

## TOOL 5

# FOREST PROBLEM AND SOLUTION MATRIX

## IN GROUPS SELECTED BY GENDER AND WEALTH CATEGORY

**AIM:** TO IDENTIFY AND RANK THE MAIN FOREST PROBLEMS, AND SUGGEST POTENTIAL SOLUTIONS. PROBLEMS OF LAW, POLICY, TENURE AND ACCESS ARE CAPTURED THROUGH THIS TOOL.

*Ask:* What do you think are the main forest problems in this area? Brainstorm a list and write them down in the left hand column.

**Roads/markets:** If no mention of markets or road access is made, ask if there are problems in getting forest products to market, or in accessing markets for forest products

### A NOTE ABOUT PREPARATIONS FOR TOOLS 4 and 5

Tools 4 and 5 are based on a series of charts the outlines of which have to be drawn ahead of time, if being done manually. Otherwise the tables and charts will be produced electronically by spreadsheet (a standard template is available from the PROFOR website).

Tool 4 uses five charts while Tool 5 uses two. Seven large flip-chart sheets are thus needed for each sub-group to be worked with. A minimum of four subgroups is needed (see Tool 1) for which 28 flip-chart sheets would be needed before going to the field. The task is made much easier if three or four facilitators help and if there are one meter long rulers available (or A1 cardboard sheets to act as rulers – such as the backs of flip-chart pads). The task still takes about half a day but it is a good way of making facilitators thoroughly familiar with the charts before they are used in the village. Those training the facilitators should be present to help throughout, to reduce errors.

Another task for facilitators is to count out 20 beans or stones into each of 40 or so small plastic bags—enough for 10 per group if it has been decided that there will be 10 participants in a group. Allowing a few spares, that means 800–900 beans or stones.

It is important to choose an object of a standard size and that will not confuse participants by breaking in half during the exercise. (It should not be too edible—avoid peanuts.) Choose beans or stones that do not roll about or blow away. Dry, hard maize kernels, haricot beans, coffee beans or gravel work well.

The counting is quick with a few helpers. It is important that there are exactly 20 beans in each bag.

**Materials needed:** 28 (7 x number of groups—it might be more than this) pre-drawn flip-chart sheets; other blank flip-chart sheets; plenty of marker pens in black (for drawing charts) and in other colors (for filling them in). Ideally, 4 meter-long rulers.

**Counters for participants.** Each participant in a group needs a plastic bag with 20 stones or beans in it—say  $20 \times 10 = 200 \times 4 = 800$  in all.

Calculators, compasses and protractors will be needed to prepare pie charts on flip-charts for Tool 4. Calculators are needed for percentages on other tools. Where possible, the use of laptop computers, with all the sheets set up within a spreadsheet program, is highly recommended. This saves considerable time and is a more secure method of data collection.

## LAYOUT FOR TOOL 5 – STEP 1

Name of location \_\_\_\_\_ and name of group \_\_\_\_\_

## TOOL 5: FOREST PROBLEM AND SOLUTION MATRIX

## SHEET 1 : MAIN FOREST PROBLEMS

	Group Participants										Totals	%
	1	2	3	4	5	6	7	8	9	10		
Problem 1												
Problem 3												
Product 3, etc.												
TOTALS	20	20	20	20	20	20	20	20	20	20	200	100%

**Tenure/access rights:** If no mention of problems accessing forest resources is made, ask if there are tenure or access problems

- As each individual completes his/her column, write the numbers in the squares, return the beans/stones to the individual, and begin again with the next person.
- Count totals laterally, and put them in the column on the right.
- This will give a ranking of problems from greatest to least.
- Copy these problems down, IN RANK ORDER, onto the next sheet before working through it with the group.

The problems raised – as perceived by richer and poorer, male and female groups will cover a range of issues as the example shows. Each time this exercise has been run, there has been a very good discussion afterwards of

where solutions ought to come from. It is usually possible to sort problems out into:

- Problems that could be solved by the household itself, or by the village government using the rights it has.
- Problems that need to be taken to the local authorities beyond the village. In the example below, some clearly constitute requests for help, or adjudication, to higher local authorities.
- Problems that (even if villagers do not understand this) can only be solved at higher levels. Some problems given in the list below need to be addressed at the national level.

The different kinds of problems can be marked with different colored markers, so that they can be grouped together, for presentation at the final plenary (Tool 6) and for raising elsewhere.

## LAYOUT FOR TOOL 5 – STEP 2

Name of location \_\_\_\_\_ and name of group \_\_\_\_\_

## TOOL 5: FOREST PROBLEM AND SOLUTION MATRIX

## SHEET 2 : FOREST PROBLEMS RANKED

Forest Problems Ranked	Solutions To The Main Forest Problems
1	
2	
3 etc.	

## WORKED EXAMPLE FROM TANZANIA: THE FINAL COLUMN WAS ADDED FOLLOWING DISCUSSIONS

FOREST PROBLEMS	SOLUTIONS TO MAIN FOREST PROBLEMS	LEVEL AT WHICH TO DEAL WITH ISSUE
<b>LAND SHORTAGES FOR FARMING AND FOR THE CREATION OF NEW VILLAGE FORESTS</b>		
<b>Pw:</b> 1 Lack of land for forest restoration/ village forests	Tree boundary planting Agroforestry	Some solutions at farm level, but lack of village forest land and farm land needs to be addressed at village, district and regional level.
<b>Pw:</b> 4 Landlessness	Reallocation of land for equal utilization especially for those who have large pieces of land not fully utilized	
<b>LACK OF WATER / DROUGHT</b>		
<b>Pw:</b> 2 Lack of water hinders tree-planting	Plant trees during rainy season	Farm level
<b>Rw:</b> 3 Dying of tree seedlings due to drought	Water tree seedlings and use manure. Use of natural regeneration of tree seeds dispersed by cattle.	Farm level
<b>Rm:</b> 5 Drought	Tree-planting of drought tolerant species and fruit trees.	Farm level
<b>FUELWOOD SHORTAGES</b>		
<b>Pw:</b> 3 Only one source of fuelwood	On-farm tree-planting	Farm level, but see also land redistribution problems
<b>CONFLICT WITH AUTHORITIES OVER CHARCOAL</b>		
<b>Pw:</b> 5 Conflict between villagers and foresters over forest products	Re: charcoal-burning from own farmland, the Village Government should provide the permit so that it can be taken to market. That permit should be respected on the road by police etc.	Lack of clarity about documents needed to sell charcoal from own land. District Level and Village Government.
<b>TREE DISEASES</b>		
<b>Rw:</b> 4 Dying of tree seedlings due to diseases and insects	Plant many. Use pesticides and mixed ashes and manure.	Farm-level
<b>GUM MARKETING</b>		
<b>Rm:</b> 4 Lack of promising markets for gum (+ Low market prices for gum); 7 Lack of knowledge on gum quality and the mixing of gums of different qualities and tree species	Request assistance on better markets for gums, and better knowledge of current prices.  Education to gum collectors on the importance of gum quality, and the importance of not mixing different gums.	Better market intelligence, through request from District-Regional level forestry officials to National Forestry and Bee-keeping Division of Ministry of Natural Resources.
<b>ILLEGAL USE OF VILLAGE FORESTS BY OTHERS</b>		
<b>Rw:</b> 1 <b>Illegal cutting of trees</b> in village land and forest conservation areas	To establish protection measures for village and private owned forests. Sharing patrol/ policing of the resources. Education/ sensitization through meetings in the village.	Village Government and some outside facilitation from ward forester
<b>Rw:</b> 5 Illegal tree cutting for fuelwood for home use	For conservation areas, get permits from sub-village forest officer. For village forest, get permission from the village chairman owning village forest. Abide by regulation on use/ harvesting of forest resources as advised by authorities (forest department and village government).	
<b>Pm:</b> 1 <b>Accidental starting of forest fires</b>	Arrest and take to Village Government who will fine him/her.	Village Government
<b>Rw:</b> 2 <b>Illegal/ unauthorized grazing</b> of cattle in village forests	A village meeting to put in place security strategies to solve the problem of illegal activities. Use village bylaws appropriately. Change security guards.	Village Government
<b>Pm:</b> 2 Unauthorized grazing	Arrest and take to Village Government to fine or warn him/ her.	Village Government

## WORKED EXAMPLE FROM TANZANIA, CONTINUED

FOREST PROBLEMS	SOLUTIONS TO MAIN FOREST PROBLEMS	LEVEL AT WHICH TO DEAL WITH ISSUE
<b>ILLEGAL USE OF VILLAGE FORESTS BY OTHERS</b>		
<b>Rm:</b> 6 Inappropriate livestock grazing	Enact local bylaws on sustainable forest utilization. These should be given equal importance among other bylaws in the village/ ward/ division. Reinforcement of current bylaws on forest utilization and management.	Village Government/ Ward/ Division
<b>Pm:</b> 3 <b>Unauthorized tree cutting</b>	Arrest and take to Village Government to be judged and punished accordingly (fine or warn)	Village Government
<b>Pm:</b> 4 <b>Unauthorized collection digging of herbal medicine products</b>	Arrest and take to Village Government with his/ her roots/ medicine as evidence.	Village Government
<b>Pm:</b> 5 <b>Unauthorized/ illegal cultivation in forest/ village forest areas</b>	Arrest, take to court, fine.	Village Government
<b>Pm:</b> 6 <b>Illegal hunting in village forests</b>	Arrest and report to village bylaws councils to be fined (punished).	Village Government
<b>NEED FOR MORE FORESTRY INPUT AT THE LOCAL LEVEL</b>		
<b>Rm:</b> 1 Lack of forestry extension officers	Urgent request to government to provide forest extension officers for improved forest productivity. Education through seminars and workshops on forest conservation.	District Level Government
<b>Rm:</b> 2 Lack of education on tree-raising and forest conservation	Education on sustainable forest management and conservation through seminars and workshops.	Contact ward-level forestry official
<b>Rm:</b> 3 Lack of projects for seed supply, tree nurseries and planting	Request projects on tree-planting and conservation.  Requests for tree seeds, seedlings, plastic poly bags, and booklets on tree-establishment. Requests for help to form farmer groups to undertake tree-nursery raising.	District Level government

**Rm = rich men; Pm = poor men; Rw = rich women; Pw = poor women**

