

Government of West Bengal  
Directorate of Forests  
Office of the Principal Chief Conservator of Forests, Head of Forest Force  
Aranya Bhawan, Block: LA-10A, Salt Lake City, Sector – III, Kolkata:: 700 106  
Phone - Fax:: (033) 2335 8581/7751, e-mail : [nfcawb@gmail.com](mailto:nfcawb@gmail.com)  
Visit us at: [www.westbengalforest.gov.in](http://www.westbengalforest.gov.in)

No- /L & LT/2M-38/2021

Dated: 04 .05.2023

To: The Additional Chief Secretary to the Govt. of West Bengal,  
Department of Forests.

Sub: Tilaboni ECL Coal Mine Project. (Proposal No. FP/WB/MIN/41301/2019).

Ref: EDS letter no. IRO/KOL/WB/MIN/41301/2019/57 dated. 20<sup>th</sup> February, 2023.

Sir,

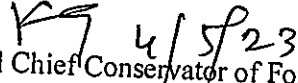
With reference to above it is submitted that.

- i. Site Specific CA scheme with related documents have been uploaded in Part-II of Parivesh Portal.
- ii. Cost Benefit Analysis has been submitted by User Agency Online.
- iii. CA is being proposed over double degraded forest land. User Agency has submitted undertaking.

The above information has been uploaded on Parivesh Portal. The proposal may please be forwarded to Integrated Regional Office, Kolkata for necessary action.

Encl: As stated above.

Yours faithfully,


  
Addl. Principal Chief Conservator of Forest  
& Nodal Officer, Forest Conservation Act.

No- /L & LT/2M-38/2021

Dated: 04 .05.2023

Copy forwarded for information and necessary action to:

1. The Chief Conservator of Forests, South-West Circle, West Bengal.
2. The Chief Conservator of Forests, South-East Circle, West Bengal
3. The Divisional Forest Officer, Durgapur Forest Division.
4. The Divisional Forest Officer, Purulia Forest Division.
5. The Divisional Forest Officer, Kangsabati (North) Forest Division
6. The General Manager (Env) Eastern Coal Field Limited, Borachak House, Sitarampur, Burdwan-713359.

  
Addl. Principal Chief Conservator of Forest  
& Nodal Officer, Forest Conservation Act.

Extra Copy

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भारत सरकार/Government of India  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
एकीकृत क्षेत्रीय कार्यालय, कोलकाता/ Integrated Regional Office, Kolkata  
IB-198, Sector - III, Salt Lake City, Kolkata-700106  
Phone: 033-2335-0902, E-mail: iro.kolkata-mefcc@gov.in



No. IRO/KOL/WB/MIN/41301/2019/57

Date: 20<sup>th</sup> February 2023

To,

The Addl. Chief Secretary,  
Department of Forests,  
Government of West Bengal,  
Aranya Bhawan, Block-LA, 10-A, Sector - III,  
Salt Lake City, Kolkata - 700106.

**Sub: Proposal for diversion of 38.38 ha forest land in favour of Eastern Coal Field Limited (ECL) for Tilaboni UG Coal Mine Project under Durgapur Forest Division, West Bengal -reg.**

Sir,

I am directed to refer to the Government of West Bengal letter No.113-For/O/L/10T-14/2022 dated 20.01.2023 on the above-mentioned subject seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980. The proposal has been examined by this office in accordance with Forest (Conservation) Act, 1980 and the following information/documents are still required to upload in Parivesh portal for further processing of the project.

- i. Site specific CA scheme along with toposheet map, kml file and CA land suitability certificate from concerned DFO.
- ii. Cost Benefit Analysis is not complete. Under 'estimation of cost of forest diversion' - the cost of CA is not included and Cost Benefit Ratio is not defined. Also, rate of NPV calculated by taking forest density 0.4 instead of 0.7, as mentioned by concerned DFO in Part-II. Corrected CBA needs to be submitted.
- iii. It may be clarified, whether CA over double degraded forest land as well as plantation of 1,30,000 plants both recommended by State Forest Department or not. Comments/ undertaking of User Agency in this regard need to be submitted.

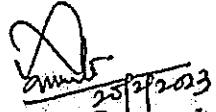
Therefore, it is requested that kindly upload the above mentioned information/documents in the PARIVESH portal for further consideration of the proposal.

Yours Sincerely,

(Dr. S. Hare Krishna Murti)  
Assistant Inspector General of Forest

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Copy to:-

1. The PCCF & HoFF, Department of Forests, Government of West Bengal, Aranya Bhawan, Salt Lake City, Kolkata, 700098.
2. The APPCF cum Nodal Officer (FCA), Department of Forest, Government of West Bengal, Aranya Bhawan, Salt Lake City, Kolkata, 700098.
3. The Divisional Forest Officer, Durgapur Forest Division, West Bengal.
4. The GM (Env), ECL, Borachak House, Sitarampur, Burdwan-713359.
5. Guard file

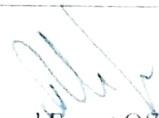
  
Assistant Inspector General of Forest


**Scheme for Compensatory Afforestation Under Kangsabati North Division, over 50 Ha Area.**

Detailed Scheme of Compensatory Afforestation over 50 ha. Under Purulia Para Range, Kangsabati North Division, Purulia.

|  |  |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|--|--|----|--|---------------|--------------|----------|---------------|-----------------------------|----------------|-----------------------------|---------------|-----------------------------|----------------|------------------------------------|----------------|----------------------|---------------|-------------|--------------|-----------------|----------------|--|--|
| 1  | Details degraded Forest Land.  | :: |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | (i) District   | :: | Purulia  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Name of Forest Division  | :: | Kangsabati North Division  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Block/ Compartment/ Survey No / Mouza  | :: | Range-Purulia Para, Mouza- Suklara, JL No – 208, Plot No 373, Area- 20 Ha, & Mouza- Naudiha, JL No 61, Plot No 3640, Area-30 ha.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Village  | :: | Suklara & Naudiha  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Area to be Afforested  | :: | 50 ha.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 2  | Description of the Area  | :: |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Soil Type  | :: | Lateritic  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Topography   | :: | More or less plain   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | Whether the area bearing any rock stock  | :: | Unwanted weeds   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 3.   | Name of the Plantation Programme   | :: | Plantation of Sal and Sal Associate Species (60:40) with 1600 nos. seedlings per ha.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 4  | Schedule of Plantation Programme   | :: | The Compensatory Afforestation on degraded forest land would be started by the Divisional Forest Officer as early as possible after the proposal is formally approved  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 5.   | Details of year-wise break up of requirement of fund is as under wage rate is as under wage rate Rs. 294.00 which may be increased as per existing labour rate | :: | <table border="1"> <tr> <td>Advance work,</td> <td>Rs 730789.00</td> </tr> <tr> <td>Creation</td> <td>Rs 9845699.00</td> </tr> <tr> <td>1<sup>st</sup> Year Maint.</td> <td>Rs. 3824030.00</td> </tr> <tr> <td>2<sup>nd</sup> Year Maint.</td> <td>Rs 3626132.00</td> </tr> <tr> <td>3<sup>rd</sup> Year Maint.</td> <td>Rs. 3391258.00</td> </tr> <tr> <td>4<sup>th</sup> to 10th Year Maint</td> <td>Rs. 9032715.00</td> </tr> <tr> <td>SMC works in CA Site</td> <td>Rs.2199050.00</td> </tr> <tr> <td>Earthen Dam</td> <td>Rs 210620.00</td> </tr> <tr> <td>Total for 50 ha</td> <td>Rs.32860293.00</td> </tr> <tr> <td colspan="2">Rupees Three crore twenty eight lakh sixty thousand two hundred ninety three only.</td> </tr> </table> | Advance work, | Rs 730789.00 | Creation | Rs 9845699.00 | 1 <sup>st</sup> Year Maint. | Rs. 3824030.00 | 2 <sup>nd</sup> Year Maint. | Rs 3626132.00 | 3 <sup>rd</sup> Year Maint. | Rs. 3391258.00 | 4 <sup>th</sup> to 10th Year Maint | Rs. 9032715.00 | SMC works in CA Site | Rs.2199050.00 | Earthen Dam | Rs 210620.00 | Total for 50 ha | Rs.32860293.00 | Rupees Three crore twenty eight lakh sixty thousand two hundred ninety three only. |  |
| Advance work,  | Rs 730789.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| Creation   | Rs 9845699.00  |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 1 <sup>st</sup> Year Maint.  | Rs. 3824030.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 2 <sup>nd</sup> Year Maint.  | Rs 3626132.00  |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 3 <sup>rd</sup> Year Maint.  | Rs. 3391258.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 4 <sup>th</sup> to 10th Year Maint   | Rs. 9032715.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| SMC works in CA Site   | Rs.2199050.00  |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| Earthen Dam  | Rs 210620.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| Total for 50 ha  | Rs.32860293.00   |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| Rupees Three crore twenty eight lakh sixty thousand two hundred ninety three only. |  |    |  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
| 6.   | Technical details  | :: | Technical details of compensatory afforestation are as follows   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | a) General Detail:   | :: | Sal & Sal Associate seedlings 1600/Ha  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | b) Spacing   | :: | 2.5x2.5 mtr.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | c) Species:  | :: | Sal & Sal Associate Species  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | d) Nursery technique:  | :: | Seedlings raised in 300 cc hycopot   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | e) Site  | :: | Pit size .60x 60+ 60/2x 60 m3.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | f) Planting method:  | :: | All Sal seedlings of one year Old to be raised in a ratio (60:40 :: Sal Sal Associate)   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | g) SMC work:   | :: | Contour trench in staggered method.  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | h) Protection:   | :: | Barbed wire fencing.   |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | i) Silvicultural Operation   | :: | As per existing working plan prescription  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | j) Maintenance   | :: | As per existing working plan prescription  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |
|  | k) Subsequent silvicultural operation proposed:  | :: | As per existing working plan prescription  |               |              |          |               |                             |                |                             |               |                             |                |                                    |                |                      |               |             |              |                 |                |  |  |

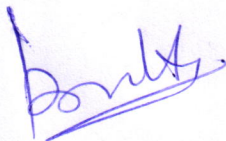
Date  
Place Purulia

  
 Divisional Forest Officer  
 Kangsabati North Division  
 Purulia

**COUNTERSIGNED**  
  
 Chief Conservator of Forests  
 South East Circle, W.B.

**List of other indigenous/Local Species to be planted in CA Plantation over  
50 Ha. of Kangsabati (N) Division including Sal & its associates**


| Sl. No. | Species           |
|---------|-------------------|
| 1.      | Tamarind          |
| 2.      | Dry Sissoo        |
| 3.      | Setisal           |
| 4.      | Maul/ Mahua       |
| 5.      | Kusum             |
| 6.      | Jamun             |
| 7.      | Palas             |
| 8.      | Haritaki          |
| 9.      | Baheda            |
| 10.     | Piasal / Bija Sal |
| 11.     | Odal              |
| 12.     | Karam             |
| 13.     | Kumbhi            |
| 14.     | Gamhar            |
| 15.     | Chalta            |
| 16.     | Dumur             |
| 17.     | Dhaw              |
| 18.     | Asan              |
| 19.     | Arjun             |
| 20.     | Jarul             |
| 21.     | Neem              |
| 22.     | Ber               |
| 23.     | Simul             |
| 24.     | Karanj            |
| 25.     | Siris             |
| 26.     | Mehogini          |
| 27.     | Sida              |
| 28.     | Bamboo            |
| 29.     | Sal               |
| 30.     | Latord            |

  
Chief Conservator of Forests  
South-East Circle, West Bengal

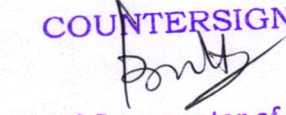
**Abstract of Compensatory Afforestation Cost & SMC Works over 50 ha**

| Sl. No. |   | Work Details                              | Cost            |
|---------|---|---|-----------------|
| 1       | Compensatory Afforestation<br>(CA Cost) | Raising seedlings or Advance Nursery work | 730789          |
|         |   | Sal & Associate Plantation Creation       | 9845699         |
|         |   | 1st Year Maintenance                      | 3824030         |
|         |   | 2nd Year Maintenance                      | 3626132         |
|         |   | 3rd Year Maintenance                      | 3391258         |
|         |   | 4th Year Maintenance                      | 1954686         |
|         |   | 5th Year Maintenance                      | 1788395         |
|         |   | 6th Year Maintenance                      | 1565841         |
|         |   | 7th Year Maintenance                      | 1047262         |
|         |   | 8th Year Maintenance                      | 925346          |
|         |   | 9th Year Maintenance                      | 883859          |
|         |   | 10th Year Maintenance                     | 867326          |
|         |   | Earthen Dam                               | 210620          |
|         |   | <b>Total =</b>                            | <b>30661243</b> |
| 2       | Associated SMC Works:                   | SMC work in CA Plantation site            | 2199050         |
|         |   | <b>Grand Total: CA cost</b>               | <b>32860293</b> |

*(Rupees Three crore twenty eight lakh sixty thousand two hundred ninety three) only*

  
**Divisional Forest Officer**  
**Kangsabati North Division**  
**Purulia**

**COUNTERSIGNED**

  
**Chief Conservator of Forests**  
**South East Circle, W.B.**

**SCHEDULE OF ADV. WORKS OF PLTN: Detailed Estimate of Production of Quality Planting Material/Seedlings in Modern Nurseries**

| Sl.   | Particular of Work  | Unit               | Type     | Rate (In Rs.)    |
|---|---|--------------------|----------|------------------|
| <b>Advance Component</b>  |   |                    |          |                  |
| 1   | Cost of making dry and seived leaf Compost inclusive of all costs   | m3                 | Material | 3000.00          |
| 2   | Cost of coarse Sand (Purchase/Collection, Carriage, Loading, Unloading, drying & seiving all inclusive)                           | m3                 | Material | 990.00           |
| 3   | Cost of Burnt Rice Husk/CDM/Vernicompost etc. (Purchase/Collection, Carrsige, Loading, Unloading, drying & seiving all inclusive) | m3                 | Material | 1200.00          |
| 4   | Preparation of potting mixture (Mixing through hand driven Mixture Machine)   | m3                 | Labour   | 588.00           |
| 5   | Disinfection of Root Trainer, Filling and keeping filled Root Trainers on stands  | for 2000 Seedlings | Labour   | 588.00           |
| 6   | Collection of quality Seeds including collection and carriage   | for 2000 Seedlings | Material | 380.00           |
| 7   | Drying, Sorting and Pretreatment of Seeds and sowing in Hygropits   | for 2000 Seedlings | Labour   | 294.00           |
| 8   | Pricking out and transplanting of seedlings in Root Trainers  | for 2000 Seedlings | Labour   | 882.00           |
| 9   | Supply of insecticides, fungicides, micronutrients, disinfectants, etc.   | for 2000 Seedlings | Material | 120.00           |
| 10  | Supply of Seiving nets, water pipes/Can etc.  | for 2000 Seedlings | Material | 80.00            |
| 11  | Watering for 90 days(January to March) including watering in Hygropits and Spraying of Insecticides.                              | for 2000 Seedlings | Labour   | 1176.00          |
| 12  | Sorting-shifting, weeding-cleaning as and when required   | for 2000 Seedlings | Labour   | 588.00           |
| 13  | Contingency   | for 2000 Seedlings | Material | 249.00           |
| Cost of 2000 seedlings /QPM(Department Rate in Rs                       |   |                    |          | 10135.00         |
| A. Cost of 2000 seedlings/QPM(Tender Rate with 10% Contractor's profit) |   |                    |          | 11148.50         |
| B. GST (18% of A;   |   |                    |          | 2006.73          |
| C.Total Cost of Work(A+B)   |   |                    |          | 13155.23         |
| D.Labour Cess (1% of C)   |   |                    |          | 131.55           |
| Grand Total (C+D) per 2000 QPM/Seedling (Tender Rate in Rs.) per Ha     |   |                    |          | 13286.78         |
| Add 10% Contactors profit for tender work (Rs.) =                       |   |                    |          | 1329.00          |
| Grand Total for Tender works with GST (Rs.) =                           |   |                    |          | 14615.78         |
| <b>Grand Total for 50 Ha</b>  |   |                    |          | <b>730789.00</b> |

**COUNTERSIGNED**

Chief Conservator of Forests  
South East Circle, W.B.

*Divisional Forest Officer  
Kangsabati North Division  
Purulia*

**SCHEDULE OF SAL & ASSOCIATED LOCAL NATIVE SPECIES CREATION OF PLANTATION  
(COMPENSATORY AFFORESTATION) WITH SAL**

| Type of Plantation   |   | Sal & Associate      |
|--|---|----------------------|
| Area of CA Land: 50 Ha   |   | 1600                 |
| No. of seedling per Ha   |   | 2.5m x 2.5m          |
| Spacing per ha   |   | 60cm. x 45cm. x 45cm |
| Pit Size   |   |                      |
| SL.  | Particulars of Work   | No. of Mandays       |
| A.   | Labour Component  |                      |
| 1  | Survey and demarcation of the plantation area including GPS Survey by technical Person.   | 2                    |
| 2  | Burning, removing debris & cleaning of the Pit site and making inspection path and Alignment of planting lines and staking the pit positions.   | 32                   |
| 3  | Digging pits (Pit Size = .060 m x .45 m x .45 m)  | 40                   |
| 4  | Alignment and cutting of contour trench of size 0.45m x 0.45m x 5 mt. total 500 m long per ha = 101.25 in 3 in staggered nnumcr.0.5 mt away from another line for easy movement. Trench kiln. to next trench line distance 10 mt. | 20                   |
| 5  | Making of Inspection Path   | 2                    |
| 6  | Cutting of Box trench of size 0.60m x 0.60m x 0.45 mt. total 1200 nos per ha  | 40                   |
| 7  | Digging Cattle proof Trench (50 rmt x 1.35 mt x 1.20 mt)  | 40                   |
| 8  | Filling up of planting pits with dug up pulverized soil, Organic manure, Fungicides, Micro-Nutrients etc and planting.  | 18                   |
| 9  | Half moon trench (0.60 x 0.15 cm x 0.15 cm)   | 30                   |
| 10   | Carriage of seedlings from Stacking site to planting pits   | 14                   |
| 11   | Transplanting of potted seedlings including carriage from field nursery to planting site and staking  | 18                   |
| 12   | 1st time weeding cleaning & mulching with application of fertilizer & vacancy filling   | 18                   |
| 13   | 2nd time weeding cleaning & mulching with application of fertilizer & vacancy filing  | 14                   |
| 14   | 3rd time weeding cleaning & mulching without application of fertilizer & vacancy filling  | 8                    |
| 15   | 4th time weeding cleaning & mulching without application of fertilizer & vacancy filling  | 6                    |
| 16   | Making- fire lines 1.501 . wide all ong the periphery and 1.20 mt. with inside pltn.  | 12                   |
| 17   | Watch Ward from Sep to March  | 60                   |
| 18   | Sorting, Shifting, Weeding, cleaning and watering of seedlings in nursery (April-June)  | 15                   |
| 19   | Application of insecticide / Organic manure to the planted seedings   | 4                    |
| 20   | Vacancy filling with potted seedlings   | 6                    |
| 21   | Application organic manure as per doses prescriber per pit  | 5                    |
| 22   | Sowing of Arhar seeds as nurse crop on the ridges of dug up soil along the continous trenches   | 2                    |
| 23   | Watering to seedlings during dry spell  | 6                    |
| <b>Total Mandays (Nos.)=</b>                                     |   | <b>412</b>           |
| X.   | <b>Cost of Labour Component @ Rs.294/MD for Departmental Work Rs.) =</b>  | <b>121128</b>        |
| <b>Add GST.18% (SAC Code: 998519) for Tender Work (Rs.) =</b>    |   | <b>21803</b>         |
| <b>Cost of Labour Component for tender work with GST (Rs.) =</b> |   | <b>142931</b>        |
| B.   | <b>Material Cost (Rs.)</b>  |                      |
| 1  | Signages (GST :18%)   | 590                  |
| 2  | Barbed wire fencing (GST : 18%)   | 22000                |
| 3  | Chemical Fertilizer @ 50 gm DAP/Plant (GST : 5%)  | 2625                 |
| 4  | Insecticides / Hormones (GST : 18%)   | 590                  |
| 5  | Organic manure (GST : 0%)   | 2200                 |
| 6  | Carriage of Seedlings and fertilizer by Truck / vehicle etc.(GST : 18%) upto Stacking site  | 2950                 |
| 7  | Cost of Arhar seeds (GST : 0%)  | 1000                 |
| Y.   | <b>Total Material Cost without Labour Cess (Rs.) =</b>  | <b>30365</b>         |
| X.   | <b>Cost of Labour Component for tender work with GST (Rs.) =</b>  | <b>142931</b>        |
| Z.   | <b>Total Cost (X + Y) =</b>   | <b>173296</b>        |
| Contingencies 3 %  |   | 4288                 |
| Labour Cess 1%   |   | 1429                 |
| <b>Total =</b>   |   | <b>179013</b>        |
| Add 10% Contactors profit (Rs.) =                                |   | 17901                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.).</b>               |   | <b>196914</b>        |
| <b>Total for 50 Ha. Plantation</b>                               |   | <b>9845699</b>       |

(Rupees Ninety eight lakh forty five thousand six hundred ninety nine) only

**COUNTERSIGNED**

Chief Conservator of Forests  
South East Circle, W.B.

Divisional Forest Office  
Kangsabati North Division  
Parulia



**SCHEDULE OF SAL & ASSOCIATED LOCAL NATIVE SPECIES CREATION OF PLANTATION  
(COMPENSATORY AFFORESTATION) WITH SAL**

| Type of Plantation   |  | Sal & Associate      |
|--|--|----------------------|
| Area of CA Land: 50 Ha   |  | 1600                 |
| No. of seedling per Ha   |  | 2.5m x 2.5m          |
| Spacing per ha   |  | 60cm. x 45cm. x 45cm |
| Pit Size   |  |                      |
| SL.  | Particulars of Work  |                      |
| A.   | Labour Component   | No. of Mandays       |
| 1  | Survey and demarcation of the plantation area including GPS Survey by technical Person.  | 2                    |
| 2  | Burning, removing debris & cleaning of the Pit site and making inspection path and Alignment of planting lines and staking the pit positions.  | 32                   |
| 3  | Digging pits (Pit Size = .060 m x .45 m x .45 m)   | 40                   |
| 4  | Alignment and cutting of contour trench of size 0.45m x 0.45m x 5 mt. total 500 m long per ha= 101.25 in3 in staggered numcr.0.5 mt away from another line for easy movement. Trench kiln: to next trench line distance 10 mt. | 20                   |
| 5  | Making of Inspection Path  | 2                    |
| 6  | Cutting of Box trench of size 0.60m x 0.60m x 0.45 mt. total 1200 nos per ha   | 40                   |
| 7  | Digging Cattle proof Trench (50 rmt x 1.35 mt x 1.20 mt)   | 40                   |
| 8  | Filling up of planting pits with dug up pulverized soil, Organic manure, Fungicides, Micro-Nutrients etc and planting  | 18                   |
| 9  | Carriage of seedlings from Stacking site to planting pits  | 14                   |
| 10   | Transplanting of potted seedlings including carriage from field nursery to planting site and staking   | 18                   |
| 11   | 1st time weeding cleaning & mulching with application of fertilizer & vacancy filling  | 18                   |
| 12   | 2nd time weeding cleaning & mulching with application of fertilizer & vacancy filing   | 14                   |
| 13   | 3rd time weeding cleaning & mulching without application of fertilizer & vacancy filling   | 8                    |
| 14   | 4th time weeding cleaning & mulching without application of fertilizer & vacancy filling   | 6                    |
| 15   | Making- fire lines 1.501 . wide all ong the periphery and 1.20 mt. with inside pltn.   | 12                   |
| 16   | Watch Ward from Sep to March   | 60                   |
| 17   | Sorting, Shifting , Weeding, cleaning and watering of seedlings in nursery (April-June)  | 15                   |
| 18   | Application of insecticide / Organic manure to the planted seedings  | 4                    |
| 19   | Vacancy filling with potted seedlings  | 6                    |
| 20   | Application organic manure as per dossen prescriber per pit  | 5                    |
| 21   | Sowing of Arhar seeds as nurse crop on the ridges of dug up soil along the continous trenches  | 2                    |
| 22   | Watering to seedlings during dry spell   | 6                    |
| <b>Total Mandays (Nos.)=</b>                                     |  | <b>382</b>           |
| X.   | <b>Cost of Labour Component @ Rs.294/MD for Departmental Work Rs.) =</b>   | <b>112308</b>        |
| <b>Add GST.18% (SAC Code: 998519) for Tender Work (Rs.) =</b>    |  | <b>20215</b>         |
| <b>Cost of Labour Component for tender work with GST (Rs.) =</b> |  | <b>132523</b>        |
| B.   | <b>Material Cost (Rs.)</b>   |                      |
| 1  | Signages (GST :18%)  | 590                  |
| 2  | Chemical Fertilizer @ 50 gm DAP/Plant (GST : 5%)   | 2625                 |
| 3  | Insecticides / Hormones (GST : 18%)  | 590                  |
| 4  | Organic manure (GST : 0%)  | 2200                 |
| 6  | Carriage of Seedlings and fertilizer by Truck / vehicle etc.(GST : 18%) upto Stacking site   | 2950                 |
| 7  | Cost of Arhar seeds (GST : 0%)   | 1000                 |
| Y.   | <b>Total Material Cost without Labour Cess (Rs.) =</b>   | <b>8955</b>          |
| X.   | <b>Cost of Labour Component for tender work with GST (Rs.) =</b>   | <b>132523</b>        |
| Z.   | <b>Total Cost (X + Y) =</b>  | <b>141478</b>        |
| Contingencies 3 %  |  | 3976                 |
| Labour Cess 1%   |  | 1325                 |
| <b>Total =</b>   |  | <b>146779</b>        |
| Add 10% Contactors profit (Rs.) =                                |  | 14678                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.).</b>               |  | <b>161457</b>        |
| <b>Total for 50 Ha. Plantation</b>                               |  | <b>8072857</b>       |

(Rupees Eighty lakh seventy two thousand eight hundred fifty seven) only

**COUNTERSIGNED**

Chief Conservator of Forests  
South East Circle, W.B.

Divisional Forest Office  
Kangsabati North Division  
Purulia

**SCHEDULE FOR 1ST YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) OVER 50 HA.**

| Type of plantation  |   | SAL SB           |
|---|---|------------------|
| No of seedlings per ha  |   | 1600             |
| Spacing per ha  |   | 2.5m x 2.5m      |
| Sl. No.   | Particulars of Work   |                  |
| <b>A. Labour Component</b>  |   |                  |
| 1   | Vacancy infilling and transport of seedlings  | 6                |
| 2   | 1st weeding, cleaning, mulching, with application of fertilizer   | 16               |
| 3   | 2nd weeding, cleaning, mulching   | 14               |
| 4   | 3rd weeding, cleaning, mulching   | 6                |
| 5   | Cutting of Firelines (3m wide)  | 12               |
| 6   | Watch & Ward  | 60               |
| 7   | Application of insecticide and Organic Manure   | 8                |
| 8   | Repairing of CPT, Contour Trench and Box Trench & fencing   | 30               |
| 9   | Raising of seedlings for infilling  | 12               |
| 10  | Watering to seedlings during dry spell  | 5                |
| <b>Total Mandays (Nos.).</b>  |   | <b>169</b>       |
| X.  | <b>Cost of Labour Component @ Rs.304/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment)</b> | <b>51376.00</b>  |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs).</b> |   | <b>9247.68</b>   |
| <b>Cost of labour Component for tender work with GST Ms.).</b>      |   | <b>60623.68</b>  |
| <b>B. Material Cost (Rs.)</b>                                       |   |                  |
| 1   | Transport of seedling/fertilizer/water tanker (GST: 18%)  | 3540.00          |
| 2   | Cost of fertilizer, cowdung manure etc (GST: 5%)  | 2100.00          |
| 3   | Cost of Insecticide (GST: 18%)  | 590.00           |
| Y.  | <b>Total Material Cost without Labour Cess (Rs.) =</b>  | <b>6230.00</b>   |
| X.  | <b>Cost of Labour Component for tender work with GST (Rs.) =</b>  | <b>60623.68</b>  |
| Z.  | <b>Total Cost (X + Y) =</b>   | <b>66853.68</b>  |
| 4   | Contingency 3%  | 2005.61          |
| 5   | Labour Cess 1%  | 668.54           |
| <b>Total =</b>  |   | <b>69,528</b>    |
| <b>Add 10% Contractors profit (Rs.) =</b>                           |   | <b>6,953</b>     |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                 |   | <b>76,481</b>    |
| <b>Total for 50 Ha. Plantation</b>                                  |   | <b>38,24,030</b> |

*(Rupees Thirty eight lakh twenty four thousand thirty only)*

*Divisional Forest Officer  
Kangsabati North Division  
Purulia*

**COUNTERSIGNED**

*Chief Conservator of Forests  
South East Circle, W.B.*

| SCHEDULE FOR 2ND YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |   |                  |
|--|---|------------------|
| Type of plantation   |   |                  |
|  |   | <b>SAL SB</b>    |
| No of seedlings per ha   |   | 1600             |
| Spacing per ha   |   | 2.5m x 2.5m      |
| Sl. No.  | Particulars of Work   |                  |
| <b>A. Labour Component</b>   |   |                  |
| 1  | Vacancy infilling and transport of seedlings  | 6                |
| 2  | 1st weeding, cleaning, mulching, with application of fertilizer   | 16               |
| 3  | 2nd weeding, cleaning, mulching   | 12               |
| 5  | Cutting of Firelines (3m wide)  | 12               |
| 6  | Watch & Ward  | 60               |
| 7  | Application of insecticide and Organic Manure   | 6                |
| 8  | Repairing of CPT, Contour Trench and Box Trench & fencing   | 25               |
| 9  | Raising of seedlings for infilling  | 10               |
| 10   | Watering to seedlings during dry spell  | 5                |
| <b>Total Mandays (Nos.).</b>   |   | <b>152</b>       |
| <b>X.</b>  | <b>Cost of Labour Component @ Rs.322/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment)</b> | <b>48944.00</b>  |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs.).</b>         |   | <b>8809.92</b>   |
| <b>Cost of labour Component for tender work with GST Ms.).</b>               |   | <b>57753.92</b>  |
| <b>B. Material Cost (Rs.)</b>  |   |                  |
| 1  | Transport of seedling/fertilizer /water tanker (GST: 18%)   | 2950.00          |
| 2  | Cost of fertilizer, cowdung manure etc (GST: 5%)  | 2100.00          |
| 3  | Cost of Insecticide (GST: 18%)  | 590.00           |
| <b>Y.</b>  | <b>Total Material Cost without Labour Cess (Rs.) =</b>  | <b>5640.00</b>   |
| <b>X.</b>  | <b>Cost of Labour Component for tender work with GST (Rs.) =</b>  | <b>57753.92</b>  |
| <b>Z.</b>  | <b>Total Cost (X + Y) =</b>   | <b>63393.92</b>  |
| 4  | Contingency 3%  | 1901.82          |
| 5  | Labour Cess 1%  | 633.94           |
| <b>Total =</b>   |   | <b>65,930</b>    |
| Add 10% Contactors profit (Rs.) =  |   | 6,593            |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                          |   | <b>72,523</b>    |
| <b>Total for 50 Ha. Plantation</b>   |   | <b>36,26,132</b> |

(Rupees Thirty six lakh twenty six thousand one hundred thirty two) only

*[Signature]*  
**Divisional Forest Officer**  
**Kangsabati North Division**  
**Purulia**

**COUNTERSIGNED**

*[Signature]*  
**Chief Conservator of Forests**  
**South East Circle, W.B.**

| SCHEDULE FOR 3RD YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |   |                  |
|--|---|------------------|
| Type of plantation   |   |                  |
|  |   | <b>SAL SB</b>    |
| No of seedlings per ha   |   | 1600             |
| Spacing per ha   |   | 2.5m x 2.5m      |
| <b>Sl. No.</b>   | <b>Particulars of Work</b>  |                  |
| <b>A. Labour Component</b>   |   |                  |
| 1  | Vacancy infilling and transport of seedlings  | 4                |
| 2  | 1st weeding, cleaning, mulching, with application of fertilizer   | 14               |
| 3  | 2nd weeding, cleaning, mulching   | 12               |
| 4  | Cutting of Firelines (3m wide)  | 12               |
| 5  | Watch & Ward  | 60               |
| 6  | Application of insecticide  | 3                |
| 7  | Repairing of CPT, Contour Trench and Box Trench & fencing   | 20               |
| 8  | Raising of seedlings for infilling  | 8                |
| 9  | Watering to seedlings during dry spell  | 4                |
| <b>Total Mandays (Nos.).</b>   |   | <b>137</b>       |
| <b>X.</b>  | <b>Cost of Labour Component @ Rs.342/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment)</b> | <b>46854.00</b>  |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs).</b>          |   | <b>8433.72</b>   |
| <b>Cost of labour Component for tender work with GST Ms.).</b>               |   | <b>55287.72</b>  |
| <b>B. Material Cost (Rs.)</b>  |   |                  |
| 1  | Transport of seedling/fertilizer /water tanker (GST: 18%)   | 2360.00          |
| 2  | Cost of fertilizer (GST: 5%)  | 1050.00          |
| 3  | Cost of Insecticide (GST: 18%)  | 590.00           |
| <b>Y.</b>  | <b>Total Material Cost without Labour Cess (Rs.) =</b>  | <b>4000.00</b>   |
| <b>X.</b>  | <b>Cost of Labour Component for tender work with GST (Rs.) =</b>  | <b>55287.72</b>  |
| <b>Z.</b>  | <b>Total Cost (X + Y) =</b>   | <b>59287.72</b>  |
| 4  | Contingency 3%  | 1778.63          |
| 5  | Labour Cess 1%  | 592.88           |
| <b>Total =</b>   |   | <b>61,659</b>    |
| <b>Add 10% Contactors profit (Rs.) =</b>                                     |   | <b>6,166</b>     |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                          |   | <b>67,825</b>    |
| <b>Total for 50 Ha. Plantation</b>   |   | <b>33,91,258</b> |

(Rupees Thirty three lakh ninety one thousand two hundred fifty eight) only

*[Signature]*  
**Divisional Forest Officer**  
**Kangsabati North Division**  
**Purulia**

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*[Signature]*  
**Chief Conservator of Forests**  
**South East Circle, W.B.**

**SCHEDULE FOR 4TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation   |   | SAL SB         |
|--|---|----------------|
| No of seedlings per ha   |   | 1600           |
| Spacing per ha   |   | 2.5m x 2.5m    |
| SL.  | Particulars of Work   |                |
| <b>A. Labour Component</b>                                     |   |                |
| 1  | 1st weeding, cleaning, mulching, without application of fertilizer  | 12             |
| 2  | 2nd weeding, cleaning   | 8              |
| 3  | Watch & Ward  | 30             |
| 4  | Repairing of CPT, Contour Trench and Box Trench & fencing   | 20             |
| 5  | Cutting of Firelines (3m wide)  | 10             |
| <b>Total Mandays (Nos.).</b>                                   |   | <b>80</b>      |
| X.   | Cost of Labour Component @ Rs.362/MD for Departmental Work (Rs.)(Wage rate has been assumed predicting 6% annual increment) | 28960          |
| Add GST.18% (sec Code.: 991579) for Tender Work over X         |   | 5213           |
| <b>Cost of labour Component for tender work with GST Ms.).</b> |   | <b>34173</b>   |
| 1  | Contingency 3%  | 1025           |
| 2  | Labour Cess 1%  | 342            |
| <b>TOTAL</b>   |   | <b>35540</b>   |
| Add 10% Contractors Profit (Rs.) =                             |   | 3554           |
| <b>Grand Total with GST (Rs.) =</b>                            |   | <b>39094</b>   |
| <b>Total for 50 Ha. Plantation</b>                             |   | <b>1954686</b> |

*(Rupees Nineteen lakh fifty four thousand six hundred eighty six) only*

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer  
Kangsabati North Division  
Purulia

**SCHEDULE FOR 5TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation                                      |  | SAL SB         |
|---|--|----------------|
| No of seedlings per ha                                  |  | 1600           |
| Spacing per ha  |  | 2.5m x 2.5m    |
| SL.   | Particulars of Work  |                |
| A.  | Labour Component   |                |
| 1   | 1st weeding, cleaning  | 8              |
| 2   | 2nd weeding, cleaning  | 6              |
| 3   | Watch & Ward   | 25             |
| 4   | Repairing of CPT, Contour Trench and Box Trench & fencing  | 20             |
| 5   | Cutting of Firelines (3m wide)   | 10             |
| <b>Total Mandays (Nos.).</b>                            |  | <b>69</b>      |
| X.  | Cost of Labour Component @ Rs.384/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 26496.00       |
| Add GST.18% (sec Code.: 991579) for Tender Work over X  |  | 4769           |
| Cost of labour Component for tender work with GST Ms.). |  | 31265          |
| 1   | Contingency 3%   | 938            |
| 2   | Labour Cess 1%   | 313            |
| <b>TOTAL =</b>  |  | <b>32516</b>   |
| Add 10% Contractors Profit (Rs.) =                      |  | <b>3252</b>    |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>     |  | <b>35768</b>   |
| <b>Total for 50 Ha. Plantation =</b>                    |  | <b>1788395</b> |

*(Rupees Seventeen lakh eighty eight thousand three hundred ninety five) only*

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer  
Kangsabati North Division  
Purulia

**SCHEDULE FOR 6TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation   |   | SAL SB          |
|--|---|-----------------|
| No of seedlings per ha   |   | 1600            |
| Spacing per ha   |   | 2.5m x 2.5m     |
| SL.  | Particulars of Work   |                 |
| <b>A. Labour Component</b>                                     |   |                 |
| 1  | 1st weeding, cleaning   | 8               |
| 2  | 2nd weeding, cleaning   | 6               |
| 3  | Watch & Ward  | 25              |
| 4  | Repairing of CPT, Contour Trench and Box Trench & fencing   | 18              |
| <b>Total Mandays (Nos.).</b>                                   |   | <b>57</b>       |
| X.   | <b>Cost of Labour Component @ Rs.407/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment)</b> | <b>23199.00</b> |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X</b>  |   | <b>4176</b>     |
| <b>Cost of labour Component for tender work with GST Ms.).</b> |   | <b>27375</b>    |
| 1  | Contingency 3%  | 821             |
| 2  | Labour Cess 1%  | 274             |
| <b>TOTAL =</b>   |   | <b>28470</b>    |
| <b>Add 10% Contractors Profit (Rs.) =</b>                      |   | <b>2847</b>     |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>            |   | <b>31317</b>    |
| <b>Total for 50 Ha. Plantation =</b>                           |   | <b>1565841</b>  |

*(Rupees Fifteen lakh sixty five thousand eight hundred forty one) only*

*[Signature]*  
**Divisional Forest Officer**  
**Kangsabati North Division**  
**Purulia**

**COUNTERSIGNED**

*[Signature]*  
**Chief Conservator of Forests**  
**South East Circle, W.B.**

**SCHEDULE FOR 7TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation                                      |  | SAL SB         |
|---|--|----------------|
| No of seedlings per ha                                  |  | 1600           |
| Spacing per ha  |  | 2.5m x 2.5m    |
| SL.   | Particulars of Work  |                |
| A.  | Labour Component   |                |
| 1   | 1st weeding, cleaning  | 6              |
| 2   | 2nd weeding, cleaning  | 5              |
| 3   | Watch & Ward   | 25             |
| <b>Total Mandays (Nos.).</b>                            |  | <b>36</b>      |
| X.  | Cost of Labour Component @ Rs.431/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 15516.00       |
| Add GST.18% (sec Code.: 991579) for Tender Work over X  |  | 2793           |
| Cost of labour Component for tender work with GST Ms.). |  | 18309          |
| 1   | Contingency 3%   | 549            |
| 2   | Labour Cess 1%   | 183            |
| <b>TOTAL =</b>  |  | <b>19041</b>   |
| Add 10% Contractors Profit (Rs.) =                      |  | <b>1904</b>    |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>     |  | <b>20945</b>   |
| <b>Total for 50 Ha. Plantation</b>                      |  | <b>1047262</b> |

*(Rupees Ten lakh forty seven thousand two hundred sixty two) only*

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer  
Kangsabati North Division  
Purulia



**SCHEDULE FOR 8TH YEAR MAINTENANCE OF PLANTATIONS (COMPENSATORY AFFORESTATION)**

| Type of plantation   |   | SAL SB        |
|--|---|---------------|
| No of seedlings per ha   |   | 1600          |
| Spacing per ha   |   | 2.5m x 2.5m   |
| SL.  | Particulars of Work   |               |
| A.   | Labour Component  |               |
| 1  | 1st weeding, cleaning   | 6             |
| 2  | 2nd weeding, cleaning   | 4             |
| 3  | Watch & Ward  | 20            |
| <b>Total Mandays (Nos.).</b>                                   |   | <b>30</b>     |
| X.   | Cost of Labour Component @ Rs.457/MD for Departmental Work (Rs.)(Wage rate has been assumed predicting 6% annual increment) | 13710.00      |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X</b>  |   | <b>2468</b>   |
| <b>Cost of labour Component for tender work with GST Ms.).</b> |   | <b>16178</b>  |
| 1  | Contingency 3%  | 485           |
| 2  | Labour Cess 1%  | 162           |
| <b>TOTAL =</b>   |   | <b>16825</b>  |
| <b>Add 10% Contractors Profit (Rs.) =</b>                      |   | <b>1682</b>   |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>            |   | <b>18507</b>  |
| <b>Total for 50 Ha. Plantation</b>                             |   | <b>925346</b> |

*(Rupees Nine lakh twenty five thousand three hundred forty six) only*

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
for South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer  
Kangsabati North Division  
Purulia

**SCHEDULE FOR 9TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation                                      |  | SAL SB      |
|---|--|-------------|
| No of seedlings per ha                                  |  | 1600        |
| Spacing per ha  |  | 2.5m x 2.5m |
| SL.   | Particulars of Work  |             |
| A.  | Labour Component   |             |
| 1   | 1st weeding, cleaning  | 5           |
| 2   | 2nd weeding, cleaning  | 4           |
| 3   | Watch & Ward   | 18          |
| <b>Total Mandays (Nos.).</b>                            |  | 27          |
| X.  | Cost of Labour Component @ Rs.485/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 13095.00    |
| Add GST.18% (sec Code.: 991579) for Tender Work over X  |  | 2357        |
| Cost of labour Component for tender work with GST Ms.). |  | 15452       |
| 1   | Contingency 3%   | 464         |
| 2   | Labour Cess 1%   | 155         |
| <b>TOTAL =</b>  |  | 16070       |
| Add 10% Contractors Profit (Rs.) =                      |  | 1607        |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>     |  | 17677       |
| <b>Total for 50 Ha. Plantation</b>                      |  | 883859      |

*(Rupees Eight lakh eighty three thousand eight hundred fifty nine) only*

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer  
Kangsabati North Division  
Purulia

| <b>SCHEDULE FOR 10TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)</b> |   |                 |
|--|---|-----------------|
| <b>Type of plantation</b>  |   | <b>SAL SB</b>   |
| <b>No of seedlings per ha</b>  |   | 1600            |
| <b>Spacing per ha</b>  |   | 2.5m x 2.5m     |
| <b>SL.</b>   | <b>Particulars of Work</b>  |                 |
| <b>A.</b>  | <b>Labour Component</b>   |                 |
| 1  | 1st weeding, cleaning   | 5               |
| 2  | 2nd weeding, cleaning   | 4               |
| 3  | Watch & Ward  | 16              |
| <b>Total Mandays (Nos.).</b>   |   | <b>25</b>       |
| <b>X.</b>  | <b>Cost of Labour Component @ Rs.514/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment)</b> | <b>12850.00</b> |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X</b>                        |   | <b>2313</b>     |
| <b>Cost of labour Component for tender work with GST Ms.).</b>                       |   | <b>15163</b>    |
| 1  | Contingency 3%  | 455             |
| 2  | Labour Cess 1%  | 152             |
| <b>TOTAL =</b>   |   | <b>15770</b>    |
| <b>Add 10% Contractors Profit (Rs.) =</b>  |   | <b>1577</b>     |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                                  |   | <b>17347</b>    |
| <b>Total for 50 Ha. Plantation</b>   |   | <b>867326</b>   |

(Rupees Eight lakh sixty seven thousand three hundred twenty six) only

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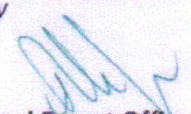
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**Chief Conservator of Forests**  
**South East Circle, W.B**

*[Signature]*  
**Divisional Forest Officer**  
**Kangsabati North Division**  
**Purulia**


## Model Estimates of Cutting Contour Trench over 50 ha

| SL No.  | Item of Works   | unit | Quantity | Mandays | Rate | Amount            |
|---|---|------|----------|---------|------|-------------------|
| <b>A</b>  | <b>Labour Cost</b>  |      |          |         |      |                   |
| 1   | Contour Survey  | Ha   | 1        | 25      | 294  | 7350              |
| 2   | Earth work in contour trench in plantatio of 5m x 0.30m x 0.30 m each x 400 mtr i.e 180 m3 with lift beyond 4m and upto 4.5 m from trench | M3   | 45       | 120     | 294  | 35280             |
| <b>Sub Total : Mandays cost per 1 ha. =</b>           |   |      |          |         |      | <b>42630.00</b>   |
| <b>Total Mandays cost per 50 ha =</b>                 |   |      |          |         |      | <b>2131500.00</b> |
| SL No.  | Item of Works   | unit | Quantity | Mandays | Rate | Amount            |
| <b>A</b>  | <b>Material Cost</b>  |      |          |         |      |                   |
| 1   | Cost for display board  | No   | 1        |         | 3500 | 3500              |
| <b>Sub Total : for Material Cost =</b>                |   |      |          |         |      | <b>3500.00</b>    |
| <b>Grand Total for (Labour+Material) over 50 ha =</b> |   |      |          |         |      | <b>2135000.00</b> |
| <b>Add Contingency 3% =</b>                           |   |      |          |         |      | <b>64050.00</b>   |
| <b>Grand Total over 50 ha =</b>                       |   |      |          |         |      | <b>2199050.00</b> |

*(Rupees Twenty one lakh ninety nine thousand fifty) only*

  
 Divisional Forest Officer  
 Kangsabati North Division  
 Purulia

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 Chief Conservator of Forests  
 South East Circle, W.B.

**Model Estimate for Earthen Dam**

| Sl No                                   | Description of item  | All dimension are in m |       |       |      | Quantity | Total Quantity | Unit | Rate                | Total Amount     |
|---|--|------------------------|-------|-------|------|----------|----------------|------|---------------------|------------------|
|   |  | No                     | L     | B     | H    |          |                |      |                     |                  |
| R&B P-230, It no - 2.03                 | Clearing grass and removal of rubbish up to a distance of 30 m outside the periphery of the area as per Technical Specifications Clause 201 for Rural Roads of MORD. By Manual Means 1x.30x.15   |                        |       |       |      | 0.045    | 0.045          | hect | 11868.00            | 534.06           |
| Road & Bridge, P-                       | Earthwork in excavation from borrow pits (land owned/ arranged by the core wall portion)   | 1                      | 25.75 | 1.1   | 0.41 | 11.61325 |                |      |                     |                  |
|   | pitching for D/S   | 1                      | 25.75 | 2.25  | 0.41 | 23.75438 |                |      |                     |                  |
|   | Spillway   | 1                      | 3     | 3.5   | 0.41 | 4.305    | 39.67263       | m3   | 99.90               | 3963.295238      |
| Road & Bridge, P-                       | Providing and laying boulders apron on river bed for protection against scour  |                        |       |       |      |          |                |      |                     |                  |
|   | D/S of Earthen Dam   | 1                      | 25.75 | 2.25  | 1    | 57.9375  |                |      |                     |                  |
|   | Core wall base   | 1                      | 25.75 | 1.1   | 0.41 | 11.61325 |                |      |                     |                  |
|   | spillway   | 1                      | 3     | 3.5   | 0.41 | 4.305    | 73.85575       | m3   | 493                 | 36410.88475      |
| spillway & Bridge, P-326, It 18.32(b) 1 | Masonry work with rough dressed Stones of size as directed with cement mortar, true to line, level and shape, including dressing and shaping boulders to size as required, curing complete including cost and carriage of all materials complete.(b) With cement-sand mortar 1 : 4 ( 1) Upto height 4.0 m  |                        |       |       |      |          |                |      |                     |                  |
|   | core well  | 25.8                   | 0.5   | 2     | 2.1  | 54.075   | 54.075         | m3   | 1781.00             | 96307.575        |
| Road & Bridge, P-234, It-3.02(i)        | Earthwork in excavation from borrow pits (land owned/ arranged by the Department) and depositing in layers of 250 mm. including breaking clods in embankment works and to fill up back of abutments, depressions and ruts with an initial lead up to 50 m and initial lift up to 1.5 m making bunds at top as  |                        |       |       |      |          |                |      |                     |                  |
|   | i) Earthen Dam (7.5=(5+10)/2)  | 1                      | 25.75 | 7.5   | 1    | 193.125  |                |      |                     |                  |
|   | ii) lift 1.5 m to 2.5 m (3.5=(2+5)/2)  | 1                      | 25.75 | 3.5   | 0.8  | 72.1     |                |      |                     |                  |
|   | iii) Deduction for   | -25.8                  | 0.5   | 2     | 1    | -25.75   | 239.475        | m3   | 99.09               | 23729.57775      |
| P-234, It-3.02(i)                       | (ii) Beyond 50 m & up to total lead of 200 m. Volume= 25% Of total Quantity.   |                        |       |       |      |          | 59.86875       | m3   | 37.50               | 2245.078125      |
| P-234, It-3.02(ii)                      | (iii) Beyond 200 m & up to total lead of 300 m Volume = 35% of Total Quantity  |                        |       |       |      |          | 83.81625       | m3   | 30.00               | 2514.4875        |
| Road & Bridge, P-237, It 3.17(b)        | B. Compacting original ground supporting embankment Loosening, Leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Tables 300.1 and 300.2 for embankment construction as per Clause 305.3.4 of Specifications for Road & Bridge Works of MoRT&H (5th Revision). |                        |       |       |      | 239.475  | 239.475        | m3   | 24.10               | 5771.3475        |
| Road & Bridge, P-                       | Turfing with Sods Furnishing and laying of the live sods of perennial turf forming   | 1                      | 25.75 | 10.54 |      | 271.405  | 271.405        | m2   | 17.60               | 4776.728         |
|   | Contingency  |                        |       |       |      |          |                |      |                     | 738.97           |
|   |  |                        |       |       |      |          |                |      | <b>TOTAL AMOUNT</b> | <b>176992.00</b> |
|   |  |                        |       |       |      |          |                |      | C. GST 9%           | 15929.28         |
|   |  |                        |       |       |      |          |                |      | S. GST 9%           | 15929.28         |
|   |  |                        |       |       |      |          |                |      | Cess 1%             | 1769.92          |
|   |  |                        |       |       |      |          |                |      | <b>Total</b>        | <b>210620.48</b> |
|   |  |                        |       |       |      |          |                |      | <b>Grand Total</b>  | <b>210620.00</b> |

**COUNTERSIGNED**

Chief Conservator of Forests  
South East Circle, W.B.

Divisional Forest Officer  
Kangsabati North Division  
Purulia

**Scheme for Compensatory Afforestation under Purulia Division, over 26.76 Ha Area.**

Detailed Scheme of Compensatory Afforestation over 26.76 ha. under Joypur Range, Purulia Division.

|    |   |  |                    |
|----|---|--|--------------------|
| 1. | Details degraded Forest Land:   |  |                    |
|    | (1) District :  | Purulia  |                    |
|    | Name of Forest Division:  | Purulia Division   |                    |
|    | Block/ Compartment/ Survey No./ Mouza   | Range-Joypur, Mouza- Bangidiri, JL No.36, Plot No. 1535, Area- 15 Ha & Mouza- Kalikapur, JL No. 35, Plot No. 56, Area- 11.76 Ha.                                       |                    |
|    | Village   | Bangidiri & Kalikapur.   |                    |
|    | Area to be Afforested   | 26.76 ha.  |                    |
| 2. | Description of the Area   |  |                    |
|    | Soil Type   | Lateritic  |                    |
|    | Topography  | More or less plain   |                    |
|    | Whether the area bearing any rock stock   | Unwanted weeds   |                    |
| 3. | Name of the Plantation Programme  | Plantation of Miscellaneous species with 1600 nos. seedlings per ha.   |                    |
| 4. | Schedule of Plantation Programme  | The Compensatory Afforestation on degraded forest land would be started by the Divisional Forest Officer as early as possible after the proposal is formally approved. |                    |
| 5. | Details of year-wise break up of requirement of fund is as under wage rate Rs. 294.00 which may be increased as per existing labour rate. | Advance work,  | Rs. 3,55,554.00    |
|    |   | Creation   | Rs.30,67,579.00    |
|    |   | 1 <sup>st</sup> Year Maint.  | Rs.17,00,988.00    |
|    |   | 2 <sup>nd</sup> Year Maint.  | Rs.15,71,628.00    |
|    |   | 3 <sup>rd</sup> Year Maint.  | Rs.14,15,760.00    |
|    |   | 4 <sup>th</sup> to 10 <sup>th</sup> Year Maint.  | Rs.39,46,072.00    |
|    |   | SMC works in CA Site   | Rs.30,14,395.00    |
|    |   | Total for 26.76 ha   | Rs. 1,50,71,976.00 |
|    |   | Rupees One Crore Fifty Lakh Seventy One Thousand Nine Hundred Seventy Six only.  |                    |
| 6. | Technical details   | Technical details of compensatory afforestation are as follows   |                    |
|    | a) General Detail:  | Miscellaneous seedlings 1600/Ha  |                    |
|    | b) Spacing :  | 2.5x2.5 mt.  |                    |
|    | c) Species:   | Jam, Arjun, Sirish, Kusum, Amlaki, Mahul, Piasal, Karam, Karanj, Chalta etc.   |                    |
|    | d) Nursery technique:   | Seedlings raised in 300 cc hycopot   |                    |
|    | e) Size   | Pit size .60x.60+.60/2x.60 m3.   |                    |
|    | f) Planting method:   | All Miscellaneous seedlings of one year Old to be raised   |                    |
|    | g) SMC work:  | Contour trench in staggered method.  |                    |
|    | h) Protection:  | Barbed wire fencing.   |                    |
|    | i) Silvicultural Operation  | As per existing working plan prescription.   |                    |
|    | j) Maintenance:   | As per existing working plan prescription.   |                    |
|    | k) Subsequent silvicultural operation proposed:   | As per existing working plan prescription.   |                    |

Date: 29/04/2023

Place: Purulia.

*G. Karan*  
Divisional Forest Officer,  
Purulia Division.

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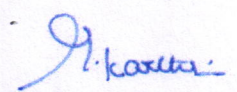
*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

ANNEXURE - 1

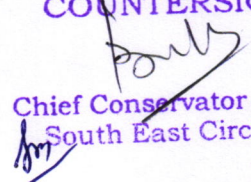
List to be Planted in CA Plantation at Joypur Range over 26.76 ha at Bangidiri & Kalikapur Mouza

| Sl. No. | Species          |
|---------|------------------|
| 1       | Tamarind         |
| 2       | Dry Sissoo       |
| 3       | Setisal          |
| 4       | Maul / Mahua     |
| 5       | Kusum            |
| 6       | Jamun            |
| 7       | Palas            |
| 8       | Haritaki         |
| 9       | Baheda           |
| 10      | Piasal/ Bija Sal |
| 11      | Odal             |
| 12      | Karam            |
| 13      | Kumbhi           |
| 14      | Gamhar           |
| 15      | Chalta           |
| 16      | Dumur            |
| 17      | Dhaw             |
| 18      | Asan             |
| 19      | Arjun            |
| 20      | Jarul            |
| 21      | Neem             |
| 22      | Ber              |
| 23      | Simul            |
| 24      | Karanj           |
| 25      | Siris            |
| 26      | Mehogini         |
| 27      | Sida             |

28. Bambo  
29. Sal  
30. latore

  
Divisional Forest Officer  
Purulia Division

COUNTERSIGNED

  
Chief Conservator of Forests  
South East Circle, W.B.

**SCHEDULE OF ADV. WORKS OF PLTN: Detailed Estimate of Production of Quality  
Planting Material/Seedlings in Modern Nurseries**

**FY 2023-24**

| Sl.   | Particular of Work   | Unit               | Type     | Rate<br>(In Rs.) |
|---|--|--------------------|----------|------------------|
| Advance Component   |  |                    |          |                  |
| 1   | Cost of making dry and seived leaf Compost inclusive of all costs  | m3                 | Material | 3,000.00         |
| 2   | Cost of coarse Sand (Purchase/Collection, Carriage, Loading, Unloading, drying & seiving all inclusive)                            | m3                 | Material | 990.00           |
| 3   | Cost of Burnt Rice Husk/CDM/Vernnicompost etc. (Purchase/Collection, Carrsige, Loading, Unloading, drying & seiving all inclusive) | m3                 | Material | 1,200.00         |
| 4   | Preparation of potting mixture (Mixing through hand driven Mixture Machine)  | m3                 | Labour   | 588.00           |
| 5   | Disinfection of Root Trainer, Filling and keeping filled Root Trainers on stands   | for 2000 Seedlings | Labour   | 588.00           |
| 6   | Collection of quality Seeds including collection and carriage  | for 2000 Seedlings | Material | 380.00           |
| 7   | Drying, Sorting and Pretreatment of Seeds and sowing in Hygropits  | for 2000 Seedlings | Labour   | 294.00           |
| 8   | Pricking out and transplanting of seedlings in Root Trainers   | for 2000 Seedlings | Labour   | 882.00           |
| 9   | Supply of insecticides, fungicides, micronutrients, disinfectants, etc.  | for 2000 Seedlings | Material | 120.00           |
| 10  | Supply of Seiving nets, water pipes/Can etc.   | for 2000 Seedlings | Material | 80.00            |
| 11  | Watering for 90 days(January to March) including watering in Hygropits and Spraying of Insecticides.                               | for 2000 Seedlings | Labour   | 1,176.00         |
| 12  | Sorting-shifting, weeding-cleaning as and when required  | for 2000 Seedlings | Labour   | 588.00           |
| 13  | Contingency  | for 2000 Seedlings |          | 249.00           |
| Cost of 2000 seedlings /QPM(Department Rate in Rs)                      |  |                    |          | 10,135.00        |
| A. Cost of 2000 seedlings/QPM(Tender Rate with 10% Contractor's profit) |  |                    |          | 11,148.50        |
| B. GST (18% of A;   |  |                    |          | 2,006.73         |
| C.Total Cost of Work(A+B)   |  |                    |          | 13,155.23        |
| D.Labour Cess (1% of C)   |  |                    |          | 131.55           |
| Grand Total (C+D) per 2000 QPM/Seedling (Tender Rate in Rs.) per Ha     |  |                    |          | 13,286.78        |
| Grand Total for 26.76 Ha  |  |                    |          | 3,55,554.00      |

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*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer,  
Purulia Division.



| Estimate for Creation of Miscellaneous Species Plantation (per Ha) - 2023-24 |  |           |                       |       |              |              |
|--|--|-----------|-----------------------|-------|--------------|--------------|
| Type of Plantation   |  |           | MISCELLANEOUS SPECIES |       |              |              |
| No. of seedlings per ha  |  |           | 1600                  |       |              |              |
| Spacing per ha   |  |           | 2.5m x 2.5m           |       |              |              |
| Pit Size   |  |           | 60cm x 45cm. X 45cm.  |       |              |              |
| Sl No.   | Particulars of Work  | SoR. Ref. | Unit                  | Rate  | Qty (mds/no) | Amount (Rs.) |
| 1  | Survey and demarcation of the plantation site including preparation of Regeneration Map and GPS Survey map   | 29        | 1 Ha                  | 294   | 2            | 588.00       |
| 2  | Clearance of undervrowth in thick forest areas : Clear felling, burning, heaping and re-burning in moderate density areas of undergrowth and bushes  | 27©       | 1 Ha                  | 294   | 12           | 3,528.00     |
| 3  | Staking and alignment of plantation site, collection of stakes, pitching etc.  | 30        | 1 Ha                  | 294   | 5            | 1,470.00     |
| 4  | Pit cutting : a) Miscellaneous species -60 x 45 x 45cm   | 31(a)     | 1 Ha                  | 294   | 42           | 12,348.00    |
| 5  | Soil moisture Conservation-Digging of box trench over a length of 500 mt of sixe 5 m x 0.45m x 0.45m.  | 32        | 1 Ha                  | 294   | 36           | 10,584.00    |
| 6  | Sorting and shifting of seedlings per each time  | 11(i)     | 1000 Nos.             | 569   | 1760 Nos.    | 1,001.44     |
| 7  | Weeding and cleaning of seedlings in Hycopots/root trainers per each time  | 12(i)     | 1000 Nos.             | 569   | 1760 Nos.    | 1,001.44     |
| 8  | Watering of seedlings in Hycopots two times per day  | 13(i)     | 10000 Nos.            | 285   | 1760 Nos.    | 50.16        |
| 9  | Creation of inspection path by removing weeds, scraping and by providing proper drain alongkflie diagonal of the plantation site. of 3 mt wide   | 42        | 100 mtr               | 1423  | 50 mtr       | 711.50       |
| 10   | Pit filling and application of Farm yard Manure : i) Miscellaneous Species   | 33(i)     | 1 Ha                  | 4838  | 1 Ha         | 4,838.00     |
| 11   | Transplanting of Hycopots seedlings into pits including man carriage from the unloading point .  | 36(i)     | 1000 Nos.             | 3557  | 1760 Nos.    | 6,260.32     |
| 12   | Application of insecticides and other chemicals whenever necessary   | 41        | 1000 Nos.             | 569   | 1600 Nos.    | 910.40       |
| 13   | Vacancy infilling of pits with new seedling wherever there mortality due abiotic and biotic factors  | 40        | 100 Nos.              | 427   | 160 Nos.     | 683.20       |
| 14   | 1st cleaning   | 38(a)     | 1 Ha                  | 3984  | 1 Ha         | 3,984.00     |
| 15   | 1st Mulching   | 39(a)     | 1000 Nos.             | 3984  | 1600 Nos.    | 6,374.40     |
| 16   | 2nd cleaning   | 38(b)     | 1 Ha                  | 3415  | 1 Ha         | 3,415.00     |
| 17   | 3rd cleaning   | 38©       | 1 Ha                  | 2846  | 1 Ha         | 2,846.00     |
| 18   | Creation of fireline to protect plantation from Fire, by making 3ntt wide fireline inside plantation and along boundary, by removing weeds and vegetation and scarping, cutting of all existing weed growth to a width of 3 in. Heaping, burning and re-burning in younger plantations | 44        | 100 mtr               | 1138  | 200 mtr      | 2,276.00     |
| 19   | Providing watch and ward in the form of man days to oversee the plantation and protect the plantation from damages aria lag out of biotic factors for the entire year  | 45        | 1 Ha                  | 3415  | 1 Ha         | 3,415.00     |
| Sub Total (labour)   |  |           |                       |       |              | 66,284.86    |
| 20   | Material : a) Farm Yard Manure: 4m3  | 50 (a)(i) | 1 Ha                  | 4600  | 0.4 Ha       | 1,840.00     |
| 21   | Material : c) Chemical Fertilizers-  | 50©       | 1 MT                  | 28750 | 0.08 MT      | 2,300.00     |
| 22   | Material : b) Insecticides, fungicides(1 ltr each/ha)  | 50(b)     | 1 Ha                  | 690   | 1 Ha         | 690.00       |
| 23   | Purchase of ingredients for different materials required for Forestry Operation including carriage upto 5km : k) Organic manure (50 gins/plants)   | 3(k)      | 1 MT                  | 23000 | 0.08 MT      | 1,840.00     |
| 24   | Transportation of Hycopots seedling from nursery to Plantation site including loading & unloading: d) lead distance >20km & upto 30km : 300CC Hycopots   | 34(d)     | 1000 Nos.             | 2118  | 1760 Nos.    | 3,727.68     |
| 25   | Collection of Hycopots after plantation & transporting back to central nursery after careful packing etc. : d) lead distance >20km & upto 30krrn : 300CC Hycopots  | 43(d)     | 1000 Nos.             | 368   | 1760 Nos.    | 647.68       |
| 26   | Fencing : Vegetative fencing using bamboo posts at least of 6 ft height with 1 ft embedded underground and not more than 5 ft apart with splitted bamboo of atleast 5 rows and using   | 46(a)     | 10 rmt                | 1098  | 70 rmt       | 7,686.00     |
| 27   | SIGNAGE : Installation of sign board with Forest directorate colour code and emblem of size 3' x 4ft made out of brick work and plastered and well finished and painted with good quality paint  | 49        |                       |       |              | 200.00       |
| Sub Total (Materials)  |  |           |                       |       |              | 18,931.36    |
| A  | Total (labour + materials)   |           |                       |       |              | 85,216.22    |
| B  | Add GST (18% on A)   |           |                       |       |              | 15,338.92    |
| C  | Total (A + B)  |           |                       |       |              | 1,00,555.14  |
| D  | Add Cess (1% on C)   |           |                       |       |              | 1,005.55     |
| E  | Add Contingency (3% on C)  |           |                       |       |              | 3,016.65     |
| F  | Add 10% Contractor profit for tender works on C  |           |                       |       |              | 10,055.51    |
| G  | Grand Total (C + D + E+F)  |           |                       |       |              | 1,14,633.00  |
| Grand Total for 26.76 ha   |  |           |                       |       |              | 30,67,579.00 |

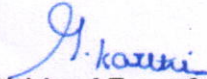
Rs. Thirty lakh sixty seven thousand five hundred seventy nine only

COUNTERSIGNED

Chief Conservator of Forests  
South East Circle, W.B.

*J. K. K...*  
Divisional Forest Officer,  
Purulia Division.

| SCHEDULE FOR 1ST YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1600                  |
| Spacing per ha   |  | 2.5m x 2.5m           |
| Sl. No.  | Particulars of Work  |                       |
| <b>A. Labour Component</b>   |  |                       |
| 1  | Vacancy infilling and transport of seedlings   | 6                     |
| 2  | 1st weeding, cleaning, mulching, with application of fertilizer  | 14                    |
| 3  | 2nd weeding, cleaning, mulching  | 12                    |
| 4  | 3rd weeding, cleaning, mulching  | 6                     |
| 5  | Cutting of Firelines (3m wide)   | 12                    |
| 6  | Watch & Ward   | 30                    |
| 7  | Application of insecticide and Organic Manure  | 8                     |
| 8  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 30                    |
| 9  | Raising of seedlings for infilling   | 12                    |
| 10   | Watering to seedlings during dry spell   | 4                     |
| <b>Total Mandays (Nos.).</b>   |  | <b>134</b>            |
| X.   | Cost of Labour Component @ Rs.312/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | <b>41808.00</b>       |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs).</b>          |  | <b>7525.44</b>        |
| <b>Cost of labour Component for tender work with GST Ms.).</b>               |  | <b>49333.44</b>       |
| <b>B. Material Cost (Rs.)</b>  |  |                       |
| 1  | Transport of seedling/fertilizer/water tanker (GST: 18%)   | <b>3540.00</b>        |
| 2  | Cost of fertilizer, cowdung manure etc (GST: 5%)   | <b>2100.00</b>        |
| 3  | Cost of Insecticide (GST: 18%)   | <b>590.00</b>         |
| Y.   | Total Material Cost without Labour Cess (Rs.) =  | <b>6230.00</b>        |
| X.   | Cost of Labour Component for tender work with GST (Rs.) =  | <b>49333.44</b>       |
| Z.   | Total Cost (X + Y) =   | <b>55563.44</b>       |
| 4  | Contingency 3%   | <b>1666.90</b>        |
| 5  | Labour Cess 1%   | <b>555.63</b>         |
| <b>Total =</b>   |  | <b>57,786</b>         |
| Add 10% Contactors profit for tender work (Rs.) =                            |  | <b>5,779</b>          |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                          |  | <b>63,565</b>         |
| <b>Total for 26.76 Ha. Plantation</b>  |  | <b>17,00,988</b>      |

  
 J. Kauri  
 Divisional Forest Officer,  
 Purulia Division.

COUNTERSIGNED

  
 Chief Conservator of Forests  
 South East Circle, W.B.

| SCHEDULE FOR 2ND YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1600                  |
|  | Spacing per ha   | 2.5m x 2.5m           |
| Sl. No.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | Vacancy infilling and transport of seedlings   | 6                     |
| 2  | 1st weeding, cleaning, mulching, with application of fertilizer  | 14                    |
| 3  | 2nd weeding, cleaning, mulching  | 10                    |
| 5  | Cutting of Firelines (3m wide)   | 12                    |
| 6  | Watch & Ward   | 30                    |
| 7  | Application of insecticide and Organic Manure  | 6                     |
| 8  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 25                    |
| 9  | Raising of seedlings for infilling   | 10                    |
| 10   | Watering to seedlings during dry spell   | 4                     |
| Total Mandays (Nos.).  |  | 117                   |
| X.   | Cost of Labour Component @ Rs.331/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 38727.00              |
| Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs).                 |  | 6970.86               |
| Cost of labour Component for tender work with GST Ms.).                      |  | 45697.86              |
| B. Material Cost (Rs.)   |  |                       |
| 1  | Transport of seedling/fertilizer /water tanker (GST: 18%)  | 2950.00               |
| 2  | Cost of fertilizer, cowdung manure etc (GST: 5%)   | 2100.00               |
| 3  | Cost of Insecticide (GST: 18%)   | 590.00                |
| Y.   | Total Material Cost without Labour Cess (Rs.) =  | 5640.00               |
| X.   | Cost of Labour Component for tender work with GST (Rs.) =  | 45697.86              |
| Z.   | Total Cost (X + Y) =   | 51337.86              |
| 4  | Contingency 3%   | 1540.14               |
| 5  | Labour Cess 1%   | 513.38                |
| Total =  |  | 53,391                |
| Add 10% Contactors profit for tender work (Rs.) =                            |  | 5,339                 |
| GRAND TOTAL for TENDER WORK with GST (Rs.) =                                 |  | 58,731                |
| Total for 26.76 Ha. Plantation   |  | 15,71,628             |

COUNTERSIGNED

Chief Conservator of Forests  
South East Circle, W.B.

Divisional Forest Officer,  
Purulia Division.

| SCHEDULE FOR 3RD YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1600                  |
| Spacing per ha   |  | 2.5m x 2.5m           |
| Sl. No.  | Particulars of Work  |                       |
| <b>A. Labour Component</b>   |  |                       |
| 1  | Vacancy infilling and transport of seedlings   | 4                     |
| 2  | 1st weeding, cleaning, mulching, with application of fertilizer  | 12                    |
| 3  | 2nd weeding, cleaning, mulching  | 10                    |
| 4  | Cutting of Firelines (3m wide)   | 12                    |
| 5  | Watch & Ward   | 30                    |
| 6  | Application of insecticide   | 3                     |
| 7  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 20                    |
| 8  | Raising of seedlings for infilling   | 8                     |
| 9  | Watering to seedlings during dry spell   | 3                     |
| Total Mandays (Nos.).  |  | 102                   |
| X.   | Cost of Labour Component @ Rs.351/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 35802.00              |
| Add GST.18% (sec Code.: 991579) for Tender Work over X (Rs).                 |  | 6444.36               |
| Cost of labour Component for tender work with GST Ms.).                      |  | 42246.36              |
| <b>B. Material Cost (Rs.)</b>  |  |                       |
| 1  | Transport of seedling/fertilizer /water tanker (GST: 18%)  | 2360.00               |
| 2  | Cost of fertilizer (GST: 5%)   | 1050.00               |
| 3  | Cost of Insecticide (GST: 18%)   | 590.00                |
| Y.   | Total Material Cost without Labour Cess (Rs.) =  | 4000.00               |
| X.   | Cost of Labour Component for tender work with GST (Rs.) =  | 42246.36              |
| Z.   | Total Cost (X + Y) =   | 46246.36              |
| 4  | Contingency 3%   | 1387.39               |
| 5  | Labour Cess 1%   | 462.46                |
| Total =  |  | 48,096                |
| Add 10% Contactors profit for tender work (Rs.) =                            |  | 4,810                 |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.) =</b>                          |  | <b>52,906</b>         |
| Total for 26.76 Ha. Plantation   |  | 14,15,760             |

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Chief Conservator of Forests  
South East Circle, W.B.

*G. K. K. K.*  
Divisional Forest Officer,  
Purulia Division.

| SCHEDULE FOR 4TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1,600.00              |
|  | Spacing per ha   | 2.5m x 2.5m           |
| SL.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | 1st weeding, cleaning, mulching, without application of fertilizer   | 10.00                 |
| 2  | 2nd weeding, cleaning  | 8.00                  |
| 3  | Watch & Ward   | 20.00                 |
| 4  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 18.00                 |
| 5  | Cutting of Firelines (3m wide)   | 10.00                 |
| Total Mandays (Nos.).  |  | 66.00                 |
| X.   | Cost of Labour Component @ Rs.372/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 24,552.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X                       |  | 4,419.36              |
| Cost of labour Component for tender work with GST Ms.).                      |  | 28,971.36             |
| 1  | Contingency 3%   | 869.14                |
| 2  | Labour Cess 1%   | 289.71                |
| GRAND TOTAL for TENDER WORK with GST (Rs.)=                                  |  | 30,130.21             |
| Total for 26.76 Ha. Plantation   |  | 8,06,284.54           |
| Orsay,   |  | 8,06,285.00           |

*G. K. K. K.*  
 Divisional Forest Officer,  
 Purulia Division.

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*[Signature]*  
 Chief Conservator of Forests  
 South East Circle, W.B.

| SCHEDULE FOR 5TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
|  | No of seedlings per ha   | 1,600.00              |
|  | Spacing per ha   | 2.5m x 2.5m           |
| SL.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | 1st weeding, cleaning  | 8.00                  |
| 2  | 2nd weeding, cleaning  | 6.00                  |
| 3  | Watch & Ward   | 20.00                 |
| 4  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 18.00                 |
| 5  | Cutting of Firelines (3m wide)   | 8.00                  |
| Total Mandays (Nos.).  |  | 60.00                 |
| X.   | Cost of Labour Component @ Rs.394/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 23,640.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X                       |  | 4,255.20              |
| Cost of labour Component for tender work with GST Ms.).                      |  | 27,895.20             |
| 1  | Contingency 3%   | 836.86                |
| 2  | Labour Cess 1%   | 278.95                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.)=</b>                           |  | <b>29,011.01</b>      |
| Total for 26.76 Ha. Plantation   |  | 7,76,334.57           |
| Orsay,   |  | 7,76,335.00           |

*G. Karthi*  
 Divisional Forest Officer,  
 Purulia Division.

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*Ponbb*  
 Chief Conservator of Forests  
 South East Circle, W.B.

**SCHEDULE FOR 6TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION)**

| Type of plantation   |  | MISCELLANEOUS SPECIES |
|--|--|-----------------------|
|  |  | 1,600.00              |
| No of seedlings per ha   |  | 2.5m x 2.5m           |
| Spacing per ha   |  |                       |
| SL.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | 1st weeding, cleaning  | 8.00                  |
| 2  | 2nd weeding, cleaning  | 6.00                  |
| 3  | Watch & Ward   | 20.00                 |
| 4  | Repairing of CPT, Contour Trench and Box Trench & fencing  | 15.00                 |
| <b>Total Mandays (Nos.).</b>                                   |  | <b>49.00</b>          |
| X.   | Cost of Labour Component @ Rs.418/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 20,482.00             |
| <b>Add GST.18% (sec Code.: 991579) for Tender Work over X</b>  |  | <b>3,686.76</b>       |
| <b>Cost of labour Component for tender work with GST Ms.).</b> |  | <b>24,168.76</b>      |
| 1  | Contingency 3%   | 725.06                |
| 2  | Labour Cess 1%   | 241.69                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.)=</b>             |  | <b>25,135.51</b>      |
| <b>Total for 26.76 Ha. Plantation</b>                          |  | <b>6,72,626.26</b>    |
| <b>Orsay,</b>  |  | <b>6,72,626.00</b>    |

*G. Kozhik*  
Divisional Forest Officer,  
Purulia Division.

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*Poults*  
Chief Conservator of Forests  
South East Circle, W.B.

| SCHEDULE FOR 7TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1,600.00              |
| Spacing per ha   |  | 2.5m x 2.5m           |
| SL.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | 1st weeding, cleaning  | 6.00                  |
| 2  | 2nd weeding, cleaning  | 5.00                  |
| 3  | Watch & Ward   | 20.00                 |
| Total Mandays (Nos.).  |  | 31.00                 |
| X.   | Cost of Labour Component @ Rs.443/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 13,733.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X                       |  | 2,471.94              |
| Cost of labour Component for tender work with GST Ms.).                      |  | 16,204.94             |
| 1  | Contingency 3%   | 486.15                |
| 2  | Labour Cess 1%   | 162.05                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.)=</b>                           |  | <b>16,853.14</b>      |
| Total for 26.76 Ha. Plantation   |  | 4,50,989.96           |
| Orsay,   |  | 4,50,990.00           |

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*[Signature]*  
Chief Conservator of Forests  
South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer,  
Purulia Division.



**SCHEDULE FOR 8TH YEAR MAINTENANCE OF PLANTATIONS (COMPENSATORY AFFORESTATION)**

| Type of plantation                                      |  | MISCELLANEOUS SPECIES |
|---|--|-----------------------|
|   |  |                       |
| No of seedlings per ha                                  |  | 1,600.00              |
| Spacing per ha  |  | 2.5m x 2.5m           |
| SL.   | Particulars of Work  |                       |
| A.  | Labour Component   |                       |
| 1   | 1st weeding, cleaning  | 6.00                  |
| 2   | 2nd weeding, cleaning  | 4.00                  |
| 3   | Watch & Ward   | 18.00                 |
| Total Mandays (Nos.).                                   |  | 28.00                 |
| X.  | Cost of Labour Component @ Rs.470/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 13,160.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X  |  | 2,368.80              |
| Cost of labour Component for tender work with GST Ms.). |  | 15,528.80             |
| 1   | Contingency 3%   | 465.86                |
| 2   | Labour Cess 1%   | 155.29                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.)=</b>      |  | <b>16,149.95</b>      |
| Total for 26.76 Ha. Plantation                          |  | 4,32,172.72           |
| Orsay,  |  | 4,32,173.00           |

**COUNTERSIGNED**

*[Signature]*  
Chief Conservator of Forests  
for South East Circle, W.B.

*[Signature]*  
Divisional Forest Officer,  
Purulia Division.

| SCHEDULE FOR 9TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |  |                       |
|--|--|-----------------------|
| Type of plantation   |  |                       |
|  |  | MISCELLANEOUS SPECIES |
| No of seedlings per ha   |  | 1,600.00              |
|  | Spacing per ha   | 2.5m x 2.5m           |
| SL.  | Particulars of Work  |                       |
| A.   | Labour Component   |                       |
| 1  | 1st weeding, cleaning  | 5.00                  |
| 2  | 2nd weeding, cleaning  | 4.00                  |
| 3  | Watch & Ward   | 16.00                 |
| Total Mandays (Nos.).  |  | 25.00                 |
| X.   | Cost of Labour Component @ Rs.498/MD for Departmental Work (Rs.).(Wage rate has been assumed predicting 6% annual increment) | 12,450.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X                       |  | 2,241.00              |
| Cost of labour Component for tender work with GST Ms.).                      |  | 14,691.00             |
| 1  | Contingency 3%   | 440.73                |
| 2  | Labour Cess 1%   | 146.91                |
| GRAND TOTAL for TENDER WORK with GST (Rs.)=                                  |  | 15,278.64             |
| Total for 26.76 Ha. Plantation   |  | 4,08,856.41           |
| Orsay,   |  | 4,08,856.00           |

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Chief Conservator of Forests  
South East Circle, W.B.

Divisional Forest Officer,  
Purulia Division.

| SCHEDULE FOR 10TH YEAR MAINTENANCE OF PLANTATION (COMPENSATORY AFFORESTATION) |   |                       |
|---|---|-----------------------|
| Type of plantation  |   |                       |
|   |   | MISCELLANEOUS SPECIES |
|   | No of seedlings per ha  | 1,600.00              |
|   | Spacing per ha  | 2.5m x 2.5m           |
| SL.   | Particulars of Work   |                       |
| A.  | Labour Component  |                       |
| 1   | 1st weeding, cleaning   | 5.00                  |
| 2   | 2nd weeding, cleaning   | 4.00                  |
| 3   | Watch & Ward  | 14.00                 |
| Total Mandays (Nos.).   |   | 23.00                 |
| X.  | Cost of Labour Component @ Rs.528/MD for Departmental Work (Rs.)(Wage rate has been assumed predicting 6% annual increment) | 12,144.00             |
| Add GST.18% (sec Code.: 991579) for Tender Work over X                        |   | 2,185.92              |
| Cost of labour Component for tender work with GST Ms.).                       |   | 14,329.92             |
| 1   | Contingency 3%  | 429.90                |
| 2   | Labour Cess 1%  | 143.30                |
| <b>GRAND TOTAL for TENDER WORK with GST (Rs.)=</b>                            |   | <b>14,903.12</b>      |
| Total for 26.76 Ha. Plantation  |   | 3,98,807.41           |
| Orsay,  |   | 3,98,807.00           |

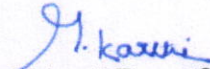
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South East Circle, W.B.

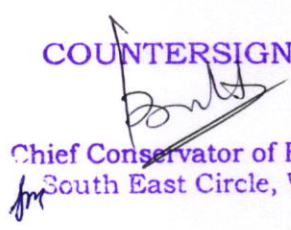
*J. K. K. K.*  
Divisional Forest Officer,  
Purulia Division.

### Abstract of Compensatory Afforestation Cost & SMC Works

| Sl. No.                     |   | Work Details   | Cost                  |
|-----------------------------|---|--|-----------------------|
| 1                           | <b>Compensatory Afforestation<br/>(CA Cost)</b> | Raising seedlings or Nursery during 2023-24              | 355554.00             |
|                             |   | Miscellaneous Species Plantation Creation during 2024-25 | 3067579.00            |
|                             |   | 1st Year Maintenance during 2025-26                      | 1700988.00            |
|                             |   | 2nd Year Maintenance during 2026-27                      | 1571628.00            |
|                             |   | 3rd Year Maintenance during 2027-28                      | 1415760.00            |
|                             |   | 4th Year Maintenance during 2028-29                      | 806285.00             |
|                             |   | 5th Year Maintenance during 2029-30                      | 776335.00             |
|                             |   | 6th Year Maintenance during 2030-31                      | 672626.00             |
|                             |   | 7th Year Maintenance during 2031-32                      | 450990.00             |
|                             |   | 8th Year Maintenance during 2032-33                      | 432173.00             |
|                             |   | 9th Year Maintenance during 2033-34                      | 408856.00             |
|                             |   | 10th Year Maintenance during 2034-35                     | 398807.00             |
| <b>Total =</b>              |   |  | <b>12057581.00</b>    |
| 2                           | Associated SMC Works: 25% of CA amount          | SMC work in CA Plantation site                           | 3014395.00            |
| <b>Grand Total: CA cost</b> |   |  | <b>1,50,71,976.00</b> |

  
**Divisional Forest Officer,**  
**Purulia Division.**

**COUNTERSIGNED**

  
**Chief Conservator of Forests**  
**South East Circle, W.B.**

**Undertaking for payment of Amount for Compensatory  
Afforestation in lieu of diversion of 38.38 Ha of Forest Land for  
Tilaboni Underground Project in Stage-I Forest Clearance**

I, on behalf of Bankola Area, Eastern Coalfields Limited, P.O. Ukhra, Dist. - Paschim Bardhaman, West Bengal, do hereby undertake for the payment of amount for Compensatory Afforestation for the grant of in-principal approval for Diversion of 38.38 Ha forest land for Tilaboni Underground Project as per demand note from the State Forest Department, Govt. of West Bengal.

*Moujam*  
*11/3/2023*  
Area Manager (PCD)  
Bankola Area

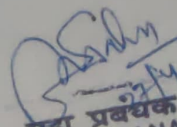
*11/3/23*  
महा प्रबंधक, बंकोला क्षेत्र, ई.सी.एल.  
General Manager  
Bankola Area

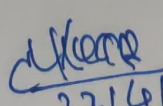
**Cost Benefit Analysis of Tilaboni UG - Diversion of 38.38 Ha as per MOEF&CC**  
**Circular Dated 01-08-2017**

**Table B: Estimation of cost of forest diversion**

| <u>Sl No</u> | <u>Parameters</u>   | <u>Remarks</u>   | <u>Value in INR</u>   |
|--------------|---|--|---|
| 1.           | Ecosystem services loss due to proposed forest diversion  | Economic value of loss of ecosystem service should be the net present value of the forest being diverted as prescribed by the MoEF&CC.<br><b>Note:</b> in case of National parks the NPV shall be 10 times the normal NPV and incase of Wildlife sanctuaries the NPV shall be five times the normal NPV as prescribed by the Ministry or any other competent authority | i) Since the forest is typically Tropical dry deciduous Forest it falls under the category-Eco Class III<br>ii) Average forest Density is 0.7 and is thus classified as dense forest<br>iii) As such Rate of NPV per Ha = ₹ 13,57,110.00<br><br>Thus, NPV for 38.38 Ha of forest land = 13,57,110.00X38.38 = <b>₹ 5,20,85,881.80.</b><br><br><u>Ref: Guidelines for Calculation of NPV vide MoEF&amp;CC, Gol, Fno. 5-3/2011-FC (Vol-I) dated 06.01.2022</u> |
| 2.           | Loss of animal husbandry or fodder  | To be quantified and expressed in Monetary terms or 10% NPV whichever is maximum   | There is no significant animal husbandry or fodder in the area.<br>As such the maximum value can be quantified as 10% NPV (10% of ₹ 5,20,85,881.80) = <b>₹ 52,08,588.18</b><br><b>(Refer Sl no.1 for value of NPV)</b>  |
| 3.           | Cost of human Settlement  | To be quantified and expressed in Monetary terms as per approved R&R Plan  | Total Cost of Human settlement is <b>₹ 10,01,00,000.00</b> as per R&R plan. Actual cost may be calculated at the time of execution and as per requirement from your end.  |
| 4.           | Loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric lines, railways) on Forest land which would require forest land if these facilities were | To be quantified and expressed in Monetary terms on actual cost basis at the time of diversion   | There will be no loss of public facilities and administrative infrastructure (Roads, buildings, schools, dispensaries, electric lines, railways) on Forest land which would require forest land if these facilities. As such the Monetary Value on actual cost basis at the time of diversion is <b>NIL.</b>  |

*Sub-Manager*

  
**महाप्रबंधक**  
**GENERAL MANAGER**  
**Eastern Coalfields Ltd.**  
**Bankola Area**  
**Dist.-Paschim Bardhaman**

  
**27/4/2023**

**महाप्रबंधक/General Manager**  
**पर्यावरण विभाग / ईटीएल मुख्यालय**  
**Environment Dept./ECL HQ.**

| Parameters                            | Remarks  | Value in INR   |
|---------------------------------------|--|--|
| diverted due to the project.          |  |  |
| 5 Possession value of the forest land | 30% of the environmental costs (NPV) due to NPV or loss of forest or circle rate of adjoining areas of the district should be added as cost component of possession value of the forest land; whichever is maximum.  | <p>i) 30% of NPV = 30 % of ₹ 5,20,85,881.80 = ₹ <b>1,56,25,764.54</b><br/>(Refer SI no.1 for value of NPV)</p> <p>ii) Circle Rate of Govt. land as per approved PR = Rs. 2,22,30,000/Ha.</p> <p>Thus, the rate of 38.38 Ha forest land = Rs. 2,22,30,000/Ha. x 38.38 ha = ₹. <b>85,31,87,400.</b></p> <p>Maximum of (i) and (ii) is ₹ <b>85,31,87,400.</b></p> <p><b>Reference Annexure – I.</b></p>   |
| 6. Cost suffering oustees of to       | The social cost of rehabilitation of the oustees ( in addition to the cost likely to be incurred in providing residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted. | <p>Majhi Bustee, which is to be rehabilitated for the project, is situated at a distance of 600 m from the forest and may be depending on the forest for firewood, leaves, etc. Assuming the entire population is dependent on the forest for these purposes, the cost of suffering can be calculated as under:</p> <p><b>1. Cost of firewood</b><br/>The maximum cost of firewood as declared by the West Bengal Govt. is ₹ 900.00 per m<sup>3</sup> (Source: <a href="http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf">http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf</a>). Taking the specific gravity of dry wood to be 0.6, weight of 1 m<sup>3</sup> of dry firewood would be 600 kg. Thus, cost of dry firewood works out to ₹ 900.00 / 600 kg = ₹ 1.50 per kg. Taking consumption of 20 kg per household per day, the total cost of firewood for 164 households works out to 20 kg x 164 HH x 730 days x ₹ 1.5 per kg = ₹ <b>35,91,600.00</b></p> <p><b>2. Cost of Mahua</b><br/>Mahua trees constitute 90% of the forest i.e. 90% of 38.38 Ha = 34.542 Ha. Taking a tree count of 1000 trees/ha for 0.7 canopy density,<br/>a) <u>Cost of Mahua Flowers</u><br/>Annual Yield of Mahua Flowers = 80-320 kg/tree (Source: <a href="http://www.foodandnutritionjournal.org">www.foodandnutritionjournal.org</a>)<br/>Taking the yield to be average as 200 kg/tree, total yield of Mahua from the forest land for 2 years = 200 kg x 1000 trees/ha x 34.542 Ha x 2 years = 1,38,16,800.00 kg<br/>Cost of Mahua Flowers per kg as per Schedule of Rates of Govt. of WB = ₹ 13.20 (Source: <a href="http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf">http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf</a>)<br/>Cost of Mahua Flowers per kg as per MSP of non-forest produce by Govt. of India = ₹ 17.00 (Source: <a href="https://pib.gov.in/Pressreleaseshare.aspx?PRID=1557528">https://pib.gov.in/Pressreleaseshare.aspx?PRID=1557528</a>)</p> |

*Chakraborty*

*[Signature]*  
**महा प्रबंधक**  
**GENERAL MANAGER**  
**Eastern Coalfields Ltd.**  
**Bankola Area**  
**Dist. Paschim Bardhaman**

*[Signature]*  
**27-4-2023**

**महाप्रबंधक/ General Manager**  
**पर्यावरण विभाग / ईस्टीएल मुख्यालय**  
**Environment Dept./ECL, HQ.**

| Parameters | Remarks  | Value in INR  |  |
|------------|--|---|--|
|            |  | <p>Taking the highest value of the two i.e., ₹ 17.00 per kg, the total cost of Mahua Flowers = ₹ 17.00 x 1,38,16,800 = ₹ 23,48,85,600.00</p> <p>b) <u>Mahua Seeds</u><br/>Annual Yield of Mahua Seeds = 20-40 kg/tree (Source: <a href="http://www.ijddr.in">www.ijddr.in</a>).<br/>Taking the yield to be average as 30 kg/tree, total yield of Mahua Seeds from the forest land for 2 years = 30.00 kg x 1000 trees/Ha x 34.542 Ha x 2 = 20,72,520 kg.<br/>Cost of Mahua Seeds per kg as per MSP of non-forest produce by Govt. of India = ₹ 25.00 (Source: <a href="https://pib.gov.in/Pressreleaseshare.aspx?PRID=1557528">https://pib.gov.in/Pressreleaseshare.aspx?PRID=1557528</a>)<br/>Thus, the total cost of Mahua Seeds = ₹ 25.00 x 20,72,520 = ₹ 5,18,13,000.00<br/>Total cost of Mahua = A+B = ₹ 28,66,98,600.00</p> <p><b>3. Cost of Sal seeds</b><br/>Sal trees constitute 10% of the forest i.e. 10% of 38.38 Ha = 3.838 Ha. Seed production from 3.838 Ha sal plantation @ 500 kg / Ha would be 1919 kg / year. Cost of sal seed produce = 1919 kg x ₹ 22.00 per kg (Source: <a href="http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf">http://www.westbengalforest.gov.in/notice/n08-02-2021-01.pdf</a>) = ₹ 42218.00 per year. Produce over 2 years = ₹ 84436.00<br/>Total cost of social rehabilitation = 1.5 x (1+2+3) = ₹ 43,55,61,954.00</p> |  |
| 7.         | Habitat Fragmentation Cost   | <p>While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as thumb rule</p>   | <p>Habitat Fragmentation Cost = 50% of NPV = ₹ 2,60,42,940.90</p>  |
| 8          | Compensatory afforestation and soil and moisture conservation cost | <p>The actual cost of Compensatory afforestation and soil &amp; moisture conservation and its maintenance in future at present discounted rate</p>  | <p>The project is an underground project. However, an estimate for Compensatory Afforestation over 76.80 Ha double degraded land including 10 years maintenance has been prepared by DFO, Durgapur for an amount of = ₹ 4,72,22,476.00</p> |

*Subin*

*Subin*  
27/4

महा प्रबंधक  
GENERAL MANAGER  
Eastern Coalfields Ltd.  
Bankola Area  
P.O.-Ukhra, Dist.-Paschim Bardhaman

*Subin*  
27.4.2023

महाप्रबंधक/General Manager  
पर्यावरण विभाग / ईलीएल मुख्यालय  
Environment Dept./ECL. HQ.



Table-C: Existing guidelines for estimating benefits of forest diversion in CBA

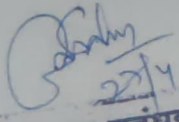
| Sl. No. | Parameters   | Remarks  | Value in INR   |
|---------|--|--|--|
| 1       | Increase in productivity attributed to specific project                    | To be quantified and expressed in Monetary term  | The increase in productivity will be the increase in electricity generated from coal extracted from Tilaboni UG which amounts to ₹ 30,85,088.6789165 lacs. For calculations, refer Annexure – II.  |
| 2       | Benefits to the economy due to specific project                            | The incremental economic benefit in monetary term due to the activities attributed to the specific project   | ₹ 94185.3 lacs which is the cost of the project that is infused directly into the economy to provide benefits by virtue of coal production and consequent generation of power, adding to energy security of the nation.  |
| 3       | No. of population benefited due to specific project                        | As per Detailed project report   | The no. of population benefited due to employment in the project year-wise is tabulated in Annexure – III. However, 880 employment will also be generated as per CIL R&R Policy where there is provision of 1 employment/2 acres of land.  |
| 4       | Economic benefits due to direct and indirect employment due to the project | As per the Detailed project report   | The economic benefits due to the generation of employment in the project in terms of wages are tabulated in Annexure – IV.   |
| 5       | Economic benefit due to Compensatory afforestation                         | Benefits from such compensatory afforestation acquiring over next 50 years and discounted to present value should be included as benefits of compensatory afforestation.<br>* For benefits of CA guideline of the Ministry for NPV estimation may be consulted | Considering the Guidelines for Calculation of NPV vide MoEF&CC, Gol, Fno. 5-3/2011-FC (Vol-I) dated 06.01.2022 and considering the fact the CA will result in Eco-class III forest the minimum economic benefit acquiring out of Compensatory afforestation is NPV. We may consider minimum value of Eco class III forest land (density 0.7) is ₹ 1,041.7176360 lacs |

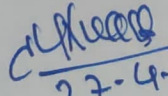
Estimated Cost = ₹ 1,51,94,09,240.88 = ₹ 15,194.0924088 lacs

Estimated Benefit = ₹ 31,80,315.6965525 lacs

Cost to Benefit Ratio = 0.0048

Sub. in. l. h.

  
27/4  
महा प्रबंधक  
GENERAL MANAGER  
Eastern Coalfields Ltd.  
Bankola Area  
P.O.-Ukhra, Dist.-Paschim Bardhaman

  
27-4-2023  
महाप्रबंधक/General Manager  
पर्यावरण विभाग / ईसीएल मुख्यालय  
Environment Deptt./ECL. H.Q.

## Government of West Bengal

Department of Land and Land Reforms and Refugee, Relief and Rehabilitation

LR(A-III) Branch, Nabanna, Howrah

No. 1827 - GE(M)/2L-120/18

Dated: 23.05.2018

From: The OSD & E.O. Assistant Secretary to the Govt. of West Bengal.  
To: The District Magistrate & Collector, Paschim Bardhaman, Vivekananda Sarani,  
P.O. R.K.Mission, Kanyapur, Asansol - 05.

Subject: Transfer of 1.13 acres of Govt. vested land at Mouza - Sarpi, J. L. No. 036 under P.S. Faridpur in the District - Paschim Bardhaman in favour of ECL, Bankola Area, Ministry of Coal, Govt. of India for coal mining.

The undersigned is directed to refer to his Memo. No. 399/DLLRO-PAB/LM/18 dated 13.03.2018 on the above-noted subject and to state that the Governor is hereby pleased to accord sanction to the transfer of 1.13 acres of Govt. land, as detailed in the land schedule below, to the Ministry of Coal, Govt. of India with effect from the date of delivery of possession of the said land on a transfer value of Rs.73,74,311/- (Rupees seventy-three lakh seventy-four thousand three hundred eleven) only for coal mining.

## Land Schedule

District - Paschim Bardhaman, P.S. Faridpur, Mouza - Sarpi, JL No. 036

| Sl. No. | Plot No. | Area (acre) |
|---------|----------|-------------|
| 1       | 869      | 0.89        |
| 2       | 908      | 0.05        |
| 3       | 1046     | 0.19        |

Total = 1.13 acres

2. The amount to be realized from the Govt. of India is to be credited to the head, "0029-Land Revenue- 00-101- Land Revenue/Tax-002 - Collection from Estate leased to farmers- 30- Lease Rent/Salami" in the budget of the current financial year. [0029-00-101-002-30].

3. If it is subsequently detected that the land in question is involved in a court case in any Hon'ble court of Law, then all concerned shall abide by the order as may be passed by that Hon'ble Court.

4. A deed of transfer as per draft "Indenture" enclosed herewith have to be executed by the District Land and Land reforms Officer, Paschim Bardhaman for and on behalf of the Governor of West Bengal and the authorized representative of the President of India along with two witnesses.

5. It is, accordingly, requested that on payment of Rs.73,74,311/- (Rupees seventy-three lakh seventy-four thousand three hundred eleven) only as transfer value, by the Government of India, the possession of the land may be handed over to the authorised representative of the Ministry of Coal, Govt. of India and thereafter, the draft deed of transfer as per "Indenture" enclosed may be engrossed on durable papers in quadruplicate, signed by the District Land & Land Reforms Officer, Paschim Bardhaman under his office seal and sent to the Government in the Land & Land Reforms and Refugee, Relief & Rehabilitation Department alongwith two witnesses for acceptance and further action. The amount payable by the Ministry of Coal, Govt. of India, is to be realized from them within 45 (forty five) days from the date of this order.

6. The space of the first page of the documents for the purpose of inserting date may be left blank and no date should be given while signing the documents.

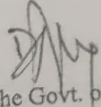
Sd/-  
OSD and E.O. Assistant Secretary to the Govt. of West Bengal

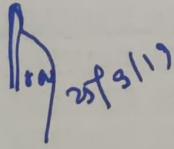
No. 1827/1(5) - GE(M)/2L-120/18

Dated: 23.05.2018

Copy forwarded for information and necessary action to the:

1. Secretary to the Ministry of Coal, Govt. of India, New Delhi.
2. Director of Land Records and Survey, West Bengal,  
35, Gopalnagar Road, Alipore, Kolkata-700 027.
3. A.D.M. & D.L. & L.R.O., Paschim Bardhaman, P.O. Rajbati, Dist. Burdwan.
- ✓ 4. General Manager, Eastern Coalfield Limited, Bankola Area, P.O. Ukhra, Dist. Burdwan,  
PIN - 713 363.
5. Guard file.

  
OSD & E.O. Assistant Secretary to the Govt. of West Bengal.

  
महाप्रबंधक/ General Manager  
पर्यावरण विभाग / ईसीएल मुख्यालय  
Environment Deptt./ECL. HQ.

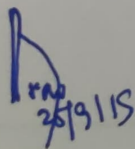
## Annexure-II

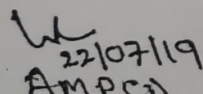
Table for calculation of increase in productivity

| Grade | Production (MT) | Avg annual coal consumption at 85% PLF for sub-critical technology as per CEC (Tonnes MW annum) | Power generated in MW | Electricity in KWh | Selling Price of Electricity @ Rs 5/KWh (INR) |
|-------|-----------------|---|-----------------------|--------------------|---|
| G-4   | 0.138           | 3118.25   | 44.26559              | 387678986.6        | 1938394933                                    |
| G-4   | 0.198           | 3118.25   | 63.49715              | 556235067.7        | 2781175339                                    |
| G-4   | 0.258           | 3118.25   | 82.73872              | 724791148.9        | 3623955744                                    |
| G-5   | 0.73            | 3243.25   | 225.0829              | 1971725892         | 9858629461                                    |
| G-6   | 0.99            | 3463.5  | 285.838               | 2503941100         | 12519705500                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.99            | 3118.25   | 317.4858              | 2781175339         | 13905876694                                   |
| G-4   | 0.97            | 3118.25   | 311.0719              | 2724989978         | 13624949892                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-4   | 0.87            | 3118.25   | 279.0026              | 2444063176         | 12220315882                                   |
| G-5   | 0.87            | 3243.25   | 288.2494              | 2349865104         | 11749325522                                   |
| Total |                 |   | 7043.6816             | 701773578          | 308508867891.65                               |

Source:

1. Grade wise production from Project Report of Tilaboni UGP
2. Norms for Coal consumption in Thermal Power Plants (Ref. No.219/G.O./TPI/CEA/2019/322)

  
 25/9/19

Signature of   
 22/07/19  
 AMPCC  
 Bankola Area

महाप्रबंधक/General Manager  
 पर्यावरण विभाग / ईसीएल मुख्यालय  
 Environment Deptt./ECL. HQ.

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Annexure-III

| Year     | 1-3 | 4   | 5   | 6   | 7-17 | 18  | 19-20 | 21-25 |
|----------|-----|-----|-----|-----|------|-----|-------|-------|
| Manpower | 904 | 734 | 742 | 742 | 799  | 799 | 787   | 787   |

Source: Project Report of Tilaboni UGP

*Handwritten signature and date: 25/9/15*

महाप्रबंधक/ General Manager  
पर्यावरण विभाग / ईसीएल मुख्यालय  
Environment Deptt./ECL. HQ.

*Handwritten signature and date: 22/07/19*  
Signature of *AMP*  
Banwala Area

Annexure-IV

| Year             | 1-3     | 4       | 5       | 6       | 7-17    | 18      | 19-20   | 21-25   |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Manpower         | 904     | 734     | 742     | 742     | 799     | 799     | 787     | 787     |
| Wages(in<br>lac) | 7134.00 | 6163.90 | 6224.92 | 6224.92 | 6716.36 | 6716.36 | 6509.27 | 6509.27 |

21/10/19

Environment Deptt./ECL. HQ.  
आर्यावर्त विभाग / ईसीएल मुख्यालय  
Environment General Manager

25/11/19

महाप्रबंधक/ General Manager  
पर्यावरण विभाग / ईसीएल मुख्यालय  
Environment Deptt./ECL. HQ.

Signature of AMP  
22/11/19  
Banwala Area