Greening the Charcoal Value Chain in Ghana



NAMA approach a

Charcoal remains one of the most important sources of fuel in Sub-Saharan Africa including Ghana. A look through the supply chain highlights the inter-linkages with issues of energy, deforestation, employment and other socio-economic and environmental challenges.

A NAMA provides an opportunity to develop a "sustainable charcoal value chain" through a combined approach of policies, technology intervention, finance and capacity building.

Charcoal Current Value Chain Status





1. Deforestation

• Ghana has one of the highest deforestation rates in the world. Ghana loses about 135,000 hectares of forests annually. • 21.7% [4,940,000 ha] of Ghana is covered in forest.

 Ghana lost 2,500,000 ha since the early 1990s.

Source: FAO Ghana – Forest Resources Assessment (2010)

2. Charcoal Production

• About 90% of the wood used is obtained from natural forests with the 10% remaining coming from logging and sawmill waste. Almost all kilns in Ghana are traditional earth mound kilns which are the least efficient in terms of charcoal yield.

Source: Strategic National Energy Plan(SNEP) of Ghana





3. Supply Chain and Distribution

 Brong-Ahafo and Eastern regions produce over half of the country's charcoal.

 Ashanti and greater Accra region consume 50% of the country's charcoal.

4. Charcoal Consumption

 GHACCO target for distributing efficient cookstoves: 5 mil. by 2020. • Population of Ghana in 2020: 30 mil.

- Average household size: 4 (GSS, 2008).
- No. of households in 2020: 7.5 mil.
- GHACCO target coverage: 2/3rds of the projected households.

Sustainable Charcoal Value Chain

Improvements under

1. Tackling Deforestration in Ghana



Reach out to community leaders and secure their buy-in



Inform and educate the rural charcoal producers through the support of community leaders

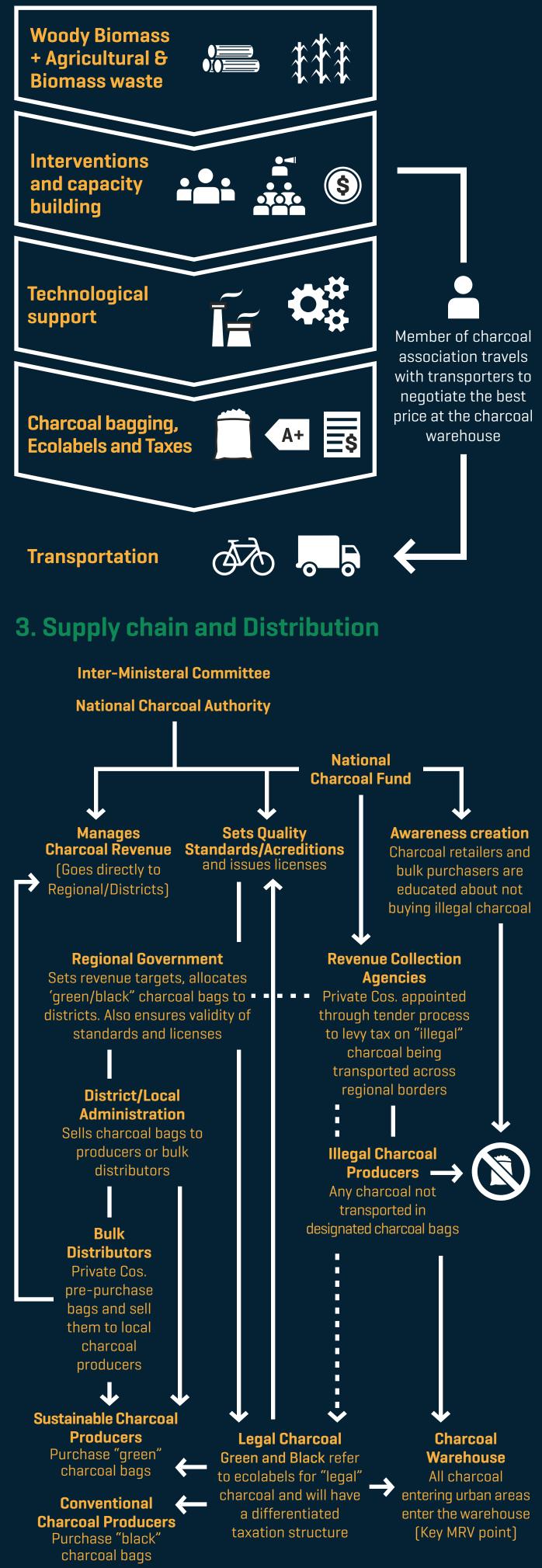


Support the creation of charcoal producers cooperatives



Government to sign formal agreements with co-operatives to **quarantee** minimum conditions for pursuing sustainable charcoal practices.

2. Forestry and Charcoal production



The complete NAMA Study jointly developed by UNDP's MDG Carbon and the Regional Environment Project on the Management of Environmental Services and Financing for Sustainable Development, is available here:

http://www.undp.org/content/undp/en/home/librarypage/environment-energy/mdg-carbon/nam a-study-for-a-sustainable-charcoal-value-chain-in-ghana/

For more information: Helene Gichenje, UNDP, www.undp.org

Dr. Alexandra Soezer, **MDG** Carbon www.mdgcarbon.org

Infographic data collated by: Arindam Basu, Grue + Hornstrup A/S

Infographic designed by: **Debarpan Das**