

**SANGRUR FOREST DIVISION, SANGRUR**

**Plantation Model For Standard Plantation under Compensatory Afforestation  
Plants Per Hectare : 1000 Nos.**

**Wage Rate Rs. 411**

| Sr. No.  |                                                                                      | Unit        | Qty.             | Unit Cost<br>(in Rs.) | Amount           |
|----------|--------------------------------------------------------------------------------------|-------------|------------------|-----------------------|------------------|
|          | <b>Nursery</b>                                                                       |             |                  |                       |                  |
|          | Nursery cost of raising plants                                                       | 1100        | 1100             | 25.00                 | 27500.00         |
| <b>A</b> | <b>Soil Work</b>                                                                     |             |                  |                       |                  |
| 1        | Site / Jungle Clearance (50%)                                                        | Ha.         | 0.5              | 6725.39               | 3362.70          |
| 2        | Alignment & Dagbaling                                                                | Ha.         | 1                | 1233                  | 1233.00          |
| 3        | Earth works in Digging of Pits<br>1000 x 0.5 m x 0.5 m x 0.4<br>m=500x2.50x0.30x0.20 | 1 M3        | 175              | 97.1541               | 17001.97         |
| 4        | Kana Stubbing 25%                                                                    | Ha.         | 0.25             | 33626.8               | 8406.70          |
| <b>B</b> | <b>Plantation Work</b>                                                               |             |                  | 0                     |                  |
| 1        | Refilling of Pits 1000x0.5mx0.5mx0.3                                                 | 100 cum     | 75               | 34.4213               | 2581.60          |
| 2        | Loading & Unloading of Plants<br>(1000+10% Wastage=1100)                             | 100 No.     | 1100             | 51.21                 | 563.31           |
| 3        | Carriage of Plants (1000+10% wastage<br>=1100 avg. distance upto 10 km.)             | 100 No.     | 1100             | 246.6                 | 2712.60          |
| 4        | i) Carriage from site to site                                                        | 100 No.     | 1000             | 164.4                 | 1644.00          |
|          | ii) Planting of Plants (1000 No. including<br>10% replacement)                       | 100 No.     | 1000             | 445                   | 4450.00          |
| 5        | Spot Irrigation (1000 Plants)                                                        | 100 No.     | 1000             | 385.3125              | 3853.13          |
| 6        | Application of Insecticide (2 Times)                                                 | 100 No.     | 2000             | 51.375                | 1027.50          |
| 7        | Application of Fertilizers (2 Times)                                                 | 100 No.     | 2000             | 51.375                | 1027.50          |
| 8        | Weeding & Hoeing 3 Times                                                             | 100 No.     | 3000             | 447.99                | 13439.70         |
| 9        | Hand Watering (10 Times)                                                             | 100 No.     | 10000            | 385.3125              | 38531.25         |
| 10       | Replanting of Plants 10%                                                             | 100 No.     | 100              | 725.658               | 725.66           |
| 11       | Rejungle Clearance (2 Times)                                                         | Per Ha.     | 1                | 2979.75               | 2979.75          |
| 12       | Covering (25% plants) of plants                                                      | 100 No.     | 250              | 369.9                 | 924.75           |
| 13       | Uncovering of plants                                                                 | 100 No.     | 250              | 41.1                  | 102.75           |
| 14       | Restubbing of Kana (1 Time)                                                          |             | 0.25             | 33627.2               | 8406.80          |
| 15       | Laying out & fixing of Barbed Wire                                                   | L/s         |                  |                       | 8100.00          |
| 16       | Watch & Ward for every 10 Ha. ( 7<br>Months)                                         | Man<br>Year | 1 Man<br>7 Month | 10686                 | 7480.20          |
| 17       | Material                                                                             |             |                  |                       |                  |
|          | i) Insecticides / Fertilizers                                                        | L/s         |                  |                       | 6200.00          |
|          | ii) POL                                                                              | L/s         |                  |                       | 6200.00          |
|          | iii) Barbed Wire                                                                     | L/s         |                  |                       | 62000.00         |
|          | <b>Sub Total</b>                                                                     |             |                  |                       | <b>230454.85</b> |
|          | <b>Maintenance 1 Year</b>                                                            |             |                  |                       |                  |
| 1        | Cost of raising plants for 30%<br>replacement                                        | 1 No.       | 300              | 25                    | 7500.00          |
| 2        | Reopening of Pits 300 x 0.50 x 0.50 x<br>0.30                                        | 1 m3        | 22.5             | 74.7194               | 1681.19          |
| 3        | Refilling of pits with earth in other soils<br>300 x 0.50 x 0.50 x 0.30              | 1 m3        | 22.5             | 34.4213               | 774.48           |
| 4        | Loading & Unloading of Plants                                                        | 1 No.       | 300              | 0.5121                | 153.63           |
|          | Carriage of Plants (30%) distance upto 10                                            |             |                  |                       |                  |



|    |                                                                      |          |                 |          |                 |
|----|----------------------------------------------------------------------|----------|-----------------|----------|-----------------|
| 6  | Spreading of plants pit to pit                                       | 100 No.  | 300             | 164.4    | 493.20          |
| 7  | Re-Planting to plants                                                | 100 No.  | 300             | 445      | 1335.00         |
| 8  | Spot Irrigation                                                      | 100 No.  | 300             | 385.3125 | 1155.94         |
| 9  | Weeding & Hoeing (three)                                             | 100 No.  | 3000            | 447.99   | 13439.70        |
| 10 | Application of Insecticide (2 Times)                                 | 100 No.  | 2000            | 51.375   | 1027.50         |
| 11 | Application of Fertilizers (2 Times)                                 | 100 No.  | 2000            | 51.375   | 1027.50         |
| 12 | Hand Watering (6 Times)                                              | 100 No.  | 6000            | 385.3125 | 23118.75        |
| 13 | Rejungle Clearance (2 Times)                                         | Per Ha.  | 1               | 2979.75  | 2979.75         |
| 14 | Restubbing of Kana                                                   | Per Ha.  | 0.25            | 33626.8  | 8406.70         |
| 15 | Watch & Ward for every 10 Ha. (7Months)                              | Man Year | 1/ Man 7 months | 10686    | 7480.20         |
| 16 | Repair of Barbed Wire                                                | L/s      |                 |          | 6200.00         |
| 17 | POL & Machinery                                                      | L/s      |                 |          | 6200.00         |
| 18 | Material and Supply                                                  | L/s      |                 |          | 6200.00         |
|    | <b>Sub Total</b>                                                     |          |                 |          | <b>89913.33</b> |
|    | <b>2nd Year Maintenance</b>                                          |          |                 |          |                 |
| 1  | Cost of raising plants for 15% replacement                           | 1 No.    | 150             | 25       | 3750.00         |
| 2  | Reopening of Pits 150 x 0.60 x 0.60 x 0.40                           | 1 m3     | 21.6            | 74.7194  | 1613.94         |
| 3  | Refilling of pits with earth in other soils 150x 0.60 x 0.60 x 0.40  | 1 m3     | 21.6            | 34.4213  | 296.68          |
| 4  | Loading & Unloading of Plants                                        | 1 No.    | 150             | 0.5121   | 76.82           |
| 5  | Carriage of Plants & Wastage = 75 avg. distance upto 10 Km.)         | 500 No.  | 1               | 246.6    | 246.60          |
| 6  | Spreading of plants pit to pit                                       | 100 No.  | 150             | 164.4    | 246.60          |
| 7  | Re-Planting to plants                                                | 100 No.  | 150             | 445      | 667.50          |
| 8  | Spot Irrigation                                                      | 100 No.  | 150             | 385.3125 | 577.97          |
| 9  | Weeding & Hoeing (Twice)                                             | 100 No.  | 2000            | 445.3394 | 8906.79         |
| 10 | Hand Watering (5 Times)                                              | 100 No.  | 5000            | 385.3125 | 19265.63        |
| 11 | Rejungle Clearance (2 Times)                                         | Per Ha.  | 1               | 2979.75  | 2979.75         |
| 12 | Pruning to Plants                                                    | 100 No.  | 100             | 485.695  | 485.70          |
| 13 | Watch & Ward for every 10 Ha. ( 7 Months)                            | Man Year | 1 Man 7 Month   | 10686    | 7480.20         |
| 14 | Repair of Barbed Wire                                                | L/s      |                 |          | 6200.00         |
| 15 | POL & Machinery                                                      | L/s      |                 |          | 6200.00         |
| 18 | Material and Supply                                                  | L/s      |                 |          | 6200.00         |
|    | <b>Sub Total</b>                                                     |          |                 |          | <b>65194.16</b> |
|    | <b>3rd Year Maintenance</b>                                          |          |                 |          |                 |
| 1  | Cost of raising plants for 10% replacement                           | 1 No.    | 100             | 25       | 2500.00         |
| 2  | Reopening of Pits 100 x 0.50 x 0.50 x 0.40                           | 1 m3     | 10              | 74.7194  | 747.19          |
| 3  | Refilling of pits with earth in other soils 100 x 0.50 x 0.50 x 0.30 | 1 m3     | 7.5             | 34.4213  | 197.78          |
| 4  | Loading & Unloading of Plants                                        | 1 No.    | 100             | 0.5121   | 51.21           |
| 5  | Carriage of Plants 50 avg. distance upto 10 Km.)                     | 100 No.  | 100             | 2.46     | 246.00          |
| 6  | Spreading of plants pit to pit                                       | 100 No.  | 100             | 164.4    | 164.40          |
| 7  | Re-Planting to plants                                                | 100 No.  | 100             | 445      | 445.00          |
| 8  | Spot Irrigation                                                      | 100 No.  | 100             | 385.3125 | 385.31          |
| 9  | Weeding & Hoeing (twice)                                             | 100 No.  | 2000            | 445.3394 | 8906.79         |
| 10 | Hand Watering (5 Times)                                              | 100 No.  | 5000            | 385.3125 | 19265.63        |



|    |                                                                     |          |               |          |                 |
|----|---------------------------------------------------------------------|----------|---------------|----------|-----------------|
| 12 | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
| 13 | Repair of Barbed Wire                                               | L/s      |               | 0        | 6200.00         |
| 14 | POL & Machinery                                                     | L/s      |               | 0        | 6200.00         |
| 15 | Material and Supply                                                 | L/s      |               | 0        | 6200.00         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>59960.90</b> |
|    | <b>4th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Cost of raising plants for 5% replacement                           | 1 No.    | 50            | 25       | 1250.00         |
| 2  | Reopening of Pits 50 x 0.50 x 0.50 x 0.40                           | 1 m3     | 5             | 74.7194  | 373.60          |
| 3  | Refilling of pits with earth in other soils 50 x 0.50 x 0.50 x 0.30 | 1 m3     | 3.75          | 34.4213  | 197.78          |
| 4  | Loading & Unloading of Plants                                       | 1 No.    | 50            | 0.5121   | 25.61           |
| 5  | Carriage of Plants 50 avg. distance upto 10 Km.)                    | 100 No.  | 50            | 2.46     | 123.00          |
| 6  | Spreading of plants pit to pit                                      | 100 No.  | 50            | 164.4    | 82.20           |
| 7  | Re-Planting to plants                                               | 100 No.  | 50            | 445      | 222.50          |
| 8  | Spot Irrigation                                                     | 100 No.  | 50            | 385.3125 | 192.66          |
| 9  | Weeding & Hoeing (twice)                                            | 100 No.  | 2000          | 445.3394 | 8906.79         |
| 10 | Hand Watering (4 Times)                                             | 100 No.  | 4000          | 385.3125 | 15412.50        |
| 11 | Pruning to Plants 30%                                               | 100 No.  | 300           | 485.695  | 1457.09         |
| 12 | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
| 13 | Repair of Barbed Wire                                               | L/s      |               | 0        | 6200.00         |
| 14 | POL & Machinery                                                     | L/s      |               | 0        | 6200.00         |
| 15 | Material and Supply                                                 | L/s      |               | 0        | 6200.00         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>54323.92</b> |
|    |                                                                     |          |               | 0        |                 |
|    | <b>5th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>7480.20</b>  |
|    | <b>6th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>7480.20</b>  |
|    | <b>7th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>7480.20</b>  |
|    | <b>8th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>7480.20</b>  |
|    | <b>9th Year Maintenance</b>                                         |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |
|    | <b>Sub Total</b>                                                    |          |               | 0        | <b>7480.20</b>  |
|    |                                                                     |          |               | 0        |                 |
|    | <b>10th Year Maintenance</b>                                        |          |               | 0        |                 |
| 1  | Watch & Ward for every 10 Ha. ( 7 Months)                           | Man Year | 1 Man 7 Month | 10686    | 7480.20         |

|   |                                                                            |  |  |                  |                  |
|---|----------------------------------------------------------------------------|--|--|------------------|------------------|
|   | <b>Total</b>                                                               |  |  |                  | <b>544728.36</b> |
|   | <b>Over Head expenses 5%</b>                                               |  |  |                  | <b>27236.42</b>  |
|   | <b>Wage Enhancement @ 10%</b>                                              |  |  |                  | <b>54472.84</b>  |
|   | <b>G. Total</b>                                                            |  |  |                  | <b>626437.62</b> |
|   | <b>Or say</b>                                                              |  |  |                  | <b>626.44</b>    |
|   |                                                                            |  |  | <b>Per plant</b> | <b>626.44</b>    |
| 1 | Cost of Compensatory Afforestation of area 0.100 @ 626438/- Rs.<br>Per ha. |  |  | CA               | 62644.00         |
|   | <b>Grand Total</b>                                                         |  |  |                  | <b>62644.00</b>  |

Divisional Forest Officer

Sangrur