

Energy and Education Event

21 June 2017

The Energy and Education seminar was held at the Bank of Tanzania on June 21, 2017, and was co-hosted with the President's Office for Regional Administration and Local Governance (PO-RALG). The seminar was moderated by Dr. Lucy Ssendi, Assistant Director for Economic and Productive Sectors at the PO-RALG. The event was centered around three presentations, including presentations of two IGC-funded studies, and concluded with a panel discussion.

The event had attendance from high-level PO-RALG officials, including Dr. Andrew M. Komba, the Director of Sector Coordination, representatives from the Ministry of Finance, and from key energy sector regulators such as TANESCO and the Rural Electrification Agency (REA). Participants also included development partners with particular interest in energy and education, including the Swedish Development Agency (SIDA), the EU Delegation, DFID, USAID, and the Norwegian Development Agency (NORAD). Other participants were from the Regional and District Education Officers Association (REDEOA), the GiveWatts organization, the EnergyChange Lab, the University of Dar es Salaam (UDSM) as well as the Youth Shaping Sharpening Movement (YSSM).

First point on the agenda was introductory statements. IGC country economist, Mr. Joshua Chipman, introduced the PO-RALG's representative, Dr. Lucy Ssendi, as the meeting's convener and thanked the PO-RALG for their partnership in organizing the event. He then gave a short introduction to the work of the IGC as well as the purpose and focus of the event. The word was then given to Dr. Lucy Ssendi, who briefly introduced the PO-RALG and its role overseeing the administration of primary and secondary schools in Tanzania.

Next point on the agenda was a presentation, titled "The Welfare Impacts of Rural Electrification: Experimental Evidence from Tanzania", by Ms. Anna Aevardottir, PhD-student at the Institute for International Economics at Stockholm University and co-investigator of the Tessa Bold research project on rural electrification - the potential and the limitations of solar power. She presented their results on the willingness-to-pay for solar power and the impact of solar power at the household level, not only on educational outcomes but also more broadly on labour supply, income, health, etc.

This was followed by the presentation "Pulling Up the Left Behind: First-year Evidence from Two Solar-energy-enabled Studies with Tanzanian Secondary Schools", by Mr. Samuel Seo, economics PhD-student at the University of Chicago and co-investigator of the Michael Greenstone project on solar-energy-enabled secondary school programs in Tanzania. He presented their estimates of how electrifying school facilities may affect educational outcomes (as measured by performance on national examinations).

The third and final presentation, titled "Edutainment made in Africa, for Africa", was given by Ms. Nisha Ligon, co-founder and CEO of the social enterprise Ubongo, together with Mrs. Shugdudu Tirane, Project Manager of Ubongo. They introduced the work of Ubongo and described the main challenges in the education sector in Tanzania as well as the challenges they encounter when trying to screen their cartoons in rural areas with limited access to electricity.

After the presentations, Dr. Andrew M. Komba, made a short statement concerning the role of the PO-RALG in the education sector and invited for effective cooperation.

The event concluded with a panel discussion to discuss the findings of the presented studies and to review current challenges in the energy sector and educational system in Tanzania. The panel consisted of Mr. Razack Lokina, Professor of Environmental and Resource Economics at UDSM, Mr. Francis Songela, Energy Programme Officer at the EU Delegation, Ms. Mayasa Hashimu, Chairperson from the Regional and District Education Officers Association (REDEOA), and Mr. Paul Kiwele, Director

from the Ministry of Finance. The discussion was centered around the following question: a) Can off-grid electrical technologies improve education access and outcomes in Tanzania and if so how? How much of a priority is this in the education sector, b) What are the challenges/potential/benefits/limitations of off-grid electrification and what can be done to encourage the development of off-grid electrification of education, service delivery, and consumers, c) What are the most important conclusions to draw from the studies presented? How can the presented studies help inform the government's policy making on rural electrification and educational programs? Where should the government focus its resources.

Based on these questions, some of the main points raised in the panel discussion were:

- Is lack of electricity the real constraint in terms of improving educational outcomes? There is a trade-off and a lot of other constraints in the education sector. Other issues include student-teacher ratios, class room infrastructure, and quality of teachers, etc.
- The importance of the teaching language since the research seems to suggest that adding bilingual videos could improve educational outcomes.
- There was general agreement that off-grid solutions are key in rural areas but also a discussion of the financing and distribution mechanisms, electricity uptake and willingness-to-pay, and the sustainability of off-grid solutions.
- The role of the private sector in providing off-grid electricity and the need for transparency on taxation rule. It was also raised that the government's and development partners' interventions should be careful not to destroy the private sector market for off-grid technology.

Closing remarks were given by Mr. Joshua Chipman and Dr. Andrew M. Komba. In his closing remarks, Mr. Joshua Chipman in particular made a point of describing how research needs to be relevant and how research can aid policy making. He also requested participants to reach out to the IGC with relevant research ideas. Dr. Andrew M. Komba summarized the main points discussed at the event and emphasized the need for partnership between the government, development partners, and the private sector in advancing rural electrification plans.

In general, there was great interest from both the government and development partners in the research presented and the discussions led to a number of policy recommendations concerning rural electrification and education policy. Please refer to the policy paper titled "Electrification and Education" for more information.