Kariba Dam Rehabilitation Project (RI) (P146515)

AFRICA | Africa | Water Global Practice | IBRD/IDA | Investment Project Financing | FY 2015 | Seq No: 9 | ARCHIVED on 29-Aug-2019 | ISR36511 |

Implementing Agencies: Zambezi River Authority, Ministry of Finance

Key Dates

Key Project Dates

Bank Approval Date: 09-Dec-2014
Planned Mid Term Review Date: 23-Mar-2020
Original Closing Date: 28-Feb-2025

Effectiveness Date: 20-Aug-2015
Actual Mid-Term Review Date: 
Revised Closing Date: 28-Feb-2025

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
The Project Development Objective is to assist in improving the safety and reliability of the Kariba Dam.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
No

Components

Name

Component 1: Institutional and Project Management:(Cost $70.30 M)
Component 2: Plunge Pool Reshaping:(Cost $99.30 M)
Component 3: Spillway Refurbishment:(Cost $124.60 M)

Overall Ratings

Name | Previous Rating | Current Rating
--- | --- | ---
Progress towards achievement of PDO | Moderately Satisfactory | Satisfactory
Overall Implementation Progress (IP) | Moderately Satisfactory | Moderately Satisfactory
Overall Risk Rating | Substantial | Substantial

Implementation Status and Key Decisions

The Kariba Dam Rehabilitation Project continues to progress. Plunge pool works are underway and the contract for the Spillway Refurbishment contract has been signed. The next project implementation support mission will be in mid-September, 2019.
## 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>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

## Results

### PDO Indicators by Objectives / Outcomes

**Number of people benefitting in the project area through risk reduction and avoided disaster**

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
<th>Comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000,000 at risk from failure</td>
<td>--</td>
<td>Dam break analysis under implementation and informing detailed assessment</td>
<td>3,000,000 people no longer at risk from failure</td>
<td>Successful completion of the rehabilitation works will improve the safety and remove the threat of risks to downstream populations</td>
</tr>
</tbody>
</table>

**Emergency Preparedness Plan adopted and operationalized**

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Comments: Measures overall outcome in securing safety of Kariba Dam through restoration of operational curve governed by EPP

### Intermediate Results Indicators by Components

#### Component 1: Institutional and Project Management

- **Emergency Preparedness Plan Updated (Text, Custom)**
  - Baseline: Existing EPP limits operations due to dam safety concerns
  - Actual (Previous): --
  - Actual (Current): EPP further revised in anticipation of the commencement of the plunge pool works
  - End Target: Updated EPP adopted and operationalized
  - Date: 27-Feb-2015, 26-Sep-2018, 26-Sep-2018, 28-Feb-2025
  - Comments: Monitors progress in updating information for improvements to the EPP

- **Dam Break Analysis Completed and Integrated into the EPP (Text, Custom)**
  - Baseline: Limited information available
  - Actual (Previous): --
  - Actual (Current): LiDAR survey complete and dam break analysis being finalized. Will inform final EPP.
  - End Target: Flood inundation and risk maps integrated into EPP
  - Date: 27-Feb-2015, 26-Sep-2018, 01-Apr-2019, 28-Feb-2025
  - Comments: Monitors progress in updating information for improvements to the EPP

#### Component 2: Plunge Pool Reshaping

- **Plunge Pool: Volume Excavated (Cubic Meter(m3), Custom)**
  - Baseline: 0.00
  - Actual (Previous): 0.00
  - Actual (Current): 0.00
  - End Target: 300,000.00
  - Date: 27-Feb-2015, 28-Sep-2018, 01-Apr-2019, 27-Feb-2020
  - Comments: Measures improved safety through physical interventions and stability of plunge pool.

#### Component 3: Spillway Refurbishment

- **Spillway: Gates Refurbished (Text, Custom)**
  - Baseline: 0 gates refurbished
  - Actual (Previous): --
  - End Target: 6 gates refurbished
Date | 27-Feb-2015 | 26-Sep-2018 | 01-Apr-2019 | 28-Feb-2025
--- | --- | --- | --- | ---
Comments: | Measures improved reliability through improved operations via refurbishment of the spillway

**Spillway: Rule Curve (Text, Custom)**

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule curve reduced by 3.5m</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>Rule curve restored to full supply level</td>
</tr>
</tbody>
</table>

The rule curve will be reviewed and revised as part of the ongoing process of the preparation for the works. The TS&S Consultant has completed the initial review associated with the plunge pool and the design review report is being prepared for the spillway refurbishment.

Date | 27-Feb-2015 | 26-Sep-2018 | 01-Apr-2019 | 28-Feb-2025
--- | --- | --- | --- | ---
Comments: | Measures impact of improved safety of the plunge pool and reliability of the spillway through restoration of full operational capacity reflected in the operating rule

### 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>
<tr>
<td>P146515</td>
<td>IDA-55630</td>
<td>Effective</td>
<td>USD</td>
<td>75.00</td>
<td>75.00</td>
<td>0.00</td>
<td>6.97</td>
<td>62.89</td>
<td>10%</td>
</tr>
<tr>
<td>P146515</td>
<td>TF-19029</td>
<td>Effective</td>
<td>USD</td>
<td>20.00</td>
<td>20.00</td>
<td>0.00</td>
<td>6.79</td>
<td>13.21</td>
<td>34%</td>
</tr>
</tbody>
</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

There has been no restructuring to date.

Related Project(s)

There are no related projects.