# Afghanistan Energy Study



Sanjukta Gupta Afghanistan Energy Study – Second Technical Committee Meeting October, 2016



This study is in line with the World Bank's Energy Sector Strategy of "minimizing the financial and environmental costs of expanding reliable energy supply" while also recognizing that "each country determines its own path for achieving its energy aspirations."

It aims to inform and support GoA's ambitious plans for enhancing electricity access in the country – which requires a series of sequenced investments.

Apart from providing technical inputs pertaining to last mile connectivity, RE technology options, household level energy demand and consumption patterns, the study aims to fill the significant knowledge gaps that exist about implementation capacity, economic, financial and welfare benefits.



## Study Components and Current Status

Component	Current Status	Next Step
1. Transactions Advisory and Knowledge Sharing	<ul> <li>Completed.</li> <li>Main Outputs:</li> <li>Formation of Technical Committee</li> <li>ToRs for main components ready</li> <li>Gender-Energy Note</li> <li>Energy Access and Consumption Note</li> </ul>	Publication of outputs and dissemination
2. Financial, Economic and Community modality assessment	<ul><li>Ongoing</li><li>Draft note on RE Technology Options</li><li>Draft ToR</li></ul>	ToR to be discussed and finalized Begin procurement process
3. Household and Enterprise Energy Diaries	Ongoing <ul> <li>Draft ToR</li> </ul>	ToR to be discussed and finalized Begin procurement process
4. Development of a Least- Cost Electrification Plan	<ul> <li>Ongoing</li> <li>Phase 1 underway (TBC by November 2016)</li> <li>Draft ToR for Phase 2</li> <li>Formation of Geospatial Sub Group</li> </ul>	Discuss role of Sub Group and draft ToR for Phase 2 Training for sub –group in December and Exposure Visit in Jan and July 2017
5. Institutional Assessment and Development	Not initiated	To be taken up after Components 2-4 are underway

The note provides a brief overview of channels that link energy interventions and gender outcomes and identifies key gender entry points in energy sector interventions for Afghanistan's Energy Goals. The main findings are:

- To enhance provision of sufficient and reliable energy services, the key gender entry points are – Engage women in decision making process and in the entire value chain; Enhance women's access to credit and affordability by using innovative methods; Conduct gender segregated baseline and feasibility studies; Stakeholder engagements; Inclusive and participatory approaches in resettlement planning; Safeguard measures for women's security; Targeted awareness campaigns
- To strengthen institutional capacity, the key gender entry points are Recruit female engineers as interns and staff; Have equitable HR policies for male and female employees (Gender Committees, child care etc.); Opt for gender certification programs like UN GES and EDGE; Introduce special tariffs for social services (health and education facilities etc.); Use women groups and SHGs to collect household fees; Train women on maintenance of equipment



## Activity 1: Output 2 – Energy Access and Consumption Note (Main Findings)

This note reviews and analyses the data already available from household surveys conducted as part of the bi-annual National Risk and Vulnerability Assessment (NRVA). The latest of these was carried out in 2013-2014 and covered 20,786 households and 157,262 persons across the country. The main findings are:

- Contrary to previous thinking, access to electricity in Afghanistan is high in both rural and urban areas. What is not known, however, is the quality of the service, or the quantities available or consumed.
- Biomass dominates the household heating and cooking sectors in rural areas. Urban areas, however, see greater use of 'cleaner' fuels such as LPG and charcoal for cooking. Firewood dominates the urban heating market. Narrowing the 'development gap' between urban and rural areas would be a useful initiative.
- The poor assign a disproportionate proportion of their household expenditures to energy relative to both high income and even average income households.
   Initiatives to improve the cost-effectiveness of energy use either through access to more efficient fuels or more efficient equipment would be of benefit.



## Next Steps: Progress with Activities 2, 3 and 4

#### Activity 2: Financial, Economic and Community modality assessment

- This activity will draw from a paper prepared on RE Technology Options and Their Relevance in Afghanistan.
- Draft ToR to be discussed

#### **Activity 3: Household and Enterprise Energy Diaries**

- This activity will draw from findings and recommendations of Outputs 1 and 2 of Activity 1
- Draft ToR in final stage and will be discussed

#### **Activity 4: Development of a Least-Cost Electrification Plan**

- This activity is being undertaken in 2 phases. Phase 1 is under way and will be completed by November, 2016.
- Draft ToR for phase 2 will be discussed



## **THANK YOU**

