Rural Electrification and Renewable Energy Development II (RERED II) Project (P131263)

Key Dates

**Key Project Dates**

- Bank Approval Date: 20-Sep-2012
- Planned Mid Term Review Date: 17-Aug-2015
- Original Closing Date: 31-Dec-2018
- Effectiveness Date: 20-Feb-2013
- Actual Mid-Term Review Date: 06-Sep-2015
- Revised Closing Date: 31-Dec-2021

Project Development Objectives

The proposed project development objectives are to increase access to clean energy in rural areas through renewable energy and promote more efficient energy consumption.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

Yes

Board Approved Revised Project Development Objective (If project is formally restructured)

Increase access to clean energy through renewable energy in rural areas.

Components

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Electricity</td>
<td>$340.19 M</td>
</tr>
<tr>
<td>Household Energy</td>
<td>$85.41 M</td>
</tr>
<tr>
<td>Sector Technical Assistance</td>
<td>$11.50 M</td>
</tr>
</tbody>
</table>

Overall Ratings

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress towards achievement of PDO</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Implementation Status and Key Decisions
The IDCOL implements access to electricity (Component A) and Household Energy (Component B). The access to electricity component supports Solar Home Systems (SHS) (under Component A.1), and mini grids, solar irrigation pumps (SIPs) and other options (under Component A.2) while the household energy component supports Improved Cook Stoves (ICS) and Biogas Digesters.

A total of 26 solar mini grids are approved. Of these, 20 mini grids are in operation; these are projected to connect 13,000 households and businesses. Six mini grids are under construction (2.0 MWp), and 20 are currently operational. 968 solar irrigation pumps are operating of which 867 are supported by RERED II, with pipeline of 1,500. The target of implementing 1 million ICS by December 2018 was achieved in January 2017.

**Risks**

**Systematic Operations Risk-rating Tool**

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political and Governance</td>
<td>--</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

**Results**

**PDO Indicators by Objectives / Outcomes**

**To increase access to clean energy in rural areas through renewable energy**

1. **Number of households, farmers, and businesses having access to clean energy services (Number, Custom)**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>2,558,014.00</td>
<td>2,598,110.00</td>
<td>6,085,082.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

2. **Generation Capacity of Renewable Energy (other than hydropower) constructed (Megawatt hour(MWh), Custom)**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
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<td>52.40</td>
<td>57.50</td>
<td>88.00</td>
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<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Direct project beneficiaries (Number, Custom)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual (Previous)</td>
<td></td>
<td>6,800,000.00</td>
<td>6,840,000.00</td>
<td>9,800,000.00</td>
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<tr>
<td>Actual (Current)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.00</td>
<td>6,800,000.00</td>
<td>6,840,000.00</td>
<td>9,800,000.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
<tr>
<td><strong>Female beneficiaries (Percentage, Custom)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual (Previous)</td>
<td></td>
<td>60.00</td>
<td>60.41</td>
<td>76.00</td>
</tr>
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<td></td>
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<td></td>
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<tr>
<td>Value</td>
<td>0.00</td>
<td>60.00</td>
<td>60.41</td>
<td>76.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
<tr>
<td><strong>People provided with access to electricity under the project by household connections (Number, Custom)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual (Previous)</td>
<td></td>
<td>5,430,000.00</td>
<td>5,430,000.00</td>
<td>5,500,000.00</td>
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<td>Actual (Current)</td>
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<tr>
<td>Value</td>
<td>0.00</td>
<td>5,430,000.00</td>
<td>5,430,000.00</td>
<td>5,500,000.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
<tr>
<td><strong>People who gained access to more energy-efficient cooking and/or heating facilities (Number, Custom)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual (Previous)</td>
<td></td>
<td>1,340,000.00</td>
<td>1,380,000.00</td>
<td>5,000,000.00</td>
</tr>
<tr>
<td>Actual (Current)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.00</td>
<td>1,340,000.00</td>
<td>1,380,000.00</td>
<td>5,000,000.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Jun-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

**Intermediate Results Indicators by Components**

**Access to Electricity**

**Number of solar home systems installed (Number, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>31-Dec-2012</th>
<th>15-Sep-2018</th>
<th>31-Dec-2018</th>
<th>31-Dec-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of connections made through mini-grid systems and captive plants (Number, Custom)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual (Previous)</td>
<td></td>
<td>1,204,912.00</td>
<td>1,204,912.00</td>
<td>1,202,174.00</td>
</tr>
<tr>
<td>Actual (Current)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.00</td>
<td>1,204,912.00</td>
<td>1,204,912.00</td>
<td>1,202,174.00</td>
</tr>
<tr>
<td>Date</td>
<td>31-Dec-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

**Number of connections made through mini-grid systems and captive plants (Number, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>31-Dec-2012</th>
<th>15-Sep-2018</th>
<th>31-Dec-2018</th>
<th>31-Dec-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>5,213.00</td>
<td>5,781.00</td>
<td>28,100.00</td>
</tr>
<tr>
<td>Date</td>
<td>31-Dec-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Collection efficiency of the SHS POs (Percentage, Custom)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Baseline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Previous)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Current)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End Target</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>96.00</td>
<td>38.00</td>
<td>38.00</td>
<td>90.00</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>28-Feb-2014</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

| **Number of solar irrigation pumps (Number, Custom)** |             |             |             |             |
| **Baseline**     |             |             |             |             |
| **Actual (Previous)** |             |             |             |             |
| **Actual (Current)** |             |             |             |             |
| **End Target**   |             |             |             |             |
| **Value**        | 0.00        | 758.00      | 867.00      | 2,170.00    |
| **Date**         | 31-Dec-2012 | 15-Sep-2018 | 31-Dec-2018 | 31-Dec-2021 |

**Household Energy**

- **Number of biogas plants for cooking (Number, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>31-Dec-2012</th>
<th>15-Sep-2018</th>
<th>31-Dec-2018</th>
<th>31-Dec-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Previous)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Current)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End Target</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>4,500.00</td>
<td>4,884.00</td>
<td>8,300.00</td>
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<tr>
<td><strong>Date</strong></td>
<td>31-Dec-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

- **Number of higher efficiency cook stoves disseminated (Number, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>31-Dec-2012</th>
<th>15-Sep-2018</th>
<th>31-Dec-2018</th>
<th>31-Dec-2021</th>
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<tr>
<td><strong>Baseline</strong></td>
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<tr>
<td><strong>Actual (Previous)</strong></td>
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<td><strong>Actual (Current)</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>End Target</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>1,337,927.00</td>
<td>1,355,506.00</td>
<td>5,000,000.00</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>31-Dec-2012</td>
<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
</tr>
</tbody>
</table>

**Sector Technical Assistance**

- **Enabling policy for renewable energy development (Text, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>30-Jun-2012</th>
<th>31-Dec-2016</th>
<th>31-Dec-2018</th>
<th>31-Dec-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>SREDA not operational</td>
<td>--</td>
<td>SREDA operational with core staff appointed</td>
<td>SREDA operational with core staff appointed</td>
</tr>
<tr>
<td><strong>Actual (Previous)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Current)</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>End Target</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Number of Female Staff in POs (Number, Custom)**

<table>
<thead>
<tr>
<th>Date</th>
<th>31-Dec-2012</th>
<th>15-Sep-2018</th>
<th>31-Dec-2018</th>
<th>31-Dec-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>282.00</td>
<td>549.00</td>
<td>549.00</td>
<td>480.00</td>
</tr>
<tr>
<td><strong>Actual (Previous)</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Actual (Current)</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>End Target</strong></td>
<td></td>
<td></td>
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</tr>
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</table>
### Grievances received that are addressed within two months of receipt (Percentage, Custom)

<table>
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<tr>
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<th>30-Nov-2017</th>
<th>15-Sep-2018</th>
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<th>31-Dec-2021</th>
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<tbody>
<tr>
<td>Value</td>
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<td>96.32</td>
<td>96.32</td>
<td>100.00</td>
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<tr>
<td>Date</td>
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<td>15-Sep-2018</td>
<td>31-Dec-2018</td>
<td>31-Dec-2021</td>
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### Data on Financial Performance

#### Disbursements (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>% Disbursed</th>
</tr>
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<tbody>
<tr>
<td>P131263</td>
<td>IDA-51580</td>
<td>Effective</td>
<td>USD</td>
<td>155.00</td>
<td>155.00</td>
<td>0.00</td>
<td>140.10</td>
<td>12.23</td>
<td>92%</td>
</tr>
<tr>
<td>P131263</td>
<td>IDA-55140</td>
<td>Effective</td>
<td>USD</td>
<td>78.40</td>
<td>78.40</td>
<td>0.00</td>
<td>67.58</td>
<td>3.02</td>
<td>96%</td>
</tr>
<tr>
<td>P131263</td>
<td>IDA-62020</td>
<td>Effective</td>
<td>USD</td>
<td>55.00</td>
<td>55.00</td>
<td>0.00</td>
<td>0.00</td>
<td>52.78</td>
<td>0%</td>
</tr>
<tr>
<td>P131263</td>
<td>TF-15034</td>
<td>Closed</td>
<td>USD</td>
<td>6.00</td>
<td>6.00</td>
<td>0.00</td>
<td>5.35</td>
<td>0.65</td>
<td>89%</td>
</tr>
<tr>
<td>P131263</td>
<td>TF-15077</td>
<td>Closed</td>
<td>USD</td>
<td>10.00</td>
<td>9.96</td>
<td>0.04</td>
<td>9.96</td>
<td>0.00</td>
<td>100%</td>
</tr>
<tr>
<td>P119549</td>
<td>TF-96551</td>
<td>Closed</td>
<td>USD</td>
<td>7.20</td>
<td>7.20</td>
<td>0.00</td>
<td>7.20</td>
<td>0.00</td>
<td>100%</td>
</tr>
<tr>
<td>P119547</td>
<td>TF-96552</td>
<td>Closed</td>
<td>USD</td>
<td>1.10</td>
<td>1.10</td>
<td>0.00</td>
<td>1.10</td>
<td>0.00</td>
<td>100%</td>
</tr>
<tr>
<td>P119549</td>
<td>TF-98472</td>
<td>Closed</td>
<td>USD</td>
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<td>6.75</td>
<td>0.00</td>
<td>6.75</td>
<td>0.00</td>
<td>100%</td>
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<tr>
<td>P131263</td>
<td>TF-A3639</td>
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<td>1.07</td>
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<td>0.00</td>
<td>1.07</td>
<td>0%</td>
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#### Key Dates (by loan)

<table>
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<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
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<td>18-Dec-2013</td>
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<td>Closed</td>
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<td>30-Sep-2013</td>
<td>30-Sep-2013</td>
</tr>
</tbody>
</table>
**Cumulative Disbursements**

![Graph showing cumulative disbursements]

**Restructuring History**


**Related Project(s)**