Madagascar-Irrigation and Watershed Management Project - PHRD (P128831)

AFRICA | Madagascar | Agriculture Global Practice | Recipient Executed Activities | Specific Investment Loan | FY 2014 | Seq No: 8 | ARCHIVED on 07-Sep-2017 | ISR29181 |

Implementing Agencies: The Republic of Madagascar, Ministry of Agriculture

Key Dates

Key Project Dates

<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>Moderately Unsatisfactory</td>
<td>Moderately Unsatisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Moderately Unsatisfactory</td>
<td>Moderately Unsatisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>
Implementation Status and Key Decisions

All outstanding major rehabilitation works and other key activities have now been launched and are ongoing. As of July 30th, US$11.8 million (87%) of the US$12.6 million grant is now legally committed, of which US$5.9 million (47%) has been disbursed. This is up from the 31% disbursed in March 2017. The remaining funds for activities to be completed by project closure will be committed and related works launched by the end of August. However overall project implementation is behind schedule.

Measures to accelerate implementation. In this regard, the project was restructured for the first time in July. Remaining activities at greater risk of not being completed by project closure were replaced by those that will be completed by February 2018. Funds have been reallocated to well performing activities that will reach more project beneficiaries, especially those severely affected by recent weather-related disasters, among them the cyclone Enawo which hit Madagascar in March 2017. The Results Framework (RF) targets have been adjusted accordingly. This has helped rebalance the end targets which had been conservatively defined at project preparation, given the crisis context and the client’s limited delivery capacity at the time.

Procedures to speed up disbursements and fund absorption are also in place.

As of July 30th, based on the revised results targets, the average yield per hectare in irrigated rice production in the project irrigation sites is 5.2 tons per hectare, which is above the end target of 4.26 hectares. 17,424 beneficiaries out of a target of 20,000, of which 43% are women, were reached by the project. 2,121 out of a target of 2,540 hectares have been cultivated with improved technologies and/or inputs provided through the project. 6,662 farmers out of a target of 7,250 have adopted improved agricultural technologies. 2,880 hectares out of the target of 5,390 have been provided with new/improved irrigation or drainage services. 2,909 water users out of the targeted 4,470 provided with new/improved irrigation and drainage services.

With the rice yielding more than doubling, project beneficiaries were able to save to invest for the upcoming season and to fund other family needs such as child education and health. These producers also served as models for the adoption of improved agricultural technologies for other producers who were unable to participate in project-funded activities. Also, with the improvement of irrigation and drainage services and the strengthening of the capacity of water user associations by taking charge of operation and maintenance, the sustainability of rehabilitated infrastructures has significantly increased.

The Bank and Government teams are working in tandem to continue to closely monitor and follow up on all the critical actions during the remaining timeframe. Another support mission will be conducted in November 2017 to assess progress and right the course wherever possible, with the end goal of ensuring completion of activities and achievement of the results and the project objective.
## 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>
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</thead>
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<tr>
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<td>Moderate</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
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<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
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<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>
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<td>Substantial</td>
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<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
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<td>Stakeholders</td>
<td>--</td>
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<tr>
<td>Other</td>
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<tr>
<td>Overall</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

## Results

**Project Development Objective Indicators**

- **Average yield per hectare in irrigated rice production in Project-intervention irrigation sites (Metric ton, Custom)**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
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<td>5.42</td>
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<td><strong>Date</strong></td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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### Direct project beneficiaries (Number, Custom)

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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>

### Female beneficiaries (Percentage, Custom Supplement)

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<thead>
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<th>Baseline</th>
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<th>End Target</th>
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<tr>
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<td>41.00</td>
<td>43.00</td>
<td>41.00</td>
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**Overall Comments**

### Intermediate Results Indicators

#### Area cultivated with improved technologies and/or inputs provided through the sub-projects (Hectare(Ha), Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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<tbody>
<tr>
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<td>948.14</td>
<td>2,120.83</td>
<td>2,540.00</td>
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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>
### Farmers adopting improved agricultural technology (Number, Corporate)

<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>4,283.00</td>
<td>6,662.00</td>
<td>7,250.00</td>
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<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

### Clients who adopted an improved agr. technology promoted by project – female (Number, Custom Breakdown)

<table>
<thead>
<tr>
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<th>Baseline</th>
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<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
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<td>28-Feb-2018</td>
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### Technologies demonstrated in the project areas (number) (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>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

### Value of the additional crop production in sub-projects supported by the project (Amount(USD), Custom)

<table>
<thead>
<tr>
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<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
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<tr>
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<td>233,961.00</td>
<td>933,000.00</td>
<td>1,270,000.00</td>
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<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
<tr>
<td>Area provided with new/improved irrigation or drainage services (Hectare(Ha), Corporate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Baseline</td>
<td>Actual (Previous)</td>
<td>Actual (Current)</td>
<td>End Target</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.00</td>
<td>1,600.00</td>
<td>2,880.00</td>
<td>5,390.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

| Area provided with improved irrigation or drainage services (Hectare(Ha), Corporate Breakdown) |
|-------------------------------------------------|-----------------|-----------------|-----------------|------------------|
| Baseline                                        | Actual (Previous) | Actual (Current) | End Target      |
| Value                                           | 0.00             | 1,600.00         | 2,880.00        | 5,390.00         |
| Date                                            | 15-Sep-2014      | 31-Jan-2017      | 30-Jun-2017     | 28-Feb-2018      |

| Water users provided with new/improved irrigation and drainage services (number) (Number, Custom) |
|-------------------------------------------------|-----------------|-----------------|-----------------|------------------|
| Baseline                                        | Actual (Previous) | Actual (Current) | End Target      |
| Value                                           | 0.00             | 4,420.00         | 2,909.00        | 4,470.00         |
| Date                                            | 15-Sep-2014      | 31-Jan-2017      | 30-Jun-2017     | 28-Feb-2018      |

Comments
The previous figure 4,420 was an error, the correct figure at end of January 2017 was 1,613 and increased as of June 30, 2017, to 2,909. The same error occurred for the number of female provided with irrigation and drainage services: the previous figure of 1,115 was not correct, the correct figure at the end of January 2017 was 94 and has increased as of June 30, 2017 to 170.

| Water users provided with irrigation and drainage services - female (number) (Number, Custom Breakdown) |
|-------------------------------------------------|-----------------|-----------------|-----------------|------------------|
| Baseline                                        | Actual (Previous) | Actual (Current) | End Target      |
| Value                                           | 0.00             | 1,115.00         | 170.00          | 670.00           |
| Date                                            | 15-Sep-2014      | 31-Jan-2017      | 30-Jun-2017     | 28-Feb-2018      |
### Operational water user associations created and/or strengthened (number) (Number, Custom)

<table>
<thead>
<tr>
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<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>54.00</td>
<td>54.00</td>
<td>54.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

### O&M fees collected by WUAs (Amount(USD), 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>2,938.00</td>
<td>10,388.00</td>
<td>33,600.00</td>
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<tr>
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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

### Schema Directeurs developed (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
<td>2.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
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</table>

### Sub-watershed management plans developed and signed (Number, Custom)

<table>
<thead>
<tr>
<th></th>
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<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
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<td>6.00</td>
<td>6.00</td>
<td>40.00</td>
</tr>
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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>
### Farmers adopting improved agricultural technology (Number, Corporate)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
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<td>6,864.00</td>
<td>7,209.00</td>
<td>7,700.00</td>
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<td>Date</td>
<td>15-Sep-2014</td>
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<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>

### Clients who adopted an improved agr. technology promoted by project – female (Number, Custom Breakdown)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
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<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
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<td>3,358.00</td>
<td>3,596.00</td>
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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</tbody>
</table>

### Anti-erosion measures implemented (lavak stabilization, etc.) (Number, Custom)

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<th>Baseline</th>
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<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</tbody>
</table>

### Area with improved SLM practices provided through the sub-projects (Hectare(Ha), Custom)

<table>
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<td>171.00</td>
<td>1,150.00</td>
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<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>
### Technologies demonstrated in the project areas (number) (Number, Custom)

<table>
<thead>
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<th>Actual (Previous)</th>
<th>Actual (Current)</th>
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<td>3.00</td>
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<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
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</table>

### Soil samples tested in project areas (Number, Custom)

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<td>30-Jun-2017</td>
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</table>

### Basic rice seeds produced (Metric ton, Custom)

<table>
<thead>
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<th>Baseline</th>
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<td>50.70</td>
<td>50.70</td>
<td>70.00</td>
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<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>

### Collaborative research/extension sub-projects under implementation/completed (Number, Custom)

<table>
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<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>70.00</td>
<td>70.00</td>
<td>84.00</td>
</tr>
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<td>Date</td>
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<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
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</table>
Collaborative research or extension sub-projects - under implementation (Number, Custom Breakdown)

<table>
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<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.00</td>
<td>55.00</td>
<td>50.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
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<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
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</table>

Collaborative research or extension sub-projects - completed (number) (Number, Custom Breakdown)

<table>
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<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>15.00</td>
<td>20.00</td>
<td>84.00</td>
</tr>
<tr>
<td>Date</td>
<td>15-Sep-2014</td>
<td>31-Jan-2017</td>
<td>30-Jun-2017</td>
<td>28-Feb-2018</td>
</tr>
</tbody>
</table>

Overall Comments
Note: the target at end of project for the indicator collaborative research or extension subprojects under implementation for component E is zero because the number of subprojects under implementation will decrease when the number of completed subprojects is increasing.

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>
</thead>
<tbody>
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<td>TF-16875</td>
<td>Effective</td>
<td>USD</td>
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<td>12.66</td>
<td>0.00</td>
<td>6.17</td>
<td>6.49</td>
<td>49%</td>
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</table>

Key Dates (by loan)

<table>
<thead>
<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>
</table>

Cumulative Disbursements
Restructuring History

Level 2 Approved on 20-Jun-2017

Related Project(s)

There are no related projects.