



COMMERCIAL FORESTRY AS PART OF INTEGRATED TREE MANAGEMENT

Approximately 80 to 90% of leaf tobacco production in Malawi is air-cured Burley. The leaves are dried in open air barns, most of which are simple sheds built with wooden poles for pillars and a thatched roof. In general these structures last only three or four years, with the poles then needing to be replaced due to weather and termite damage. Flue Cured and Fire Cured leaf tobaccos are also produced in Malawi, and both types also need wood for the curing barn structure or as fuel for the curing heat source.



Limbe Leaf Tobacco Company Limited (LLTC)

is committed to ensuring that its contracted farmers have sustainable sources of wood for both Burley barn building materials and for curing Flue Cured and Fire Cured leaf tobacco.

This starts on the farm with contracted growers receiving support from the Company to grow a minimum number of trees each season linked to their planned tobacco production. Additionally LLTC has implemented a 'live barn' programme for its Burley tobacco growers, requiring that they plant trees around the footprint of a curing barn so that they form sustainable, enduring support poles for the structure that then avoid the need for ongoing replacement and the associated wood use.

LLTC's commercial forestry project is also a key component of the integrated program

centred on its forestry nursery and plantation operation in the heart of the tobacco growing area in Central Malawi. The site currently covers a total area of 2,000 hectares, 46% of which is under commercial planted forestry, 23% is indigenous woodland management and regeneration as well as riparian, wetland restoration and preservation.

Plantings include indigenous species alongside Eucalyptus varieties, as well as Bamboo species for either Biomass supply or for building materials for barns, all to be supplied to contracted smallholder growers. The seedlings for each year's planting are produced in modern nurseries on the site.



All planted tree compartments are subject to verification and audit procedures with the participation of international, independent auditors, including the assessment of management and silvicultural practices, survival rates and traceability.

The indigenous forest areas are carefully mapped, with the protection and regeneration managed with assistance from consultants having expertise in regeneration and maintenance of indigenous woodland. A biodiversity inventory and monitoring system has been implemented in the indigenous forest and wetland areas to build on existing best practices.

Other project activities on site include:

- the **production of biomass in briquette form** fed by the lops and tops from harvested trees, specific high yielding biomass varieties of Bamboo and Miscanthus. The biomass briquettes and the harvest from the forests on the site are distributed to contracted growers providing as a sustainable source of wood and fuel;
- the development of models for '**live burley curing barns**', involving the planting of trees at appropriate distances and symmetry in the shape of a barn. These trees then serve as pillars for the barn removing the need for wood to be cut from forest to erect or replace barn structures.



Integrated tree management coupled with the training of farmers and the inclusion of the wider communities is a fundamental component of LLTC's vision for long term sustainability.