

Implementation Status & Results
Iraq
Dokan and Derbandikhan Emergency Hydro Power Project (P099059)

Operation Name: Dokan and Derbandikhan Emergency Hydro Power Project (P099059) Project Stage: Implementation Seq.No: 15 Status: ARCHIVED Archive Date: 30-Dec-2013

Product Line: IBRD/IDA Country: Iraq Approval FY: 2007
 Region: MIDDLE EAST AND NORTH AFRICA Lending Instrument: Emergency Recovery Loan
 Implementing Agency(ies):

Key Dates

| | | | | | | | |
|---------------------|-------------|-----------------------|-------------|------------------------------|-------------|------------------------|-------------|
| Board Approval Date | 12-Dec-2006 | Original Closing Date | 31-Dec-2010 | Planned Mid Term Review Date | 30-Apr-2012 | Last Archived ISR Date | 13-Sep-2013 |
| Effectiveness Date | 30-Oct-2007 | Revised Closing Date | 31-Dec-2013 | Actual Mid Term Review Date | 23-Apr-2012 | | |

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objective of the proposed project is to: (i) help alleviate the current power supply shortfall in the Kurdish region through urgent repair work; (ii) strengthen the capacity of local operational staff; and (iii) prepare for the subsequent rehabilitation of the Dokan and Derbandikhan hydropower plants. The reliability of both power plants is very low and the effective capacity of each has been as low as 50 percent. Subsequent rehabilitation would restore their original capacity of 400 and 249MW respectively.

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

Yes No

Component(s)

| Component Name | Component Cost |
|--------------------------|----------------|
| Repairs for Dokan | 8.15 |
| Repairs for Derbandikhan | 20.75 |
| Technical Assistance | 11.10 |

Overall Ratings

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

Implementation Status Overview

Rehabilitation works on priority components of the Dokan and Derbandikhan hydropower stations have been almost completed and change orders under existing contracts are well

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managed by the Project Management Team (PMT) under the Ministry of Electricity of Kurdish Regional Government of Iraq (KRG MoE). Remaining minor works are expected to be completed on schedule by the Project Closing Date of December 31, 2013.

Locations

| Country | First Administrative Division | Location | Planned | Actual |
|---------|-------------------------------|------------------|---------|--------|
| Iraq | Not Entered | Sadd Dukan | | |
| Iraq | Not Entered | Derbandikhan Dam | | |

Results

Project Development Objective Indicators

| Indicator Name | Core | Unit of Measure | | Baseline | Current | End Target |
|--|--------------------------|-----------------|----------|---|--|--|
| Dokan HP availability increased. | <input type="checkbox"/> | Text | Value | 65% | 80% | 80% |
| | | | Date | 11-Nov-2006 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | | Based on the completion of major rehabilitation and controlling system works, PMT and Project Consultant (ELC) have approved the current availability in Dokan HPP as 80%. | Capacity availability increase will be realized upon completion of full rehabilitation, especially through vibration & overheating prevention works. |
| Derbandikhan power capacity increased. | <input type="checkbox"/> | Text | Value | 60% | 80% | 80% |
| | | | Date | 20-Nov-2006 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | Capacity availability increase will be realized upon full completion of rehabilitation, especially in switchyard, by December 15, 2013. During the December 2013 Supervision mission the availability increase will be discussed. | Based on the completion of major switchyard rehabilitation and controlling system works, PMT and Project Consultant (ELC) have approved the current availability in Derbandikhan HPP | Capacity availability increase will be officially confirmed upon completion of full rehabilitation, especially in switchyard. |
| Percentage of relevant staff trained in operation, maintenance and rehabilitation who pass the end program assessment. | <input type="checkbox"/> | Text | Value | 0% of relevant staff trained and passed an assessment. | 100% | 100% |
| | | | Date | 20-Nov-2006 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | | 100% of relevant staff trained and passed the end program assessment. PMT has submitted the final Capacity Building/Training | This is new a new indicator included through second restructuring approved in August 2012. |

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|---|-------------------------------------|-----------------------------------|----------|-----------------------------------|---|--|
| | | | | | Report consisting of detailed explanation of completed activities and quality assessments. | |
| Design and costing for assessed subsequent rehabilitation completed along with bidding documents. | <input type="checkbox"/> | Text | Value | No rehabilitation plans in place. | Rehabilitation design and costing 100% completed and bidding documents ready. | Rehabilitation design and costing 100% completed and bidding documents ready. |
| | | | Date | 11-Nov-2006 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | No rehabilitation plans in place. | Fully completed. | This is new indicator included through second restructuring approved in August 2012. |
| Generation Capacity of Hydropower constructed or rehabilitated under the project | <input checked="" type="checkbox"/> | Megawatt | Value | 0.00 | 43.00 | 109.00 |
| | | | Date | 30-Oct-2007 | 01-Nov-2013 | 31-Dec-2013 |
| | | | Comments | | During the December 2013 Supervision mission the total availability increase will be discussed. | As per MNADE request, this Core Indicator was added November 18, 2013. |
| Generation Capacity of Hydropower rehabilitated under the project | <input checked="" type="checkbox"/> | Megawatt Sub Type Breakdown | Value | 0.00 | 109.00 | 109.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | | PMT and Project Consultant (ELC) have confirmed the generation capacity of HPPs constructed/rehabilitated under the project as 109MW. | As per MNADE request, this Core Indicator was added November 18, 2013. |

Intermediate Results Indicators

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| Indicator Name | Core | Unit of Measure | | Baseline | Current | End Target |
|---|--------------------------|-----------------|----------|-------------|---|--|
| Excitation and control systems replaced; switchgear, dam intake structures, Derbandikhan dam slippage area, hydro-mechanical and substation equipment repaired. | <input type="checkbox"/> | Percentage | Value | 0.00 | 100.00 | 100.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | | Equipment purchased and physical implementation works done. Minor adjustments being completed by no later than December 31, 2013. | This indicator is revised to better reflect intermediate targets necessary for PDOs to be met. |
| Derbandikhan hydraulic system redesign reviewed and approved. | <input type="checkbox"/> | Percentage | Value | 0.00 | 100.00 | 100.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 |
| | | | Comments | | Works completed as planned. | This indicator is revised to better reflect intermediate |

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| | | | | | | | |
|--|--------------------------|------------|----------|-------------|---|--|---------------------------------------|
| | | | | | | | targets necessary for PDOs to be met. |
| Operational problems at Derbandikhan and Dokan resolved (resulting in reliable unit availability) | <input type="checkbox"/> | Text | Value | 0.00 | 100.00 | 100.00 | 100.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 | |
| | | | Comments | | Full commissioning of rehabilitated equipment completed. | This indicator is revised to better reflect intermediate targets necessary for PDOs to be met. | |
| Rehabilitation needs assessment completed | <input type="checkbox"/> | Percentage | Value | 0.00 | 100.00 | 100.00 | 100.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 | |
| | | | Comments | | Fully completed. | Rehabilitation needs assessment completed. | |
| Staff fully and effectively trained on the various operations, maintenance and rehabilitation aspects. | <input type="checkbox"/> | Percentage | Value | 0.00 | 100.00 | 100.00 | 100.00 |
| | | | Date | 30-Oct-2007 | 17-Dec-2013 | 31-Dec-2013 | |
| | | | Comments | | 100% of relevant staff trained and passed the end program assessment. PMT has submitted the final Capacity Building/Training Report consisting of detailed explanation of completed activities and quality assessments. | This indicator has been revised to ensure that progress is better able to be monitored. | |

Data on Financial Performance (as of 13-Dec-2013)

Financial Agreement(s) Key Dates

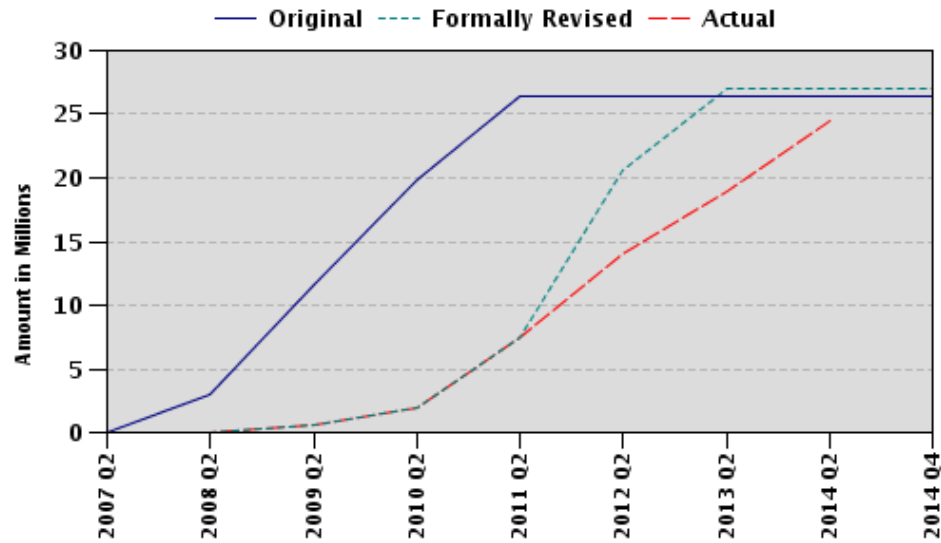
| Project | Ln/Cr/Tf | Status | Approval Date | Signing Date | Effectiveness Date | Original Closing Date | Revised Closing Date |
|---------|-----------|-----------|---------------|--------------|--------------------|-----------------------|----------------------|
| P099059 | IDA-42490 | Effective | 12-Dec-2006 | 02-Apr-2007 | 30-Oct-2007 | 31-Dec-2010 | 31-Dec-2013 |

Disbursements (in Millions)

| Project | Ln/Cr/Tf | Status | Currency | Original | Revised | Cancelled | Disbursed | Undisbursed | % Disbursed |
|---------|-----------|-----------|----------|----------|---------|-----------|-----------|-------------|-------------|
| P099059 | IDA-42490 | Effective | XDR | 27.00 | 27.00 | 0.00 | 24.43 | 2.57 | 90.00 |

Disbursement Graph

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Key Decisions Regarding Implementation

Following the extension of the Project Closing Date (September 30, 2012), up to December 31, 2013, J.V Luthardt GmbH & HEAG was awarded to execute the rehabilitation of Derbandikhan HPP switchyard. As of December 2013, main physical erection works have been finalized as planned. The second Project Closing Date extension has thus allowed completion of this major rehabilitation. The World Bank Project Team successfully conducted the last project supervision mission for this project in December 2013. Next step will be the preparation of the Project's Implementation Completion and Results Report (ICR).

Restructuring History

Level two Approved on 03-Sep-2010, Level two Approved on 22-Aug-2012

Related Projects

There are no related projects.