# Eig TOOL 11a <br> ASSESSMENT AND UTILISATION OF FOREST AND TREE PRODUCTS 



## TOOL 11a

## ASSESSMENT AND UTILISATION

 OF FOREST AND TREE PRODUCTS
## What is the purpose of assessment and utilisation of forest and tree products?

- To identify local knowledge and preferences for utilising different trees and forest products (by different stakeholder groups).
- To identify relevant project interventions and activities for forest management, REDD+ and smallholder agroforestry type projects.


## Plan Vivo Carbon Standard (PV Climate) requirement?

- Highly recommended for all projects that involve tree planting or utilisation of trees and other forest products.


## When to use this tool?

- This is a tool to get information that will be included in the land management plan part of the PDD.
- Normally this tool should be used after a Participatory Resource map (Tool 9) has already been completed.


## Why is this tool required?

This is a tool that has multiple uses. For community-based REDD-type projects, it will generate information about how a forest (or other community-managed resource) is being used for different products required by the community and will show what potentials exist for sustainable resource management. For smallholder and agroforestry type projects it can be used to assess farmer preferences for different tree species that could be planted as a project intervention. For blue carbon projects it could provide information about how communities are using the marine resources for different products or species.

The tool for Assessment and Utilisation of Forest and Tree products is important for developing the participatory management plan for a community-managed resource
(land management plan). It can also be used for planning the production of tree seedlings for planting in smallholder tree planting and agroforestry projects based on the preferences of different stakeholder groups (especially men/women).

## Who should participate?

No more than 15 participants. If there are more people, divide the group into 2 (based on different subgroups) and make sure that there is an opportunity for each subgroup to present their finished chart to the whole group at the end. It is particularly useful to have separate men's and women's groups for this tool.

## How to use the tool?

This participatory tool has three parts. (a) A forest or tree product pair ranking exercise to find out which forest products are most important for participants. Based on the results of (a) you can then do a forest product prioritisation matrix (b) to see which species are preferred for each of the types of product. (c) Is a forest product demand assessment which finds out how much of each product households in the community use or require. This is an optional step that may not be needed for all projects.

## Part (A): Forest and tree product ranking

This tool is primarily used for community-based resource management, but it can be easily modified for smallholder tree planting projects to find out which types of tree products participants would like to get from their smallholdings. In this case, the categories might include food/fruits, cash incomes, building materials, medicines etc.

Divide participants into at least 2 groups (preferably one men's and one women's group).

Select a place with a good surface for drawing the matrix e.g. bare soil for drawing with a stick, or concrete/wood floor in a house for drawing with chalk.

Explain to participants that you would like them to identify which forest products are most needed by them (ranking).


Using the participatory forest resource map (if you have prepared one earlier) make a list of all the forest products being used by asking which products come from different areas.

Select a symbol for each product e.g. green leaves for fodder; dry leaves for litter; a piece of wood for timber etc. and draw these on a post-it note or card. Put the cards (or samples of these products) in the squares along the top and also down one side of the matrix drawn on the ground.

Start to fill in the matrix by getting participants to decide between pairs of forest products which is the most needed e.g. which is most needed,
fuelwood or timber? Put the selected product's picture/symbol in the relevant square. As each square is filled, ask why participants chose that product.

$\square$
Once the matrix is complete, add up the number of squares in which each product occurs. The product that is in the most squares is the most needed (highest priority)

Select someone from each group to present the completed matrix to the other groups.

$\square$
Compare the men's and women's matrices. If they are different, ask participants why they think this is so and ask the different groups to discuss this further.

Copy the final matrices onto a sheet of paper for future use or take a photograph for your own records.

## Part (B): Forest and tree product prioritisation

As with the previous tool, this can be modified for smallholder tree planting and agroforestry projects to find out which tree species could be planted for different products e.g. which species are most important for fruit or nut production; or which species are most important for soil stabilisation. This will help to plan the production of the species that smallholders would prefer to plant (from local nurseries).

$\square$
Divide participants into small groups (one for women and one for men)

$\square$
Across the top of a large sheet of paper, write the forest products they identified in the previous forest product ranking exercise in order of preference e.g. the most important on the left and the least important on the right. You can also include forest 'ecosystem services' such as water, environment, biodiversity etc. if you wish. Be as specific as you can - for example rather than writing 'timber', put down sub-categories such as construction timber, or small building poles etc.

Ask participants to agree which species are the most important for each of these products. Write this list of species down the left hand side of the sheet of paper using local names for species (you can check the scientific names later). Include shrubs and herbs as well as trees if these are important.

For each species assign a value (between 1 and 5) showing how important the species is for that particular product - this is the species preference. For example, if oak is the most important species for fodder then give it a value of 5 ( 5 stars). Put symbols to show this value in the matrix.

Next, assign a value to each species to show how scarce or abundant it is in the forest (its availability). For example, if oak for fodder is scarce then give it a value of 1 ( 1 star). Put symbols to show this, using different symbols to avoid confusion with species preference e.g. XXX and ****

Remember that some species can be used for more than one product e.g. oak can be used for timber, fodder, and fuelwood.

Try to divide the board product types into useful sub-categories e.g. if some tree species are more suitable for construction timber, you could have a category called construction timber and perhaps a different category for building poles.

$\square$
Select someone from each group to present the completed matrix to the other groups.

Discuss any differences between the matrices prepared by different groups. Also discuss how this information can be used to develop rules or activities for the forest management plan or plan vivos. Remember to make a record of all the points raised.

$\square$
Take a photograph of all the matrices for project records.

## Part (C) Forest and tree product demand assessment

This is a tool that is used for the development of a management plan for a communitymanaged resource. It is not required for smallholder tree planting projects.

$\square$
Divide participants into several small groups. Each group should complete the same exercise. If possible, form separate groups for men and women as with the previous steps.

$\square$
Each group prepares a list of forest products they use in their own households. This should be as detailed as possible, and includes all forest products e.g. don't just write 'timber' but break it into different categories or uses. Get participants to describe these categories.

Ask each group to estimate their annual household requirement for each product. Make sure that you use local measurements as far as possible e.g. timber should be estimated in terms of numbers of trees, poles etc. rather than cft or m3. Firewood could be measured in back loads or trailer loads.

Ask each group to estimate how many households in the village actually use these products. For example, out of 60 households, only 55 might actually require fodder. If all households use the product, then write "all".

After each group has completed their table, get groups to present their figures to each other. Point out any inconsistencies or differences between groups and discuss these until they have agreed on household use figures.

Calculate the forest product requirements for the whole village by multiplying household use by the number of households. Record this information in the format provided.

## A: Forest and tree product ranking

|  |  |  |  | Fodder 3 coting and | $\begin{gathered} \text { Leaf litter } \\ 15 \\ 12 \end{gathered}$ |  | $\begin{gathered} \text { Grazing } \\ \text { forin } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | //1/1/1/1/1 | $\longdiv { Z }$ |  |  |  |  |  |
| $\begin{aligned} & \text { Mushrooms } \\ & \mathrm{P}_{-1}=\frac{1}{4}+T \end{aligned}$ | / //1/1/1/7/ |  | $X$ |  |  |  |  |
| $\begin{aligned} & \text { Fodder } \\ & \text { ec adtige } \end{aligned}$ |  | ecsorso | ecsongo |  |  |  |  |
|  |  |  |  | $3.6 \operatorname{lon}^{2} 8$ <br>  |  |  |  |
| $\begin{aligned} & \text { Water } \\ & 4^{4} 8^{4+1} e^{r i d i} \end{aligned}$ | $\sqrt{4} y^{+4} y^{-10}$ | $\left.4+y^{4+}\right)^{-10}$ | $4+y^{+0} y^{\sqrt{n}-2}$ | $4 y^{4}+y^{-10}$ | $\sqrt{\pi} y^{4}+\sqrt{n}+$ | $\searrow$ |  |
| $\begin{gathered} \text { Grazing } \\ \text { staint } \end{gathered}$ | 2f | 大 | 5 | 3c of -7ans | coske | $\sqrt{-1)^{4}} e^{-10}$ |  |

## B: Forest and tree product prioritisation

|  | Firewood | Timber | Leaf Litter | Fencing | Flag Poles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blue Pine | X | XXXXX | XXXXX | X | XXX |
|  | $\star \star \star \star$ | $\star \star \star \star \star$ | $\star \star \star \star \star$ | $\star \star \star$ | $\star \star \star \star$ |
| Oak | XXX |  | XX |  |  |
|  | $\star \star \star$ |  | $\star \star \star$ |  |  |
| Rhododendron | X |  |  |  |  |
|  | $\star \star$ |  |  |  |  |
| Spruce |  | X |  |  | X |
|  |  | $\star \star$ |  |  | $\star \star$ |
| Bamboo |  |  |  |  |  |
|  |  |  |  | $\star$ |  |
| Ferns |  |  | XXXX |  |  |
|  |  |  |  |  |  |

## Legend

| Highly preferred | $\boldsymbol{x} \mathbf{x} \mathbf{x x x}$ | Little preferred | $\mathbf{x}$ |
| :--- | :--- | :--- | :--- |
| Highly available | $\boldsymbol{\star} \boldsymbol{\star} \boldsymbol{\star} \boldsymbol{\star}$ | Little available | $\boldsymbol{\star}$ |

## C: Forest and tree product demand assessment

| Products | Demand/HH/Year | Total/Year |
| :---: | :---: | :---: |
| Fuel wood | 200 back loads | 6600 backloads |
| Fodder | 180 back loads | 5940 backloads |
| Leaf litters | 100 back loads | 3300 backloads |
| Flag post | 9 Nos | 297 Nos |
| New Construction Timber <br> Drashing <br> Shingleps <br> Cham <br> Tsim <br> Dangchu | Every after 30 years <br> 4 Nos <br> 6 Nos <br> 80 Nos <br> 80 Nos <br> 100 Nos | 5 Nos <br> 7 Nos <br> 88 Nos <br> 88 Nos <br> 110 Nos |
| Renovation Timber <br> Drashing <br> Cham <br> Tsim <br> Dangchu | Every after 30 years <br> 3 Nos <br> 6 Nos <br> 8 Nos <br> 10 Nos | 20 Nos <br> 40 Nos <br> 53 Nos <br> 66 Nos |
| Fencing post | 80 Nos | 2640 Nos |
| Agriculture Implements (handle) | As and when required |  |
| Incense (Blue Pine needles) | As and when required |  |

