



Biofuel Evaluation for Technological Tanzanian Efficiency using Renewables – integrated Strategies (Better-iS)

Leibniz Centre for Agricultural Landscape Research (ZALF)

Country/Region:	Tanzania
International Agricultural Research Center participation:	World Agroforestry Center ICRAF, International Food Policy Research Institute IFPRI
Leading scientists:	Dr. Stefan Sieber, Dr. Götz Uckert
Duration:	Jan 2009 – Dec 2011

Initial situation

In Sub-Sahara Africa, the possibility to benefit from the production of liquid biofuels as possible substitute for fossil fuels has gained importance. Options range from subsistence production and small scale cooperatives in rural areas to large scale profit and export orientated plantations. Various institutions in Tanzania enhance and foster currently processes to better guide and consult involved actors of energy crop-value chains.

Approach of the project

The project Better-iS will contribute to improve the outreach of new findings adequate value chains of energy crops and cropping systems for local and national policy decision-making. Therefore the project combines methods of top-down modelling to simulate scenario-based global implications for bio fuel value chains and bottom-up sustainability impact assessments. The findings will be merged to an information system, which

will be accessible to all groups of involved actors and decision makers.

The assessments take into account scenario-based ex-ante simulations on future implications through relevant global drivers; in particular most likely impacts of climate change as well as the production potential of feed-stock and consumption patterns of biomass and bio-energy.

In detail, Better-iS analyses especially the viability of decentralised energy production with “Multi Functional Platforms” (MFPs). They consist of a combustion engine and a generator using straight vegetable oils (SVOs). Contrary to small scale options, large scale



plantations or outgrower schemes will be taken into consideration as alternative pathway. Data about the ecological, social and economic spinoffs of several production chains will be gathered, analysed and used as database for the prediction of most likely future trends and advisable policy scenarios.

Major results achieved

Better-iS started at the beginning of 2009. The collaboration with African partners have been established and the case study region in Morogoro has been defined. Input needs for analysis and the output could be defined in detail. The counterparts as local institutions, NGOs and public authorities have been identified. In particular, the project team is currently establishing the collaboration with Tanzanian Master Students to optimise the capacity building strategy of the project. The output products for the information system will be expected to be defined by end of this year.



Expected impact

Sustainable biofuel policy strategies are about to be established in Tanzania. Better-iS will provide an information system to better support the policy decision making at local and national scale.

Capacity building will be conducted for selected stakeholder groups in Tanzania. A group of different Master students from various scientific disciplines (e.g. Engineering, Resource Assessment, Crop Science, and Forestry) will be supervised in the frame of biofuel value chains. All partners of Better-iS will benefit from the close collaboration with Sokoine University of Agriculture and the University of Dar es Salaam.

Collaborating institutions: Wuppertal Institute (WI), Institute for Environmental Economics and World Trade (IUW), Germany; Sokoine University of Agriculture (SUA), University of Dar es Salaam, Tanzania

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