Afghanistan Energy Study



Sanjukta Gupta Afghanistan Energy Study – Second Technical Committee Meeting January, 2017



Background and Rationale

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.



Activity 1: Transactions Advisory and Knowledge Sharing

Activity Summary

The objective of this assignment was to lay the groundwork for Activities 2 through 5 in terms of on-boarding the key officials of the responsible ministries (MEW and MRRD); preparation of Terms of References and undertake stakeholder consultations.

Current Status

The timeline envisaged for this Activity at the Concept stage was one year and key initiatives planned under this activity has been completed. The main outputs from this activity has been:

- Formation of Technical Committee
- ToRs for main components ready
- Gender Energy Note disseminated extensively and finalized
- Draft Energy Access and Consumption Note currently in process of finalization. Will be shared with Technical Committee for final concurrence

Next Steps and Key Timeline

Share revised version of Energy Access and Consumption Note with Technical Committee Complete Publication of outputs and dissemination

April 2017



Activity 2: Financial, Economic and Community Modality Assessment

Activity Summary

This Activity will be focusing on a sample of around 8000 ongoing and completed electricity subprojects under the National Solidarity Program (NSP)/MRRD and use the same to carry out a financial and economic analysis to understand the (i) cost-efficiency in delivering electricity subprojects through a community driven development type approach such as NSP; (ii) economic impact of micro-hydro power MHP, solar and mini and on-grid sub-projects; (iii) functionality, O&M needs, cost recovery and other factors that affect sustainability of these schemes. The analysis will also include an assessment of the community modalities necessary for modern energy service delivery, including to understand the (iv) effectiveness and sustainability of using a community led implementation modality for energy delivery and Operations & Maintenance; and (v) exploring community buy in for large scale infrastructure investments. The Activity will be completed by December 2018.

Current Status

Eol to be floated by January 2017.

Next Steps and Key Timeline

Selection of firms and complete contracting

March 2017



Activity 3: Household and Enterprise Energy Diaries

Activity Summary

This Activity will comprise of a comprehensive household and enterprise survey, whose main objective would be to assess energy consumption patterns of various fuels by rural and periurban households, community institutions and small scale enterprises and the financial implications and opportunities for scaling up energy services provision to the same. The survey tools to be used for collecting information from households, community institutions and small enterprises will be different – while traditional surveys will be used to gather information on community institutions and enterprises as well as demographic and socio-economic characteristics of households, a Diary method will be used to gather energy consumption and expenditure related information from households.

The proposed assignment will be carried out in two phases (a pilot Phase 1 along the CASA – Col and a scaled up Phase 2). The Activity will be completed by December 2018.

Current Status

Eol floated. Procurement to be completed by March 2017.

Next Steps and Key Timeline

Survey to commence.

March 2017



Activity 4: Development of a Least-Cost Electrification Plan

Activity Summary

Based on a sound economic analysis of the different technology options, forecasted energy demand and energy resources' potentials, the proposed activity will use proven methodologies to spatially identify and prioritize areas that should be electrified either (i) by extension of the national grid, based on the national government's generation and transmission development plans (including plans for imports) or (ii) through the provision of decentralized energy systems such as mini grids (diesel, hybrid diesel-renewables or renewables -especially small hydro-) and individual systems (i.e. Solar Home Systems).

This assignment is being carried out in two phases and will be completed by December 2017.

Current Status

The Phase 1 of the assignment is currently under way. Phase 2 will begin subsequent to completion of Phase 1. The initiation meeting for the Geo-spatial working group – consisting of nominated representatives from MEW, MRRD, KPU, AGCHO, CRIDA and DABS – was conducted on December 5, 2016. The Working Group is being trained on the ONSSET software in New Delhi in February 1-2, 2017.

Next Steps and Key Timeline

Phase 2 Initiation

April 2017



Title of Presentation

Activity 5: Institutional Assessment and Development

Activity Summary

The key objective of this Activity is to do a thorough institutional assessment of MEW and MRRD in order to understand their ability to expand energy supply to rural areas either via on or off grid endeavors and the institutional ability to technically support, finance as well as maintain such schemes. It will involve among other activities a technical skills assessment for future investment operations, develop a capacity building plan and associated roadmap for the medium to long term and the provision of trainings and knowledge sharing events across ministries and other relevant entities both locally and internationally and development of a capacity building roadmap for the sector. This activity is intrinsically linked with the outputs of Activities 2 – 4. The Activity will be completed by December 2018.

Current Status

The ToR for this activity is currently been drafted by the Task Team.

Next Steps and Key Timeline	
Finalize ToR and REol	June 2017
Advertize Eol	July 2017
Selection of Firm and Signing of Contract	August 2017



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