



COFFEE FARMING TOPIC 13: CANOPY MANAGEMENT (PRUNING, REJUVENATION AND OLD TREES REPLACEMENT)

WHAT is pruning and rejuvenation?

There are 2 types of canopy management: Pruning and rejuvenation, that are essential activities in coffee care, aimed at maintaining the plant's health and increasing its yield.

- **Pruning** involves **removing unproductive, old, damaged, or disease-affected branches** so that the tree can breathe properly, receive sufficient sunlight, and have the strength to sprout healthy branches that produce good yields.
- **Rejuvenation**, on the other hand, involves **replacing old or low-yielding trees by removing the main plants** to allow new, productive trees to grow, or by replacing the entire coffee clump with new seedlings. This helps increase both the quantity and quality of coffee production sustainably.

Why canopy management?

- To stimulate the new coffee trees to sprout again and to ensure the coffee plant develops fruit-bearing branches
- To allow the tree to receive sunlight, which helps it bloom and prevents pests and diseases from finding places to hide
- To promote the sprouting of new coffee tree shoots
- To enable the coffee tree to produce productive branches, the tree must receive sunlight, which helps it develop flowers, and prevents pests and diseases from finding hiding places.



Old, Unproductive Coffee



Young, Productive Heads

Old trees are also excellent hosts for coffee pests such as the white stem borer. This pest will slowly kill the tree.



1) Pruning



This Tree Has Open Centres. The Inner Branches Have Been Cut.

- Removing suckers from the main trees
- Clearing the spaces between the main trees where branches overlap – this activity provides good aeration (opening the centers)
- Removing dry branches and old main trees at the base of the tree, pruning branches that touch the ground

2) Rejuvenation

Rejuvenation is a practice used to restore productivity and vigor in old, unproductive, or poorly managed coffee trees by encouraging the growth of new, healthy shoots to replace aging branches and stems.

Step1: Removing old stems



The main stems of the coffee tree should be cut at 25–30 cm above the ground, with the cut made at a 45-degree angle to allow rainwater to drain off. Use proper pruning tools to prevent diseases from entering through the cut surface.

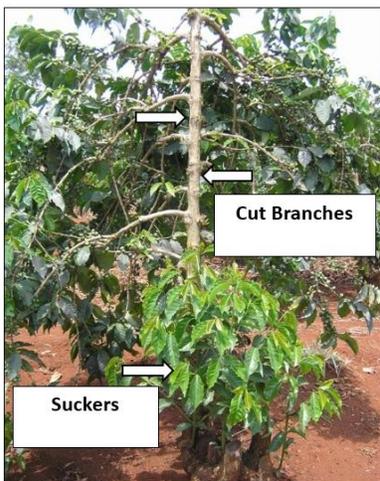
Step2: Select three well-developed and closely spaced shoots

Retain and allow 3-selected shoots (suckers) to develop into the main coffee stems.



Step3: Cut the remaining old stem

When the new shoots are **one year old**, the remaining old main stem will also be **cut back** using the same method described above, leaving **three new main stems** to continue growing.



Steps of rejuvenation



- The appropriate time for rejuvenation is after harvesting and before flowering.
- Rejuvenate coffee trees after 7–10 years of harvesting. Beyond this period, trees no longer produce sufficient yields, and the incidence of pests and diseases increases.
- Replace old trees by planting new seedlings after about 30 years of coffee production. This decision is made by the farmer based on the productivity of the coffee trees; when yields decline significantly, the trees are replaced.