Installation of Multi Purpose Mini-Hydro Infrastructure for Energy & Irrigation

Background

More than 90 percent of Liberia’s population relies on traditional energy sources such as firewood, charcoal, candles, kerosene and palm oil to meet their energy needs. Access to electricity, either via the national grid or through off-grid schemes (isolated or mini-grids), is key to Liberia’s overall development and therefore requires pressing attention.

Recognizing the important role, small hydropower could play in the realization of its ambitious socio-economic development strategies by triggering economic development. The Government has accorded priority to small-hydropower development. Focusing on mini-hydropower plants, especially in regions where the economic potential is high as in Ganta, could be very effective. With the further development of other hydro projects, they could be converted into mini-grids and further expansion could see the mini-grids eventually integrating into the national grid.

However, there are several barriers for the development of mini-hydropower in the country. The most important barrier is the lack of national capacity for exploring mini-hydro resources. Another important barrier is the lack of financial resources. In addition, potential investors do not have confidence / trust in mini-hydropower investments, in spite of the best efforts by international organizations and experts. The main reason behind this are doubts about the security of financial return.

The proposed project will establish a hydropower site in an off-grid isolated community (near Ganta) and use the process for learning-by-doing and building local capacity. The project will also review the existing regulatory framework and formulate recommendations to upgrade this framework, particularly on the financial mechanisms needed to promote private sector involvement in rural electrification. The project is expected to lay the foundation for a market environment for mini hydro-based renewable energy in Liberia, and will have a significant demonstration effect for rapid replication in other potential sites of the country.

Objective

To develop the market environment for improving access to mini-hydro based modern energy services in rural areas.
GEF Strategic Programme on Energy in West Africa
UNIDO ENERGY PROJECT

Project Components

- Strengthen institutional capacity at national and local levels for implementation of mini hydro power (MHP) system for productive uses and improved energy access.
- Design and construct a 1 MW small hydropower based mini grid at identified site.
- Build capacity for local agencies to successfully operate and maintain MHP systems.
- Develop a policy and regulatory framework and appropriate incentive structure for future development of MHP systems to support energy access, irrigation, and productive uses.

Executing Partners/Agencies at National Level

The executing partners/agencies in this project are Winrock International/USAID and the Rural and Renewable Energy Agency of the Ministry of Land, Mines and Energy.

Project Budget

GEF – US$ 2 million (including PPG and agency fees); Co-financing – US$ 4 million (issued)

Progress

- Inception workshop is under preparation and the steering committee was organized.
- Consulting activities are underway, including preparation of environmental impact assessment report and holistic incorporation of gender mainstreaming.
- Project management unit (PMU) is being established.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>CEO Endorsement/Approval</td>
<td>March 2012</td>
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<tr>
<td>Implementation Start</td>
<td>June 2012</td>
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<tr>
<td>Mid-term Evaluation</td>
<td>December 2013</td>
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<tr>
<td>Project Closing Date</td>
<td>May 2016</td>
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