Energy for Development
Makueni County,
Sept 2012

To date it is estimated that around 1.5 billion people around the world have no access to reliable electricity. The provision of electricity is vitally important for development, alleviation of poverty and for fulfilling the Millennium Development Goals (MDGs).The project addresses the electricity needs of rural communities in East Africa and addresses the fundamental scientific, engineering, social and policy research issues in rural power generation and distribution, transferring knowledge between participating countries and building research capacity both in the UK and in the other collaborating nations. The project funded under the title *Replication of rural decentralised off-grid electricity generation through technology and business innovation* termed "*Energy for Development*" has been progressing according to its various phases. This news item conveys the successful implementation phase of the project which targets electricity supply for around 3000 inhabitants within a surveyed rural region in Kenya.

Kitonyoni a village in Makueni County is selected as the first intervention project and is set to benefit from the solar energy driven community-based research project awarded to the University of Southampton and Imperial College - London (IC) by the Research Councils UK (RCUK) and Department of International Development (DFID), United Kingdom. The implementation phase builds on the previous 3 years of the 5 year programme, scoping various options for electrification and its social implications in rural Kenya. The final focus centred on various areas in Makueni County with Kitonyoni market selected as the winning site by the project researchers.

The UK and Kenyan teams started work on the project mid-September with power switch on occurring around 23 September. Professor AbuBakr S. Bahaj, Head of the Sustainable Energy Research Group (www.energy.soton.ac.uk, SERG) at the University of Southampton and the PI on the project said "'the project, is set to benefit 3,000 inhabitants and around 30 direct connections to shops, school, churches and hospitals''. "The main aim of the project is to enable the community to develop and progress through the provision of sustainable energy and is a noble venture that was destined to change the lives of the local community if exploited wisely. ''In practical terms the installation will enable the community can harness the solar energy to light their homes and also initiate viable enterprises to help alleviate poverty in the area''.

The project is structure to challenge the community to initiate viable income generating activities that could take advantage of the venture to change their lives, and Kitonyoni was identified by the team over the other villages as the best suitable site for a project of this kind due to its grave needs, its remote locality and the enthusiasm of its community to support this activity.

Figure 1 Professor AbuBakr Bahaj addressing the Kitonyoni community at the project site.

SERG is part of the University of Southampton's Engineering and Environment Faculty working with Social Sciences at the university and Imperial College (London) constituting an interdisciplinary team of researchers bringing the different fields involved in renewables, energy efficiency, social and economic aspects of these fields to rural community electrification.

Figure 2 The finalised 13.5 kWp installation, in which the two shipping containers were utilised to house the system switch gear and the other as an office for the project established village cooperative.