|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Conservation and Sustainable Use of Biodiversity and Forests in Ethiopia – South Wollo Biodiversity and Afforestation Project** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Form for the Afforestation Plots Management Planning | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plot ID  1 | |  | | | | | | | | | | |  | | | | | | | | | | | | |  | |
| Region/Zone/Woreda/ | | | | | | | | | | | Kebele | | | | | | | | | | | | | Plot | |
| **Owners**  **(names/contacts)** | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Gross Size (ha)** | 3 | | | | **Plantable**  Area (ha) | | | | 4 | | | | | | **Site Classification**  (1-3 and + or non + Site) | | | | | | | | | | | 5 | |
| **Location**  **description** |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Afforestation Model** | Type | | Name  6 | | | | | | | | % | | | | Name | | | | % | | | Name | | | | | % |
| Fast grow | |  | | | | | | | | 7 | | | | 8 | | | | 9 | | | 10 | | | | | 11 |
| Long rotate | | 12 | | | | | | | | 13 | | | | 14 | | | | 15 | | | 16 | | | | | 17 |
| Indigenous | | 18 | | | | | | | | 19 | | | | 20 | | | | 21 | | | 22 | | | | | 23 |
| **Required surviving seedlings per ha** | Type | | | | | Target 1st monitoring | | | | | | | | | | | Target 2nd monitoring | | | | | | | | | | |
|  | | | | | N/ha | | Total (N/ha X ha) | | | | | | | | | N/ha | | | | Total (N/ha X ha) | | | | | | |
| Fast growing | | | | | *1500* | | 24 | | | | | | | | | *1406* | | | | 27 | | | | | | |
| Long Rotation | | | | | *300* | | 25 | | | | | | | | | *281* | | | | 28 | | | | | | |
| Indigenous | | | | | *200* | | 26 | | | | | | | | | *188* | | | | 29 | | | | | | |
| **Production expected next**  **10 years** | Gross Production estimation (only one production type (good, medium or low) can be used and filled per afforestation plot) Prices estimated after harvest and yarding at road side | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Species Type | | | | | | | | | | | Annual  Production  *m³/ha/year* | | | | Total 10 Year Gross Production | | | | | | | | | | | |
| Wood  (m³ /year X ha X 10 X %) | | | | | | | | Money  (total m³ X price per m³) | | | |
| Fast growing (good) | | | | | | | | | | | *25* | | | |  | | | | | | | |  | | | |
| Fast growing (medium) | | | | | | | | | | | *20* | | | |  | | | | | | | |  | | | |
| Fast growing (low) | | | | | | | | | | | *15* | | | |  | | | | | | | |  | | | |
| Total Timber production after 10 years | | | | | | | | | | | | | | |  | | | | | | | |  | | | |
| Long Rotation (good) | | | | | | | | | | | *20* | | | |  | | | | | | | |  | | | |
| Long Rotation (medium) | | | | | | | | | | | *15* | | | |  | | | | | | | |  | | | |
| Long Rotation (low) | | | | | | | | | | | *10* | | | |  | | | | | | | |  | | | |
| Total long rotate wood stocks 10 years | | | | | | | | | | | | | | |  | | | | | | | |  | | | |
| Indigenous trees (good) | | | | | | | | | | | *10* | | | |  | | | | | | | |  | | | |
| Indigenous trees (medium) | | | | | | | | | | | *7* | | | |  | | | | | | | |  | | | |
| Indigenous trees (low) | | | | | | | | | | | *4* | | | |  | | | | | | | |  | | | |
| Total Indigenous wood stocks 10 years | | | | | | | | | | | | | | |  | | | | | | | |  | | | |
| **Labor Investments needed for establishment (excluding harvesting and related activities)** | Average estimation of labour input (tick Y if applicable, N if not applicable) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y/N | Work Type | | | | | | | | Difficulty Type / Details | | | | | | | | | | PD / ha | | | | | Total PDs  (PD/ha X ha) | | |
|  | Clearing | | | | | | | | -- | | | | | | | | | | 20 | | | | |  | | |
|  | Ploughing | | | | | | | | -- | | | | | | | | | |  | | | | |  | | |
|  | Terracing, Water harvesting | | | | | | | | Class 1 - minimum measure site | | | | | | | | | | 450 | | | | |  | | |
|  |  | | | | | | | | Class 2 – moderate measure site | | | | | | | | | | 780 | | | | |  | | |
|  |  | | | | | | | | Class 3 - intensive measure site | | | | | | | | | | 1260 | | | | |  | | |
|  | Pit preparation | | | | | | | | Standard site 2500/ha | | | | | | | | | | 42.5 | | | | |  | | |
|  |  | | | | | | | | Plus site 3333/ha | | | | | | | | | | 56.5 | | | | |  | | |
|  | Planting | | | | | | | | Incl. transport and fertilizer appl. standards site | | | | | | | | | | 42.5 | | | | |  | | |
|  |  | | | | | | | | Incl. transport and fertilizer appl. standards site | | | | | | | | | | 56.5 | | | | |  | | |
|  | Weeding year 1 | | | | | | | | Standard site 2500/ha | | | | | | | | | | 17.5 | | | | |  | | |
|  |  | | | | | | | | Plus site 3333/ha | | | | | | | | | | 23.5 | | | | |  | | |
|  | Coppice management | | | | | | | | All site similar | | | | | | | | | | 12 | | | | |  | | |
|  | Weeding year 2-5 | | | | | | | | Standard site 2500/ha | | | | | | | | | | 27.5 | | | | |  | | |
|  |  | | | | | | | | Plus site 3333/ha | | | | | | | | | | 36.5 | | | | |  | | |
|  | Maintenance | | | | | | | | Thinning (fast grow), pruning & general maintenance | | | | | | | | | | 62 | | | | |  | | |
| Total labour input in Person Days (PDs) | | | | | | | | | | | | | | | | | | | | | | | |  | | |
| **Investment in cash money** | **Seedling Cost – Easy conditions** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tree type | | | | | | Number / ha  (n/ha) | | | | | | Cost per seedling  (Birr) | | | | | Total Cost (Birr)  (number /ha X cost per seedling X ha) | | | | | | | | | |
| Fast growing | | | | | | 1 875 | | | | | |  | | | | |  | | | | | | | | | |
| Long rotation | | | | | | 375 | | | | | |  | | | | |  | | | | | | | | | |
| Native tree | | | | | | 250 | | | | | |  | | | | |  | | | | | | | | | |
| Fertilizer /seedling | | | | | | 2500 | | | | | |  | | | | |  | | | | | | | | | |
| Total Cost Seedlings | | | | | | | | | | | | | | | | |  | | | | | | | | | |
| **Seedling Cost – Difficult conditions** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tree type | | | | | | Number / ha  (n/ha) | | | | | | Cost per seedling  (Birr) | | | | | Total Cost (Birr)  (number /ha X cost per seedling X ha) | | | | | | | | | |
| Fast growing | | | | | | 2 500 | | | | | |  | | | | |  | | | | | | | | | |
| Long rotation | | | | | | 500 | | | | | |  | | | | |  | | | | | | | | | |
| Native tree | | | | | | 333 | | | | | |  | | | | |  | | | | | | | | | |
| Fertilizer /seedling | | | | | | 3333 | | | | | |  | | | | |  | | | | | | | | | |
| Total Cost Seedlings | | | | | | | | | | | | | | | | |  | | | | | | | | | |
| **Signatures to confirm that the management plan was agreed** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date:  30 | | | | Signature Technician / DA | | | | | | | | | | |  | | | | | | | | | | | | |
| Signature Owners: | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
| **Submitted** to WCU (date) | | | | 31 | | | | | | | | | | **Approved** by (signature) | | | | | | | | |  | | | | |
| **Archived by** (name) | | | |  | | | | | | | | | | **Archive date** | | | | | | | | | 32 | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Feld Nummer** | **FeldName** | **Feld Inhalt** | **Feldtyp** |
| 1 |  | Plot ID | 12 digit number, integer |
| 2 |  | Owner Names | Text 100 letters |
| 3 |  | Gross Size | Number, 2 digits after comma |
| 4 |  | Plantable Size | Number, 2 digits after comma |
| 5 |  | Site Classification | Text, Selection field, 1, 1+, 2, 2+,3,3+ |
| 6 |  | Model-Fast grow-1-name | Text, 25 letter |
| 7 |  | Model-Fast grow-1-percent | Number, integer, % |
| 8 |  | Model-Fast grow-2-name | Text, 25 letter |
| 9 |  | Model-Fast grow-1-percent | Number, integer, % |
| 10 |  | Model-Fast grow-3-name | Text, 25 letter |
| 11 |  | Model-Fast grow-3-percent | Number, integer, % |
| 12 |  | Model-Long Rotate-1-name | Text, 25 letter |
| 13 |  | Model- Long Rotate-1-percent | Number, integer, % |
| 14 |  | Model-Long Rotate-2-name | Text, 25 letter |
| 15 |  | Model-Long Rotate-2-percent | Number, integer, % |
| 16 |  | Model-Long Rotate-3-name | Text, 25 letter |
| 17 |  | Model-Long Rotate-3-percent | Number, integer, % |
| 18 |  | Model-indigenous-1-name | Text, 25 letter |
| 19 |  | Model-indigenous-1-percent | Number, integer, % |
| 20 |  | Model-indigenous-2-name | Text, 25 letter |
| 21 |  | Model-indigenous-2-percent | Number, integer, % |
| 22 |  | Model-indigenous-3-name | Text, 25 letter |
| 23 |  | Model-indigenous-3-percent | Number, integer, % |
| 24 |  | 1st monitor target fast grow total N trees | Number |
| 25 |  | 1st monitor target long rotate total N trees | Number |
| 26 |  | 1st monitor target indigenous total N trees | Number |
| 27 |  | 2nd monitor target fast grow total N trees | Number |
| 28 |  | 2nd monitor target long rotate total N trees | Number |
| 29 |  | 2nd monitor target indigenous total N trees | Number |
| 30 |  | Plan agreement Date | Date |
| 31 |  | Plan submission to WCU Date | Date |
| 32 |  | Archive Date | Date |