case of any activities involves in NP, WLS, Eco sensitive zones) the wild life approval from NBWL shall be applicable.
Eco Sensitive Zone Notifications	Regulate certain activities around National Parks and Wildlife Sanctuaries so as to minimise the negative impacts of such activities on the fragile ecosystem encompassing the protected areas. Eco Sensitive Zones have been notified for each National Park and Wildlife Sanctuary.	The project will not finance any civil works in the eco-sensitive zones, national parks, wildlife sanctuaries.
Forest (Conservation) Act, 1980	Permits judicious and regulated use of forest land for non-forestry purposes.	<b>Applicable</b> in case of any road construction activity, upgradation, expansion falling in notified forest area (RF/PF) or Natural protected areas. Majorly Tribal blocks are under forest area, the maintenance work of existing PMGSY/PWD roads may not require approval, however upgradation of existing earthen road or other may need forest approval as per FC ACT 1980. PMU will need to apply the forest diversion application through PARIVESH Portal Online.
The Indian Forest Act(Tripura amendment) Act 1984 & amendments	Envisaged to consolidate the law relating to forests, the transit of forest-produce and the duty leviable on timber and other forest-produce & Declaration of RF,PF	A process of Forest Diversion under FC Act 1980 has been presented in Annexure 1.
Guidelines for extraction of trees from non-forest areas, 2010	The guidelines are framed regarding the extraction of trees from non-forest areas including plantations in non-forest areas	<b>Applicable</b> – Project interventions like road upgradation may require tree cutting for non forest areas, thus the guideline applies.

Name of relevant Act/Policies/Rules	Objective	Relevance to Subproject Interventions
Forest Right Act - 2006, The Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Right) Act, 2006	To recognize and vest certain forest rights in the forest dwelling Scheduled Tribes and other traditional forest dwellers such as the collection of Minor forest produce, access to grazing grounds and water bodies, traditional areas of use by nomadic or pastoral communities etc.	<b>Applicable</b> -since Project Interventions related activities such as road upgradation may need forest approval, hence NOC from Forest Rights Committees of respective Gram Panchayat and Village Committees under Tripura Tribal Area Autonomous District Council via District magistrate (District Level Committee DLC on Forest Rights Act, 2006) shall be required under this act.
Biological Diversity Act 2002, and Biological Diversity Rules, 2004  The Tripura biological diversity rules (2008) stipulate	Applicable for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.	<b>Applicable</b> - It acts like a guideline in preventing the planning of project subcomponents near the environmental sensitive areas including national parks, wildlife sanctuaries etc., Biodiversity Heritage sites are under purview of this act. None of the subproject intervention are proposed within Biodiversity Heritage sites.
Wetland (Conservation and Management) Rule 2010	To ensure better conservation and management and to prevent degradation of existing wetlands in India.	Applicable to this project because investment is likely to happen for fishery activities , pond cultivation etc.,

### 3.2 THE WORLD BANK ENVIRONMENTAL AND SOCIAL FRAMEWORK

17. In the World Bank's ESF, ten Environmental and Social Standards (ESSs) are outlined to set out the mandatory requirements that apply to the Borrower and projects. The Environmental and Social Standards (ESSs) are as follows:

#### **Environmental and Social Standards (ESSs) of World Bank's new Environmental and Social Framework (ESF)**

- ESS 1 Assessment and Management of Environmental and Social Risks and Impacts;*
- ESS 2 Labor and Working Conditions;*
- ESS 3 Resource Efficiency and Pollution Prevention;*
- ESS 4 Community Health and Safety;*
- ESS 5 Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement;*
- ESS 6 **Biodiversity Conservation, and Sustainable Management of Living Natural Resources;***
- ESS 7 Indigenous Peoples;*
- ESS 8 Cultural Heritage;*
- ESS 9 Financial Intermediaries; and*
- ESS 10 Information Disclosures and Stakeholder Engagement.*

18. ESS6 of The World Bank Environmental and Social Framework **refers the protecting and conserving biodiversity and sustainably managing living natural resources.** The tribal regions of the state are endowed with rich forest, biodiversity, protected areas and reserve forest etc.

19. **ESS 6 is particularly significant in TRESP and aims to protect and conserve biodiversity and habitats; to apply the mitigation hierarchy and the precautionary approach in the design and**

**implementation of projects that could have an impact on biodiversity;** to promote the sustainable management of living natural resources; to support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

20. The (BMP) has been prepared with key strategies for biodiversity conservation that include site screening for avoiding critical natural habitats; promotion of indigenous species in plantations, nurseries and avoidance of exotic, invasive species in farming; Promoting rearing of native local species in livestock interventions etc. The ESMF includes screening and eligibility checklists to ensure exclusion of activities that would adversely affect biodiversity such as felling of trees, activities causing irreversible impacts to critical and natural habitats, felling of trees without a permit etc.

21. The ESMF -TRESP has included **an exclusion/negative list of activities which might be falling in the Eco sensitive area, Wild life sanctuary, and notified elephant corridors, this will eliminate the possibility of activities involving in critical natural habitats/eco-sensitive zones having species with critical biodiversity value.** Appropriate measures in the ESMPs will also include precautionary measures to prevent any possible impact on aquatic life (due to discharges from worksites and/or dumping of debris in water bodies) and mandatory prior approval for tree felling from forest department as per regulatory requirement (FC act 1980, Forest Right Act 2006), and for non-forest trees (Guidelines for extraction of trees from non-forest areas" 2010). Movement of elephant near few of the village habitation (Ramkrishnapur VC, Maharanipur VC) has been reported during site visit and also from PCCF Office (Agartala). Sensitization amongst contractor, worker and all staff shall be done by the respective PIU TRESP official and Forest department as part of Training/workshop under the project. In Livelihood sector (agriculture and livestock enhancement), Package of Practice (PoP) of TRESP project will be followed during the implementation of project so that the native/local species harvest in the project. Awareness/training for the same shall be facilitated by PIU (TRESP) in association with respective line department (ARDD, DoF).

**Table 3-2: World Bank’s ESF and applicability to TRESP**

ESS	ESS Objectives	Applicability to TRESP
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> <li>To protect and conserve biodiversity and habitats.</li> <li>To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity</li> <li>To promote the sustainable management of living natural resource</li> <li>To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities</li> </ul>	<p>The ESA assesses the potential impact on bio-diversity and natural habitat due to the project interventions.</p> <p>ESS 6 is relevant</p> <p>As the project does not finance any rural roads or schools within EZS, Natural habitats/critical habitats, no impact on these habitats is expected. The Project will adopt a negative list excluding these areas right at the screening stage and any sub-project falling under these habitats will be excluded. However, few roads are near forest areas, or passing through stretched of un—notified / unprotected forests. Trees falling and shrubs clearing may be required in non-forest areas, which may have potential impacts on bio-diversity due to the project activities.</p>

## 4. Major Risk and Management Measures

22. As the project does not finance any rural roads or schools within EZS, Natural habitats/critical habitats, no impact on these habitats is expected. The Project will adopt a negative list excluding these areas right at the screening stage and any sub-project falling under these habitats will be excluded. However, few roads are near forest areas, or passing through stretched of un—notified / unprotected forests. Trees falling and shrubs clearing may be required in non-forest areas, which may have potential impacts on bio-diversity due to the project activities.

### Description of Negative/Exclusion List of Activities in terms of biodiversity protection

23. The activities that are likely to pose high risks and severe negative impacts on the environment, health and safety will not be supported under TRESP project. A list of such activities has been compiled as the 'Negative/ Exclusion List of Activities' and is presented below:

Sr. No.	Activities not to be supported under TRESP
1.	Any subproject within protected areas (including <b>National Parks, Wildlife Sanctuaries, etc</b> ), <b>MoEFCC /State Govt Notified Eco-Sensitive Zones around National Parks and Wildlife Sanctuaries; and located/passing through Elephant Corridor.</b>
2.	Any activity that leads to <b>conversion of natural or critical habitats, legally protected and internationally recognized areas of high biodiversity and in designated forest areas.</b>
3.	Any subproject in <b>Ramsar site or Notified Wetlands</b>

24. Project activities will involve selection of project based on the screening exercise as per screening checklist of particular project sector interventions. Screening checklist has indicators of site selection, involvement of eco sensitive zones, disturbance to local flora and fauna, and activities if falling within exclusion list, thus at initial stage, the project can scrutinized based on its ecological sensitivity and disruption of local flora and fauna.

25. **Potential Risk:** Under the project, potential risks that could result in a loss of biodiversity and ecosystem services could arise from unmanaged chemical pesticide and fertilizer use and agricultural run-off, use of non-native /exotic varieties and replacement of local varieties with hybrid or exotic trees, plants, and animal species, habitat and land-use conversion, un-sustainable and un-scientific harvesting, and e) unmanaged rubber plantation etc.. The potential risks on the biodiversity due to subproject interventions sector wise are presented below:

- **In Agriculture-allied activities**, project aims at enhancing the agriculture productivity by providing high quality seeds & better fertilizers to farmer and reducing the Slash and Burn practice in Tribal areas. Thus project will benefit the region in ecological term by reducing the Jhum cultivation practices, associated soil erosion, disappearance of native species from forest and invasion of exotic weeds and other plants. **No direct adverse impact on flora and fauna observed.**
- **Potential Risk in Agriculture livelihood interventions:** Use of pesticides, insecticides and other chemical fertilizers in farming practices; In **fisheries intervention**, there is chance of having

introduction of **exotic species** of fisheries if not handled properly. Improper and excess use of chemicals/nutrient in cage culture fisheries, Improper disposal of Fishery wastes (like diseased dead fish in low-lying areas) may leads to growth of microbes and flies in the vicinity and this area becomes highly vulnerable to diseases.

- In subproject of **livestock interventions, inappropriate breed selection, introduction of exotic species** which can not to be acclimatize with the local climate may also pose risk in terms of increase mortality rate and further loss. Obnoxious gas issues from piggery shed, disease outbreak in livestock, unhygienic conditions of cattle shed may pose health issues among farmers. While working with diseased pigs, several swine infections can be transmitted to humans, some with potentially serious outcomes. Among the diseases which may occur from exposure to zoonotic agents in swine are: brucellosis, erysipeloid, and streptococcus suis meningitis, ascariasis, swine influenza, scabies, ringworm, leptospirosis, toxoplasmosis, salmonellosis, trichinosis, and cysticercosis. Wastes from piggery often become a suitable place for growth of microbes, flies and insects which is a major cause of disease contamination. Improper handling of Vaccination, medication, needles, contaminated biomedical waste etc. at village veterinary centre & subsequent infections.
- **School:** In subproject interventions enhancing learning environment in School complexes, **no direct impact on biological environment has been noticed**. The school renovation is to be done within existing school complexes hence no fresh land involvement, tree felling noticed.
- **Connectivity Improvement – Road:** During Construction phase, project intervention of road upgradation, there might be risk of **tree felling, bush cleaning, and disturbance to local ecological flora and fauna of the project area**. During road construction, dust can be an issue for the vicinity vegetation. There will be chances that excavated material might be dumped on both sides of the road which leads to the loss of local vegetation. There is no direct impact on the local aquatic flora and fauna perceived but some of the selected road sites are very close to the Fisheries ponds. Subsequently, there is a chance that dust and soil that erode may cause pollution of these ponds and ultimately affect the aquatic flora and fauna. Avifaunal species are not directly impacted by the different activities of the TRESP but during construction phase of the road, due to high noise and dust from the vehicle might lead to a change in the local composition of the avian species richness.

26. Potential negative impacts from the different project activities and their mitigation measures are described in the tables bellow:



**Table 4-1: Potential Negative Impact and Management for Roads (Construction and Upgradation) under TRESP**

Sl. no.	Activities	Potential Negative Impact/Concern	Management Measure
1.	<ul style="list-style-type: none"> <li>• Clearing of Trees</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of vegetation and trees along the alignment.</li> <li>• Effect to the local flora and fauna.</li> <li>• Tree felling without prior approval may be negative project activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Prior permission for tree felling to be taken from the forest department in terms of RF /PF affected (as per FC act 1980), and for non-forest trees (Guidelines for extraction of trees from non-forest areas" 2010)</li> <li>• FRA 2006 shall be applied for diversion of forest below 1 hectare and having max. 75nos. of tree felling, the approval shall be from respective DFO.</li> <li>• Forest diversion of more than 1 hectare shall involve as per online procedure of FC act 1980.</li> <li>• Avenue plantation should be carried out for both affected and non-affected areas according to the availability of the space.</li> <li>• Some of the native trees usually planted are: Kadam, Jack-Fruit Tree, Coconut, Palm, Jamun Tree, Banyan Tree, Ivy-Like Fig, The Peepal etc.</li> <li>• Monitoring and care should be taken for the planted trees.</li> </ul>
2.	<ul style="list-style-type: none"> <li>• Animal Movement area</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of not awareness of animal (elephant) in the project aspirational block Mungiakami &amp; Tulashikhar (Ramkrishnapur VC, Maharaniapur VC) especially the area towards Khowai.</li> </ul>	<ul style="list-style-type: none"> <li>• Sensitization amongst contractor, worker and all staff shall be required by the respective PIU TRESP official and Forest department.</li> <li>• A toll free no. to be provided near to work place for such kind of helpline.</li> <li>• No construction should be allowed in the night time to avoid chances of human and animal conflicts.</li> </ul>
3.	<ul style="list-style-type: none"> <li>• Site clearing/ Devegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Vegetation loss from land clearing.</li> <li>• Disturbance/Destruction of flora and fauna</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid removal of vegetation and trees to the extent possible protect all vegetation not required to be removed against damage.</li> <li>• Site clearance shall be carried out in such a way that the clearing and grubbing waste are disposed immediately in the designated dumping site identified for the project.</li> <li>• Compensatory afforestation measure 1:10 in lieu of each tree cut to be provided.</li> </ul>

**Table 4-2: Potential Negative Impact and Management for School (Renovation & Construction) Under TRESP**

Sl. no.	Activities	Potential Negative Impact/Concern	Management Measure
1.	• Clearing of Trees	• Loss of trees and vegetation • Soil erosion and surface runoff.	<ul style="list-style-type: none"> <li>• Felling of trees is not envisaged at any stage of the project. However under unavoidable conditions if any of the trees are required to be cut/felled, then prior permission as per existing procedure from Forest, ensuring appropriate compensation including compensatory plantation as stipulated by the forest department shall be undertaken.</li> <li>• Compensatory afforestation measure 1:10 in lieu of each tree cut to be provided.</li> </ul>
2.	• Site clearing/ Devegetation	<ul style="list-style-type: none"> <li>• Vegetation loss from land clearing.</li> <li>• Disturbance/Destruction of flora and fauna.</li> </ul>	<ul style="list-style-type: none"> <li>• Site clearance shall be carried out in such a way that the clearing and grubbing waste are disposed immediately in the designated dumping site identified for the project.</li> </ul>

**Table 4-3: Potential Negative Impact and Management form Agriculture/Horticulture sector under TRESP**

Sl. no.	Activities	Potential Negative Impact/Concern	Mitigation Measures
1.	• Site Selection	<ul style="list-style-type: none"> <li>• Inappropriate site selection may lead to lesser yield and loss.</li> <li>• Jhum cultivation followed by intensive farming may lead the land use change especially in hilly terrains.</li> </ul>	<ul style="list-style-type: none"> <li>• Suitable soil selection should be done as per the crops requirements given POP TRESP.</li> <li>• Any well drained soil is suitable for cultivation. Sites having sandy and sandy loam fertile soils shall be preferred.</li> <li>• Generally sandy soils are suitable for mustard cultivation. However, other light soils are also equally good for Mustard crop cultivation.</li> <li>• Few of the areas of North Tripura are having jhum cultivation. Intensive farming activities in such areas shall be promoted with proper availability of quality seeds and associated infrastructure and farming self-sustainable.</li> </ul>
2.	• Land Preparation	• Loss of biodiversity	<ul style="list-style-type: none"> <li>• Limiting clearance of vegetation to those areas where farming will be conducted only.</li> </ul>
3.	• Use of chemical Fertilizer and pesticides	<ul style="list-style-type: none"> <li>• Soil contamination may result due to overuse of fertilizer and other chemicals that are used to enhance the productivity/ yield.</li> <li>• Increased use of pesticides/ fertilizers could lead to issues related to storage, handling, application and disposal</li> <li>• Usage of fertilizer in intensive hill terrain</li> </ul>	<ul style="list-style-type: none"> <li>• Banned pesticide as WHO shall be strictly prohibited.</li> <li>• Use of suitable fertilizer with a prescribed dose limit (guidance shall be obtained from Agriculture Department).</li> <li>• Overuse of fertilizers particularly nitrogen attract more aphids.</li> <li>• A combination of organic and inorganic fertilizer is a good option.</li> <li>• Promoting the use of bio-fertilizer and vermicopost.</li> <li>• Training on IPM should be facilitated to farmer in order to make them aware of the hazards</li> </ul>

Sl. no.	Activities	Potential Negative Impact/Concern	Mitigation Measures
		<p>farming would pose risk of adding fertilizer in the soil and subsequently water.</p> <ul style="list-style-type: none"> <li>• Probability of pesticides and fertilizers flowing into food chain and posing a health risks/ hazards.</li> </ul>	<p>of fertilizer and other alternative climate resilient methods.</p> <ul style="list-style-type: none"> <li>• Integrated pest management plan should be referred with respect to the proposed Project Interventions and accordingly the suggested mitigation/ management measures should be adopted.</li> <li>• to detect changes in soil fertility, and further applicability of optimum usage of fertilizer and related decision on application rates, and avoid unsustainable nutrient depletion and over-fertilization periodic soil analysis shall be done by PGs/CLFs</li> </ul>
4.	<ul style="list-style-type: none"> <li>• Selection of crop (Oil seed, Fruits and Vegetables) variety</li> </ul>	<ul style="list-style-type: none"> <li>• If appropriate variety of crop (oilseed, Fruits and Vegetables) with respect to the particular season and climatic zone</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of suitable crop (Oilseed, Fruits and Vegetables) variety with respect to area/ zone should be adopted (as per POP of TRESP)</li> </ul>
5.	<ul style="list-style-type: none"> <li>• Crop rotation problem</li> </ul>	<ul style="list-style-type: none"> <li>• Mono cropping of Oilseed crop may lead to depletion of similar kind of nutrients from the soil</li> </ul>	<ul style="list-style-type: none"> <li>• Rotation wise cropping shall be followed by short duration legumes such as green gram, black gram, Arhar which shall be cultivated to maintain the soil nutrient balance.</li> </ul>

**Table 4-4: Potential Negative Impact and Management form Livestock sector under TRESP**

Sl.No	Project Activity	Potential Negative Impact/Concern	Mitigation Measures
1.	<ul style="list-style-type: none"> <li>• Providing shelter to livestock, rearing house, hatchery etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Shed Spacing and Sanitation problem (Congested and unclean shed without proper facilities for urine drainage, lack of ventilation etc.) will lead to outbreak and spread of diseases.</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of sheds should be such that it should avoid areas that are close to waterways or those with shallow groundwater.</li> <li>• Proper waste drainage system should be provided</li> </ul>
2.	<ul style="list-style-type: none"> <li>• Livestock Rearing</li> <li>• Indigenous species</li> <li>• More Introduction of exotic breed of pig which is threatening indigenous species</li> </ul>	<ul style="list-style-type: none"> <li>• Adoption of unhygienic practices in livestock rearing</li> <li>• Selection of breeds that cannot adapt to the local climatic conditions will lead to loss of livestock or results in low productivity and might have health issues.</li> <li>• Biodiversity Threat</li> </ul>	<ul style="list-style-type: none"> <li>• Vaccinated baby unit (livestock) to be provided to PGs</li> <li>• Prohibition of use of antibiotics to 'prevent' an early death of the pigs without proper medical guidance used</li> <li>• Injection of growth hormones to accelerate the growth of pigs, goat to attain higher body mass ratio to meet the market demand should be avoided.</li> <li>• Appropriate caging and periodic monitoring of livestock</li> <li>• Selection of suitable breed in order to have increased adaptability.</li> </ul>

Sl.No	Project Activity	Potential Negative Impact/Concern	Mitigation Measures
			<ul style="list-style-type: none"> <li>• Indigenous species should be promoted in artificial insemination facility.</li> <li>• Provide awareness to the farmers about significance of the indigenous pig species</li> </ul>
3.	<ul style="list-style-type: none"> <li>• Livestock rearing and animal health</li> </ul>	<ul style="list-style-type: none"> <li>• The traditional farmers have little knowledge on food safety, public health risk and zoonotic issues in pig rearing.</li> <li>• Infectious disease</li> <li>• Sudden outbreak of disease like Swine fever/African swine fever/ Foot and Mouth disease FMD, in pig or Goat Pox/PPR in case of goat.</li> </ul> <p>1.</p>	<ul style="list-style-type: none"> <li>• Proper surveillance and disease investigation should be ascertained by the Disease investigation Laboratories of the department.</li> <li>• Animals must be maintained in good body condition and remedial action (veterinary attention, improved nutrition, or husbandry) taken when in poor condition, or when there are signs of significant distress, ill-health, disease, or injury.</li> <li>• Animals should be periodically checked for the presence of parasites, and any corrective treatment deemed necessary to prevent distress and suffering should be administered as soon as possible.</li> <li>• Any sick or injured animals should be treated or cared for to alleviate pain and distress as soon as practically possible, including being isolated or humanely destroyed if necessary.</li> <li>• An awareness program to farmer on precaution measures that needs to be adopted during epidemic/ spreading of infectious diseases in pig should be made available. Knowledge on the possible diseases that could be transmitted from pig to humans such as H1N1, swine flu should be provided.</li> <li>• Provision of mobile veterinary services to be offered during emergency period for critical and emergency care.</li> <li>• Following proper Vaccination and deworming schedule.</li> <li>• Provide mandatory health Check-ups</li> <li>• Provide livestock Health calendar depicting season and disease relationship and related preventive measures to check disease occurrence.</li> <li>• Regular interaction with medical service provider about animal health and precautions that are to be followed.</li> </ul>

**Table 4-5: Potential Negative Impact and Management form Fisheries sector under TRESP**

Sl. No.	Project Activity	Environmental and Social Impacts	Mitigation Measures
1.	<ul style="list-style-type: none"> <li>• Selection of fish species</li> <li>• Fish productivity enhancement</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of fish species that cannot adapt to the local climatic conditions will lead to loss</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of native species having greater climatic adaptability.</li> </ul>

Sl. No.	Project Activity	Environmental and Social Impacts	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Establishment of Fish Mill and Hatcheries</li> <li>• Enhancement of production of formulated fish feed</li> </ul>	<p>or results in low productivity.</p> <ul style="list-style-type: none"> <li>• Introduction of exotic species might result in biodiversity loss as well loss of Indigenous species.</li> </ul>	<ul style="list-style-type: none"> <li>• Indigenous species should be promoted through artificial insemination facility</li> <li>• Interactions with the technicians of the fish seed provider would be helpful to make a suitable choice of fish species as per climate and season requirement.</li> <li>• Package of Practice (PoP) of TRESP project should be followed during the implementation of project</li> <li>• The selected fish species/ variety should reduce external inputs and maintenance costs</li> </ul>

## 5. Conclusion

27. Biodiversity is essential for the processes that support all life on Earth, including humans. Without a wide range of animals, plants and microorganisms, we cannot have the healthy ecosystems that we rely on to provide us with the air we breathe and the food we eat. A Biodiversity Management Plan (BMP) is a implementation plan for conserving, restoration and enhancement of biodiversity value of an area during development activity. The BMP sets the objectives and describes the management actions necessary to deliver the desired outcomes. The approach to biodiversity management involves a range of stakeholders, including the PMU, PIU, the Contractors (and subcontractors), local authorities, regulatory agencies and the general public for development project. Such a system therefore requires robust processes regarding information dissemination, training, and designation of responsibility, management actions, monitoring, control, and corrective actions.

28. TRESP comprises agriculture-related activities, livestock interventions, fisheries interventions, school building construction, and road upgradation, which may have an impact on the local diversity of the project intervention region. To achieve long-term results from the planned project activity, it is necessary to adhere to the applicable laws, policies, and ESMPS of the ESMF during execution of the project.

## 6. Site Photographs



Figure 6-1: Plantation along the road-Jalaya Bazar to Jadavpara Road



Figure 6-2: Thick avenue trees at Ragia Para to Tanarai Para Road



**Figure 6-3: Banana plantation along Govindabari main road to Paisaram KP Road**



**Figure 6-4: Bachai Bari Class 12 School Campus**





**Figure 6-5: Barlaram Kobra HS School Campus**



**Figure 6-6: Pond near Gobindabari main road to Suresh KP road at Gotaya Village**

## 7. Annexure: 1

### PROCESS FOR DIVERSION OF FOREST LAND FOR NON-FORESTRY PURPOSE UNDER FOREST (CONSERVATION) ACT,1980

The diversion of forest land for any forestry purpose requires prior approval of Govt. of India under Section 2 of the provisions of Forest (Conservation) Act, 1980.

For this purpose, the concerned user agency is required to formulate a proposal for seeking diversion of forest land, which is submitted to concerned DFO on prescribed Form- I (FORM A for proposals seeking first time approval under the Act).

As per Forest Conservation (Amendment) rule, 2003,2004, Following Agencies Empowered to Grant Forest Clearance for Diversion of Forest Land

- i. Upto 5 ha - Regional Offices of the MoEF as per Forest (Conservation) Rules, 2003 (Shillong in case Tripura)
- ii. > 5 ha and upto 40 ha - R.O., MoEF, to Process, Scrutinize and Forward Diversion Proposal (In Consultation State Forest Advisory Group) to MoEF-HQ along with their Recommendations
- iii. > 40 ha -State Government/UT Administration to forward the proposal with recommendations to MoEF (Scrutinized by Forest Advisory Committee)
- iv. RO, MoEF - To Carry out Site Inspection, if Diversion is > 100 ha or if there is any Violation Under FC (Act) (1980) or EPA (1986) for the Proposal/Project Under Implementation Stage/ Completed

#### Key Documents required for the forest Diversion Proposal

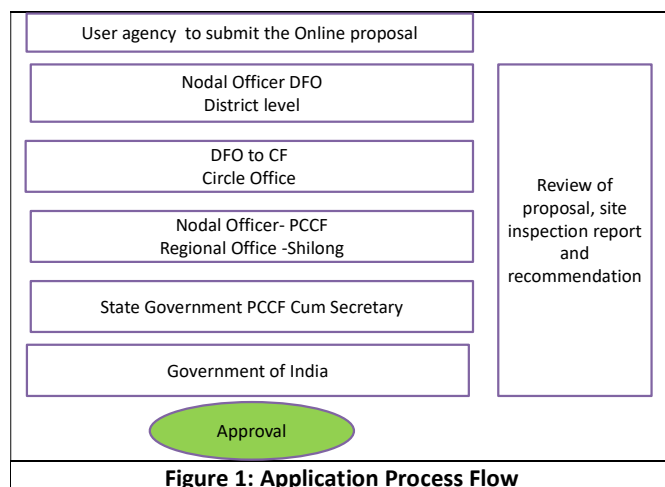
1. General details – (Project Details, User Agency, Details of Person Making Application-Authorization from User agency).
2. Details of Land required for the Project (Details of forest land proposed to be diverted- for road chainage wise sqm/acre/ha of land required on either side of the road).
3. Maps of forest land proposed to be diverted (Land impacted on Topo sheet, Polygon KML file of impacted land, DGPS Geo-coordinates of diverted land.).
4. Justification for locating the Project in forest land and details of alternates examined.
5. Employment likely to be generated.
6. Displacement of People due to the project, if any.
7. Details of Cost-Benefit analysis for the Project (application in case of >5h of diversion in hills)
8. Status of settlement of rights under the Forest Rights Act,2006 on the forest land proposed to be diverted.
9. Details of land identified for Compensatory Afforestation (not applicable for central government projects).

#### Flow of the Forest Clearance

##### At User Agency level

- Register with the Online Single Window Portal Parivesh portal for the credentials(<https://parivesh.nic.in/Login.aspx>).
- After registration, User-id and password will be communicated automatically to the registered email-d of UA.
- Fill and submit online application

- Upload relevant documents (polygon of land to be diverted in KML form, DGPS maps etc.) on portal and save it.
- If proposal submits without shortcoming or fulfilling the sought details on proposal, User Agency will upload Acknowledgement slip (as a single pdf file) received from the offices of DFOs, DCs and Nodal Officer.
- If proposal is complete, then UA will receive email regarding Acceptance of the proposal from the Nodal Officer.
- Nodal Officer (DFO): Examine the proposal submitted by UA.
- After receiving Acknowledgement slip, Nodal Officer will upload final Acceptance on portal and proposal will be forwarded to concerned DFOs and DCs for further processing.
- DFO/DCFs Process the proposal (Form-A, Part-II) and upload Site Inspection report and Recommendation on portal.
- When Recommendation is uploaded, proposal will be moved to CF/CCF for further processing.
- DCs, CF/ CCF: Complete proposal (Form-A, Part-I) including all relevant documents will be available for viewing.
- Upload the details related with settlement of rights under FRA and NOC of Gram Sabhas, if any.
- When Recommendation is uploaded, proposal will be moved to State Secretary for further processing.
- Complete proposal (Form-A, Part-I to Part-IV) including all relevant documents, report from DC and recommendation of DFO, Circle and Nodal Officer will be available for viewing
- When Recommendation is uploaded, proposal will be moved to either Regional Office or Head Office, MoEF, Delhi as per the flow defined in the system for further processing.
- After Recommendation the approval shall be accorded from Regional Office.



**Figure 1: Application Process Flow**

**Clearances (Stage-I & Stage-II Final Approval)**

**Stage- I Clearance (Approval in Principle):**

Generally, the following conditions are stipulated for compliance before final approval:

- Payment for Compensatory Afforestation (CA) – by Cheque / Draft.
- Payment for Net Present Value (NPV) – by Cheque / Draft.
- Additional Afforestation Cost, Penal Afforestation Cost.
- Any other payment
- And if any other condition for compliance like non-forest land etc.

*NOTE: Permission to work might be obtained on Stage 1 Approval*

Eco-Value class	VDF	DF	OF
	NPV (in Rs.)		
Class I	10,43,000	9,39,000	7,30,000
Class II	10,43,000	9,39,000	7,30,000
Class III	8,87,000	8,03,000	6,26,000
Class IV	6,26,000	5,63,000	4,38,000
Class V	9,39,000	8,45,000	6,57,000
Class VI	9,91,000	8,97,000	6,99,000

Eco-Class I - Tropical Wet Evergreen Forests,  
Tropical Semi Evergreen Forests and  
Tropical Moist Deciduous Forests

Eco- Class II- Littoral and Swamp Forests

Eco-Class III- Tropical Dry Deciduous Forests

Eco-Class IV - Tropical Thorn Forests and Tropical Dry Evergreen Forests

Eco-Class V - Sub-tropical Broad-Leaved Hill Forests,  
Sub-Tropical Pine Forests and  
Sub-Tropical Dry Evergreen Forests

Eco-Class VI - Montane Wet Temperate Forests,  
Himalayan Moist Temperate Forests,  
Himalayan Dry Temperate Forests,  
Sub Alpine Forest,  
Moist Alpine Scrub and Dry Alpine Scrub

**Figure2: NPV Rate Chart**

### **Stage- II Clearance (Final approval):**

- After the compliance of the conditions, stipulated in Stage I, proposal
- Final Approval (Handing Over of the Land).
- Deposition of funds.
- Fulfillment/Compliances of Stipulated Conditions
- Compliance of Forest Right (Act) 2006.
- Compensatory Afforestation (CA) Related Issues

### **Application of Forest (Conservation) Act,1980**

#### Time Period Prescribed

- State Government to Central Government – 210 days.
- Nodal Officer receipt or return a proposal – 10 days.
- DFO (T) concerned and CF (T) – to Nodal Officer – 90 days.
- Nodal Officer through PCCF to State – 30 days.
- Nodal Officer / PCCF – State – PCCF-cum-Secretary – GOI – 60 days.
- Regional Office (5 Ha. Regional Office & > 5-40 Ha GOI approval) – 45 days.
- Government of India > more than 40 Ha – 90 days

#### NOTE:

1. Nodal Officer – Incomplete proposal – User Agency – 10 days: This time period shall not be counted for any future reference.
2. GOI – till 15 days of the expiry of time limit prescribed – construed that the proposal has been rejected by the State Government and State – inform – User Agency.
3. State - Subsequently – forward – GOI – explanation for delay and action taken.