What Are Cover Crops?

Cover crops are plants grown **not for harvest,** but to **protect soil, add nutrients, and retain moisture.**



COMMON TYPES INCLUDE:



Legumes
(beans, clovers)



Grasses
(millet, sorghum)



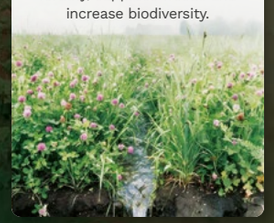
Fast covering species
(sunhemp)

Why Cover Crops Matter

WITHOUT COVER CROPS
Soil erosion & poor structure.



WITH COVER CROPS
Prevent erosion, improve fertility, suppress weeds and increase biodiversity.





Prevent soil erosion during rains



Improve soil fertility (especially legumes that add nitrogen)



Suppress weeds naturally



Improve soil structure and moisture



Increase biodiversity and insect habitat

How to Establish Cover Crops (Step-by-Step)

Step 1: Choose the Right Species

Choose the right species for your climate:

DRY AREAS
(Limited Rainfall)



- **Cowpea** (*Vigna unguiculata*)
- **Pigeon Pea** (*Cajanus cajan*)
- **Lablab** (*Lablab purpureus*)
- **Sunhemp** (*Crotalaria juncea*)

WET/MEDIUM RAINFALL



- **Clover** (*Trifolium* spp.)
- **Mucuna (Velvet Bean)** (*Mucuna pruriens*)
- **Oats** (*Avena sativa*)
- **Ryegrass** (*Lolium* spp.)

Step 2: Clear the field gently

A clean, gentle seedbed prepares for healthy cover crop emergence and preserves the living soil

Remove stones, large debris



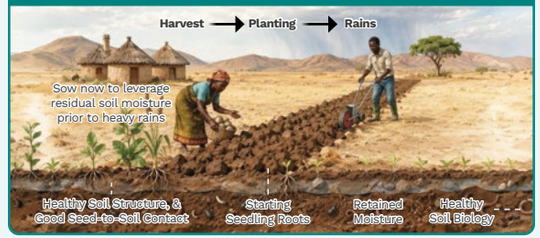
Avoid deep tilling—keep soil structure intact



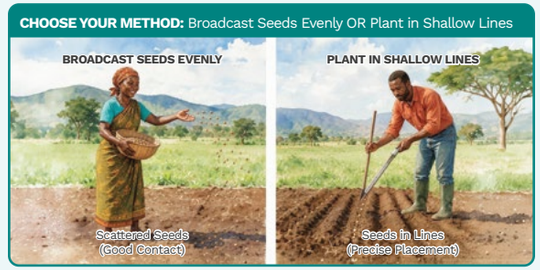
Step 3: Plant the cover crop

Proper seeding creates a strong foundation for a robust and dense cover crop, ensuring maximum soil cover and fertility boost.

OPTIMAL TIMING: Plant Immediately After Harvest, Before Heavy Rains



CHOOSE YOUR METHOD: Broadcast Seeds Evenly OR Plant in Shallow Lines



& Poor soil conditions:



Surface Crust



Poor Contact / Weak/No Seedling Development



Dry or Waterlogged Soil

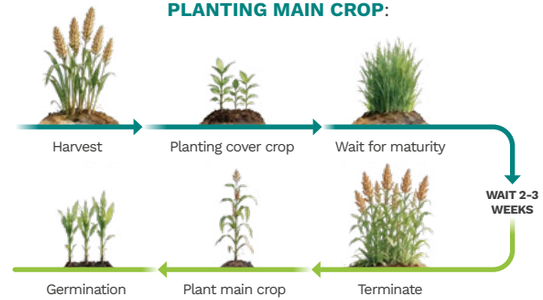
Step 4: Maintain the Cover Crop

Minimal maintenance – just protect from grazing:



Step 5: Terminate at the Right Time

TIMING & METHODS: 2-3 WEEKS BEFORE PLANTING MAIN CROP:



Terminate the cover crop well ahead of corn planting to ensure residue decomposition and soil health.

METHOD 1: SLASH
Slash with Panga



METHOD 2: ROLL DOWN
Manual Roller-Crimper



BENEFITS OF LEAVING RESIDUE AS MULCH:



BAD WAY: BARE SOIL (NO MULCH)



TIMELY TERMINATION AND RESIDUE MULCHING SECURE MAXIMUM BENEFITS FROM THE COVER CROP, ENSURING HEALTHY SOIL AND A SUCCESSFUL MAIN CROP SEASON

Community Roles for Management

VILLAGE/WATER USER COMMITTEE

- Set communal dates for planting/termination
- Coordinate seed bulk buying and tool sharing
- Agree on no grazing windows inside cover cropped plots



LEAD FARMERS/ YOUTH GROUPS

- Run small demo plots
- Keep seed banks/ nurseries for hardy species
- Organize labor sharing ("mwethya/harambee") for timely sowing and rolling



ELDERS/LOCAL ADMINISTRATION

- Mediate boundary issues
- Reinforce by laws on stray animals and field burning

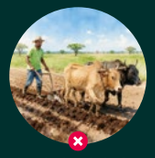


SCHOOLS/CLUBS

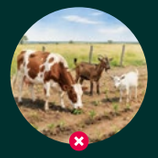
- Track simple indicators (ground cover %, soil moisture jars)
- Host field days



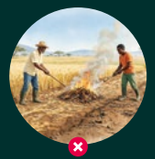
What not to do



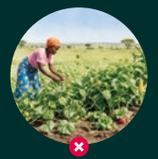
Do not plough deeply before sowing cover crops (destroys structure and soil biology).



Do not let livestock graze the cover before it fully establishes or before biomass build up.

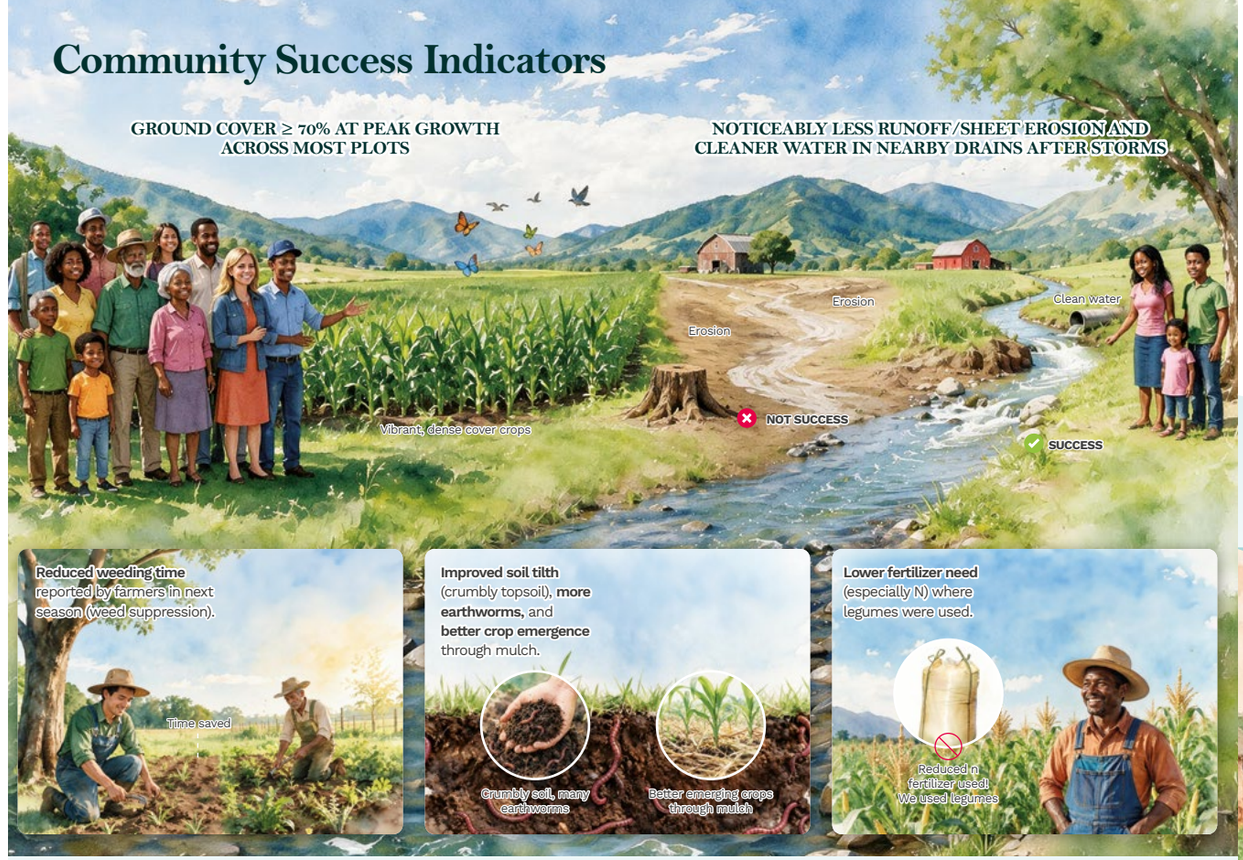


Do not burn residues after termination—keep mulch on the soil.



Do not use invasive or unsuitable species that may smother subsequent crops.

Community Success Indicators



Monitoring & Maintenance Checklist

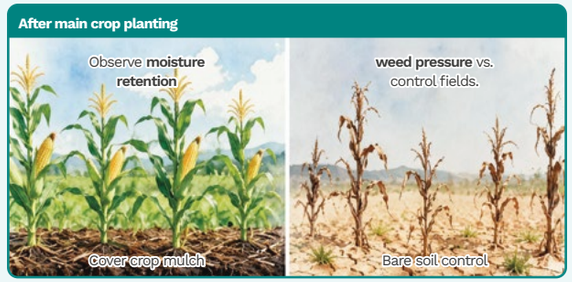
Monthly during growing period



At termination



After main crop planting



The Nature Conservancy

Community Practical Field Guide for Agricultural BMPs

Cover Crops



"Planting crops to protect and improve your soil between main seasons." **Planting crops primarily to protect and improve soil between (or alongside) main cash crop seasons.**

PROTECTION • RESTORATION • MANAGEMENT