Norms for undertaking compensatory Afforestation scheme for planting 100 nos of tall seedlings for Diversion of 0.09ha of Forest Land under laitkor Protected Forest which was leased to Lumparing Nepali UP School since1978.

|       | 301  | ooi since 197          | 0.   |                              |
|-------|--|------------------------|--|------------------------------|
|       | Creation and 1st Ye  | ear Mainten            | ance of Plantation   |                              |
| Sl.no | Item of Work   | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>for first year | Amount when wage rate is 373 |
|       | Wage rate is Rs.1.0  | 8 times the            | present wage rate  |                              |
| 1     |  | 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                     |
|       | Fire protection during dry and windy season i) wages of fire watchers from November of the creation year to April of the following year.                                   | 10                     | 10.80  | 4028.40                      |
| 4     | ii)Fireline clearance including controlled<br>burning form November in the cration year<br>to April of the following year  | 10                     | 10.80  | 4028.40                      |
| 5     | Maintenace of cramp hut, signboard, ducumentation, protection from grazing, upkeep of records and other miscellaneous works  | 30                     | 32.40  | 12085.20                     |
| 6     | Supervision cost   | 12                     | 12.96  | 4834.08                      |
|       | Sub Total  | 172                    | 185.76   | 69288.48                     |
| 7     | Soil & Moisture conservation measures in the plantation area @15% of the total cost of 1st year creation.  | 26.28                  | 28.38  | 10586.64                     |
| 8     | Monitoring & Evaluation @2%  | 3.5                    | 3.78   | 1409.94                      |
| 9     | Adding 8.5% being contingency due to escalation cost of materials etc.after ascertaining the rate of interest dure to accrue from CA money to be deposited by User Agency. | 17.42                  | 18.81  | 7017.47                      |
|       | Total for 1st Year creation and maintenance  | 219.20                 | 236.74   | 88302.53                     |

| Second Year                  | Maintenance            | of Plantation  |                          |
|------------------------------|------------------------|--|--------------------------|
| Wage rate is Rs.1.           | 17 times the           | present wage rate  |                          |
| Item of Work                 | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate | Amount when wage rate is |
| 2                            | 3                      | 4  | 5                        |
| by one year old seedlings in | 5                      | 5.85   | 2182.05                  |
| g and weedings 3 times       | 45                     | 52.65  | 19638.45                 |

| Sl.no | Item of Work   | Mandays<br>per Hectare | considering annual increase in wage rate | 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                     |
|       | Fire Protection  | 10                     | 11.70                                    | 4364.10                      |
| 3     | 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     | Suppervision cost  | 12                     | 14.04                                    | 5236.92                      |
|       | Sub total  | 112                    | 131.04                                   | 48877.92                     |
| 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                       |
|       | Adding 8.5% being contingency due to escalation cost ets.after ascrtaining the rate of interest due to accrue from CA money to be deposit by user agency | 11.14                  | 13.03                                    | 4861.61                      |
|       | Total in the 2nd year  | 142.18                 | 166.35                                   | 62048.7738                   |

| Third Year | Maintenance | of Plantation |
|------------|-------------|---------------|
|------------|-------------|---------------|

# Wage rate is Rs.1.27 times the present wage rate

| Sl.no | Item of Work  | Mandays<br>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 weedings 3 times  | 45                     | 57.15  | 21316.95                     |
| 3     | Fire protection i) Wages of Fire watchers   | 10                     | 12.70  | 4737.10                      |
|       | ii) Fire line clearance including controlled burning  | 10                     | 12.70  | 4737.10                      |
| 4     | Maintenenance of cramp hut, signborad, 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                      |
| -     | Sub Total   | 111                    | 140.97   | 52581.81                     |
|       | Provision for soil & moisture conservation measures in the plantation area @ 15%  | 16.65                  | 21.15  | 7887.27                      |
|       | 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                      |
|       | Total in the 3rd year   | 140.91                 | 178.96   | 66750.48                     |

# Fourth Year Maintenance of Plantation-

# Wage rate is Rs.1.4 times the present wage rate

| Sl.no | Item of Work   | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate | Amount when wage rate is 373 |
|-------|--|------------------------|--|------------------------------|
| 1     | 2  | 3                      | 4  | 5                            |
|       | Vacancy filling wherever necessary   | 2                      | 2.80   | 1044.40                      |
|       | Climber cutting and three times weeding  | 45                     | 63.00  | 23499.00                     |
|       | i) Wages of Fire watchers  | 10                     | 14.00  | 5222.00                      |
| 3     | ii) Fireline clearance including controlled burning, etc   | 10                     | 14.00  | 5222.00                      |
| Δ     | Maintenance of cramp hut, signboard, fencing, inspection paths protection from   | 30                     | 42.00  | 15666.00                     |
|       | Supervision cost   | 12                     | 16.80  | 6266.40                      |
|       | Sub total  | 109                    | 152.60   | 56919.80                     |
| (     | 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 money to be deposited by user agency | 10.84                  | 15.18  | 5660.65                      |
|       | Total in the 4th year  | 138.37                 | 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<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>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                      |
| 2     | 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                      |
|       | sub total  | 92                     | 143.52   | 53532.96                     |
| 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                      |
|       | Total in the 5th year  | 116.79                 | 182.19   | 67957.77                     |

# Sixth Year Maintenance of Plantation

Wage rate is Rs.1.74 times the present wage rate

| Sl.no | Item of Work   | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>for first year | Amount when wage rate is |
|-------|--|------------------------|--|--------------------------|
| 1     | Climber cutting including silivicultural works   | 20                     | 34.80  | 12980.40                 |
|       | i) wages of faire watcher  | 10                     | 17.40  | 6490.20                  |
|       | ii) maintenace of fireline including controlled burning etc.   | 10                     | 17.40  | 6490.20                  |
|       | Maintenace of cramp hut, signborad, fencing, inspection paths, protection from grazing, documentation, upkeep of records and other miscellaneaous works.         | 30                     | 52.20  | 19470.60                 |
|       | Supervision Cost   | 12                     | 20.88  | 7788.24                  |
|       | Sub Total  | 82                     | 142.68   | 53219.64                 |
|       | 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                  |
| -     | Total in the 6th Year  | 104.09                 | 181.12   | 67556.49                 |

### Seventh Year Maintenance of Plantation

# Wage rate is Rs.1.97 times the present wage rate

| Sl.no | Item of Work   | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>for first year | Amount when wage rate is 373 |
|-------|--|------------------------|--|------------------------------|
| 1     | Climber cutting including silviculture works   | 16                     | 31.52  | 11756.96                     |
|       | i) Wages of fire watcher   | 10                     | 19.70  | 7348.10                      |
| 2     | 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 miscellanous works.        | 30                     | 59.10  | 22044.30                     |
| 4     | supervision Cost   | 12                     | 23.64  | 8817.72                      |
|       | Sub total .  | 78                     | 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                      |
|       | Total in the 7th year  | 99.02                  | 195.07   | 72760.8862                   |

### Eight year maintenace of Plantation

# Wage rate is Rs.2.25 times the present wage rate

| Sl.no | Item of Work  | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>for first year | Amount when wage rate is 373 |
|-------|---|------------------------|--|------------------------------|
| 1     | climber cutting including silivicultural works  | 16                     | 36.00  | 13428.00                     |
|       | i) wage of fire watchers  | 10                     | 22.50  | 8392.50                      |
| 2     | 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                     |
|       | Sub total   | 78                     | 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 contingel 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                      |
|       | Total in he 8th year  | 99.02                  | 222.80   | 83102.535                    |

|       | Ninth year  | maintenace o           | of Plantation                          |                          |
|-------|---|------------------------|--|--------------------------|
|       |   |                        | present wage rate                      |                          |
| SI.no |   | Mandays<br>per Hectare | Mandays per hectare considering annual | Amount when wage rate is |
| 1     | Climber cutting including siliviculture works   | 12                     | 30.96                                  | 11548.08                 |
|       | i) Wages of fire watchers   | 10                     | 25.80                                  | 9623.40                  |
| 2     | 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                 |
|       | Sub Total   | 74                     | 190.92                                 | 71213.16                 |
| 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                  |
|       | Total in the 9th year   | 93.94                  | 242.37                                 | 90402.2196               |

90402.2196

#### Tenth year maintenace of Plantation

Wage rate is Rs.3 times the present wage rate

| Sl.no | Item of Work  | Mandays<br>per Hectare | Mandays per hectare<br>considering annual<br>increase in wage rate<br>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 miscellaneaous 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                      |
|       | Sub Total   | 78                     | 234.00   | 87282.00                     |
| 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                      |
|       | Total in the year 10th Year   | 99.02                  | 297.06   | 110803.38                    |

| SI.No | Year                               | Mandays | Mandays per considering annual increse 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 maintence              | 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 maintenance             | 93.94   | 242.37  | 90402.2196                   |
| 10    | Tenth year maintenace              | 99.02   | 297.06  | 110803.38                    |
|       | Grand total per hectare            | 1252.54 | 2096.36   | 781941.9                     |

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

Area for planting 1000 trees =

Area for planting 100 trees=

0.10ha

1.00ha

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