



Sustainable Wood-fuel Use

A forest degradation solution by SNV Energy

The Challenge

Wood-based fuels remain the primary energy source for households in developing countries. In Sub-Saharan Africa, 93 per cent of households in rural areas and 58 per cent of households in urban zones rely on wood-fuel¹. The International Energy Agency estimates that the number of users of biomass for energy in Africa will rise by more than 40% to about 922 million by 2030, and in Asia it will be 1.75 billion by 2030².

The extraction of wood for fuel has been identified as one of the principal drivers of forest degradation in national REDD+ programmes, particularly for Sub-Saharan Africa. However, if managed properly, wood-fuel can be a renewable energy source and a critical income source for the poor.

The Opportunity

The wood-fuel value chain is typically characterised by the presence of many actors, informal practices and often unequal distribution of benefits, leading to a situation where there is little incentive to extract wood-fuel sustainably; with the poorest groups marginalised the most.

Policies and projects in the wood-fuel sector often address parts of the value chain in relative isolation. SNV has developed an approach that can help policy makers and practitioners to better understand the wood-fuel value chain and to target interventions in ways that contribute to reducing forest degradation and improve the livelihoods of those communities involved in the sector. Based on application of this tool we are supporting a number of interventions, primarily across Sub-Saharan Africa.

¹ IEA, 2010. World Energy Outlook. Paris: OECD, International Energy Agency.

² IEA (2011), CO2 Emissions from Fuel Combustion: Highlights. International Energy Agency, Paris



Our service package comprises a diverse offering tailored to the needs of key actors of the supply chain

- Applying a wood-fuel value chain approach to identify interventions that reduce forest degradation while bringing the greatest benefits to the poorest groups.
- Supporting the sustainable management of tree resources as a source of wood-fuel through the development of forest management plans, assisted natural regeneration, business plans and establishing plantations.
- Introducing wood-fuel efficient technologies such as charcoal kilns and cookstoves meeting high quality standards of fuel efficiency, safety, emissions reductions, affordability, durability and convenience for household cooking needs.
- Strengthening the organisation of wood-fuel groups, enabling them to more effectively meet sustainability requirements and facilitating communication along the supply chain to raise their awareness on the importance of forest protection.
- Exploring carbon and REDD+ financing opportunities. Our experience of ten years in this field has resulted in 11 emission reduction programs with a carbon asset of more than 3 million tons CO₂ equivalent in Africa and Asia.

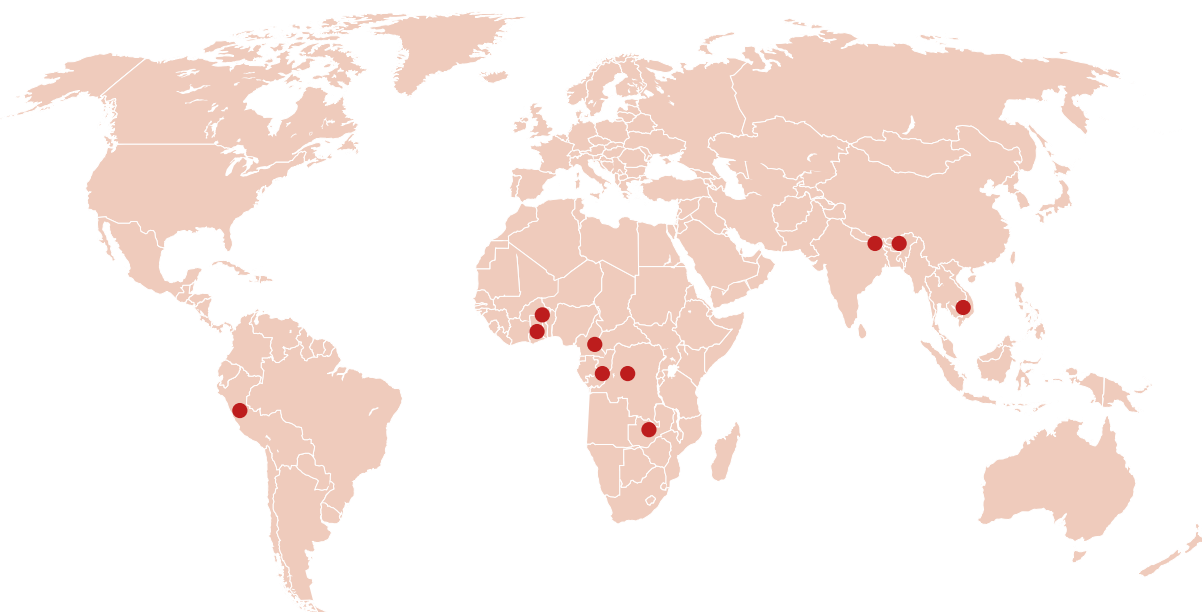
SNV has developed a 3-pronged approach consisting of identifying the main actors, determining the key issues, and designing tailored interventions. The projects we implement pay special attention to:

1. Sustainable Forest and mangrove management
Wood-fuel-reliant households require a continuous supply of biomass, obtained through the conversion of forestlands into farmlands, directly extracted from forests or agroforestry systems or sourced from plantations or timber operations.

> In the Democratic Republic of Congo, SNV supports local businesses to produce charcoal from renewable sources by focusing on land use planning, improved carbonization, monitoring systems, labelling of charcoal, marketing and taxation.

2. Introducing wood-fuel efficient technologies
In Ghana and Cameroon, we work with female entrepreneurs to introduce energy efficient technologies in the fish smoking industry, leading to reductions of up to 39% in fuel-wood consumption. Increasing prices and precarious supplies of fuel wood are strong economic incentives for fish smokers to switch to more efficient stoves.

> SNV supports the introduction of improved technologies for carbonisation in DRC, Vietnam and Tanzania. The objective is to promote a sustainable charcoal industry, by supporting improved technologies along the entire value chain from charcoal production to consumption.



For further information

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