

NATIONAL GREENHOUSE GAS INVENTORY SYSTEM





GREEN INVESTMENT OPPORTUNITIES FOR MALAWI'S FORESTRY SECTOR

In 2016, the impact of deforestation and forest degradation on the water supply to Malawi's capital Lilongwe was so severe that the army was deployed to protect forest reserves. This dramatic action represents the crisis Malawi faces due to over-extraction of forest resources and agricultural expansion.

Over 96% of the country's population depends on wood or charcoal as their primary cooking and heating fuel. In 2017, deforestation and forest degradation were estimated to comprise one-third of Malawi's total emissions. Population growth and a slow electrification rates will result in continued pressure on Malawi's remaining forests unless actions are taken.

In 2017, emissions from deforestation and forest degradation accounted for 33% of Malawi's total greenhouse gas emissions.

In 2019, the Government of Malawi, through the Ministry of Natural Resources, Energy and Mining, in the Environmental Affairs Department (EAD), launched the **Greenhouse Gas Inventory System** (GHG-IS) to monitor and report national emissions

across all economic sectors. This comprehensive system establishes a process through which EAD engages public and private sector partners to collect critical information needed to produce reliable estimates of greenhouse gas emissions.

Emissions estimates produced by the GHG-IS can help the government, investors, and development partners develop effective, practical and mutually beneficial strategies to achieve green growth. Understanding the greatest sources of emissions allows Malawi to make targeted interventions and better access climate finance.

Through improved data collection and management processes, the GHG-IS generates more complete information about the supply and demand for wood and timber in Malawi. This information can help identify investment opportunities and recognize practices that enhance sustainability and lower emissions.

FOREST LANDS AND GREENHOUSE GAS EMISSIONS

Forests play a vital role in the health of the planet and their removal from many landscapes is a major driver of climate change. As trees and other vegetation grow, they pull carbon dioxide (the most important greenhouse gas driving climate change) from the atmosphere and store it. Over the past one hundred years, the clearing and burning of vast amounts of this forest biomass by humans to meet demands for goods and land has released much of this stored carbon back into the atmosphere.

FORESTRY SECTOR OPPORTUNITIES FOR GREEN GROWTH

Understanding sources of emissions in the Malawian context presents many opportunities for forestry activities to lower the country's greenhouse gas emissions. Programs that increase forest cover also offer important co-benefits such as regulating water supply, improving soil health, providing habitat for pollinators, and increasing resilience to the impacts of severe weather events associated with climate change.

Where facilitated through extension services, other technical support, or economic incentives, activities that plant trees in Malawi's landscapes can also support national GHG accounting efforts by establishing improved data sharing channels.

Beneficial actions could include:

- •Promoting the integration of appropriate trees in agriculture, otherwise known as agroforestry, offers a multitude of benefits. These include supplying a source of wood fuel and fodder, improved soil fertility, less susceptibility to wind and rain damage, and improving resilience against drought.
- •Expanding woodlots and plantations to increase the supply of wood fuel in Malawi, especially near urban areas where local charcoal and firewood supply does not meet demand.
- •Increasing yields of existing plantations through improved management to increase supply or quality of wood fuels and timber.
- •Improving forest protection through enhanced patrols or community forest management programs.



For more information about the GHG-IS and its uses, contact the EAD representative listed below.

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