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## Core Participants

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### **University of Dar es Salaam**

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### **Universidade Eduardo Mondlane**

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## First Contributions

During 2009-2011 STEEP-RES has submitted 4 papers to scientific journals, and published 3 conference proceedings and 4 reports. Five Masters' degree theses have been conducted. Seminars have been held in Tanzania, Mozambique and Sweden. One licentiate thesis was defended in 2011 and a second will be defended March 2012.

In 2011 the project received grants from several research funding institutions and the activities are now expanding.

Boosting rural development  
through renewable energy

# STEEP-RES

Social Technical Environmental Evaluations of  
Potential Renewable Energy Systems

A research program in  
East and Southern Africa





**STEEP-RES** was initiated in 2008 and now works as an umbrella for several Swedish multi-disciplinary research projects targeting the development of sustainable energy systems for increasing the welfare in rural areas of sub-Saharan Africa.

**Rural development** is urgently needed and Africa has plenty of renewable energy. But modern technical systems must be thoroughly integrated in society and environment, and must bring economic returns to local communities, if it is to catalyse rural development.

## On-going Research within STEEP-RES

### Can Renewable Energy Increase Rural Productivity?

This project addresses how available renewable energy sources and available technologies can be integrated in existing and future rural production such as agriculture, processing, and storage of goods, in order to boost economic and industrial development on various scales. **Funded by Formas**

### How Can a Big Company Reach the Market of the Poor?

This project uses the 'bottom of the pyramid' approach to identify market segments and adapted business models that could be used for a large company in order to create mutual benefits in providing technologies for rural production and services, meeting the needs of low income groups. **Part of the SKF-Chalmers UTC collaboration and funded by SKF**

### What is a Good Governance of Rural Electrification?

This project targets formal and informal institutional constraints to wider adoption, adaptation and diffusion of small-scale renewable energy technologies in rural areas. **Funded by Sida**

### Which Renewable Energy Sources are Available?

This project, which is the first among the STEEP-RES projects, investigates the natural occurrence of different renewable energy sources and their geographical and technological match with electricity demand in East and Southern Africa. In addition to the better known land-based sources, the potential for upcoming ocean energy is covered.

**Funded by Stiftelsen Futura**

## Collaborations

STEEP-RES is collaborating with other research projects and institutions in Africa and Scandinavia, here are some:

### University of Dar es Salaam

The College of Engineering and Technology and the Business School of Tanzania undertake research on renewable energy technologies and resource assessments in direct collaboration with Chalmers and STEEP-RES.

### Universidade Eduardo Mondlane

This Mozambican collaboration partner conducts research on renewable energy technologies and resources and has hosted and participated in several of the STEEP-RES studies.

### University of Oslo – The Solar Transitions Project

A Norwegian research team works in the same field as STEEP-RES, transferring solar power competence between India and Kenya. Co-operation between the two projects has been initiated.

### Minesto Tidal Energy Solutions

The Gothenburg based ocean energy developer Minesto is among the most progressive and rewarded in the world. The ocean energy division of STEEP-RES collaborates on ecological risk assessments of this technology.

