

STRENGTHENING CO-OPERATION LINKS IN THE EAST AFRICAN ENERGY SECTOR: THE ENRICH PROJECT

International Conference:

Fostering Cooperation in Energy Efficiency and Accessibility in East Africa

13-14 March, 2017. Zanzibar, Tanzania



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Senior Project Manager
University of Alicante



PROJECT OVERVIEW



KEY PROJECT DATA

TITLE: *“Enhancing Energy Accessibility & Efficiency Through Establishing Sustainable STI Support National Networks with a Regional Dimension in East Africa” (ENRICH)*

DURATION: 39 M (01/02/2014 – 30/04/2017)

FUNDED BY: the European Commission on the Framework of the **ACP-EU Cooperation Programme in Science and Technology (S&T II)** with a Grant Contract identification No. FED/2013/330-235. The ACP S& T II Programme is implemented by the ACP Group of States.



CONSORTIUM

UNIVERSITY OF ALICANTE (SPAIN)

GLASGOW CALEDONIAN UNIVERSITY (UK)

AFRICAN VIRTUAL UNIVERSITY (KENYA)

MOI UNIVERSITY (KENYA)

MZUMBE UNIVERSITY (TANZANIA)

MAKERERE UNIVERSITY (UGANDA)

INTER UNIVERSITY COUNCIL FOR EAST AFRICA

DIRECTORATE OF RESEARCH MANAGEMENT & DEVELOPMENT
(KENYA)

TANZANIAN COMMISSION FOR S&T

UGANDA NATIONAL COUNCIL FOR S&T



AFRICAN VIRTUAL UNIVERSITY
UNIVERSITE VIRTUELLE AFRICAINE
UNIVERSIDADE VIRTUAL AFRICANA



Universitat d'Alacant
Universidad de Alicante



CHALLENGES & RATIONALE



BACKGROUND

RATIONALE: concern over **energy deficit & poverty, price volatility** and **energy security** in Eastern Africa.

- ❑ **Restricted access to energy resources** hampers sustainable development in EA.
- ❑ Research institutes & academia **support inadequate** to address this “energy emergency”.
- ❑ Various countries at the policy level stress importance of energy access and quality research and innovations, but **policies, political decisions and societal needs are miss-matched.**



OBJECTIVES & TARGET GROUPS



OVERALL AND SPECIFIC OBJECTIVES

Overall objective: To strengthen Science, Technology and Innovation (STI) co-operation in East Africa (EA) countries by **promoting operational and effective management of research and innovation activities with a special focus on energy access and efficiency.**

Specific Objectives:

- 1) To promote a **STI support culture** within 3 EA countries by improving the quality of STI support services and its co-ordination with relevant stakeholders.
- 2) To create **3 STI support national networks** with a specific focus on energy access and efficiency



TARGET GROUPS & FINAL BENEFICIARIES

Beneficiaries



HEI staff trained, benefit from STI support provided by National Networks and EAENet



Graduate & PhD Students benefit from internship and mobility opportunities developed by EAENet



HEIs benefit from enhanced STI support networks and increased communication with industry and policy makers



Higher Education and Science & Technology authorities benefit from increased dialogue with HEI and industry



Businesses, professionals and NGOs in the Energy Sector benefit from increased access and dialogue with HEIs and policy makers



RESULTS & IMPACT



RESULTS

- **300 managers & researchers** trained in Research & Innovation Management (policies & processes, KT, fundraising, proposal drafting, project and IP management).
- **3 STI Support National Networks** (Kenya, Tanzania & Uganda)
- **1 regional network with on-line platform & database of experts:** East Africa Energy Access & Efficiency Network (EAEEnet)
- **2 International Conferences on energy accessibility and efficiency**
- **6 National Round Tables** with **energy stakeholders** from Academia, Government, Industry and Society.
- **9 National Workshops** organised on fundraising, Project and IP Management and proposal drafting.



TRAINING WORKSHOPS



Research Support Offices and Policies & Procedures, Makerere University, Kampala, Uganda, February 2015.

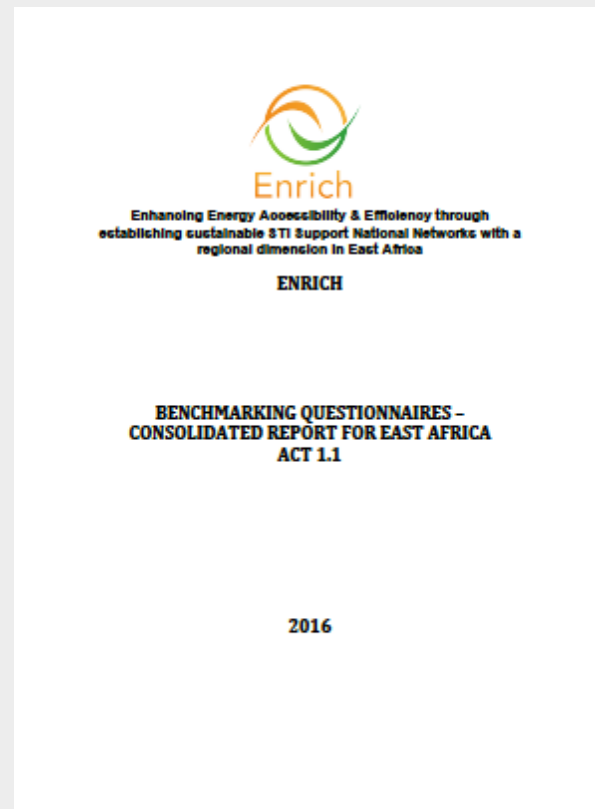
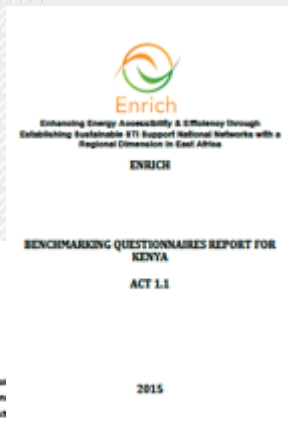
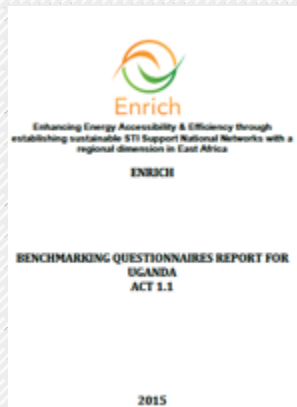


Fundraising & Grant writing, MOI University, Nairobi, Kenya, May 2015.

Project & Intellectual Property Management, Mzumbe, Dar es Salam, Tanzania, 6 & 7 October 2015



NEEDS ANALYSIS OF STI ACTIVITIES IN THE TARGETED EA COUNTRIES: COUNTRY REPORTS & CONSOLIDATED REPORT



DEVELOPMENT EAST AFRICA ENERGY ACCESS AND EFFICIENCY NETWORK (EAENET)

Vision: To be the network of excellence for knowledge generation, exchange and dissemination on energy access and efficiency in East Africa and beyond.

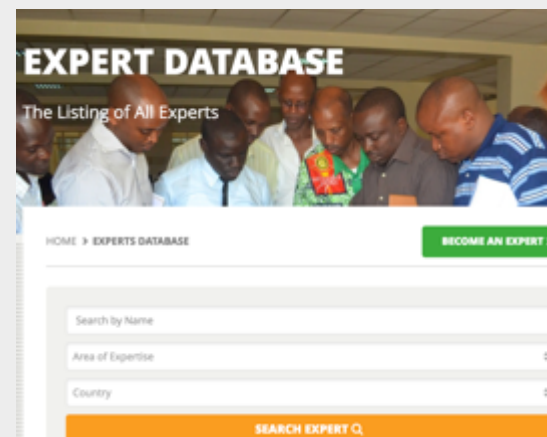
Mission: To provide an open access interactive platform for research and training in Science, Technology & Innovation, to enhance access and optimize use of energy resources.

- 1 manager and 1 researcher appointed at each National Network: EAENet Kenya, EAENet Tanzania & EAENet Uganda
- Memorandum of Understanding (MoU)
- Statutes, Membership Structure, Regulations and Activities
- Sustainability plan for the 3 Networks



EAENET PORTAL & NATIONAL WEBSITES

- **Experts in the energy field and environment sectors.** Experts from other field are not restricted: 65 experts already in the portal. Areas of expertise:
 - Energy Access
 - Energy Efficiency and sustainability
 - Knowledge Transfer
 - General IP Management
- **Regional and national policies**
- **Case studies**
- **EAENet Portal:** eaenet.org/eac
- **EAENet Kenya:** eaenet.org/ke
- **EAENet Tanzania:** eaenet.org/tz
- **EAENet Uganda:** eaenet.org/ug



1ST ENRICH INTERNATIONAL CONFERENCE

“Energy accessibility & efficiency: the importance of Science, Technology and Innovation support services”

MZUMBE University in Dar es Salaam, Tanzania, 8th October 2015



One of the key players of a workshop on the 'Project and Intellectual Property Management', Prof Joseph Kuzilwa, speaks in Dar es Salaam yesterday. Patenting of energy innovations was discussed at the event that drew participants from East Africa and Europe. (PHOTO) | THE CITIZEN CORRESPONDENT

Academic roots for reliable, affordable energy for progress

Dar es Salaam. Without reliable energy, developing countries will not realise their development objectives. Mzumbe University's immediate former vice chancellor, Prof. Joseph Kuzilwa, said.

He told journalists yesterday here that African governments

need to work with other partners to ensure that there are reliable, affordable and sustainable sources of energy to fuel development. "There is no short cut for this. We need energy for development."

Prof Kuzilwa is one of the key players in the 'Project and Intellectual Property Management' workshop that started yesterday at Mzumbe University, Dar es Salaam campus. The two-day event

is taking place under the Enhancing Energy Accessibility and Efficiency through establishing sustainable Science, Technology and Innovation Support National Networks with a regional dimension in East Africa project.

The project is co-financed by the European Commission on the framework of the ACP-EU Co-operation programme in science and technology (The Citizen Correspondent)

African nations challenged to come up with more energy sources

By Guardian Reporter

AFRICAN governments were on Tuesday challenged to collaborate with other partners to ensure that there are reliable, affordable and sustainable sources of energy to fuel development.

Without reliable energy, developing countries will not realise their development

objectives and dreams," said Prof Joseph Kuzilwa, one of the key players in the 'Project and Intellectual Property Management' workshop that started yesterday at Mzumbe University, Dar es Salaam campus.

The two-day workshop is taking place under the Enhancing Energy Accessibility and Efficiency through establishing sustainable Science, Technology

and Innovation (STI) Support National Networks with a regional dimension in East African projects.

The project is co-financed by the European Commission on the framework of the ACP-EU Co-operation programme in science and technology.

Kuzilwa, who is the immediate former Vice Chancellor, Mzumbe University, said Africa was lagging behind in reliable energy

provision, something he said derails development endeavours.

He said the project in short called ENRICH, seeks to promote regional cooperation in the energy and environment sectors in East African countries by establishing three national networks to support STI and a regional portal with an experts data base.

He said quality STI support services will be promoted in

Tanzania, Kenya and Uganda and that cooperation links will be strengthened in the energy sector among academia, researchers, industrialists and policy makers.

The project is run with experts from University of Alicante in Spain, Glasgow Caledonian University, African Virtual University and Moi University in Kenya, Mzumbe University and Uganda's Makerere University.

Also involved Inter University

Council for East Africa and science commissions from East African countries.

Noelia Lopez from Alicante University said the workshop wants to introduce successful projects management and provide an introduction to intellectual property rights. It targets managers and researchers, particularly in the energy field from EA partner states.

"Participants will be involved

in the establishment of STI support national network," she said.

For her part, Prof Anne Nangulu from Moi University said through innovation, Africa can solve the challenges of energy and realise progress.

"We are trying to think of the best ways science, technology and innovation can help and how these innovations can be patented," she said.

2ND ENRICH INTERNATIONAL CONFERENCE

**“Promoting partnerships
between Government, Industry
and Higher Education
Institutions in energy access and
efficiency within East Africa”**

Kampala, Uganda

8th September, 2016



ENRICH & SUCCEED NETWORK NATIONAL ROUND TABLES

- 1st RT & 2nd RT on “**Energy accessibility & efficiency in Kenya**”, MOI University , Nairobi, Kenya, 3rd May 2016 & 9 March 2017
- 1st RT & 2nd RT on “**Energy accessibility & efficiency in Uganda**”, Makerere University , Kampala, Uganda, 30th June 2016 & 6 March 2017
- 1st RT “**Energy accessibility & efficiency in Tanzania**”, Mzumbe University , Morogoro, Tanzania, 2nd August 2016



IMPACT OF PROJECT OUTCOMES IN THE STATE OF PLAY OF STI & RESEARCH EA

- **Increased capacities** in STI support services
- **Improved quality** of STI support services
- **Increased dialogue** and **cooperation links** in the Energy Sector at national and regional level among academia, researchers, industries and policy makers.
- **Enhancement of regional cooperation in STI in energy** in East Africa.



CONCLUSION

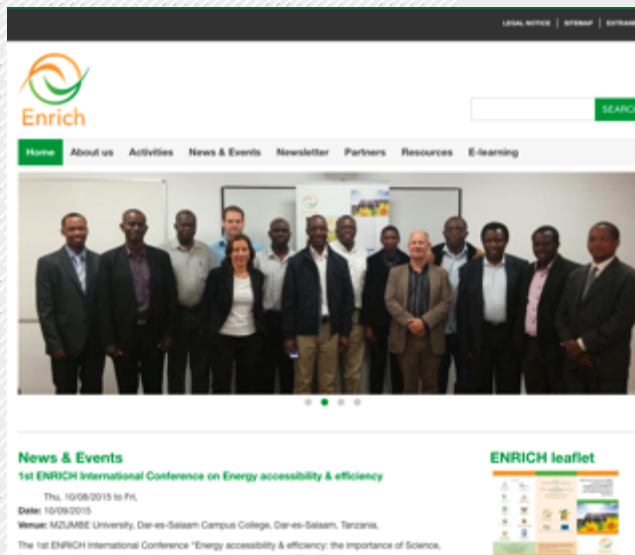
The way forward.....

- More **collaboration on energy access and efficiency** in EA through EAENet, a new channel for STI
- **Strengthening the STI framework** in EA to enable knowledge generation, exchange and dissemination
- Develop institutional capacity in the area of **internationalisation of STI**
- **Joint innovative research** among HEIs, Research Centres and industry at national, regional and international level.



MORE INFO:

ENRICH WEBSITE



WWW.ENRICH-PROJECT.EU



FACTSHEET



ACP SCIENCE & TECHNOLOGY PROGRAMME

ENRICH - Enhancing energy accessibility & efficiency through establishing sustainable STI support national networks with a regional dimension in East Africa

Regional co-operation in the energy and environment sectors in East African countries will be promoted by establishing three national networks to support science, technology and innovation (STI) and a regional portal with a database of experts. This infrastructure will foster regional dialogue among academia, researchers, industries and policy makers, improving the flow of communication between the levels of policy and operation. Managers and researchers will be trained in critical aspects of innovation management and will replicate these trainings through national support networks. Collaboration and dialogue with policy makers will take place at national (round tables) and regional (inspirational conferences) level.

Grant
FED/2010/100-2010

Co-ordinator
Université de Nairobi
Kenya

Partners
Georgia College
University, UK
Africa World University
Kenya
Moi University, Kenya
Moi University, Tanzania
Moi University, Uganda
Jomo Kenyatta University for East Africa (JKU), Uganda
University of Research
Development and Development
(URDD), Kenya
Tanzanian Commission for Science and Technology
(TANCOMST), Tanzania
Uganda National Council for Science and Technology
(UNCST), Uganda

Project duration
18 months
1/1/2011 - 12/31/2012

EU grant
€10 million

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enrich@enrich-af.eu
enrich@enrich-af.eu

Challenge

Energy deficit and energy poverty have become a major obstacle to growth and development in East Africa. One of the major energy issues in the context of the EU partnership with Africa is price volatility and energy security. Eastern Africa suffers from high prices in the energy market and shrinking national energy resources. In Tanzania, for instance, 80% of domestic energy consumption is biomass, which is used for cooking (firewood and charcoal) and approximately 95% of deforestation is due to the collection of firewood and production of charcoal.

Restricted access to energy resources is hampering the East African region from sustainable development. Despite the energy emergency in the region, support from research institutes and academia is inadequate to address this situation. However, at the policy level, various countries have claimed the importance of energy access and quality research and innovations. Unfortunately, there is a mismatch between policies, political decisions and societal needs.

Focus

The project will promote quality science, technology and innovation (STI) support services in Kenya, Tanzania and Uganda, and strengthen co-operation links in the energy sector at national and regional level among academia, researchers, industries and policy makers.

Rationale

By strengthening STI cooperation in the energy sector in Kenya, Tanzania and Uganda, solutions and innovations

will be stimulated that will eventually alleviate energy poverty through enhanced energy accessibility and efficiency. The current low energy access rate and urgent need for alternative energy resources is partially due to a shortage of well-trained personnel and weak national and regional co-operation.

The project will enhance expertise and knowledge of research and innovation management by promoting operational and effective management of research and innovation activities, in particular by improving the quality of research and innovation support services and their contribution with relevant stakeholders in the energy sector, such as policy makers, research centres, non-governmental organisations (NGOs) and enterprises.

Method

An in-depth analysis of the situation with the innovation ecosystem in Kenya, Tanzania and Uganda will be carried out. It includes in research and innovation, research and innovation policy, research and innovation support services, environment for knowledge transfer. A pilot will be followed by intensive training of managers and researchers (particularly in the energy field) at the participating higher



Electricity from the national grid is used for street lighting in central urban areas in Kenya. The project will enhance the use of solar energy for street lighting in the national grid and other up-streaming the main production unit (September 2010).

Implemented by the ACP Secretariat




Financed by the European Union





MORE INFO:

ENRICH POSTERS & LEAFLET

	
	
<p>Enhancing energy accessibility & efficiency through establishing sustainable STI support national networks with a regional dimension in East Africa</p>	
<p>The project will promote quality science, technology and innovation (STI) support services in Kenya, Tanzania and Uganda, and strengthen cooperation links in the energy sector of national and regional level among academics, researchers, industries and policy makers.</p>	<p>DURATION 1 February 2014 31 January 2017</p>
	

Enhancing Energy Accessibility & Efficiency through establishing sustainable STI Support National Networks with a regional dimension in East Africa



Enrich promotes regional cooperation in the Energy sector in East Africa by establishing three National STI Networks to support Science, Technology and Innovation, as well as the creation of an online regional portal with a database of experts in the field of Energy.

Results

- 380 managers & researchers trained in Research & Innovation Management (policies & processes, knowledge transfer, fundraising, proposal drafting, project & IP management).
- 3 STI Support National Networks (Kenya, Tanzania & Uganda).
- 1 regional network with online platform and database of experts: East Africa Energy Access and Efficiency Network (EAENet).
- 2 International Conferences on Energy Accessibility & Efficiency.
- 6 National Round Tables with Energy stakeholders from Academia, Government, Industry and Society.

Impact

- Increased capacities in STI support services.
- Improved quality of STI support services.
- Increased dialogue and cooperation links in the Energy Sector at national and regional level among academia, researchers, industries and policy makers.
- Enhancement of Regional Cooperation in STI in Energy in East Africa.

Beneficiaries



HEI staff trained, benefit from STI support provided by National Networks and EAENet



Graduate & P.O Students benefit from networking and mentoring opportunities developed by EAENet



HEI benefit from enhanced STI support infrastructure and increased competitiveness with industry and policy makers



Higher Education and Science & Technology authorities benefit from increased dialogue with HEI and industry



Academia, professionals and HEI in the Energy Sector benefit from increased access and dialogue with HEI and policy makers

Contribution to the ACP S&T objectives



Address the scientific & technological divide between ACP states and the more industrialised countries



Use of STI for socio-economic development



Strengthen Science, Technology & Innovation (STI) to create countries, regions and use of economic knowledge

Establishment of East Africa Energy Access and Efficiency Network (EAENet)

Capacities built for improving quality of STI support services

Cooperation and networking on energy access and efficiency among key stakeholders

The way forward...

More collaboration on energy access and efficiency in East Africa through EAENet, a new channel for STI. Strengthening the STI framework in East Africa to enable knowledge generation, exchange and dissemination. Develop institutional capacity in the area of Internationalisation of STI. Joint innovative research among HEIs, Research Centres and Industry at national, regional and international level

www.enrich-project.eu

www.eaenetwork.org

Coordinator



Partners



ENRICH is co-financed by the European Union's Cooperation Programme in Science and Technology (ACP S&T II), a programme of the ACP Group of States with the financial support of the European Union, under contract number 4022001-01-01-0001



The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019719. The views and opinions expressed in this publication are those of the authors and not necessarily those of the European Commission. The European Commission is not responsible for any use of the information contained therein.

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Duration
 7 years, from February 2014 to January 2027

Funding
 ACP-EU Co-operation Programme in Science and
 Technology (SMT II)

For more information, visit us at
www.enrich-project.eu

**Enhancing Energy Accessibility
 & Efficiency through
 establishing sustainable STI
 Support National Networks
 with a regional dimension in
 East Africa**


Enrich
 Improving the ACP landscape


 ACP-EU
 Strengthening the European Union


Enrich



ENRICH Project is co-funded by the European Commission as the European Union's 4th EU Co-operation Programme in Science and Technology (SMT II) with African Continental Universities (ACU) in the framework of the ACP-EU Co-operation Programme in Science and Technology (SMT II).

This action has been prepared with the financial support of the ACP-EU Co-operation Programme in Science and Technology (SMT II) under the leadership of the European Commission. The views expressed in this document are those of the author(s) and do not necessarily represent those of the European Commission or the African Continental Universities.



NEWSLETTERS

- ❑ ENRICH newsletter: 288 subscribers.



Thank you! VISIT US ON

www.enrich-project.eu

www.eaenet.org

Any Questions???
Thanks for you attention!!!

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