

Enhancing management

Landscape

Intercropping is a pillar in agroforestry and land management.

Intercropping perennials with other crops have numerous advantages and include enhanced soil health, biodiversity conservation, efficient water use, resilient farm management and increased productivity.

Benefits of intercropping

Intercropped or shaded coffee or cocoa remains productive for between 40 to 60 years compared to 20 to 25 for mono crops. This means a better return on investment to the farmer. In intercropping, farmers also get more food and income from the secondary crop.

Intercropping leaves more roots in the ground hence improving soil health and farm productivity in the long run. The roots in the ground increase water infiltration and water holding capacity of the soil.

Intercropping reduces evapotranspiration and improves on microclimate in the plantations in addition to carbon sequestration and climate change mitigation. Leguminous plants reduce the need for fertilizers as they fix atmospheric nitrogen into the soil.

Compared to monocultures, intercropped coffee and cocoa have more pollinators and beneficial insects. In such a health environment, plant pest and disease incidence is lower.

Intercropping considerations

For substantial effects, mitigating climate change requires joint efforts of enhancing climate smart farming practices and

reducing deforestation in wider landscape.

Diversity both at farm and landscape scales is key to more resilient and sustainable food systems.