



Charcoal certification and standards in Tanzania: options and opportunities

Key Messages

It is feasible for the Tanzania Bureau of Standards to set a compulsory sustainable forest management standard, applicable to charcoal, linked to Tanzania's National Forest Stewardship Standards.
A TBS charcoal standard could reduce charcoal's damage to people's health and the environment. Awareness and capacity on charcoal certification and standards is low. Government leadership is needed to mainstream charcoal and sustainable forest management standards.

Charcoal certification

Charcoal, from natural woodlands, is the most popular urban cooking fuel, in Tanzania. However, some charcoal production is harmful to woodlands. Poor quality charcoal also causes health problems.

Certification is a voluntary, market-based tool that seeks to promote environmental, social and economic sustainability in products. Certification requires products to meet sustainability criteria and indicators. Compliance is verified through independent audits. Globally, certification has been widely applied to forest products including charcoal.

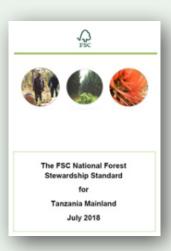
Tanzania has developed National Forest Stewardship Standards (NFSS), a nationally-determined Forest Certification process. They are applicable to all forest products including charcoal. The NFSS cover forest management and 'chain of custody', the process of identifying certified from non-certified products. The NFSS were validated by national stakeholders and approved by the Forest Stewardship Council (FSC) – International, in 2018. So far, these have been applied successfully to timber but not to charcoal. The voluntary nature of certification and the significant expense of meeting the standards and compliance verification, have limited their applicability to charcoal. This reflects low awareness on certification and low willingness-to-pay a premium for product sustainability. This policy note looks at how the NFSS could be more effective in improving charcoal sustainability if linked with the Tanzania Bureau of Standards (TBS) and the Standards Act, 2009.

Charcoal standards

Standards are product requirements defined by the TBS

in consultation with producers and consumers. They comprise rules and technical specifications designed to ensure product safety and reliability. They are legal instruments and TBS has a legal mandate to set either voluntary or compulsory standards. Two charcoal-

related TBS standards exist: TZS 473: 2019 for biomass cook stoves, and TZS 1312:2010 on charcoal quality, including carbon and moisture content criteria. Both standards seek to reduce harm to consumers. However, TBS standards do not yet consider social and ecological impacts during production.



Assessing the feasibility of a standard applicable to charcoal production

The study outlined in this policy note looked at whether NFSS could be linked to TBS compulsory standards to promote more sustainable charcoal production. It is based on a review of documents including the NFSS and TBS standards and consultation with TBS, experts, government staff and charcoal producers. The study collated and ranked strengths, weaknesses, opportunities and challenges of establishing a TBS standard linked to the NFSS. At the end of the study an application was submitted to TBS to approve the NFSS as a government standard applicable to forest management.

Important opportunities and challenges in making NFSS compulsory in sustainable charcoal production	
Opportunities	
	Improved forest management and charcoal quality will be better for people's health and the environment. Improved transparency and accountability along the charcoal value chain, linked to chain of custody standards.
Challe	Improved working conditions for charcoal producers and traders. Builds on established national processes (TBS and NFSS). enges
	Low awareness of charcoal certification and standards among producers, consumers and government. Limited capacity to meet, verify and audit sustainable charcoal criteria. High costs of compliance and enforcement, with low financial incentives. Informality of the charcoal sector and limited awareness of the sector's economic value.

Options

Voluntary certification vs. compulsory standards

With low consumer awareness on the benefits of certified charcoal, compulsory standards are more likely to be effective than relying on voluntary certification. TBS applies compulsory standards to products that affect health, safety and the environment and so are relevant to charcoal. They can be made compulsory through TBS or forestry sector legal instruments such as regulations. Other countries, including Uganda, Namibia and South Africa, have adopted this approach.

An additional charcoal kiln standard

Another option is to set a standard for charcoal kiln efficiency and carbonisation rates. This would link with charcoal quality standard TZS 1312:2010. It could be applied to the improved basic earth kilns currently used in sustainable charcoal production in Tanzania.

Key Findings and Conclusions

- Linking NFSS certification with a compulsory TBS standard is feasible and could improve the sustainability of charcoal value chains, with many benefits for charcoal producers and consumers.
- Charcoal standards are supported by national policy, including in the National Forest Policy Implementation Strategy 2021-31.
- The NFSS provide relevant criteria for a standard and are the product of an extensive consultation and review process. They link with the internationally recognised Forest Stewardship Council. In 2021, TBS provisionally accepted them for adoption.
- Communities practicing sustainable forest

- management could be group-certified for multiple forest products. This would spread certification costs.
- Establishing a charcoal value chain standard requires coordination between many stakeholders. It needs strong government leadership.
- Government institutions and law enforcement mechanisms are important to create an enabling environment for standards and certification.
- A charcoal product standard will incentivise communities to produce charcoal more sustainably.
- Change will take time and investment to build capacity and change attitudes and practices.

Recommendations

- Raise awareness on the benefits of charcoal certification and TBS standards including to producers, consumers, government staff and NGOs.
- Build the capacity of charcoal producers and forest managers to achieve sustainable practices, compliant with NFSS.
- Mainstream forest product certification and the NFSS in the curricula of higher learning institutions offering forestry courses.
- Build the capacity of local certifiers, forest resource managers and auditors to fulfil their roles and responsibilities in the governance of forest product standards and certification.
- Implement a pilot project to test the feasibility of applying the NFSS to the charcoal value chain. This could be implemented in the Kilosa District villages already practicing sustainable charcoal production.

This policy note is based on: Kalonga, S. 2021. Implementing charcoal certification in community- based forest management areas in Tanzania. TFCG Technical Paper 49.



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Embassy of Switzerland in Tanzania

http://www.tfcg.org/tfcg-technical-paper-49-charcoal-certification-and-cbfm-intanzania-2021-final/

The research was supported by the **Swiss Agency for Development and Cooperation** through the Conserving Forests through sustainable, forest-based Enterprise Support in Tanzania (CoForEST) Project https://www.tfcg.org/what-we-do/develop/coforest/