



PROVIDING A NEW WAY TO RECYCLE DISCARDED BIOMASS,
LLTC HELPS IMPROVE THE
ENVIRONMENT AND THE
FERTILITY OF MALAWI'S POOR
SOIL AT THE SAME TIME.

INNOVATIVE FARMING SOLUTIONS RISE FROM THE DUST

For a long time in Malawi, discarded tobacco dust and stems – which make up about 15% of the total green tobacco processed in a year – were considered the waste of leaf processing, and the only way to dispose of it was at the tobacco waste disposal site on the outskirts of Lilongwe. Then farmers found that the tobacco dust and stems could be used as a substitute for, or in combination with, inorganic fertilizer for maize production in Malawi's organic matter poor soils. However, they cannot clear all of the discarded dust and stems every season, and it is very difficult to transport in bulk because the dust and stems are so lightweight.

GREEN TOBACCO



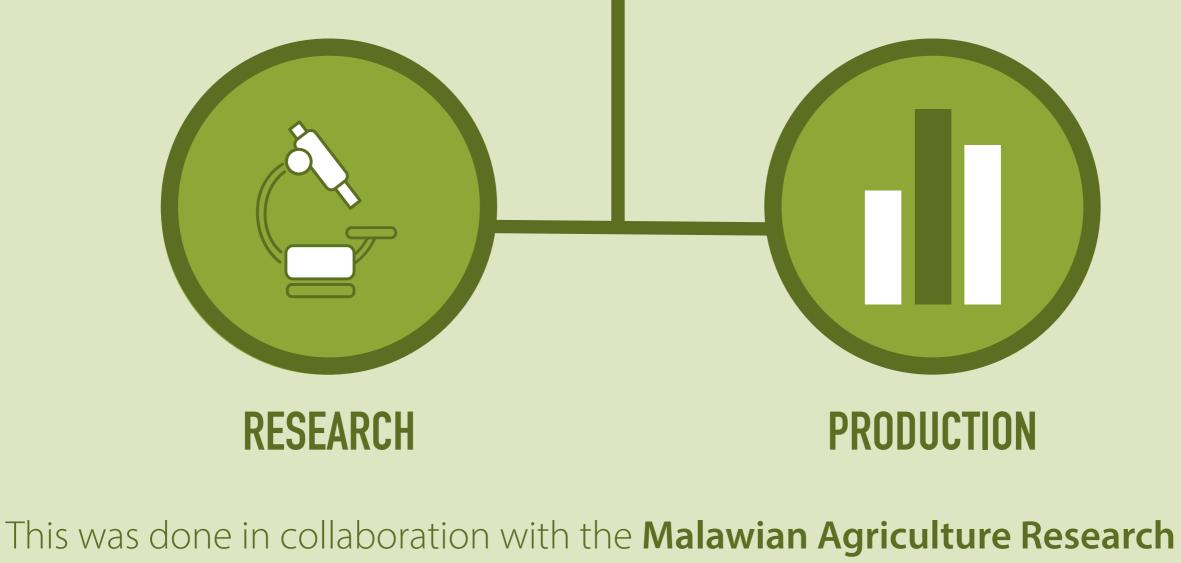
DISCARDED WASTE

FERTILIZER

REUSED



A few years ago, the factory department at Limbe Leaf Tobacco Company (LLTC) championed a multi-year project to scientifically test the nutritive value of tobacco dust, stems and a combination of the two, in the form of pellets, for maize production.



and Extension Trust (ARET), a body mandated to promote the sustainable production of high value export crops while conserving natural resources and protecting the environment. ARET approved the tobacco and dust pellets for use as a fertilizer.

During the processing of the tobacco, the dust is extracted and transported

through high-volume air transport systems to a screening separator. The dust drops onto a conveyor belt and is transported to a silo, where it is stored. It is fed into a high-compression stationary pelletizing unit, then weighed and conveyed to a bagging unit where it is packed as pellets into 25kg heavy-duty paper bags. Compared to the same volume of stems and dust, the pellets take up much less room and are therefore far easier to transport.

16 000 BAGS OF DUST PELLETS PRODUCED



In 2016, 20% of the nearly 16 000 bags of dust pellets that were produced was used by LLTC's reforestation project, as it is an excellent termite deterrent that improves the survival rate of new saplings. The remaining 80% was made available to employees and commercial outlets, as it is extremely cheap compared to inorganic fertilizer (just US\$2 compared to about US\$22 per bag). Through innovative use of what was previously considered waste materials, LLTC has created an alternative source of fertilizer for the farmers of Malawi.