



ROYAL
ACADEMY OF
ENGINEERING

PUTTING ENGINEERING AT THE HEART OF SOCIETY

Engineering Skills for the Future

7th Annual LCEDN Conference
Sebastian Scott

Royal Academy of Engineering
Programme Manager

Who are we?

- UK's **national academy of engineering** with a **global outlook**
- **Fellowship** of Engineers
- Working with government shaping national **policy**
- **Leading** the profession, **Recognising** great engineering and promoting engineering at the heart of society
- Nurturing engineering **education** and **skills**





ENGINEERS FOR AFRICA

Identifying engineering capacity needs
in Sub-Saharan Africa

A summary report

Africa UK Engineering for Development Partnership
October 2012



WE DON'T HAVE
ENOUGH PEOPLE IN
ENGINEERING.
**THAT'S THE BASIC
PROBLEM.**

...ENGINEERS WERE
GRADUATING
WITHOUT THE
NECESSARY SKILLS
AND EXPERIENCE
TO BE EMPLOYABLE.

Higher Education Partnerships in sub-Saharan Africa (HEP SSA)

- To improve the quality of teaching in higher education institutions in sub-Saharan Africa through collaborations with local industry and UK academia.
- Based on a 'hub and spoke' model
- Currently funding institutions in: Botswana, Kenya, Malawi, Namibia, Nigeria, Tanzania, Uganda, Zambia and Zimbabwe.
- Applications for funding re-opens on 1st June 2018



Case Study

The University of Zimbabwe (UZ) had struggled for five years to source sufficient water from the city of Harare

Through the HEP SSA programme, three technicians were able to use their experience from their Industrial Secondment, alongside a team of young students

Since becoming fully operational in 2014, the university now independently sources water.

This highlights the possibility of the programme, and the potential benefits of the secondments.





- Robust collaborative partnerships, cutting edge research and new approaches to engineering education
- Provides academics in emerging markets access to world-class expertise.
- Build the skills base and improves the employability of students by giving them the opportunity to work on real-life engineering challenges
- Applications for funding re-opens in September 2018

Industry-Academia Partnership Programme

Case Study

- The University of Kota has been developing an M.Tech course in Solar Energy
- The University of Cranfield has developed cutting edge Solar Energy technology
- Partnering with the University of Kota in India, the University of Cranfield was able to utilize the university's facilities.
- In return, the University of Cranfield provided expertise and support
- This has created a new UK-Indian partnership, access to cutting edge technology, and facilities, and developed joint research and teaching possibilities between the two universities



Opportunities

- Higher Education Partnerships in sub-Saharan Africa (HEP SSA) open for applications 1 June 2018
- The Africa Prize for Engineering Innovation is open for applications until 23 July 2018
- Inclusivity & Wellbeing: Coastal Communities in a 3°C World Symposium, Rio de Janeiro 15-18 July 2018
- Industry-Academia Partnerships Programme (IAPP) open for applications September 2018
- Engineers as Healthcare Practitioners Symposium, Vietnam, November 2018





ROYAL
ACADEMY OF
ENGINEERING

Thank you

For more information on the opportunities available please contact Sebastian Scott on Sebastian.scott@raeng.org.uk
Or access more information on our website: www.raeng.org.uk