Preparation of Project Identification Form (PIF) and Project Preparation Grant (PPG) Documents for the Demonstration and Promotion of Biomass-based Power Plants in Sierra Leone

Executive summary

Background
The United Nations Industrial Development Organization (UNIDO) has been promoting clean energy-based entrepreneurship activities in African region and under this initiative, UNIDO identified biomass power as one of the potential solution for renewable energy-based rural electrification and promotion of small industrial applications for rural population. In this regard, UNIDO is approaching GEF to fund the project. As per GEF guidelines, the Project Identification Form and Project Preparatory Grant request document need to be prepared with the description of rationale of the project, baseline scenario, reason for UNIDO assistance, barriers, activities planned under the project, and the expected global environmental and local benefits with expected expenditure, co-financing sources etc. For this UNIDO approached TERI to prepare this document and TERI prepared both the documents based on its previous experience and further literature review and information analysis about the feasibility of biomass power sources in Sierra Leone. Description of the activities done under the PIF and PPG document preparation is given below.

Project Identification (PIF) document
Following information have been gathered through literature survey, previous project experience, and interaction with the UNIDO persons as well as the concerned persons in Sierra Leone.

Description of the consistency of the project with
- The GEF focal area/LDCF/SCCF strategies /NPIF Initiative
- National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.

Project overview
In this section we described the baseline project and the problem that it seeks to address. It covered the following things:
- Electricity situation in Sierra Leone;
- Biomass energy potential and present status;
- Barriers for the development of these technologies and suggested measures;
- Explained the project component and activities planned to overcome these barriers;
- Incremental cost analysis for the proposed project option;
- Environmental and socio-economic benefits at national as well as international level;
- Sustainability and replicability of the project;
- Project implementation arrangement;
- Risk and mitigation analysis.