Workshop

Energy Plus Framework and Rural Electrification for Universal Energy Access

14 October 2015
TERI, New Delhi

Background Note

Globally 1.2 billion people live without access to electricity. Electricity access is one of the most primary and fundamental components, within the energy access bundle, that contributes towards poverty alleviation. Its availability and delivery has garnered immense priority for implementers, policy makers and service providers across the world as well as in India. The direct benefits of access to affordable, reliable and sustainable electricity services, for poverty alleviation and the overall socio-economic development of any rural area, are also seen to be essential prerequisites to achieving the Millennium Development Goals (MDGs), and going forward, to achieve the Sustainable Development Goals (SDGs). While the global movement towards making electricity services more accessible and reliable has witnessed a surge in the last five years, there are several instances that display gaps in the sustainability of these efforts. A majority of the approaches and initiatives that saw initial success eventually fizzled out in the long run, making the electricity access intervention a short lived relief activity than a long term solution.

The UNDP highlights that in order to have more sustainable and long term solutions, there is a need to move away from a minimalist approach for electrification which is more consumption oriented, to an 'energy plus' approach that emphasizes on productive uses of energy within the context of energy access programmes. Based on a collaborative review of 17 energy access programmes and projects implemented by governments, development agencies and the private sector in Asia-Pacific, the UNDP published its findings in the report, "*Towards an Energy plus Approach for the Poor – A Review of Good Practices and Lessons Learned from Asia and the Pacific*" in 2011. The review revealed how projects and programmes which combined the delivery of energy services with income-generating measures like business development, information support, access to capital and market linkages, had better potential for sustainability, poverty reduction and economic and human development. The review sought to pave the way for a transition to this 'Energy Plus' approach.

In India too, there has been an immense effort to enhance electricity access for overall socio-economic betterment and rural development. A number of government programmes and state level initiatives have been implemented in this direction and have demonstrated considerable success in driving the electrification status forward. A key example is the Rajiv Gandhi Grameen Vidyutikaran Yojana, the national rural electrification programme launched in 2005 (renamed as Deen Dayal Upadhyay Gram Jyoti Yojana since December 2014, with an expanded scope), with the objective of electrifying every village and making provisions for access to electricity for rural households. The programme also attempted to create opportunities for productive usage and other co-benefits of electricity in rural areas. However, the progress of most rural electrification programmes in India has largely been documented from the perspectives of physical connections, village coverage and around financial and institutional delivery mechanisms; with relatively lesser focus on the outcomes from the household's electricity demand perspective and also their contribution to the local rural economy.

Against this background, with support from and in collaboration with the Global Network on Energy for Sustainable Development (GNESD), TERI attempted to analyse the rural electrification programme in India, with a special focus on the co-benefits and productive use of electricity in line with the 'Energy Plus' framework. The research project also attempted to identify key factors that contribute towards the success of or limit India's rural electrification policies and programmes; and their implementation in enhancing

electricity access, creating economic and income generation opportunities to improve local income levels and alleviate poverty. The findings from the study indicate that electricity alone may not bring in the desired benefits. It is also essential to channelize both electricity and non-energy inputs, through synergistically aligned development programs to get full benefits of electricity provision. The study also shows that channelizing non-energy inputs through effective local institutions and partnerships accelerates the process of income augmentation through the productive use of electricity.

A half day workshop is being organised to share the findings of the study and discuss the importance of the need for an "Energy Plus" approach and how it can be initiated into existing processes and programmes. The workshop will be attended by leading experts in policy, implementation and project design, who will share recent trends, experiences and lessons learnt from off-grid as well as on grid rural electrification programmes.

The wider objectives of the workshop are:

- To share findings from the GNESD-TERI study;
- To build consensus on inputs that are essential to enable sustainable electricity access in rural India;
- To aggregate learning from the workshop and share with the stakeholders in India and abroad; and
- To catalyse policy coherence and coordination for effective electricity access in rural India

Programme

09:30- 10:00 **Registration & Tea**

10:00 – 10:30	• Welcome remarks – Mr Debajit Palit, Associate Director, TERI • Opening Address – Dr Leena Srivastava, Vice Chancellor, TERI University (on leave)
10:30 – 10:50	**Film Screening**
10:50 – 12:10	• Energy Plus Approach – Mr Thiyagarajan Velumail, Global Energy Policy Advisor, UNDP • "TERI- GNESD study on Analysis of the electrification programme in India using the Energy Plus framework and the key lessons" - TERI • *Discussants:* Dr V K Jain, Director, MNRE; Ms Soma Dutta, Energia; Dr. Balachandra Patil, IISc, Bangalore, Dr Akanksha Chaurey, CEO, IT Power Consulting Private Limited
12:10 – 12:40	***International Experiences*** • Renewable Energy for Rural Livelihood Programme in Nepal - Mr Jiwan Kumar Mallik, Solar Power Expert (SPE), Renewable Energy for Rural Livelihood (RERL) Programme, Alternative Energy Promotion Centre, Nepal • Urban and Peri Urban Energy Access in Myanmar - Dr P Abdul Salam, Associate Professor - Energy Field of Study, School of Environment, Resources and Development, Asian Institute of Technology, Thailand
12:40 – 13:20	• Moderated discussion on "How important are non-energy inputs or is electricity enough for total energy access and productive use?"
13:20 – 13:30	• Special address by GNESD (via video conferencing) • Wrap Up

13:30 – 14:30 **Networking Lunch**