WIDENING INFORMED STAKEHOLDER ENGAGEMENT IN REDD+

Charcoal and REDD+ in Kenya

Analytical studies and the Kenya REDD+ process

A series of in-depth analytical studies have been carried out in Kenya to inform formulation of the REDD+ strategy and readiness process. This information note summarizes the study “Analysis of the charcoal value chain in Kenya”, and assists disseminating the content to reach as many stakeholders as possible. The REDD+ mechanism aims to reduce GHG emissions arising from deforestation and forest degradation and to support country efforts that promote conservation and sustainable management of forests and enhancement of forest carbon sinks. It seeks to provide compensation to governments, communities, companies or individuals in developing tropical countries for actions taken to reduce greenhouse gas (GHG) emissions from the forest sector. Its implementation involves the design and application of appropriate land and forest management practices.

Introduction

Deforestation and forest degradation accounts for about 17-18% of anthropogenic global greenhouse gas (GHG) emissions, the biggest contributor after energy supply (power and fossil fuel), which accounts for about 26 percent of emissions (IPCC 2007). Different studies have identified charcoal production as a key driver of deforestation and forest degradation in Kenya. Recent studies by the United Nations and the United States indicate that charcoal production is also playing a key role in supporting terrorism in the Country. Charcoal is the residue when wood is burnt in the absence of air. It is light to transport and burns well and is the favoured fuel for many urban dwellers.

Charcoal is Kenya’s most widely used fuel, estimated at 2.5 million tonnes of charcoal produced annually with a total net worth of Kshs 135 billion (MEWNR, 2013). Addressing the “charcoal problem” is a major concern in Kenya’s efforts in reducing deforestation and forest degradation, sustainable management of forests and enhancement of carbon stocks (REDD+) as part of its National Climate Change Response Strategy (NCCRS).

Biomass is a major source of energy in Kenya with 68% of the population relying on it. It is estimated that about 2.5 million tonnes of charcoal are produced annually in Kenya which generates Kshs 135 billion. The challenges associated with the charcoal value chain are contributing to deforestation and forest degradation and hindering efforts to conserve available forest resources. Charcoal has been identified as an important commodity in the development of REDD+ strategy in Kenya. The key challenges facing the charcoal value chain include:

- Unregulated trade in charcoal: Wood harvesting, charcoal burning, transport and trade in many parts of the country are still unregulated despite the enactment of the charcoal regulations in 2009.

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1 Synthesis of the report “Analysis of the charcoal value chain in Kenya” by Ministry of Environment, Water and Natural Resources, Republic of Kenya
Systemic corruption: Corruption is widespread and deep rooted in the trade. The situation worsens during the periodic bans on production and trade, when producers have to make frequent bribes to deliver charcoal to the market.

Inefficient technologies: Inefficient conversion technologies result in high deforestation to produce small quantities of charcoal.

Unsustainable resources use: Limited feedstock material for charcoal production as the preferred indigenous species are depleted without being replenished.

Inequity and exploitation: Economic exploitation of certain actors along the charcoal value chain as a result of the informal organizational of charcoal production, transportation and marketing.

Key recommendations
- Further strengthening and implementation of the Charcoal Rules.
- The new charcoal rules should be modified to take into consideration devolved function of forestry which include regulation of charcoal production and trade at county level.
- Harmonize energy and forest acts in relation to licensing of charcoal production and align with new constitution.
- Empower local resource user groups to track and report illegal activities.
- Strengthening producer associations by ensuring that all producers join the associations.
- Promoting alternative sources of income for charcoal producers.
- Promoting energy saving technologies for consumers.
- Introduce incentives for promoting investments in high efficiency technologies in production.
- Promote private sector investment in commercial tree growing for charcoal production.
- Promote certification scheme which will help in identification of charcoal produced from sustainable sources.

Charcoal value chain
- The charcoal value chain starts from where the tree is cut and ends with where the charcoal is used. Wood for charcoal production is sourced from private farms (40%), government forests (20%) and communal lands (40%) through both legal and illegal means (Republic of Kenya 2002). Conversion of private land from pasture to farming is the key driver of charcoal production especially in Narok County. In Garissa and Baringo Counties, charcoal production is driven by the desire to clear invasive species (Prosopis juliflora) to reclaim grazing land.
- In parts of central and western Kenya, conversion of wood is carbonised to meet Kenya’s annual charcoal demand. This accelerates deforestation and forest degradation in the country. Unfortunately, there is little being done by the charcoal producers and other actors in the value chain to harvest sustainably as regeneration of charcoal trees (feedstock) is not considered part of the charcoal production business.
- Compared to other energy sources, biomass including charcoal is the most widely used energy source in Kenya at about 68%, followed by petroleum products at 22%, electricity 9% and other forms of energy at 1% (MEWNR, 2013). Charcoal is consumed in both cities and rural areas in Kenya with major cities like Nairobi, Mombasa, Kisumu and Nakuru among others accounting for more than 50% of the charcoal use in Kenya. All social classes rely on charcoal, even high-income groups of which 83% depend on charcoal for domestic energy needs that include, but are not limited to, cooking.

Charcoal production technologies
- There are different technologies in use for charcoal production in Kenya. These include; labour intensive first generation traditional earth-mound kilns with very low wood to charcoal conversion efficiencies. The second generation modified earth mound kilns (for example, the Brazilian beehive, half-orange brick, drum and the casamance kilns) have higher efficiency rates of up to 30%. The third generation charcoal technologies target the recovery of harmful gases besides integrating charcoal production with other processes such as power generation and perhaps chemical manufacture. Third generation technologies are still being tested.

Charcoal in the Kenyan economy
- 2.5 m tones at a value of KSH135 billion annually, a value almost equal with the tea industry.
- Over 200,000 jobs in production
- Over 500,000 jobs in transport and sale
- Supports over 2.5 million families
- Up to KSH 5.1 billion in revenue to government through licenses and business permits.

Charcoal value chain stakeholders
- Land owner seeking to convert his land
- Producer (usually an immigrant)
- Agent (usually a broker)
- Transporter
- Traders (both retail and wholesale)
- Users
- Enforcement services

Taxation and other fiscal measures
- Despite generating estimated revenue of Kshs135 billion annually, there are no taxes levied on charcoal in Kenya. Studies indicate that due to lack of an appropriate taxation system for charcoal, Kenya loses about Kshs 21.6 billion annually based on the 16 per cent value added tax. The government generates income from charcoal only through licenses and business permits. The Forest Act, 2005 and the Charcoal Rules 2009, require charcoal producers to get licenses from Kenya Forest Service (KFS). Charcoal transporters are also issued with a movement permit by KFS for transporting the charcoal to urban areas. Forest officials are also empowered by law to impose penalties on those found producing or transporting charcoal without the necessary permits. Under the Forest Act 2005, the Director of KFS is also authorized to issue charcoal import and export licenses. Businesses operating within towns, municipalities and cities are also required by various laws to have business licenses/permits irrespective of what they sell. Many such businesses sell charcoal to earn extra income. A 2011 report by the World Bank indicates that the current charcoal licensing systems operate merely for revenue collection and are not related to sustainable harvests, as they do not give any regard to the quantities of wood harvested.
Charcoal hotspots in Kenya

Charcoal production is highest in arid and semi-arid areas although it is practiced all over Kenya. Of the 47 counties in Kenya, those with the highest production rates include Kajiado, Makueni, Kitui, Kwale, Baringo, Elgeyo Marakwet, Tana River, Kilifi, Garissa, Laikipia, Machakos, Marsabit, Meru, Narok, Tharaka and Turkana counties. (MEWNR, 2013). Examples from a few counties indicate that:

• Most charcoal in Kajiado is produced in Bisil area towards the Namanga border, and is sold in Nairobi and its environs.
• The charcoal hotspots in Makueni County are farmlands in Kibwezi, Makindu, Kathonzweni and Makueni districts, with very little charcoal coming from Mbooni East.
• LungaLunga and Mwereni group ranches are the main charcoal producing areas in Kwale County.
• Ololulunga and Siyabei areas are the main charcoal producing areas in Narok County.
• Within Marigat District of Baringo County, charcoal comes from Salabani, Ng’ambo, Ilinarwa, Ilchamus and Loboi locations. 50% of this charcoal is transported to Nakuru, 40% to Nairobi and 10% to other areas including Kisumu city.

Challenges

The charcoal value chain is bedeviled by many challenges. This includes but not limited to:

1. Unregulated/illegal charcoal trade: Wood harvesting, charcoal burning, transport and trade in many areas continue unregulated despite the enactment of the charcoal regulations in 2009. Groups outside Charcoal Producer Associations (CPAs) produce 60% percent of the charcoal. This makes the regulation of the charcoal business more difficult.

2. Rampant and Systemic Corruption in the Charcoal trade. The situation worsens during the periodic bans on production and trade where producers have to part with large bribes to the police and county council security apparatus to deliver charcoal to the market. This diminishes the legitimacy of the charcoal business, and leaves many producers and transporters vulnerable to economic abuse.

3. Inefficient conversion technologies result in high deforestation to produce small quantities of charcoal. These are the logical consequence of the unregulated & insecure setting, clandestine operation and overall capacity deficits. There is need to link the producers to other sources of finance to invest in more efficient technologies.

4. Limited feedstock materials for charcoal production as the preferred indigenous species are being depleted. The unsustainable fuel wood resource exploitation with no efforts made to replenish are a consequence of lack of strategies for sustainable fuel wood exploitation within the charcoal sector.

5. Exploitation along the charcoal value chain as a result of the informal organizational nature of charcoal production, transportation and marketing.

Policy and legislative frameworks

- Constitution of Kenya 2010 -
- Energy Act 2006
- Energy Policy 2007
- Forest Act 2005 and Forest Policy 2007
- Policy responses to the Charcoal problem
- Vision 2030
- Kenya Charcoal Policy handbook

Despite having all the necessary permits and licenses, a transporter had to part with a total of Kshs. 23 400/- as bribes to police officers to transport 350 bags of charcoal from Namanga to Nairobi a distance of 150 km.
Recommendations

Addressing deforestation and forest degradation requires concerted effort by all stakeholders to put in place all necessary policy and legislative frameworks and implementation of appropriate interventions. To arrest the negative impact of unsustainable charcoal production on deforestation and forest degradation and create conducive environment of sustainable charcoal sector the following initiatives need to be put in place:

1) Policy, Legal and Institutional

A. Short term
   i. Full roll-out and implementation of the Charcoal Rules.
   ii. Ensure implementation of RULES and guidelines that require sustainable production and trade in charcoal.
   iii. Implementation of requirements that charcoal sales are done at collection centres only.

B. Medium term
   ii. Align legal provisions on charcoal to new constitution (e.g., with the creation of county governments, does the District Environment Committee which is represented in the charcoal licensing committee still exist?).
   iii. Standardization of charcoal quality and packaging units.

C. Long Term
   i. Enhanced vigilance in identified hotspots to ensure no illegal activities take place.
   ii. Promote research including detailed study on charcoal imports and exports.

2) Community Forest Associations, Charcoal Producer Associations and Charcoal Producer Groups

A. Short term
   i. Empower local resource user groups to track and report illegal activities.

B. Medium term
   i. Strengthening producer associations by ensuring that all the producers join the associations.

C. Long term
   i. Promoting alternative sources of income.
   ii. Facilitate start-up of micro-finance schemes and mobilize for funds to enable producers access better technologies.

3) Consumers

i. Promotion of energy saving technologies

A gap in the current study appears to be the lack of secure tenure for charcoal producing communities, and the role of customary community institutions in controlling charcoal making in the drylands.

References


