What is FMNR?

Farmer Managed Natural Regeneration (FMNR) means helping **trees grow back** naturally on farms and grazing land, instead of planting new seedlings. Many fields already have living tree roots, stumps, or small seedlings hidden in the soil. FMNR helps farmers select, protect, and prune these natural shoots so they grow into healthy trees that work together with crops and livestock. Think of FMNR as "working with what is already in the ground."

HEALTHY LAND STARTS FROM WHAT IS ALREADY BENEATH OUR FEET.



Why FMNR Matters (Benefits for Farmers and Communities)

How FMNR supports water, land and nature

- **Cooler microclimate** Tree shade cools air for crops
- **Habitat forb** (nesting feeding)
- **Habitat for insects** (pollinators)
- **Habitat flora**
- **Habitat for birds** (grazing & feeding)
- **Increased water retention** Trees and shrubs in FMNR systems help retain water

CLIMATE CHANGE ADAPTATION: FMNR CAN HELP MITIGATE

Benefits for Farmers and Community

- **Provides reliable farm products** Firewood, poles, fruits, gums, honey
- **Reduces cost compared** to tree planting
- **Less labor, more time,** especially for women and youth
- **Reduces conflicts** Strengthens cooperation and local by-laws

BUILDS LONG-TERM CLIMATE RESILIENCE

Where Does FMNR Work Best?

FMNR works in many landscapes, but results are fastest where nature is still alive underground. Areas with visible tree stumps, root suckers, or wild seedlings and key places such as:

BEST PLACES FOR FMNR:

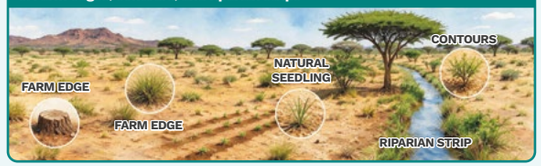
1. Degraded croplands, fallow fields and abandoned land



2. Grazing lands and bushlands



3. Farm edges, contours, and riparian strips



Avoid or adapt FMNR in:

- Permanently waterlogged zones
- Highly saline soils
- Areas with uncontrolled fire or grazing (unless rules are agreed)

Core FMNR Principles (What Makes It Work)

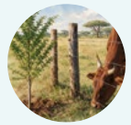
All successful FMNR systems follow five simple principles:



Select and manage natural regrowth not every shoot is kept



Protect young trees from grazing, fire, and damage



Balance trees with crops and pasture spacing matters



Harvest carefully trees must keep growing after use



Farmers lead the process rules are agreed locally

Step-by-Step: How to Practice FMNR in the Field

Step 1: Engage with community and know the field

- Walk farms or communal areas with farmers
- Discuss what farmers need most (firewood, fodder, shade, income)



Step 2: Select the Best Shoots

- For each stump or seedling cluster
- Keep 3-5 strong, straight shoots



Step 3: Prune Correctly (Very Important)

- Prune from the bottom up
- Remove lower branches up to 1/3–1/4 of stem height



Step 4: Manage Tree Spacing

- Trees must support farming—not compete with it



Step 5: Protect Regenerating Trees

- Protect young shoots from the three main threats



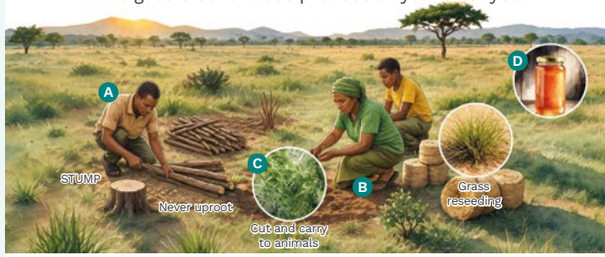
Step 6: Support with Soil and Water Care (When Needed)

- In degraded areas, combine FMNR with:



Using FMNR Trees Without Killing Them

FMNR trees are meant to be used, but carefully.
The goal is continuous production year after year.



A. FIREWOOD AND POLES

- Never uproot stump
- Harvest one stem per stump
- Leave at least 1/3 of the crown

B. FODDER

- Introduce valuable species only if natural regrowth is weak

C. CUT AND CARRY TO ANIMALS

- Protect trees – no cutting needed

D. TIMBERS

- Encourage flowering species

Community Roles in FMNR

A. FARMERS

- Select, prune, protect, and harvest trees

B. COMMUNITY LEADERS

- Support rules
- Resolve conflicts
- Coordinate protection

C. FIELD OFFICERS

- Train on pruning and spacing
- Support monitoring
- Link communities to services

What NOT to Do in FMNR
(Common Mistakes)



Monitoring & Maintenance Checklist
Check every 2–6 months:



REGULAR MONITORING KEEPS FMNR PRODUCTIVE

Community Success Indicators


More trees every season


Better crop and pasture performance


Shorter firewood collection time


Increased shade and soil cover


Strong community cooperation

Quick Training Exercise for community, led by a field officer or community champion (15 Minutes)

Take community members to walk to a field.

Ask: “What trees, stumps, or small seedlings do you see already growing here?”

Identify 3–5 strong, straight shoots, stumps or seedlings.

Point out weak, bent, or crowded shoots to remove.

Explain why keeping fewer strong shoots is better than keeping many weak ones.

Demonstrate correct pruning: Pruning from the bottom up; Removing only lower branches; Never cutting the top of the tree.

Assign **volunteer teams** for pruning. Learning by doing the FMNR way.

Agree on one protection rule.

Ask: “Which rule can everyone respect and enforce together?”

FMNR WORKS WHEN COMMUNITIES OBSERVE THE LAND, MAKE DECISIONS TOGETHER, AND PROTECT WHAT GROWS

Handling Conflicts Fairly



FMNR can affect access to land, resources, and livelihoods, so conflicts may arise. Fair and transparent conflict management helps protect ecosystems while strengthening community unity.

- Share information openly
- Involve all user groups in decisions
- Use neutral mediators when needed

Who to Contact for Help

Local NGOs: Green Living Movement Zambia, World Vision Zambia, Self Help Africa, Peace Parks Foundation, GIZ, WWF.

Government Agencies: Forestry Department, Ministry of Agriculture, Ministry of Lands and Natural Resources.

Training Opportunities: Farmer Field Schools, NGO-led workshops.

Site-specific guidance
Standard pruning technique

WHAT TO DO

- Select 3–5 of the strongest, straightest stems per stump/root
- Cut unwanted stems close to the point of origin, no stubs
- Use sharp tools for clean cuts
- Remove lower side branches on retained stems to encourage a single trunk
- Prune regularly during the growing season
- Time major pruning before the rains
- Protect regenerating stumps from livestock and fire



WHAT NOT TO DO

- Don’t cut all stems to ground level repeatedly
- Don’t leave long stubs
- Don’t over-prune in one session
- Don’t select stems by convenience alone
- Don’t delay selection on multi-stemmed regrowth
- Don’t prune during peak drought stress
- Don’t strip all foliage
- Don’t skip protection after pruning



FOLLOW-UP IS CRITICAL

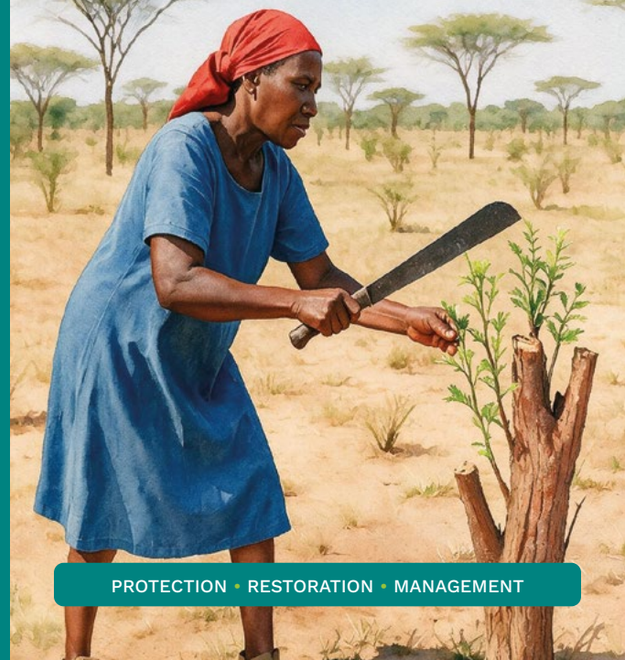
- Faster healing
- Strong, straights
- Check pruned trees every 2–6 months
- Remove unwanted new shoots early



DO NOT PRUNE FMNR TREES UNLESS YOU FOLLOW THE CORRECT CUTTING TECHNIQUE

The Nature Conservancy

Community Practical Field Guide for Farmer Managed Natural Regeneration (FMNR)



PROTECTION • RESTORATION • MANAGEMENT