Establishing and managing a gliricidia fallow: from transplanting to harvest of tree biomass

TRAINING MODULES 2 AND 3

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Establishing and Managing a Gliricidia Fallow: From Transplanting to Harvest of tree Biomass.

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Module 2:
Establishing and managing a Gliricidia fallow
A. Transplanting

2.1 Transplanting of gliricidia (6-8 weeks). The seedlings must be transplanted on a rainy day or when there is enough moisture in the soil.

2.2 Uproot seedlings with soil lumps on roots and put in well-ventilated containers.
2.3 Carrying gliricidia to the main field. Make sure that seedlings are properly carried to avoid root exposure and general plant damage.

2.4 Transplanting gliricidia. Plant seedlings at a spacing of 1m x 1m, between rows and between the plants in each row in the intended fields.
2.5 Weeding. Remove all unwanted plants, which might interrupt the growth of the young Gliricidia plants.

2.6 Making a firebreak. Free the plants from all materials that might catch fire and create a firebreak around the field.

2.7 Gliricidia sepium field at 18-24 months of growth, often ready for cutting.
Module 3:

Using Gliricidia biomass to fertilise maize fields, 24 months onwards
C. Pruning Gliricidia

3.1 Trees are cut at 30cm and left in the field for two weeks for them to drop leaves (Early September).

3.2 Two weeks after cutting. Gliricidia biomass ready for incorporation into soil.
3.3 Tree stumps with leaves having dropped off [plenty of leaves]. Dry poles and sticks can be used for other purposes (Late September).

3.4 Make ridges (or dig in) incorporating Gliricidia leaves and soft twigs in readiness for maize planting (Early October).
3.5 Maize is planted on ridges (or on the flat) at normal planting space (October).

3.6 Maize growing with Gliricidia coppices (December).
3.7 Coppices are cut back again and applied in between maize plants as top dressing (January).

3.8 Maize and gliricidia coppices ready for second cutting (Early February).
3.9 Second cutting: Cut the coppices and apply between maize plants as top dressing (Late February).

3.10 By March a good stand of maize and Gliricidia left uncut
3.11 April to May- Maize ready for harvesting. Gliricidia remains growing

3.12 Gliricidia stands [fallow] after maize in readiness for second season [May-Oct]
About ICRAF

The World Agroforestry Centre/International Centre for Research in Agroforestry was established in 1978 to promote agroforestry research in developing countries. ICRAF was created in response to a visionary study led by John Bene of Canada’s International Development Research Centre (IDRC). The study coined the term “agroforestry” and called for recognition of the key role trees play on farms. During the 1980s ICRAF operated as an information council focused on Africa. It joined the Consultative Group on International Agricultural Research (CGIAR) in 1991 to conduct strategic research on agroforestry at a global scale, changing its name from Council to Centre.

ICRAF is now recognised as the international leader in agroforestry research and development. The expanded scale of operation has necessitated adopting a new name World Agroforestry Centre.

ICRAF’s global research and development themes are:
- Land and People
- Environmental Services
- Trees and Markets
- Institutional Strengthening

ICRAF Southern Africa Programme

ICRAF Southern Africa is one of the six active regional programmes; the others are East and Central Africa, Sahel, Africa Humid Tropics, Latin America, South Asia, and South East Asia. The Southern Africa Programme commenced activities in 1985 and opened the regional office in 1987, in Malawi. In 1999 the regional office moved to Harare, Zimbabwe. ICRAF-SA has offices and fully fledged programmes in Malawi, Mozambique, Tanzania, Zambia and Zimbabwe. In other SADC countries the programme works through universities and other partners.

The ICRAF SA programme responds to the development challenges of Southern Africa notably: poverty, land degradation, food shortages, decreasing access to fuel wood, fodder and the diverse effects of HIV/AIDS, etc. The response to problems is through the Agroforestry Project for Sustainable Development in the Zambezi Basin Project, which covers all the five countries.
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