

Norms for undertaking compensatory Afforestation scheme for planting 100 nos of tall seedlings at Compartment-5 under Upper Shillong Protected Forest for the Diversion of 0.11 ha (0.05 ha Law Syiem, 0.023 ha Riat Laban Reserve Forest and 0.033 ha Laitkor Protected Forest) of forest land for laying pipeline, Shillong.

Creation and 1st Year Maintenance of Plantation

| Sl.no  | Item of Work  | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
|--|---|---------------------|---|------------------------------|
| Wage rate is Rs.1.08 times the present wage rate |   |                     |   |                              |
| 1  | 2   | 3                   | 4   | 5                            |
| 1  | Plantation of nursery seedling including carriage from nursery centres to plantation sites and proper ramming after planting etc.   | 20                  | 21.60   | 8056.80                      |
| 2  | Cost of manure and bio-fertilizer   | 40                  | 43.20   | 16113.60                     |
| 3  | Mulching and 3 times weeding  | 50                  | 54.00   | 20142.00                     |
| 4  | Fire protection during dry and windy season<br>i) wages of fire watchers from November of the creation year to April of the following year.                                       | 10                  | 10.80   | 4028.40                      |
|  | ii) Fireline clearance including controlled burning from November in the creation year to April of the following year   | 10                  | 10.80   | 4028.40                      |
| 5  | Maintenance of camp hut, signboard, documentation, protection from grazing, upkeep of records and other miscellaneous works   | 30                  | 32.40   | 12085.20                     |
| 6  | Supervision cost  | 12                  | 12.96   | 4834.08                      |
|  | <b>Sub Total</b>  | <b>172</b>          | <b>185.76</b>   | 69288.48                     |
| 7  | Soil & Moisture conservation measures in the plantation area @15% of the total cost of 1st year creation.   | <b>26.28</b>        | 28.38   | 10586.64                     |
| 8  | Monitoring & Evaluation @2%   | <b>3.5</b>          | 3.78  | 1409.94                      |
| 9  | <b>Adding 8.5% being contingency due to escalation cost of materials etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency.</b> | <b>17.42</b>        | 18.81   | 7017.47                      |
|  | <b>Total for 1st Year creation and maintenance</b>  | <b>219.20</b>       | <b>236.74</b>   | 88302.53                     |

| Second Year Maintenance of Plantation            |  |                     |   |                              |
|--|--|---------------------|---|------------------------------|
| Wage rate is Rs.1.17 times the present wage rate |  |                     |   |                              |
| Sl.no  | Item of Work   | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | 2  | 3                   | 4   | 5                            |
| 1  | Vacancy filling by one year old seedlings in mortality areas   | 5                   | 5.85  | 2182.05                      |
| 2  | Climber cutting and weedings 3 times   | 45                  | 52.65   | 19638.45                     |
| 3  | <b>Fire Protection</b>   | 10                  | 11.70   | 4364.10                      |
|  | ii) Fire line clearance including controled burning  | 10                  | 11.70   | 4364.10                      |
| 4  | Maintenance of cramp hut, signboard, inspection paths fencing protection from grazing documentation upkeep of records and other miscellaneous works.           | 30                  | 35.10   | 13092.30                     |
| 5  | Supervision cost   | 12                  | 14.04   | 5236.92                      |
|  | <b>Sub total</b>   | <b>112</b>          | <b>131.04</b>   | <b>48877.92</b>              |
| 6  | Provision for soil & moisture conservation measures in the plantation area @15%  | 16.8                | 19.66   | 7331.69                      |
| 7  | Monitoring & Evaluation @2 %   | 2.24                | 2.62  | 977.56                       |
|  | <b>Adding 8.5% being contingency due to escalation cost ets.after ascraining the rate of interest due to accrue from CA money to be deposit by user agency</b> | <b>11.14</b>        | <b>13.03</b>  | <b>4861.61</b>               |
|  | <b>Total in the 2nd year</b>   | <b>142.18</b>       | <b>166.35</b>   | <b>62048.7738</b>            |

| Third Year Maintenance of Plantation             |   |                     |  |                              |
|--|---|---------------------|--|------------------------------|
| Wage rate is Rs.1.27 times the present wage rate |   |                     |  |                              |
| Sl.no  | Item of Work  | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate | Amount when wage rate is 373 |
| 1  | 2   | 3                   | 4  | 5                            |
| 1  | Vacancy filling wherever necessary  | 4                   | 5.08   | 1894.84                      |
| 2  | Climber cutting and weeding 3 times   | 45                  | 57.15  | 21316.95                     |
| 3  | Fire protection<br>i) Wages of Fire watchers  | 10                  | 12.70  | 4737.10                      |
|  | ii) Fire line clearance including controlled burning  | 10                  | 12.70  | 4737.10                      |
| 4  | Maintenance of camp hut, signboard, fencing inspection paths, protection from grazing, documents upkeep of records and other miscellaneous works            | 30                  | 38.10  | 14211.30                     |
| 5  | Supervision cost  | 12                  | 15.24  | 5684.52                      |
|  | <b>Sub Total</b>  | <b>111</b>          | <b>140.97</b>  | <b>52581.81</b>              |
| 6  | Provision for soil & moisture conservation measures in the plantation area @ 15%  | 16.65               | 21.15  | 7887.27                      |
| 7  | Monitoring & evaluation @2%   | 2.22                | 2.82   | 1051.64                      |
| 8  | Adding 8.5% being contingency due to escalation cost etc.after ascertaining the rate of interest due to accrue from CA money to be deposited by user agency | 11.04               | 14.02  | 5229.76                      |
|  | <b>Total in the 3rd year</b>  | <b>140.91</b>       | <b>178.96</b>  | <b>66750.48</b>              |

| Fourth Year Maintenance of Plantation           |   |                     |   |                              |
|---|---|---------------------|---|------------------------------|
| Wage rate is Rs.1.4 times the present wage rate |   |                     |   |                              |
| Sl.no   | Item of Work  | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1   | 2   | 3                   | 4   | 5                            |
| 1   | Vacancy filling wherever necessary  | 2                   | 2.80  | 1044.40                      |
| 2   | Climber cutting and three times weeding   | 45                  | 63.00   | 23499.00                     |
| 3   | i) Wages of Fire watchers   | 10                  | 14.00   | 5222.00                      |
|   | ii) Fireline clearance including controlled burning, etc  | 10                  | 14.00   | 5222.00                      |
| 4   | Maintenance of cramp hut, signboard, fencing, inspection paths protection from  | 30                  | 42.00   | 15666.00                     |
| 5   | Supervision cost  | 12                  | 16.80   | 6266.40                      |
|   | <b>Sub total</b>  | <b>109</b>          | 152.60  | 56919.80                     |
| 6   | Provision for soil & moisture conservation measures measures in the plantation area @ 15%                               | 16.35               | 22.89   | 8537.97                      |
| 7   | Monitoring & evaluation @2%   | 2.18                | 3.05  | 1138.40                      |
|   | Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA | 10.84               | 15.18   | 5660.65                      |
| 8   | money to be deposited by user agency  |                     |   |                              |
|   | <b>Total in the 4th year</b>  | <b>138.37</b>       | 193.72  | 72256.814                    |

| Fifth Year Maintenance of Plantation             |  |                     |   |                              |
|--|--|---------------------|---|------------------------------|
| Wage rate is Rs.1.56 times the present wage rate |  |                     |   |                              |
| Sl.no  | Item of Work   | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | Climber cutting including silvicultural works  | 30                  | 46.80   | 17456.40                     |
| 2  | i) Wages of fire watchers  | 10                  | 15.60   | 5818.80                      |
|  | ii) Maintenance of Fireline including controlled burning etc   | 10                  | 15.60   | 5818.80                      |
| 3  | Maintenace of cramp hut, signborad, fencing, inspection paths, protection from   | 30                  | 46.80   | 17456.40                     |
| 4  | Supervision cost   | 12                  | 18.72   | 6982.56                      |
|  | <b>sub total</b>   | <b>92</b>           | <b>143.52</b>   | <b>53532.96</b>              |
| 5  | Provision for soil & moisture conservation measures in the plantation area @ 15%   | 13.8                | 21.53   | 8029.94                      |
| 6  | Monitoring & Evaluation @ 2%   | 1.84                | 2.87  | 1070.66                      |
|  | Adding 8.5% being contingency due to escalationcost etc.after ascertaining the rate of interest due to accure from CA money to be deposited by User agency | 9.15                | 14.27   | 5324.20                      |
|  | <b>Total in the 5th year</b>   | <b>116.79</b>       | <b>182.19</b>   | <b>67957.77</b>              |

| Sixth Year Maintenance of Plantation             |  |                     |   |                              |
|--|--|---------------------|---|------------------------------|
| Wage rate is Rs.1.74 times the present wage rate |  |                     |   |                              |
| Sl.no  | Item of Work   | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | Climber cutting including silivicultural works   | 20                  | 34.80   | 12980.40                     |
| 2  | i) wages of faire watcher  | 10                  | 17.40   | 6490.20                      |
|  | ii) maintenace of fireline including controlled burning etc.   | 10                  | 17.40   | 6490.20                      |
| 3  | Maintenace of cramp hut, signborad, fencing, inspection paths, protection from grazing, documentation, upkeep of records and other miscellaneous works.          | 30                  | 52.20   | 19470.60                     |
| 4  | Supervision Cost   | 12                  | 20.88   | 7788.24                      |
|  | <b>Sub Total</b>   | <b>82</b>           | <b>142.68</b>   | <b>53219.64</b>              |
|  | Provision for soil & moisture conservation measures in the plantation area @ 15%   | 12.3                | 21.40   | 7982.95                      |
|  | Monitoring & evaluation @ 2%   | 1.64                | 2.85  | 1064.39                      |
|  | Adding 8.5% being contingency due to escalation cost etc.after ascertaining the rate of interest due to accrue from CA money to be deposited by the user agency. | 8.15                | 14.18   | 5289.51                      |
|  | <b>Total in the 6th Year</b>   | <b>104.09</b>       | <b>181.12</b>   | <b>67556.49</b>              |

| Seventh Year Maintenance of Plantation           |  |                     |   |                              |
|--|--|---------------------|---|------------------------------|
| Wage rate is Rs.1.97 times the present wage rate |  |                     |   |                              |
| Sl.no  | Item of Work   | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | Climber cutting including silviculture works   | 16                  | 31.52   | 11756.96                     |
| 2  | i) Wages of fire watcher   | 10                  | 19.70   | 7348.10                      |
|  | ii) Maintenance of fireline including controlled burning etc.  | 10                  | 19.70   | 7348.10                      |
| 3  | Maintenace of cramp hut, singborad, fencing, inspection paths, protection from grazing, documentation, upkeep of records and othe miscellaneous works.       | 30                  | 59.10   | 22044.30                     |
| 4  | supervision Cost   | 12                  | 23.64   | 8817.72                      |
|  | <b>Sub total</b>   | <b>78</b>           | 153.66  | 57315.18                     |
|  | Provision for soil & moisture conservation measures in the plantation area @ 15%   | 11.7                | 23.05   | 8597.28                      |
|  | Monitoring & Evaluation @ 2%   | 1.56                | 3.07  | 1146.30                      |
|  | Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accre from CA money to be deposited by user agency. | 7.76                | 15.29   | 5702.13                      |
|  | <b>Total in the 7th year</b>   | <b>99.02</b>        | <b>195.07</b>   | <b>72760.8862</b>            |

| Eight year maintenace of Plantation              |  |                     |   |                              |
|--|--|---------------------|---|------------------------------|
| Wage rate is Rs.2.25 times the present wage rate |  |                     |   |                              |
| Sl.no  | Item of Work   | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | climber cutting including silvicultural works  | 16                  | 36.00   | 13428.00                     |
| 2  | i) wage of fire watchers   | 10                  | 22.50   | 8392.50                      |
|  | ii) maintenace of Fireline including controlled burning etc  | 10                  | 22.50   | 8392.50                      |
| 3  | Maintenace of cramp hut, signboard, fencing, inspection paths, protetion from grazing, documentation, upkeep of records and other miscellanous           | 30                  | 67.50   | 25177.50                     |
| 4  | Supervision cost   | 12                  | 27.00   | 10071.00                     |
|  | <b>Sub total</b>   | <b>78</b>           | 175.50  | 65461.50                     |
| 5  | Provision for soil & moisture conservation measures in the plantation area @ 15%   | 11.7                | 26.33   | 9819.23                      |
| 6  | Monitoring & Evaluation area @ 15%   | 1.56                | 3.51  | 1309.23                      |
|  | Adding 8.5% being contigel due to escalation cost after ascertaining the rate of interest due to accrue from CA money to be deposited by the user agency | 7.76                | 17.46   | 6512.58                      |
|  | <b>Total in he 8th year</b>  | <b>99.02</b>        | <b>222.80</b>   | <b>83102.535</b>             |



| Ninth year maintenace of Plantation              |   |                     |   |                              |
|--|---|---------------------|---|------------------------------|
| Wage rate is Rs.2.58 times the present wage rate |   |                     |   |                              |
| Sl.no  | Item of Work  | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1  | Climber cutting including siliviculture works   | 12                  | 30.96   | 11548.08                     |
| 2  | i) Wages of fire watchers   | 10                  | 25.80   | 9623.40                      |
|  | ii) Maintenace of fireline including  | 10                  | 25.80   | 9623.40                      |
| 3  | Maintenace of cramp hut, signboard, fencing, inspection paths, protection fromgrazing, documentation, upkeep of records and other miscellaneous | 30                  | 77.40   | 28870.20                     |
| 4  | Supervision cost  | 12                  | 30.96   | 11548.08                     |
|  | <b>Sub Total</b>  | <b>74</b>           | <b>190.92</b>   | <b>71213.16</b>              |
| 5  | Provision for soil & Moisture conservation  | 11.1                | 28.64   | 10681.97                     |
| 6  | Monitoing & evaluation @ 2%   | 1.48                | 3.82  | 1424.26                      |
| 7  | Adding 8.5% being contingency due to  | 7.36                | 18.99   | 7082.82                      |
|  | <b>Total in the 9th year</b>  | <b>93.94</b>        | <b>242.37</b>   | <b>90402.2196</b>            |

| Tenth year maintenace of Plantation           |   |                     |   |                              |
|---|---|---------------------|---|------------------------------|
| Wage rate is Rs.3 times the present wage rate |   |                     |   |                              |
| Sl.no   | Item of Work  | Mandays per Hectare | Mandays per hectare considering annual increase in wage rate for first year | Amount when wage rate is 373 |
| 1   | climber cuting siliviculture works  | 10                  | 30.00   | 11190.00                     |
| 2   | i) wages of fire watchers   | 10                  | 30.00   | 11190.00                     |
|   | ii) maintenace of fireline including controlled burning etc.  | 10                  | 30.00   | 11190.00                     |
| 3   | Maintenace of cramp hut, signboard, inspection paths, protection from grazing, documentation, upkeep of records and other miscellaneous works                   | 30                  | 90.00   | 33570.00                     |
| 4   | Supervision cost  | 12                  | 36.00   | 13428.00                     |
| 5   | Misc.expenditure e.g salvaging of fencing materials from the plantation centre wherever fencing is no longer necessary  | 6                   | 18.00   | 6714.00                      |
|   | <b>Sub Total</b>  | <b>78</b>           | <b>234.00</b>   | <b>87282.00</b>              |
| 6   | Provision for soil & moisture conservation measures in the plantation area @15%   | 11.7                | 35.10   | 13092.30                     |
| 7   | Monitoring & evaluation @ 2%  | 1.56                | 4.68  | 1745.64                      |
|   | Adding 8.5% being contingency due to escalation cost etc. after ascertaiing the rate of interest due to accure from cA money to be deposited by the user Agency | 7.76                | 23.28   | 8683.44                      |
|   | <b>Total in the year 10th Year</b>  | <b>99.02</b>        | <b>297.06</b>   | <b>110803.38</b>             |

**Cost Abstract for Compensatory Afforestation Scheme**

| Sl.No | Year                               | Mandays        | Mandays per considering annual increase in wage rate | Amount when wage rate is 373 |
|-------|------------------------------------|----------------|--|------------------------------|
| 1     | First year creation and maintenace | 219.20         | 236.74   | 88302.528                    |
| 2     | Second year maintenace             | 142.18         | 166.35   | 62048.7738                   |
| 3     | Third Year maintenace              | 140.91         | 178.96   | 66750.4761                   |
| 4     | Fourth year maintenace             | 138.37         | 193.72   | 72256.814                    |
| 5     | Fifth Year Maintenace              | 116.79         | 182.19   | 67957.7652                   |
| 6     | Sixth Year maintenace              | 104.09         | 181.12   | 67556.4918                   |
| 7     | Seventh Year maintenace            | 99.02          | 195.07   | 72760.8862                   |
| 8     | Eight year maintenace              | 99.02          | 222.80   | 83102.535                    |
| 9     | Ninth Year maintenace              | 93.94          | 242.37   | 90402.2196                   |
| 10    | Tenth year maintenace              | 99.02          | 297.06   | 110803.38                    |
|       | <b>Grand total per hectare</b>     | <b>1252.54</b> | <b>2096.36</b>                                       | <b>781941.9</b>              |

Cost for raising compensatory afforsation for 1 Ha for tall seedlings= Rs 781941.9

Area for planting 1000 trees = 1.00ha

Area for planting 100 trees= 0.10ha


Hence cost for rasing 100 tall seedlings= Rs 78,194.19

Purchase cost of 100 numbers tall seedlings= Rs 10,000.00

Total= Rs 88,194.19

Say Rs 88,194.00

**Rupees Eighty Eight Thousand One Hundred Ninety Four only**

  
 Divisional Forest Officer  
 East Khasi Hills & Ri Bhoi (T) Division  
 Shillong