



Developing options for more sustainable woodfuel value chains in Sub-Saharan Africa

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Woodfuel matters

Woodfuel is the main source of energy for cooking for over 60% of households in Sub-Saharan Africa, contributing to the food security and nutritional needs of millions of people. Due to the lack of contextually appropriate alternative energy sources and growing charcoal demand from urban centers, woodfuel production is expected to increase in the coming decades. The sector provides income to millions of people, including small-scale producers and collectors, traders, transporters and sellers, who rely on woodfuel revenues for their livelihoods.

However, despite its socioeconomic importance, woodfuel production and trade is still a mostly informal sector. It is not organized, it has weak or inadequate legal frameworks, and it contributes little to government revenues. The inadequate governance of woodfuel, in combination with increasing demand, results in unsustainable wood harvesting that causes deforestation and forest degradation and greenhouse gas emissions.

In contrast, sustainable woodfuel value chains can positively contribute to livelihoods, household income and a secure supply of cooking fuel, while mitigating negative environmental impacts.

Addressing knowledge, technical and policy gaps

Through the GML project, CIFOR aims to contribute to develop more sustainable woodfuel value chains across Sub-Saharan Africa, with a focus on Cameroon, the Democratic Republic of Congo (DRC), Zambia and Kenya, and extending to neighboring countries regarding cross-border trade.

In the first phase of this project, CIFOR produced **knowledge** on the characteristics of woodfuel value chains and trade flows. This included insights on regulatory frameworks and informal structures; woodfuel supply of high priority sites, including urban centers, cross border zones, refugee sites and sensitive ecosystems; and potential benefits for those involved in production and trade and production systems as part of wider forest-agricultural landscapes.

Based on identification of priority areas and stakeholder needs, CIFOR and its partners are now developing a range of **options for improved sustainability** of woodfuel. After testing these options on the ground, it will be possible to assess their potential to reduce environmental impacts, increase socio-economic benefits, and improve governance and incentive mechanisms.

Moreover, lessons on integrating gender aspects and wider scalability, replicability and financing options inform ongoing engagement of governments and other stakeholders to provide meaningful **policy and technical solutions** for a sustainable woodfuel future in Sub-Saharan Africa.

Financed by the European Union and led by the Center for International Forestry Research (CIFOR), Governing Multifunctional Landscapes in Sub-Saharan Africa: Managing trade-offs between social and ecological impacts (GML) is a four-year project that aims to address key knowledge, technical and policy gaps related to the global impacts of the FLEGT Action Plan, as well as forest and land governance, trade in informal and legal timber products, deforestation-related commodity-based agribusiness, woodfuel and ultimately sustainable forest and land-use management and improvement of livelihoods.

Cameroon



Reducing the degradation of mangroves in the Littoral region through **improved fish smokers, improved extraction practices** and **management options**.



Promoting charcoal **production from wood residues** in the Littoral region by building a network of producers with Wood Processing Units (WPU).



Supporting and developing a business model for charcoal briquettes **production from organic residues** from households, agriculture or factories (including sawdust).



Improving **woodfuel management in refugee hosting areas** in the East region, including through the development of model agroforestry systems with fast growing species and food trees in areas under pressure; and the creation of a business model and marketing strategy for improved end-use, including cooking techniques, cook stoves, and commercial stoves.

Kenya



Developing **community action plans** in Baringo and Kitui counties to promote better management of woodlands and sustainable harvesting of trees, and more efficient processing and carbonization.



Supporting the Baringo County Environmental Committee in the development and the implementation of a roadmap towards sustainable **Prosopis juliflora charcoal** production.



Supporting Kitui County in the implementation of TIPS for devolved forestry functions and development of a **road map for sustainable woodfuel production** and local use.

Democratic Republic of Congo



Producing sustainable woodfuel in the Yangambi landscape, including through **community-led agroforestry** systems, and **improved carbonization techniques**.



Producing **briquettes from sawmill** residues and developing a business model to supply the local market in the city of Kisangani.

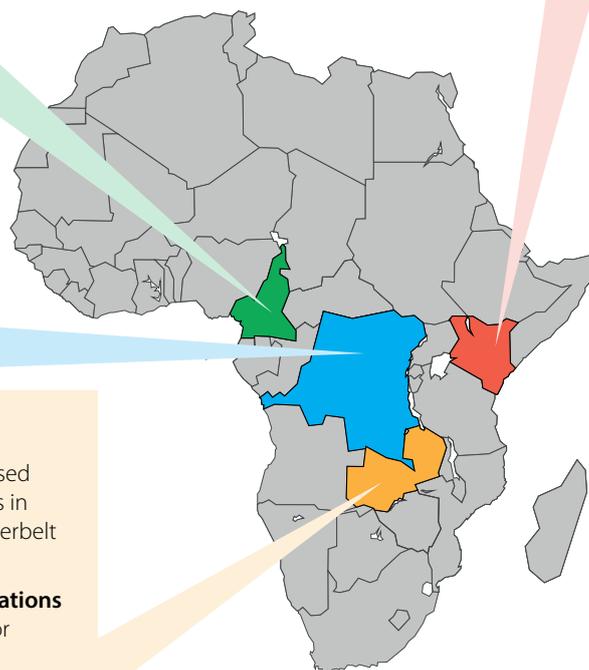
Zambia



Developing participatory forestry action plans, including evidence-based **assisted natural regeneration** options for degraded production sites in three districts: Mushindamo (North-western province), Mufulira (Copperbelt province) and Nchelenge (Luapula Province).



Supporting more efficient production by **charcoal producers' associations** in Choma District, including through charcoal kiln efficiency studies for cushion feedstock supplies in woodfuel production and supply areas.



Working in partnership

The project works closely with relevant partners, stakeholders and operators. Key global partners for the work on sustainable woodfuel value chains include the Food and Agriculture Organization of the

United Nations (FAO), the Forest and Farm Facility (FFF), World Agroforestry (ICRAF) and *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ). The project also works in partnership with national and local organizations, including governments, private sector, universities, research institutes, and NGOs.



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Main partners



Food and Agriculture
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