

FARMER-MANAGED NATURAL REGENERATION: STEPS TO SUCCESS

Farmer-managed natural regeneration allows living stumps, roots and seeds in the ground to grow and flourish, restoring land and livelihoods.

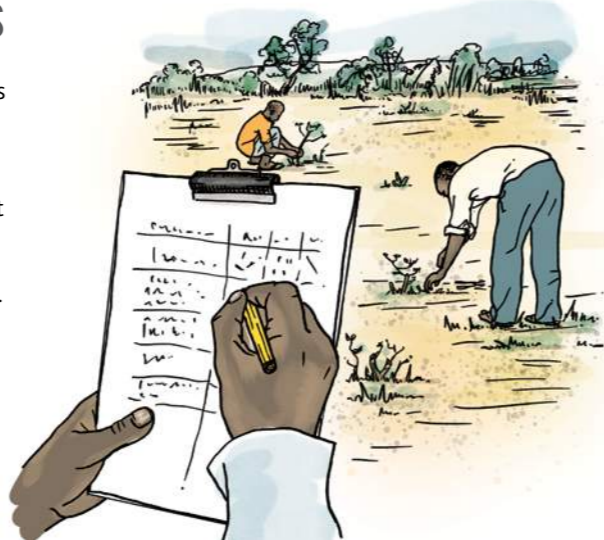


1 NEEDS ASSESSMENT

With the participation of all community members, assess the local environmental and agricultural situation. Discuss current challenges and future goals. This will help everyone decide if farmer-managed natural regeneration could be useful and, if so, the best approach to take. If possible, visit a community where the techniques are already being used to learn from their experiences.

2 SELECT STUMPS AND SEEDLINGS

- Survey the land for sprouting stumps or seedlings and identify which species are present.
- Work out which species are preferred based on required use. Use the template below to help collect this information.
- Select and protect the stumps to be regenerated.
- Where there are no obvious stumps, protect the land from grazing livestock and fire, allowing plants to emerge from roots and seeds in the soil.
- Where there is bush encroachment, select useful trees and cut out the rest.



Template to use when choosing trees

Priority needs	Contributions that trees could make to address these needs	Required tree characteristics	Available tree species that might be useful
eg fodder for livestock in dry season	<ul style="list-style-type: none"> • edible leaves, bark and seed pods • improved grass growth under canopy 	<ul style="list-style-type: none"> • fodder tree • open canopy for light shade 	<ul style="list-style-type: none"> • <i>Acacia</i> • <i>Leucaena</i> • etc

Trees may be selected because they are good for firewood, fence posts, timber, fodder, fruit, nuts, shade, natural medicines, or a combination of these. Legumes may be chosen because of their ability to bring nitrogen from the air into the soil.

THE THREE GOLDEN RULES OF PRUNING

While the act of pruning itself is not difficult, there are three important rules to keep in mind to prevent trees from becoming diseased or damaged.

- 1. Use sharp tools.** Saws, secateurs, machetes, harvesting knives or axes may be used as long as they are sharp and provide a clean cut.
- 2. Cut upwards not downwards.** This causes less damage to the bark and allows the tree to recover more quickly. It also reduces the risk of disease or insects entering the wound.
- 3. Cut off side branches up to halfway up the trunk.** Pruning higher may make the stem too fragile to survive high winds or animals brushing against it.

3 PRUNE AND MANAGE

Correct pruning stimulates rapid growth and results in taller, straighter, more useful tree trunks. This is because the remaining stems have more space to grow.

- For each stump, select three to five of the tallest, straightest stems and remove the others.
- For each remaining stem, prune off side branches up to halfway up the trunk.
- Protect the stems from livestock, fire and competing vegetation or weeds.
- When a main stem is harvested, choose a younger stem to replace it.



4 MAINTAIN AND USE

- Remove emerging new stems and prune side branches every few months. This will help the selected stems to grow more quickly. The prunings can be used or sold for firewood or fodder, depending on the species.
- Use trees for planned purposes; harvesting branches, portions of wood, fruit/nuts or the whole tree as necessary.



World Vision has published a manual for all who are interested in understanding farmer-managed natural regeneration better. Download free of charge from www.fmnrhub.com.au or write to World Vision, GPO Box 9944, Melbourne, VIC 3001, Australia.