# Outcome 2. Biomass energy-related research, knowledge management and governance.

The project aims to communicate credible data and analysis through coordinated advocacy leading to more biomass-friendly governance of Tanzania's energy sector.

In 2014, SDC commissioned a series of studies on the potentials, limitations and impacts of biomass energy; and on knowledge, attitudes and perceptions of biomass energy in Tanzania.

Building on these studies and on the draft Biomass Energy Strategy for Tanzania 2014, the project aims to raise awareness and put pressure on priority stakeholders to make changes in policy, regulations and policy implementation to improve the sustainability of the biomass energy sector with a particular focus on charcoal.

Within Outcome 2 of the project, MJUMITA is specifically advocating for policy and regulatory frameworks which will incentivize sustainable forest management on village land and result in a greater proportion of charcoal revenue reaching communities.



#### About the project partners

### The Swiss Agency for Development and Cooperation (SDC)

SDC is Switzerland's international cooperation agency within the Federal Department of Foreign Affairs (FDFA). The project is financed by SDC. <u>daressalaam@eda.admin.ch</u> www.eda.admin.ch/daressalaam

#### Implementing Partners: Tanzania Forest Conservation Group (TFCG)

TFCG is a national non-governmental organization whose mission is to conserve and restore the biodiversity of globally important forests in Tanzania. TFCG is the lead partner in the implementation of Outcomes 1 and 2.

tfcg@tfcg.or.tz

www.tfcg.org

### Tanzania Community Forest Conservation Network (MJUMITA)

MJUMITA is a national network of community groups involved in participatory forest management. The network provides a forum for capacity building, advocacy and communication for these groups. MJUMITA is responsible for advocating for policies that incentivize community-based forest management by integrating sustainable charcoal production.

mjumitaorg@mjumita.org www.mjumita.org

#### Tanzania Traditional Energy Development Organisaation (TaTEDO)

TaTEDO is a sustainable energy development organization with 20 years experience of working on rural energy projects including sustainable charcoal. TaTEDO is responsible for building capacity on improved kiln technology and is contributing to national advocacy and communication work by the project.

energy@tatedo.org www.tat

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The project is also working closely with Kilosa District Council and the Tanzania Forest Service Agency.







# Transforming Tanzania's Charcoal Sector

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

## Why do we need to transform Tanzania's charcoal sector?

Current demand for charcoal and fuel wood exceeds the sustainable supply. As a result, charcoal production is a major driver of deforestation and forest degradation in protected areas and on village land. Demand is predicted to increase for at least the next 20 years driven by population growth and urbanisation.

Charcoal and commercial fuel wood generated US\$ 1 billion in revenue for producers, transporters and sellers in 2012. However the regulatory framework for the charcoal sector is complex and inconsistently applied. As a result the sector is vulnerable to corruption, mismanagement and economic losses.

#### Did you know?

- Biomass represents 90 % of Tanzania's energy demand.
- 95 % of households in Tanzania use wood fuel or charcoal for cooking and heating.
- 91 % of households in Dar es Salaam use charcoal for cooking.
- There is almost no charcoal that is produced sustainably in Tanzania.

Making biomass energy production more sustainable is fundamental to national energy security; to reducing deforestation; and to protecting ecosystem services.

The traditional policy response has been to promote more efficient stoves, fuel switching and tree planting. However recent data demonstrate that these strategies alone will be insufficient to change the current, environmentallydamaging charcoal value chains. As such there is an urgent need to broaden the policy response to reform the regulatory framework and to embrace sustainable woodland management for fuel production. With 2.3 million ha of forest and woodland in village land forest reserves in Tanzania, sustainable charcoal production could offer a much-needed revenue stream for village forest reserves as well as providing rural employment.

#### **Project Overview**

The Transforming Tanzania's Charcoal Sector (TTCS) initiative aims to deliver sustainable development and benefits to rural communities in Tanzania through enhanced environmental sustainability from better biomass harvesting and through more efficient production technologies and biomass energy-friendly energy sector policies. The TTCS project intends to achieve its goal through two interlinked outcomes:

Outcome 1: Sustainable Charcoal.

**Outcome 2:** Biomass energy-related research, knowledge management and governance.

Outcome 1 aims to demonstrate a commerciallyviable, sustainable, charcoal value chain at local level. Policy-related challenges at local level are fed into a national advocacy and awareness campaign through Outcome 2.

#### Timescale

SDC have committed funding for the project from March 2012 – August 2015.

#### **Project location for Outcome 1**

The activities under Outcome 1 are implemented in 10 villages in Kilosa District, Morogoro Region. The project focuses on woodland adjacent to the high biodiversity forests of the Rubeho Mountains.



#### **Outcome 1. Sustainable Charcoal**

Establishing a real-life, pro-poor, sustainable charcoal value chain that inspires and persuades decision makers to engage in the transformation of Tanzania's Charcoal Sector; and provides a tangible demonstration of the changes that are needed in the policy and regulatory environment.

#### What is sustainably produced charcoal?

Sustainably produced charcoal is charcoal produced from woodlands under participatory forest management that applies ecologically sound harvesting principles. Charcoal is produced using efficient kiln technology and is produced and transported legally.

#### The Kilosa Sustainable Charcoal Model

Since March 2012, the project has supported 8 villages with a combined area of 59,958 ha of woodland in Village Land Forest Reserves (VLFRs), to produce charcoal sustainably. The communities have designated 6,040 ha of the VLFRs as forest management units dedicated to sustainable charcoal production. Using scientific literature on miombo ecology and standard forestry methods, the project has developed a 24 yr harvesting rotation model that aims to be robustly sustainable and easy-to-use. After an area is harvested, natural regeneration is encouraged through careful fire management and exclusion of other disturbances such as livestock.

Mean monthly sales of sustainably produced charcoal from the 8 villages reached US\$ 12,000 after 1 year of production of which ~50 % was retained by the communities in fees to pay for the management of the VLFRs and to contribute to community development. Working closely with the Tanzania Forest Service Agency and Kilosa District Council, the communities are authorized to issue official harvesting permits. Building community capacity on governance, financial management and record keeping is central to the project.

During the proposed 2nd phase, the project plans to integrate evidence-based recommendations for improvements to the model; and to scale up.