

# Synergies of livestock–Agroforestry system in Ethiopia

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## Agroforestry

- To improve animal welfare through good feed, shade, and shelter from trees and shrubs
- Land use management system in which trees or shrubs are grown around or among crops or pastureland.
- Agroforestry try to balance various needs:
- To produce trees for timber, for food and fodder and other commercial purposes
- To produce a diverse, adequate supply of nutritious foods both to meet global demand and to satisfy the needs of the producers themselves
- To ensure the protection of the natural environment so that it continues to provide resources and environmental services to meet the needs of the present generations and those to come.

## Silvopastoralism

A type of agroforestry that combines livestock and trees, offering alternative feed resources during periods of low forage availability, particularly in drought-prone regions, which can have beneficial effects on pasture growth and animal welfare.

## Customized Agroforestry type/forms according to agroecology and farmers' interest

- Trees and shrubs on pastures
- Home gardens/Multi-story tree gardens
- Parkland Agroforestry/tree in Croplands
- Cut & carry fodder production/Protein bank
- Plantation crop combinations
- Boundary Planting
- Hedgerow intercropping
- Agroforestry for Soil and water conservation
- Agroforestry for fuel wood production
- Cut & carry fodder production/Protein bank
- Live fences of fodder trees & hedges
- Trees and shrubs on pastures
- Shelterbelts and windbreaks

## Recap questions

- Why Agroforestry needed?
- Why trees in agricultural landscapes?
- What livestock benefits from agroforestry system?
- What agroforestry benefits from livestock integration?

## Livestock benefits

Fruit/ exotic trees for livestock feed and shade

- Papaya, Mango, Banana, Sugarcane, *Neem*, *Grevillea*

Vegetables for livestock feed in your community

- Cabbage, Tomatoes, Onion, Fossolia

Root crops for livestock feed in your community

- Sweet potato, yam, Cassava

Indigenous tree as source feed

- *Juniperus procera*, *Cordia Africana*, *Balanites aegyptiaca*, Chokiya(local name), Domay(local name)

## Agroforestry benefits

- Soil quality, Nitrogen fixation (natural fertilizer), Carbon sequestration, Biodiversity, Weed and pest control,



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