

Note with perspectives

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Introductory remarks: I have limited personal experience of having worked with charcoal. However, after having spent most of my professional life working with forests, agroforestry, trees, agriculture, land use, natural resources, etc. in Africa and, to a lesser degree, other parts of the tropics, I have obviously numerous times become aware of the enormous extent and importance of the charcoal sector. Not only the production, popularity, demand, trade and consumption of charcoal, or the sometimes dramatic environmental impacts of the all this, but also, and increasingly, its economic and developmental magnitude, problems and potential. It is this latter aspect of charcoal, i.e. its economic potential that I will focus on in these short reflections.

Examples: To get an idea of the economic magnitude of the charcoal trade/market, I will mention a few examples. Most are a bit outdated – they come from my more active time - but I think that the message is still valid today, probably even more dramatic figures.,

- **Kigali 2007** (own assessment during a consultancy mission). Consumption and value of sales in the city. 1 bag sold at 10 USD. Total annual sale value in Kigali: 23 million USD. Of this farmers sold for c. 10 million USD, i.e. the value added in the chain was c. 13 million USD. Compared to the main export product – coffee – that brought in 35 million USD.
- **Kenya 2008** (unpublished consultancy report). *“The charcoal industry represents an estimated annual market value of USD 425 million that is not visible to the government because of its informal nature. The Govt. loses over USD 68 million annually as a result of not having regulatory and VAT tax collection mechanisms for the charcoal industry”.*
- **Tanzania 2009** (World Bank). Annual value of charcoal at sale: USD 650 million; 2 million full/part-time jobs. Not in official GDP, estimated loss of tax USD 100 million.
- **Sweden today.** In my own country, charcoal today is a luxury article used by hundreds of thousands of people in their outdoor barbeque grills during summertime. One bag of 2.5 (!) kg of charcoal sells at c. 5 USD. This means that a bag of the normal size traded in East Africa of c. 30-40 kg would cost between 75 and 80 USD, compared to the value according to the current study of c. 6-8 USD per bag in the producer stage.

Naturally, there are many more, and more recent, examples and studies – national, regional and local - that could be quoted (some will certainly come up in this webinar) to underline the enormous economic value in the charcoal value chain.

Some reflections: The economic importance of the charcoal production, trade and consumption is undisputable, and it is, in all likelihood, increasing in volume and value over time. Still, much of the discussions and concerns around charcoal focus on its often negative environmental impact – deforestation and forest degradation. These negative impacts are, unfortunately, also undisputable. In some cases this has led to hasty and less well thought over restrictions and prohibition of charcoal production and trade instead of measures to improve the industry. Because the facts remain – people want charcoal, they need charcoal and they are prepared to pay for charcoal. And, not only for domestic cooking and heating purposes, but also for small scale industry and craft (e.g. blacksmiths). In addition, there is a growing, lucrative export market – little known because of its informal, sometimes illegal, nature. Cf. export from East Africa to the Arabian Peninsula.

Three major sets of issues must be addressed and acted upon in order to bring the sector into the formal economy, make it environmentally friendly and sustainable, and realise its economic and employment potential:

- Make the production, trade, sales and consumption legal and bring it into the formal economy. Tax it (e.g. through VAT on sales) and use this income to provide advice and support to the various actors in the chain.
- Improve the charcoal production technology. The present mainly used earth kilns ought to gradually be replaced with more permanent brick/metal kilns. This technology is already available (in 1972, i.e. almost half a century ago, when I was a junior lecturer at Makerere University we took the students on a study trip to commercial charcoal production in large permanent kilns in the Mafiga Forest).
- Finally, and not least important, ensure that the wood needed for the production is sustainably produced. Every tree felled for charcoal production should be replaced by at least three newly planted trees. Cf. example from Brazil where 90% of trees for charcoal for the industry come from plantations. This will, when successful and in operation, also turn the charcoal industry into a “climate-smart” CO₂-neutral energy source.

The way forward: Naturally, to achieve these goals will not be easy – economic and ecological conditions vary between countries and locally; legislation and technologies will have to be adapted and fine-tuned to a wide array of situations, choice of tree species and their management will vary, markets will differ, etc. One thing is clear, we need to know and understand the whole chain much better. And that is why the research and studies on “Sustainable business models for charcoal” which we will have presented and discussed today are so crucially important. I am greatly looking forward to hear more about the knowledge and ideas that have been coming out of these studies.

Thank you!