



**Africa
Engineers
Forum**



ice
Institution of Civil Engineers

**ENGINEERS
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POVERTY**

The Africa-UK Engineering for Development Partnership



What is the Partnership?

The Africa-UK Engineering for Development Partnership brings together the engineering community in Africa and the UK in a consortium led by the **Africa Engineers Forum, The Royal Academy of Engineering, Engineers against Poverty**, and the **Institution of Civil Engineers**. The purpose of the Partnership is to strengthen the capacity of the African engineering profession and promote mutually beneficial links between engineers in Africa and the UK.

The Partnership's purpose is to:

- contribute to the development of a supportive and vibrant engineering community within Africa, encompassing the public and private sectors and academia, with the ability to produce, attract and retain the best engineers
- enhance connectivity between African engineers and other key professional groups including decision makers in the business and public policy arenas
- promote investment in infrastructure that is fit for purpose and improve the sustainability of African engineering projects
- build closer and mutually beneficial links between the engineering communities in the UK and Africa

Why engineering?

Engineering has an essential role to play in the **development of**, and provision of **access to**, new **medical interventions**, safe **drinking water** and **sanitation** facilities, **sustainable energy** generation technologies and other public services.

Engineering is a key enabler of **wealth creation**, both underpinning the **innovation** process and being necessary for building the **infrastructure** (physical and virtual) required for enterprises, supply chains and **markets** to function.

Engineering increases the **resilience** of communities, for example by providing **practical tools** to adapt to rapid **climate change**, one of the greatest threats to fragile environments and economic growth worldwide.



Raila Odinga, President of Kenya, at the launch of the Partnership in London

What has the Partnership achieved so far?

Programme of workshops across sub-Saharan Africa (SSA)

Between March 2010 and November 2011, the Africa-UK Partnership held a series of thematic workshops in sub-Saharan Africa (SSA) which created opportunities for African engineers to exchange information and to develop key skills. The events also facilitated the development of links between professionals in the public and private sectors and academia, across the spectrum of the engineering profession. To improve efficiency and to provide extended networking opportunities, the workshops were held in conjunction with existing events wherever possible.

“The road to prosperity is paved by good engineering solutions.” Prof Calestous Juma HonFREng FRS

Scoping Workshop - Pretoria, South Africa (17 March 2010)

This scoping discussion identified the key issues affecting the engineering profession across SSA. It gave further support and direction to the planned activities of the Partnership and emphasised the true dearth of engineering capacity in SSA, particularly within engineering institutions.

Rural Transport and Development Workshop - Arusha, Tanzania (29-30 November 2010)

The inhibiting effects of poor road infrastructure on the potential for economic growth and development in SSA were highlighted at the Pretoria Scoping Workshop. This event brought in senior speakers to share their knowledge and experience with the delegates, including John Hine, Senior Transport Policy Specialist at Tanzania's Ministry of Infrastructure and Development. A briefing note on the key messages of the workshop has been produced and pushed to a wider African audience.

Young Professionals Workshop - Gaborone, Botswana (13-16 September 2011)

This workshop gathered 36 young engineers from around Africa and gave them the opportunity to learn from each other, network, discuss different best practices and share their knowledge and experiences. Over the course of the workshop, delegates participated in a range of sessions on themes such as career development, ethics and opportunities and challenges peculiar to the engineer in Africa.

Engineering Education Workshop - Harare, Zimbabwe (17-18 November 2011)

During the final workshop of 2011, delegates discussed opportunities to improve the engineering curricula in African universities and ensure that graduate engineers are equipped with the skills and knowledge needed to promote sustainable development and fight poverty. 40 teaching professionals, policy makers and other key stakeholders from 11 different sub-Saharan African countries came together to identify the major challenges for engineering education in Africa, to explore ways of improving curricula and to advise the Africa-UK Partnership on how it can support African institutions in making these improvements.

Report on engineering capacity in sub-Saharan Africa

Over the past two years, Engineers Against Poverty (EAP) has lead research, on behalf of the A-UK Partnership, into capacity building needs in the engineering sector in SSA. Through the use of interviews with key stakeholders and widely distributed surveys this research aims to gather views of both professional engineers and the decision makers who interact with them on how the formation, status and impact of engineers in Africa can be improved. It is anticipated that when it is published in early 2012, this report will make a significant contribution to the existing literature in this area, as well as helping to direct and inform the future activities of the Partnership.

Future of the Partnership

Over the past two years, the Partnership has helped develop a SSA-wide network of engineering institutions, while giving professional engineers from across Africa the opportunity to build links and exchange knowledge with those in other disciplines and countries. Going forward, the Partnership aims to build on these achievements whilst focusing its activities on specific aspects of capacity building.

The Partnership is considering a range of programmes targeted at meeting the needs identified in the process of producing the report on engineering capacity in SSA. These include:

- improving engineering education
- building the capacity of professional engineering institutions
- developing the ability of the engineering profession to influence government policy in relevant fields

Who is involved?



The **Africa Engineers Forum** (AEF) is a network of African multidisciplinary national engineering societies or institutions which currently represent the majority of Southern African Development Community countries, as well as Ghana and some East African Development Community countries.

The vision of the AEF is to strive to ensure an appropriate level of efficient human resource capacity in the built environment professions, particularly engineering, to enable Africa to ultimately achieve sustainable development for all the people of Africa. The **South African Institution of Civil Engineering** (SAICE) provides the secretariat to the AEF.

The **Royal Academy of Engineering** promotes the engineering and technological welfare of the country. Its Fellowship comprises the UK's most eminent engineers and provides the leadership and expertise for the Academy's activities, which focus on the relationships between engineering, technology, and the quality of life. As the UK's national academy, it provides independent and impartial advice to Government; works to secure the next generation of engineers; and provides a voice for Britain's engineering community.



The Royal Academy of Engineering



The **Institution of Civil Engineers** (ICE) is a global membership organisation that promotes and advances civil engineering around the world. Founded in 1818 and governed by a Royal Charter, today ICE has over 77,000 members in more than 150 countries. The vision of ICE is to support 'Civil Engineers at the heart of society, delivering sustainable development through knowledge, skills and professional expertise'. The Institution has had a strong international membership base for many years.

Engineers Against Poverty works with industry, government and civil society to fight poverty and promote sustainable development. It influences corporate and public policy and helps develop practical solutions aimed at creating jobs, promoting enterprise development and improving education and training.



Other important partners include **UNESCO**, the **World Federation of Engineering Organisations** and the **Association of Black Engineers-UK**.

For more information, please email holly.wright@raeng.org.uk

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