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Independent Evaluation ADB

Evaluation Approach Paper

Project Performance Evaluation Report for the Multitranche Financing Facility: Madhya Pradesh Power Sector Investment Program in India

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A. Introduction

1. The objective of this program performance evaluation report (PPER) is to assess the performance of Asian Development Bank's (ADB's) multitranche program loans provided to India to improve the accessibility, quality, affordability, and sustainability of the national electricity supply. The PPER has been scheduled for preparation four years after the final loan closed in 2015 and a year after the circulation of the final tranche's project completion report (PCR) in 2018.

2. The proposed PPER will evaluate the six tranches included in the Multitranche Financing Facility (MFF): Madhya Pradesh Power Sector Investment Program implemented by ADB in India. This evaluation paper sets out the background, details of the selected projects including evaluation findings and lessons, evaluation scope and approach, requisite data sources and tentative resource, and schedule requirements of this evaluation.

B. Background

3. **Country context.** During early 2000s, the state of Madhya Pradesh faced formidable difficulties in providing energy supplies needed to spur its poverty reduction and economic development. The transmission capacity in Madhya Pradesh was inadequate as investment in the transmission network did not match increasing demand, and the distribution system could not provide reliable supply to consumers, which suffered from severe capacity shortages with distribution losses of about 40%–45% in many areas.[1] This was the result of many years of insufficient funding for the expansion and maintenance of the system to accommodate the rapid increase in the number of consumers. Over time, the decades-old wiring and equipment caused numerous and prolonged power outages, low voltage, and an increasing inability to connect new consumers—which was exacerbated by extensive power theft through illegal connections and a lack of metering. As the state's population grew and farmers relied increasingly on irrigation to grow crops, the need for better power distribution became acute.

4. **Sector context**. To overcome the existing challenges in Madhya Pradesh, the government had developed a sector road map linked to a comprehensive investment program. The sector road map's objective was to establish the route to achieving the sustainable growth of the power sector in Madhya Pradesh. The road map aimed to deliver the following outcomes: (i) strengthening power supply capacity to improve access to reliable and affordable electricity, (ii) enhancing efficiency and quality of power supply; and (iii) ensuring financial health of the

[1] ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to India for the Madhya Pradesh Power Sector Investment Program*. Manila.

power sector through continued power sector reform at the sector and corporate levels. Based on the sector road map, the Madhya Pradesh power sector needed an estimated $5.3 billion in investments through to 2012. The largest component was power generation which accounted for $2.3 billion of investment (43%), followed by $1.6 billion for distribution, including rural electrification (30%), and $1.4 billion for transmission (26%). The investment program also included $40 million for a comprehensive capacity building program to meet the sector's increasing management capacity requirements.

5. **Strategic context.** The MFF tranches are aligned with the strategies of both the Indian government and ADB as outlined below.

(i) **Government.** The Government of India's Integrated Energy Policy (2006) specifically targeted the modernization of transmission and distribution systems, as well as power sector reform to reduce technical and commercial losses from state transmission and distribution utilities.[2] Based on the said policy, the Government of Madhya Pradesh initiated a comprehensive review of its power sector and developed a road map calling for the expansion of the power transmission system followed by a major rehabilitation and systemic refurbishment of the distribution system.

(ii) **ADB.** The tranches' objectives were clearly aligned with ADB's country strategy and program for India in 2003–2006, which focused on clean energy development in the energy sector, as well as ADB's Strategy 2020 that had infrastructure as one of five core areas of operations and placed emphasis on (a) helping expand the supply of energy, (b) promoting energy efficiency through supply-side and demand-side measures, (c) supporting clean energy; and (d) facilitating the removal of policy, institutional, regulatory, technological, and legal constraints on promoting efficient energy use.[3]

6. The state government of Madhya Pradesh, through the Indian Ministry of Finance, requested a loan of $620 million from the ADB to: (i) install high tension transmission and distribution system lines to replace inefficient low-tension lines, (ii) rehabilitate existing distribution transformer stations, (iii) construct new transformer stations, and (iv) separate rural and village feeder lines to enable better service to its remote rural areas. The Madhya Pradesh Power Sector Investment Program was developed as an MFF to facilitate individual loans to the transmission and distribution companies—to achieve more efficient operation and meet consumer needs more effectively.

C. Project Design

7. The Madhya Pradesh Power Sector Investment Program was approved and implemented from 2007 to 2015, and was one of the first to use the MFF modality in the Indian energy sector. The MFF approach was utilized to facilitate the implementation of successive interventions based on the priorities set by Madhya Pradesh Power Transmission Company Ltd. (TRANSCO) and the distribution companies (DISCOMs). As the MFF was being implemented concurrently with several other initiatives to improve the state's electrical distribution systems, and to make the best use of the ADB loan funds, each successive project was specifically designed to fill gaps not covered by

[2] Government of India, Planning Commission. 2006. *Integrated Energy Policy: Report of the Expert Committee.* New Delhi.

[3] ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

the various ongoing schemes.[4] According to the Facility Completion Report (FCR), the DISCOMs indicated that the multitranche approach helped them address the sequential and changing priorities in each district, which would not have been possible under a conventional project loan.[5] A summary of each tranche is provided in Table 1.

Table 1: Tranches in the MFF - Madhya Pradesh Power Sector Investment Program

Tranche No. (Loan No.)	Project Cost ($ million)			Executing Agency
	Appraised Amount (Disbursed, %)	**Foreign Exchange Cost** (Disbursed, %)	**Local Currency Cost** (Disbursed, %)	
1 (2323)	**132.5** (114.05, 86%)	**106.0** (97.27, 92%)	**26.5** (16.78, 63%)	TRANSCO
2 (2324)	**65.7** (64.30, 98%)	**45.0** (40.75, 91%)	**20.7** (23.55, 114%)	DISCOM-E
3 (2346)	**197.8** (176.10, 89%)	**144.0** (141.91, 99%)	**53.8** (34.19, 64%)	TRANSCO
4 (2347)	**159.7** (81.81, 51%)	**90.0** (74.16, 82%)	**69.7** (7.65, 11%)	DISCOM-E, DISCOM-C, DISCOM-W
5 (2520)	**270.2** (163.80, 61%)	**166.0** (134.02, 81%)	**104.2** (29.79, 29%)	DISCOM-E, DISCOM-C, DISCOM-W
6 (2732)	**125.5** (81.23, 65%)	**69.0** (55.36, 80%)	**56.5** (25.87, 46%)	MPPMCL, TRANSCO, DISCOM-E, DISCOM-C, DISCOM-W
Facility Total	**951.4** (681.29, 72%)	**620.0** (543.47, 88%)	**331.4** (137.83, 42%)	

MFF = multitranche financing facility, PCR = program completion report.
[a] TRANSCO = Madhya Pradesh Power Transmission Co. Ltd., DISCOM-E = Madhya Pradesh Poorv Kshetra Vidyut Vitaran Co. Ltd., DISCOM-C = Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co. Ltd., DISCOM-W = Madhya Pradesh Paschim Kshetra Vidyut Vitaran Co. Ltd., MPPMCL=Madhya Pradesh Power Management Co. Ltd.
Source: Asian Development Bank (corresponding PCRs).

8. According to the FCR, the facility's total disbursement of the local currency cost was only around 42% or nearly $200 million less than originally estimated. The TRANSCO and the DISCOMs attributed the unutilized loan funds to the inflated cost estimates for the ADB-prepared tranches 1 and 2 which had not taken into account the following factors: (i) more competitive bid prices with ADB financing, (ii) lower procurement cost for equipment and materials sourced from within India, (iii) local currency devaluation between the periodic financing request preparation and bids submission, (iv) exemption of the excise duty on international competitive bidding contracts under the ADB loan by the Ministry of Finance, (v) competitive prices realized by optimizing the contractor's scope of work to the field survey results, (vi) implementation of remaining parts of terminated contracts from DISCOMs' own resources, (vii) the borrower paying the financing costs, and (viii) works completed by ongoing projects funded from other sources. The PPER will further explore and evaluate these causes.

[4] These initiatives included four national government programs as follows: the Rajeev Gandhi Scheme for Electrification of Villages, the Jyoti Gram Yojna program for electrification of villages, the Restructured Accelerated Power Development Reform Program; and the ADB-supported Feeder Separation Program; as well as lower-level programs being implemented by each DISCOM, partly self-funded and partly financed by the Rural Electricity Corporation (REC) and the Power Finance Corporation (PFC).

[5] ADB. 2018. *Project Completion Report: India Madhya Pradesh Power Sector Investment Program (Tranche 6 and Multitranche Financing Facility)*. Manila.

9. The expected impacts of the MFF - Madhya Pradesh Power Sector Investment Program were as follows:

(i) **Sustained economic growth and social development of Madhya Pradesh**. By achieving the target of 6% annual Gross State Product between 2007–2012.
(ii) **Meeting energy demand growth in Madhya Pradesh.** By eliminating the energy deficit altogether by 2012 (from 13% in 2007).

10. The expected outcome of the facility were as follows:

(i) **Sustainability and commercial viability of the power sector**. By making the sector independent of direct state support in terms of total investment funding by 2012 (from 30% funding in 2007), and by eliminating financial losses in the sector by 2011 (from INR 2.7 billion in 2005).
(ii) **Transmission expansion**. By 2008–2009, to increase transmission capacity to 8,170 MW (from 5,563 MW in 2005–2006), to enhancing system availability to 97.5% (from 95% in 2005–2006), and reducing technical losses in transmission system to 4.9% (from 5.2% in 2005–2006).
(iii) **Distribution system enhancement**. By reducing distribution system losses to 19% in 2012 (from 40%–45% in 2005–2006), improving system reliability, substantially reducing fault restoration time, and reducing customer complaints about quality of electricity supply.
(iv) **Institutional strengthening**. By equipping Madhya Pradesh Energy Department with the capacity to conduct further reforms, improving the capacity of Madhya Pradesh Electricity Regulatory Commission (MPERC), improving human resources, financial management, and accounting in all sector companies.
(v) **Energy efficiency improvement**. By establishing energy conservation funds that support small scale projects promoting energy efficiency.
(vi) **Increased private sector participation**. By providing opportunities for private sector actors to participate (a) in support of operation and maintenance of the DISCOMs as required, (b) as private sector power producers (i.e., solar farms), and (c) through lease of distribution lines for private operations.

11. The MFF had two sets of outputs that varied across the tranches as follows:

(i) For tranches 1 and 3, outputs were mainly **transmission expansion**, which involved the construction of transmission lines for power evacuation, and strengthening of transmission systems.
(ii) For tranches 2, 4, 5, and 6, outputs were as follows:

    (a) **Distribution enhancement**. This was achieved through installation of high voltage distribution systems, installation of remote metering for either industrial or private consumers, renovation of substation protection system and customer service lines, strengthening of distribution system, metering of distribution transformers, along with the implementation of supervisory control and data acquisition.
    (b) **Provision of resource planning and management capability**. This was to be achieved by the installation of the enterprise resource planning system.

(c) **Computerization and automation of distribution system operations**. This was to be accomplished by providing computers for distribution system operations, monitoring and data collection.
(d) **Collection of system geographic information systems (GIS), consumer data and profiles**. This was achieved through implementing GIS surveys of the un-surveyed districts of the distribution system, and by updating consumer data on 480,000 connections.
(e) **Modernization of Business Management**. This was done by the installation of automated integrated business solution and related services.
(f) **Development of management information system for power trade function**. This was to be accomplished by installation of fully functioning power trading system by 2009.
(g) **Establishment of Energy Conservation Fund**. The fund was to be established by 2010, in accordance with the Energy Conservation Act of 2001.
(h) **Facilitation of private sector participation in distribution**. This was to be achieved through piloting strategic partnership modalities and expanding franchising scheme.
(i) **Financial sustainability of the power sector**. This was to be accomplished by transferring cash management responsibilities transferred to DISCOMs, recruiting independent directors at the board level, establishing board level committees (including audit and risk management committees), developing internal audit guidelines, recruiting internal controllers, establishing and implementing multi-year tariffs through DISCOMs, and achieving loss reduction targets agreed with MPERC.

12. As for the facility input, the total facility cost was appraised at $951.4 million, out of which $620 million was to be secured from the ADB's ordinary capital resources to support a time slice of India's energy sector road map to expand and rehabilitate the total transmission and distribution systems. The MFF included a proposed $25 million grant from the Department for International Development (DFID) of the United Kingdom focused on capacity building. However, this was later shifted to support a technical assistance cluster and parallel MFF that focused on gender inclusivity in the energy sector.[6]

13. According to the PCRs, the tranches within the MFF was categorized B for environment, C for involuntary resettlement, and C for indigenous peoples' safeguards, and complied with India's environment, social, health, and safety laws and regulations. The PPER will verify the following findings from the PCRs of safeguard compliance during the MFF implementation;

(i) The environmental management plan was implemented and ADB's Safeguard Policy Statement (2009) complied with over the life of the project.
(ii) Work involved existing distribution systems located along existing road alignments and rights-of-way.
(iii) Though new substations were constructed on unoccupied government land, there were no public complaints regarding the project's environmental, resettlement, and indigenous people aspects, nor were there were any safety issues reported.
(iv) There were no adverse environmental impacts noted during the pre-construction and construction phases.

[6] Footnote 5, p.1. DFID supported capacity development for a computerized system management by providing $20 million, while ADB co-funded an additional $10 million for the technical assistance.

14. According to the FCR, no analysis of the expected economic performance of the facility was undertaken and no overall economic internal rate of return (EIRR) was estimated during the MFF appraisal. As such, an aggregated assessment of the economic performance of each of the six tranches of the MFF was used to provide a weighted average EIRR based on the reevaluated EIRRs of each project included in PCRs for the MFF. The facility was rated efficient in achieving outcome and output as the aggregate of the six projects' EIRR for the overall MFF was estimated at 21.7% (on a weighted average basis), compared to 20.3% at appraisal, and as it was implemented within the original time period and budget.[7] The PPER will assess the soundness and accuracy of the EIRR methodology used in the FCR.

Table 2: Economic Internal Rate of Return for Madhya Pradesh Power Sector Investment Program

Tranche No.	Economic Capital Cost		Economic Internal Rate of Return (EIRR)	
	As Appraised (2015 base)	Actual (2015 base)	As Appraised (%)	PCR Reevaluation (%)
1	5,537.0	5,355.5	14.9%	20.6%
2	2,812.0	2,963.1	14.7%	18.5%
3	7,674.0	6,832.1	14.9%	19.3%
4	4,812.8	5,193.1	15.9%	21.5%
5	11,658.0	9,958.3	27.2%	25.3%
6	4,643.0	3,791.0	30.4%	22.0%
	Weighted averages		**20.3%**	**21.7%**

D. Major Findings from Completion Reports

15. **Overall Facility Rating.** According to FCR, all six tranches and entire facility were rated successful, based on the four criteria ratings of relevant, effective, efficient, and likely sustainable. However, the validation for tranche 1 of the MFF found that inadequate attention was paid during project formulation to the institutional aspects for the implementation of the MFF. Also, the project had a time overrun and lapses in implementing environmental and social safeguards in the initial years, making it less than efficient in tranche 1 and 2. The PPER will assess whether the lessons learned from these findings in the earlier tranches were successfully fed back to the later tranches to increase the effectiveness and impact of the facility as a whole.

16. **Environmental and Social Safeguards.** The participating institutions' priorities, commitment, and capacity to implement the crucial components, such as environmental and social safeguards were not adequately assessed, which is evident from the fact that the bulk of planned energy generation expansion in Madhya Pradesh would be coal-based.[8] Although the project was approved before ADB's 2009 Energy Policy took effect, ADB should have taken greater care in supporting energy projects to contribute to decarbonizing by not, directly or indirectly, funding coal-power generation. As the lapses on the environmental and social safeguards had caused the development impact of tranche 1 to be assessed as less than satisfactory,[9] the issue of the link between use of coal-based energy in this facility and ADB's support for a low carbon economy will need to be reviewed for this PPER.

[7] Footnote 5, p.66.
[8] Footnote 1, p.3.
[9] Independent Evaluation Department. 2015. *Validation Report: Multitranche Financing Facility – India Madhya Pradesh Power Sector Investment Program (Tranche 1)*. Manila: ADB.

17. **Lessons Learned.** According to the FCR, the facility demonstrated the benefit of the MFF approach whereby state level investment and reform roadmap was established and successive projects were implemented while helping train and build up implementation experience among the implementing agencies. The long-term partnership between the State and ADB, made possible through the MFF modality, helped modernize the electrical sector in the whole state and demonstrated the benefits of such focused relationships in successful implementation of sector road maps requiring more than a decade of commitment and investments of billions of dollars.

18. **Recommendation**. The following recommendations were made in the PCRs, and the PPER will check whether they were applied in subsequent tranches (where applicable):

(i) The project implementation schedule set during the appraisal of the MFF and tranches should be realistic by taking into account project preparedness, as has subsequently been adopted by ADB.
(ii) As this was the first MFF to the state of Madhya Pradesh, both the executing and implementing agencies should have applied the lessons learned in subsequent projects to reduce implementation times.
(iii) In cases where project consultants were not required, ADB should have provided close support to implementing agencies for the preparation and appraisal of their first projects under an MFF—as this would have required full involvement of the resident mission.
(iv) Senior managers in the end-user organizations needed to have been fully acquainted with ADB requirements for the smooth execution of the projects.
(v) ADB should consider supporting more distribution projects designed to maximize efficiency by reducing distribution system technical losses and metering programs to reduce non-technical losses.

E. Evaluation Scope and Approach

19. **Objectives.** The PPER aims to assess the performance and results of ADB's support under the MFF: Madhya Pradesh Power Sector Investment Program, identify issues and lessons, and provide recommendations for future ADB support in the Energy sector in India. The experience garnered will also be shared to enhance ADB's energy sector operations and MFF modality more broadly.

20. **Evaluation Questions**. The overarching question would be *To what extent and how has ADB contributed to the goal of supporting sustained economic growth and/or social development in the targeted rural areas through this MFF?* The evaluation questions will be as follows:

(i) *Does the EIRR used in the FCR correctly reflect the actual MFF's performance? Are there better alternative methods to approximate EIRR for the entire MFF?*
(ii) *What were the key contributing factors behind the undisbursed loans, especially in the latter half of the MFF (tranches 4–6)? How can one maximize the windfall from such factors in the future?*
(iii) *Do the PCRs' claims of safeguard compliance hold true throughout the implementation cycle?*

21. **Scope.** The PPER will assess project formulation, design, implementation, achievements, sustainability, and development impact. In particular, it will (i) assess the project's relevance, effectiveness, and efficiency in achieving its objectives and outputs, sustainability of outcomes, the institutional development, and socio-economic impacts; (ii) assess the performance of ADB,

project executing and implementing agencies, and other participating institutions; and (iii) identifying issues and lessons for future ADB operations to support energy sector.

22. **Methodology.** The PPER will use a mixed evaluation method of triangulating quantitative and qualitative information of various sources from the facility to the sector level. It will involve (i) a desk review of the project documents and other related background materials, (ii) a field mission to India to collect feedback from in-country stakeholders and additional data to fill in the information gaps identified during the desk review; and (iii) consultations with the project team in the ADB headquarters and in the India Resident Mission.

23. The desk review of project documents will include the project report and recommendation of the president, loan agreement, back-to-office reports, project midterm review report, ADB's board documents, the PCRs, and the PVRs. The review will also include pertinent ADB country and sector strategy for India at both appraisal and evaluation. During the field mission, the evaluation team will collect first hand perception and opinions through semi-structured interviews and discussions with key stakeholders in India. These will include concerned ministries and government agencies, the project executing and implementing agencies, project steering committee, project management unit, donor agencies, and relevant nongovernmental organizations. The evaluation team will also consider conducting a questionnaire-based survey of the distribution companies (DISCOMs) as well. The PPER will follow the IED's 2016 Guidelines for evaluation of Public Sector Operations. An indicative evaluation framework is presented in Appendix 3.

F. Data Sources

24. **Secondary data through desk review.** Secondary data sources include, among others, (i) ADB policies and strategies (e.g., Energy Policy 2009, Strategy 2030, Strategy 2020, Midterm review of Strategy 2020); (ii) ADB analytical reports; (iii) project documents (e.g., project report, back-to-office reports, midterm review reports, PCRs, and other development partners' reports); and (iv) IED evaluation studies (e.g., country program, thematic and corporate evaluations).

25. **Primary data through field observation and key informant interview**. Primary data will be gathered during consultations with staff from the South Asia Department and through an independent evaluation mission to India. Interviews will be conducted with staff from ADB operations including the resident mission; key sources/responsible officials/stakeholders in central and provincial government offices; staff of TRANSCO, DISCOM, MPERC, Madhya Pradesh Power Management Company Limited, the Ministry of Finance, Ministry of Power; beneficiaries at community levels; development partners (including DFID and World Bank); and other stakeholders. Field observations and interviews in selected project sites will be conducted to directly discuss with government counterparts and observe the condition of project outputs.

G. Tentative Schedule and Resources

26. The PPER will be carried out according to the following schedule, subject to approvals:

Table 3: Tentative Schedule for PPER of MFF - Madhya Pradesh Power Sector Investment Program

Activity / Milestone	Target Date
Approval of Evaluation Approach Paper	II–III August 2019
Independent Evaluation Mission in India	II–III September 2019
Analysis and Preparation of Draft PPER	IV September–III October 2019
Draft PPER for Interdepartmental and Government Review	IV October–I November 2019
Draft for Editor's Review	II–IV November 2019
Submission to Director, IETC	II December 2019
Approval of Director General, IED	III December 2019
Circulation	II January 2020

IED = Independent Evaluation Department, IETC = Thematic and Country Division, MFF = multitranche financing facility, PPER = project performance evaluation report.

27. The evaluation team will be undertaken by a team led by Eungji Kim (Senior Evaluation Specialist) and supported by Michelle Angieline Dantayana (Evaluation Assistant), a local consultant in India, and an international consultant with experience in energy sector evaluation. The evaluation report will be peer reviewed by two internal peer-reviewers, while overall guidance will be provided by the Director, Thematic and Country Division, IED. The time commitment for the PPER will be about 5–6 months intermittently.

H. DISSEMINATION OF FINDINGS

28. The PPER will be available to the public after approval by the Director General, IED, as it will be uploaded on ADB's external and internal websites and provide inputs to ADB's evaluation information system.

Appendixes:
1. Basic Project Data of the MFF
2. Summary Ratings of the MFF
3. Indicative Evaluation Framework

Supplementary Appendixes (available upon request):
A. Terms of References for International and National Consultants
B. Cost Estimates

BASIC PROJECT DATA – MFF 11: MADHYA PRADESH POWER SECTOR INVESTMENT PROGRAM

Tranche No.	Loan No.	Total Project costs (actual)	Foreign Exchange Cost (actual)	Local Currency Cost (actual)	Key Dates								Months (effective to closing)
					Appraisal	Loan Negotiation	Loan Approval	Loan Agreement	Loan Effective (agreement)	Loan Effective (actual)	Closing (agreement)	Closing (actual)	
1	**2323-IND**	**132.5** (114.05)	**106.0** (97.27)	**26.5** (16.78)	12 DEC ~ 14 DEC 2006	19 FEB ~ 20 FEB 2007	04 APR 2007	12 APR 2007	14 MAY 2007	11 JUL 2007	30 JUN 2011	30 JUN 2012	**62**
2	**2324-IND**	**65.7** (64.30)	**45.0** (40.75)	**20.7** (23.55)	12 DEC ~ 14 DEC 2006	19 FEB ~ 20 FEB 2007	04 APR 2007	12 APR 2007	14 MAY 2007	11 JUL 2007	30 SEP 2011	15 JUL 2013	**75**
3	**2346-IND**	**197.8** (176.10)	**144.0** (141.91)	**53.8** (34.19)	12 DEC ~ 14 DEC 2006	16 AUG ~ 17 AUG 2007	21 AUG 2007	23 AUG 2007	21 NOV 2007	24 DEC 2007	31 DEC 2011	16 SEP 2013	**71**
4	**2347-IND**	**159.7** (81.81)	**90.0** (74.16)	**69.7** (7.65)	12 DEC ~ 14 DEC 2006	16 AUG ~ 17 AUG 2007	21 AUG 2007	07 MAR 2008	05 JUL 2008	11 JUN 2008	31 DEC 2011	1 MAY 2014	**71**
5	**2520-IND**	**270.2** (163.80)	**166.0** (134.02)	**104.2** (29.79)	12 DEC ~ 14 DEC 2006	31 MAR ~ 1 APR 2009	13 APR 2009	27 MAY 2009	25 AUG 2009	07 SEP 2009	30 JUN 2013	22 JUL 2015	**72**
6	**2732-IND**	**125.50** (81.23)	**69.0** (55.36)	**56.50** (25.87)	12 DEC ~ 14 DEC 2006	10 DEC 2010	21 DEC 2010	10 MAY 2011	8 AUG 2011	29 JUN 2011	30 JUN 2014	26 JUN 2015	**47**

Tranche No.	MFF-related Mission Data													
	Fact-Finding		Appraisal		Total Project Administration		Consultation / Inception		Loan Review		Special Loan Administration		Midterm / Completion Review	
	No. of Missions	Person-days	No. of Missions	Person-days	No. of Missions	Person-days	No. of Missions	Person-days	No. of Missions	Person-days	No. of Missions	Person-days	No. of Missions	Person-days
1	**1**	**45**	**1**	**29**	**12**	**150**	1	5	8	85	2	30	1	5
2	**1**	**45**	**1**	**29**	**14**	**163**	1	30	9	90	2	30	2	13
3	**1**	**45**	**1**	**15**	**12**	**151**	1	30	8	85	2	30	1	6
4	**1**	**45**	**1**	**5**	**12**	**100**	3	24	6	50	2	10	1	16
5	**1**	**45**	**1**	**15**	**13**	**111**	2	21	7	44	2	20	2	26
6	**1**	**45**	**1**	**15**	**7**	**51**	2	8	4	23	-	-	1	20

Source: ADB - PCR (Project Completion Reports) for each corresponding tranches.

SUMMARY RATINGS - MFF 11: MADHYA PRADESH POWER SECTOR INVESTMENT PROGRAM

	Facility	Tranche 1		Tranche 2		Tranche 3		Tranche 4		Tranche 5		Tranche 6
Criteria	**PCR**	PCR	PVR	PCR	PVR	PCR	PVR	PCR	PVR	PCR	PVR	PCR
Relevance	**Relevant**	Highly Relevant	Relevant	Relevant	Relevant	Relevant	Relevant	Relevant	Relevant	Relevant	Relevant	Relevant
Effectiveness	**Effective**	Effective	Effective	Effective	Effective	Effective	Effective	Less than Effective	Less than Effective	Effective	Effective	Effective
Efficiency	**Efficient**	Efficient	Less than Efficient	Efficient	Less than Efficient	Efficient	Efficient	Efficient	Efficient	Efficient	Efficient	Efficient
Sustainability	**Likely Sustainable**	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable	Likely Sustainable
Overall Assessment	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**	**Successful**
Development Impact	**Satisfactory**	Satisfactory	Less than Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Performance of Borrower & Executing Agency	**Satisfactory**	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Performance of ADB	**Satisfactory**	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

PCR = Project Completion Report, PVR = Validation of Project Completion Report.

INDICATIVE EVALUATION FRAMEWORK

Evaluation Criteria	Evaluation Scope / Criteria	Indicators/Information Required	Sources of Information	Method
Relevance	• Consistency with the country's development priorities • Consistency with ADB's country and sector strategies • Appropriateness of project design	• Project design and framework • Process followed in design formulation • Project outputs and outcomes • Overall project performance	• Board and management meeting minutes • RRP, PCRs (ADB and Government), BTORs and other project documents • Discussions with EA, IAs, participating organizations, and concerned ADB staff	• Desk review of pertinent project documents • Key informant interviews (qualitative, in-depth and semi-structured) • Analysis of project performance indicators
Effectiveness	• Extent that project outcomes/targets as defined in the design and monitoring framework were achieved • Factors responsible for non-achievement and/or achievement of expected outcomes • Influence of the implementation arrangements and processes on project outputs and outcomes • Role of overall economic, policy and institutional environment in affecting project outcomes	• Project targets, expected outcomes vs. actual performance • Views of stakeholders	• Project performance reports • RRP, PCRs (ADB and Government), BTORs and other project documents • Discussions with EA, IAs, participating organizations, and concerned ADB staff • Pertinent secondary data from government sources	• Desk review of pertinent project documents and reports • Key informant interviews (qualitative, in-depth and semi-structured) • Analysis of project actual performance vis-à-vis targets and expected outcomes
Efficiency	• Assessment of how well project resources were used in achieving the outcomes • Efficiency of implementation processes and arrangements • Timeliness of financing	• Efficiency indicators • Loan utilization indicators • Appropriateness of implementation arrangements and processes • Financing and disbursements timeline	• Performance and portfolio reports of IAs and participating organizations • PCRs, BTORs and other project documents/reports • Financial statements of implementing and participating agencies • Discussions with EA, IAs, participating organizations, and concerned ADB staff	• Estimation and analysis of efficiency indicators • Key informant interviews • Desk review of pertinent documents and reports
Sustainability	• Continued relevance of both the tranches and facility at the time of evaluation • Likelihood of human, institutional, financial resources, and etc. being sufficient for sustained outcomes attributable to the project • Continued support from stakeholders • Institutional capacity and viability to sustain project outcome • Conducive policy environment	• Sustainability indicators (portfolio quality, financial sustainability ratios) • Continued interest of stakeholders to support project outcomes • Capacity and sustainability of implementing agencies in continuing their guarantee/fund operations • Policy reforms and infrastructure instituted	• Performance and operations reports of implementing and participating agencies • Financial statements of implementing and participating agencies • Discussions with EA, IAs, participating organizations, and concerned ADB staff	• Estimation and analysis of sustainability indicators • Key informant interviews • Desk review of pertinent documents and reports

Evaluation Criteria	Evaluation Scope / Criteria	Indicators/Information Required	Sources of Information	Method
Performance of Executing and Implementing Agencies	• Quality of preparation • Quality of implementation • Adequacy of monitoring, evaluation and reporting	• Degree of ownership and involvement in identification and design formulation • Support for policy development and infrastructure • Adequate institutional arrangements for project implementation • Covenants complied with. • Monitoring, evaluation and reporting system instituted and operated.	• Discussions with EA, IAs, participating organizations, and concerned ADB staff • ADB performance data/reports.	• Key informant interviews • Review of pertinent documents and reports (BTORs, etc.)
Performance of ADB	• Quality of design and at entry • Quality of supervision	• Relevant economic, institutional and stakeholder analysis for establishing project rationale • Assessment of project risks and incorporation of lessons learned • Effective monitoring and evaluation system and clear reporting arrangements • Adequacy of supervision • Responsiveness to project issues and requests for changes during implementation	• Discussions with EA, IAs, participating organizations, and concerned ADB staff • ADB staff reports	• Key informant interviews • Review of pertinent documents and reports (BTORs, etc.)
Impact	• Socioeconomic, institutional and policy impact • Sector impacts	• Evidence of sustained economic growth and/or social development in the targeted rural areas due to intervention (i.e. increased agricultural outputs) • Measure of energy cost reduction due to better efficiencies and lower maintenance costs • Measure of reduction in energy deficits and/or increase in energy surplus due to intervention • Evidence of sustained sector reform / development / improvements resulting from intervention	• ADB data, performance and mission reports • Project reports and records • Discussions with EA, IAs, participating organizations, and concerned ADB staff • Government sources for legal and regulatory changes undertaken • Surveys conducted by the project and other institutions	• Key informant interviews • Direct observation through field visits/interviews • Review of impact assessment surveys

ADB = Asian Development Bank, BTOR = back-to-office report, EA = executing agency, IA = implementing agency, RRP = report and recommendation of the President, PCR = project completion report.
Source: Evaluation team