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Report No: ICR00004510

IMPLEMENTATION COMPLETION AND RESULTS REPORT

Cr. 49430-IN/TF096651

ON A

CREDIT IN THE AMOUNT OF SDR 9,800,000 (US$15.36 MILLION EQUIVALENT)
AND
GLOBAL ENVIRONMENT FACILITY GRANT IN THE AMOUNT OF US$8.14 MILLION

TO THE

REPUBLIC OF INDIA

FOR THE

Biodiversity Conservation and Rural Livelihoods Improvement Project
{September 25, 2018}

Environment & Natural Resources Global Practice
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective {Jul 06, 2018})

Currency Unit	=	INR
INR 68.89	=	US$1
US$1.41	=	SDR 1

FISCAL YEAR
April 01 – March 31

Regional Vice President:	Hartwig Schaffer
Country Director:	Junaid Kamal Ahmad
Senior Global Practice Director:	Karin K. Kemper
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Task Team Leader(s):	Anupam Joshi, Jiang Ru
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ABBREVIATIONS AND ACRONYMS

ALS	Agasthyamalai Landscape
APO	Annual Plan of Operations
AWS	Askot Wildlife Sanctuary
BCRLIP	Biodiversity Conservation and Rural Livelihood Improvement Project
BT	Benefits Transfer
CAGR	Compounded Annual Growth Rate
CAS	Country Assistance Strategy
CEC	Central Empowered Committee
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
CSO	Civil Society Organization
DEA	Department of Economic Affairs
EDC	Eco-Development Committee
FGD	Focus Group Discussion
FLC	Field Learning Center(s)
FM	Financial Management
FMR	Financial Management Report
GAAP	Governance and Accountability Action Plan
GEER	Gujarat Ecology, Environment and Research
GEF	Global Environment Facility
GEO	Global Environmental Objective
GNP	Gir National Park
GOI	Government of India
GTI	Global Tiger Initiative
Ha	Hectare
IA	Implementing Agency(ies)
ICR	Implementation Completion and Resutls Report
IDA	International Development Association
INR	Indian Rupees
IPF	Investment Project Financing
IRR	Internal Rate of Return
ISR	Implementation Status and Results Report
KMTR	Kalakad Mundanthurai Tiger Reserve
LRK	Little Rann of Katchh
M&E	Monitoring and Evaluation
MEE	Management Effectiveness Evaluation
METT	Management Effectiveness Tracking Tool
MIS	Management Information System
MOEFCC	Ministry of Environment, Forest and Climate Change
MP	Madhya Pradesh
MS	Moderately Satisfactory
MTR	Mid Term Review
MU	Moderately Unsatisfactory

NPV	Net Present Value
NTCA	National Tiger Conservation Authority
NTFP	Non-Timber Forest Product
OP/BP	Operational Policy/Bank Procedure
PA	Protected Area(s)
PCR	Project Completion Report
PDO	Project Development Objective
PMU	Project Management Unit
PPR	Post Procurement Review
PRA	Participatory Rural Assessment
PSC	Project Steering Committee
PTR	Periyar Tiger Reserve
SFM	Sustainable Forest Management
SHG	Self Help Group
STEP	Systematic Tracking of Exchanges in Procurement
STR	Satpura Tiger Reserve
TN	Tamil Nadu
TPRM	Tri-Partite Portfolio Review Meeting
TTL	Task Team Leader
US$	United States Dollar
VCC	Village Conservation Committee
VFC	Village Forest Committee
WII	Wildlife Institute of India

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P088520	Biodiversity Conservation and Rural Livelihoods Improvement
Country	**Financing Instrument**
India	Investment Project Financing
Original EA Category	**Revised EA Category**
Partial Assessment (B)	Partial Assessment (B)

Related Projects

Relationship	Project	Approval	Product Line
Supplement	P088598-Biodiversity Conservation and Rural Livelihoods Improvement	17-May-2011	Global Environment Project

Organizations

Borrower	Implementing Agency
Ministry of Environment and Forests	Wildlife Institute of India, Gir Lion Society, BCRLIP Landscape Society LRK, Satpura Tiger Foundation Madhya Pradesh, BCRLIP Landscape Society Askot, Satpura Tiger Foundation Maharashtra, KMTR Tiger Foundation, Periyar Tiger Foundation

Project Development Objective (PDO)

Original PDO

To develop and promote new models of conservation at the landscape scale1 through enhanced capacity and institution building for mainstreaming biodiversity conservation outcomes.

Achieving this objective would involve the demonstration and scaling up of landscape conservation approaches. This would specifically involve tools and techniques improvements, and knowledge and capacity building tosupport multi-stakeholder partnerships to mainstream biodiversity conservation. It would also involve improving rural livelihoods, enhancing learning, and replicating successful participatory conservation models at the landscape scale.

PDO as stated in the legal agreement

To develop and promote new models of conservation at the landscape level through enhanced capacity and institution building for mainstreaming biodiversity conservation outcomes.

FINANCING

	Original Amount (US$)	Revised Amount (US$)	Actual Disbursed (US$)
World Bank Financing			
P088520 IDA-49430	15,360,000	15,360,000	3,170,222
P088598 TF-96651	8,140,000	8,140,000	5,341,218
Total	**23,500,000**	**23,500,000**	**8,511,440**
Non-World Bank Financing			
Borrower	6,590,000	0	0
Local Communities	930,000	0	0
Total	**7,520,000**	**0**	**0**
Total Project Cost	**31,020,000**	**23,500,000**	**8,511,440**

KEY DATES

Project	Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
P088520	17-May-2011	13-Jul-2011	27-Feb-2015	31-Mar-2018	31-Mar-2018
P088598	17-May-2011	13-Jul-2011	27-Feb-2015	31-Mar-2018	31-Mar-2018

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US$M)	Key Revisions

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Moderately Unsatisfactory	Moderately Unsatisfactory	Negligible

RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US$M)
01	22-Sep-2011	Satisfactory	Satisfactory	1.50
02	11-Mar-2012	Satisfactory	Satisfactory	1.51
03	08-Oct-2012	Satisfactory	Moderately Satisfactory	1.52
04	25-Apr-2013	Moderately Satisfactory	Moderately Unsatisfactory	1.54
05	19-Aug-2013	Moderately Satisfactory	Moderately Satisfactory	1.54
06	10-Mar-2014	Moderately Unsatisfactory	Moderately Unsatisfactory	1.84
07	16-Sep-2014	Moderately Unsatisfactory	Moderately Unsatisfactory	1.91
09	07-Jun-2015	Moderately Unsatisfactory	Moderately Unsatisfactory	2.02
10	21-Dec-2015	Moderately Unsatisfactory	Moderately Unsatisfactory	2.22
11	19-Apr-2016	Moderately Unsatisfactory	Moderately Unsatisfactory	2.41
12	22-Nov-2016	Moderately Unsatisfactory	Moderately Unsatisfactory	2.58
13	09-Jun-2017	Moderately Unsatisfactory	Moderately Unsatisfactory	2.67
14	07-Dec-2017	Moderately Unsatisfactory	Unsatisfactory	3.17
15	29-Mar-2018	Moderately Unsatisfactory	Unsatisfactory	3.17

SECTORS AND THEMES

Sectors

Major Sector/Sector	(%)
Agriculture, Fishing and Forestry	**89**
Public Administration - Agriculture, Fishing & Forestry	20
Forestry	69
Social Protection	**11**
Social Protection	11

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3)	(%)
Private Sector Development	**100**
Jobs	100
Urban and Rural Development	**7**
Rural Development	7
Land Administration and Management	7
Environment and Natural Resource Management	**91**
Environmental Health and Pollution Management	21
Air quality management	7
Water Pollution	7
Soil Pollution	7
Renewable Natural Resources Asset Management	53
Biodiversity	46
Landscape Management	7
Environmental policies and institutions	17

ADM STAFF		
Role	**At Approval**	**At ICR**
Regional Vice President:	Isabel M. Guerrero	Hartwig Schafer
Country Director:	N. Roberto Zagha	Junaid Kamal Ahmad
Senior Global Practice Director:	John Henry Stein	Karin Erika Kemper
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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

1. **The project rightly recognized that India's rich biodiversity is threatened due to high degree of people's dependence and over-exploitation.** India is recognized as one of the twelve mega-diverse countries in the world with about 10% share of the global biodiversity. Much of India's rich biodiversity is deeply enshrined within its traditions and cultural heritage. Over 100 million people, mostly schedule tribes, living in and around forests depend on them for their daily subsistence and livelihoods. This is reflected in high levels of collection of firewood and fodder; unsustainable extraction of non-timber forest products (NTFP), poaching and illegal wildlife trade. As a result, there is loss of forest cover, erosion of land productivity and reduction of biodiversity.

2. **The project's assumption that the Protected Area (PA) network in India is facing clear constraints to the viability and effectiveness of conservation, was well founded.** Government of India (GOI) has established a network of more than 500 PAs across different ecosystems and bioregions to conserve the country's unique biodiversity and natural habitats. However, these are largely managed as "islands" surrounded by other forms of land uses that are often not compatible with conservation goals and outcomes. In addition, there are extensive areas of remaining natural habitat, especially forests, which harbor rich biodiversity surrounding the existing PA network, that are not managed for conservation outcomes. The lack of an integrated land and natural resource use focus has constrained conservation strategies to systematically reduce threats to biodiversity conservation. The project sought to address this by way of introducing and piloting the landscape approach for conservation. There is also significant difference of opinion[1] in the country with regards to the government strategy for establishment of protected areas, particularly in relation to curtailment of access to resources within these areas.

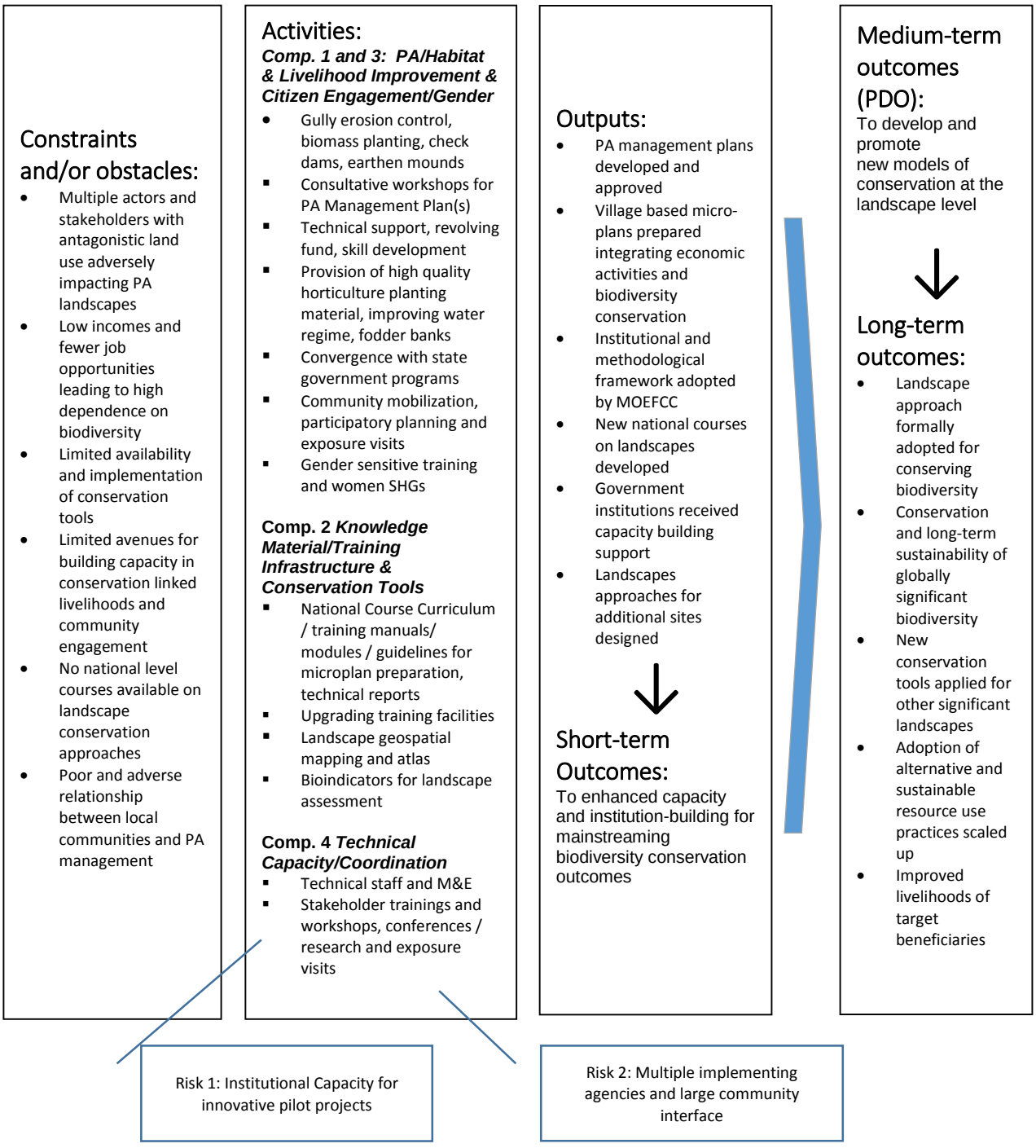
3. **The project was prepared at the request of the Government of India (GOI) to support its urgent call for action on biodiversity conservation.** Established by the Prime Minister's Office in 2005, a special Task Force of eminent scientists and environmentalists recommended a comprehensive set of conservation actions and highlighted the need to mainstream conservation and livelihood concerns within larger production systems that are adjoining protected areas. Under this context, BCRLIP was prepared to test the GOI approach of mainstreaming conservation objectives within landscapes selected through wide stakeholder consultation and to better understand how to improve the management of PAs in consonance with improved local community access to resource and other livelihood options.

4. **The World Bank's global leadership on biodiversity conservation provided the rationale and opportunity to innovate and introduce the landscape approach.** The rationale for Bank support for the project was strong. The World Bank has been a major financier of biodiversity projects globally. The project built on experiences gained under the Bank-supported eco-development and forestry projects in India, involvement of local institutions under a suite of watershed projects and lessons from several rural livelihood projects working on aggregation through self-help groups. Combining this with experience from other countries uniquely positioned the Bank to pilot and replicate landscape approach within the framework of sustainable land and natural resource management.

[1] One stream of opinion promotes 'inviolate' area approach, whereas another advocates the 'co-existence' approach.

Theory of Change (Results Chain)

5. The theory of change is presented in Figure 1 below[2].



[2] Figure 1 presents a summary of major outputs. The project delivered many more and are featured in Annex 1B

Project Development Objectives (PDOs)

6. The PDO, as given in the legal agreement, was *to develop and promote new models of conservation at the landscape level through enhanced capacity and institution building for mainstreaming biodiversity conservation outcomes*. The PDO as given in the PAD is slightly different from that of the legal agreement in terms of using the word 'scale' in place of 'level'. The rest of the PDO statement is similar.
7. The Project also had a Global Environmental Objective (GEO), which was *to enhance the conservation of globally significant biodiversity and ensure its long-term sustainability by promoting appropriate conservation practices in biodiversity-rich landscapes*.

Key Expected Outcomes and Outcome Indicators

8. The PDO has two objectives against which it is rated. In Annex 3 the PAD on Results Framework and Monitoring, there are differences in wording of indicators between table on pages 26-28 and table on pages 31-35. The latter table has been used for this ICR.

   PDO objective 1: Develop new models of conservation at the landscape level

   Outcome indicators:

- Landscape conservation approach successfully adopted in two landscape sites
- Institutional and methodological framework and guidelines for landscape conservation approaches developed and tested in high biodiversity landscapes
- Population of key indicator species/umbrella species stable or improving within PAs (this indicator measured the GEO)
- Areas brought under enhanced biodiversity protection (this indicator was added in December 2012)

   PDO objective 2: Promote new models of conservation at the landscape level

   Outcome indicators:

- At least 600,000 hectares within landscapes more effectively managed for conservation outcomes
- Government institutions provided with capacity building to improve management of forest resources (this indicator was added in December 2012)
- Forest area brought under management plans (this indicator was added in December 2012)

Components

9. **Component 1: Demonstration of Landscape Conservation Approaches in Two Pilot Sites (Total project costs: US$13.11 million of which US$3.12 million from GEF and US$6.73 from IDA; disbursed US$3.43 million).** This component focused on developing tools, techniques, knowledge and skills towards improved conservation and rural livelihoods outcomes in the two landscapes of Little Rann of Kutch in Gujarat and Askot in Uttarakhand. These landscapes included protected areas, biological corridors, and high-value conservation sites in production landscapes. As part of the demonstration and learning effort, this component supported: (a) Participatory ecological and social mapping to identify areas of high biodiversity value and resource

dependencies and threats; (b) Improved management of biodiversity rich areas within and outside the protected areas in the landscape through planning and skills development, boundary demarcation, habitat management, research and awareness etc.; (c) Mainstreaming of biodiversity considerations in production areas within the landscapes through dialogue and collaboration with sectoral agencies; and (d) Development and implementation of livelihood strategies to enhance local community benefits from sustainable management of natural resources linked to conservation. This component supported the preparation of village micro-plans, investments to improve local livelihoods and reduce dependencies on forest resources, participatory monitoring, and community institutional development.

10. **Component 2: Strengthening Knowledge Management and National Capacity for Landscape Conservation (Total project costs: US$6.22 million of which US$2.49 million from GEF and US$2.28 from IDA; disbursed US$2.20 million).** This component supported improved knowledge and capacity building based on learning and experience from the two demonstration landscapes (in Component 1) and other local conservation models. It was envisaged that the training and skills development in Component 2 would likely encourage the uptake of landscape-level planning and management at additional capacitated sites with GOI or other non-project sources of funding. There were two sub-components supporting the Field Learning Centers (FLC) and a national capacity-building program.

    (a) The Field Learning Centers at Periyar (Kerala), Kalakad (Tamil Nadu), and Gir (Gujarat) provided hands-on training through cross visits, exchange assignments, work experience and training sessions, and distillation of conservation best practice. Each of the three learning centers specialized in specific topics based on their comparative advantages[3] and experiences and provided training to staff from project landscapes and other parts of the country.

    (b) The national capacity-building program operated through the Wildlife Institute of India (WII) to facilitate the promotion of landscape conservation approaches nationwide. This sub-component supported developing the national curriculum with specific modules for training that drew on and distilled good practices from the two pilot sites (in Component 1) and the three field learning centers [in Component 2 (a)] as well as other successful conservation initiatives in the country. The training was delivered to different target audiences, namely policymakers, senior and mid-level forestry and wildlife staff, range forest officers, and other development sector agencies to build capacity and support for landscape conservation; and development of operational manual and guidelines for promotion of landscape approaches.

11. **Component 3: Scaling Up and Replication of Successful Models of Conservation in Additional Landscapes (Total project costs: US$7.57 million of which US$2.06 million from GEF and US$3.28 from IDA; disbursed US$3.10 million).** This component supported further testing and replication of landscape conservation approaches to two additional high biodiversity landscapes from the third year onwards with project financing. The extension of the landscape approach to these two additional landscapes was to build on, and expand experiences derived from the two demonstration landscapes (in Component 1) utilizing capacity-building effort (in Component 2). The selection of the two additional sites was based on the criteria covering: (a) global biodiversity importance; (b) level of pressures or threats on these biological resources: (c) local interest and

[3] Periyar FLC – Private-Public Cooperation, Sustainable Financing of Community Livelihoods and Community Organization Building; Kalakad FLC – Community Mobilization, Participatory Monitoring and Management of Community Revolving Fund; Gir FLC – Regional Planning and Multi-Sectoral Coordination

support for conservation; (d) state of readiness or preparedness for landscape management; and (e) value addition in terms of providing new learning and experience in landscape conservation.

12. **Component 4: National Coordination for Landscape Conservation (Total project costs: US$4.12 million of which US$0.48 million from GEF and US$3.06 from IDA; disbursed US$0.24 million).** This component was for supporting the coordination for landscape conservation at the Ministry of Environment and Forests (MOEF; now MOEFCC). It was to establish a Management Information System (MIS) for project and landscape monitoring, impact evaluation, and limited operational and technical support to enable MOEFCC to coordinate and administer the implementation of project activities and facilitate replication elsewhere in India. This component also supported preparation activities for the two additional landscape sites to be supported under the Project (in Component 3). It was to support the establishment of a national communication system for the Project, undertake policy and legal studies relating to conservation, impact assessment and review, and third-party monitoring of the Project. A Project Management Unit (PMU) was established in MOEFCC to carry out these functions.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

Revised PDOs and Outcome Targets

13. PDO and outcome targets remained unchanged throughout the implementation.

Revised PDO Indicators

14. While no changes were made to the original PDO indicators, three PDO and GEO as well as three intermediary indicators were added to the results framework in December 2012. These were the core sector indicators of the Bank and were added without any formal restructuring.

Revised Components

15. Components remained unchanged throughout the implementation.

Other Changes

16. **Change in fund flow arrangements.** The originally agreed fund flow arrangements, as noted in the legal agreement, were changed unilaterally by the borrower. In the original design, funds were directly released from the MOEFCC to the Implementing Agencies. In the altered arrangements, funds from MOEFCC were released to the State Government (treasury), which then transferred the funds to the Implementing Agencies.

Rationale for Changes and Their Implication on the Original Theory of Change

17. The fund flow was changed due to a Government Order from the Ministry of Finance directing all budget funded activities to be routed through the State Government treasury. The changed fund flow arrangements were not approved through a formal restructuring. This had the following implications on the original theory of change, which also adversely affected the achievement of results:

- Slowed down the pace of implementation by delaying release of funds to the implementing agencies; An analysis of funds flow revealed that routing funds through State Governments added up to 12 months delay.
- Reduced the time for implementing the project activities.

- Reduced the amount of funds assigned for activities by deducting 10% flexi funds[4] by the State Government.
- Constrained the independent working of the Implementing Agencies.

II. OUTCOME

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

Rating **High**

18. **The project was implemented during two country strategies and an upcoming country partnership framework and is highly relevant with each.** With respect to biodiversity conservation and linked-livelihoods, the circumstances and challenges in the country did not change much during project implementation. Even though the country witnessed the expansion of the PA network and a reduction in the number of poor people, the dependence on biodiversity resources remained high, especially in rural and remote forest fringe communities. The recently unveiled wildlife strategy (in October 2017) of the country makes direct reference to the application of the landscape approach, which was piloted under this project. The relevance of the PDO with the three country strategies remain established below:

- ***Country Assistance Strategy (CAS-FY09-12).*** The PDO directly supported its second pillar on 'ensuring sustainable development' by working for improving livelihoods in high biodiversity landscapes.
- ***Country Partnership Strategy (CPS-FY13-17).*** The PDO was relevant to the engagement area 2 – 'transformation'. It contributed directly to the achievement of the CPS Outcome and Indicator 2.5 (Additional 500,000 hectares brought under enhanced biodiversity protected area management).
- ***Country Partnership Framework (CPF-FY18-22).*** By improving biodiversity-based livelihoods, sustainable management of biodiversity-rich landscapes, emphasizing on gender aspects and inclusion and investing in adoption of new processes and technology for promoting efficiency and sustainability of using natural resources, the PDO continues to be highly relevant to the upcoming CPF, which has 'resource efficient growth', as a focus area.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

Rating **Modest**

19. The first objective of the PDO "to develop new models of conservation at the landscape level" has been assessed as partially achieved. The last ISR rated this as Moderately Unsatisfactory. The following outcomes were realized:

- The project succeeded in developing new participatory landscape-approach conservation models. But these could not be technically documented and fully tested at the scale needed to confirm their success, across all four landscapes supported by the project.

[4] Funds retained by the State Government for investing in any activity, as deemed necessary by the State

- Four new models[5] emerged: (i) Decentralized Planning and Mainstreaming Centric; (ii) Traditional Institutions and Local Governance Centric; (iii) Community Participation and Financial Inclusion Centric; and (iv) Convergence Centric.

- The project contributed to improving the existing conservation planning tools. Adoption of these tools is yet to happen for informing the management of these landscapes, as well as their use by other landscapes.
  - An Institutional and Methodological Framework and Guidelines for Landscape Conservation Approach has been drafted but not finalized. It is yet to be approved and adopted by MOEFCC.
  - Geospatial technology was deployed for mapping and preparing high resolution habitat and wildlife distribution maps for the Landscape Atlas for two project landscapes.
  - Camera-traps were used for monitoring population of globally significant biodiversity.
- Improvement of rural livelihoods remained limited due to inadequate financing and only partial implementation of the microplans prepared through project support, as well as lack of partnerships with specialized livelihood support agencies around dairy, forest produce, agriculture and other natural resources.
  - Over 400 microplans with identified investments of about US$ 7 Million (31% of total project cost) were developed but actual investment fell significantly short of targets (less than US$3 Million spent).
  - Alternative livelihoods were promoted but the scale remained low. About 500 youth were trained in hospitality services and about 350 are currently gainfully employed for over a year.
  - Sustainable resource use practices, such as, production and use of organic fertilizers, gravity-based water storage and harvesting, sustainable forestry management (SFM) practices, etc. were introduced. The beneficiary feedback survey and anecdotal reporting indicates that about 10% user groups have adopted sustainable use practices, but no evidence-based assessment was carried out at the landscape sites.

20. The second objective of the PDO “to promote new models of conservation at the landscape level”, has been assessed as partially achieved. The last ISR rated it as Moderately Unsatisfactory. The following outcomes were realized:

- The promotion, replication and scaling up a landscape-approach based conservation models was taken up in two other project areas. In addition, the landscape approach was promoted in other areas without project funding. Full adoption of these could not happen.
  - Government of Gujarat has replicated some of the elements of the landscape approach for two other landscapes within their state from their own budgetary resources.
  - Satpura landscape (in Madhya Pradesh) successfully established formal multi-stakeholder partnerships and tested preparation of district developmental plans with mainstreaming of biodiversity concerns in project landscapes.
- The project successfully developed institutional capacity (of target institutions). However, implementation capacity remained weak in creating and operationalizing a multi-stakeholder institutional platform at the landscape level, and building of multiagency partnerships for biodiversity mainstreaming.

[5] The new landscape approach-based conservation models are described in the tenth Implementation Support Mission Aide Memoire (January 15 – February 09, 2018), paragraph #5(a)

  - Capacity for participatory conservation approaches for holding stakeholder consultations and community mobilization was built well. As a result, beneficiary numbers exceeded the original target (25,000 against 5,000).
  - Capacity for preparing participatory microplans and promoting convergence with Government schemes and programs was built well. Two rounds of training were provided to the spearhead teams.
- Capacity of the three Field Learning Centers was substantially built for developing and delivering training on specific thematic topics, such as, human-wildlife conflict and animal rescue, village microplanning, natural resource based livelihoods, regional planning and conservation, management of community revolving fund, etc. Over 10,000 individuals from Government Departments and Agencies and project beneficiaries, including some officials from non-project landscapes were trained at these FLCs during project implementation.
- New knowledge was generated and technical and managerial capacity of the landscape societies was built within the landscapes. Societies at Satpura, Gir and Agasthyamalai landscapes are well established and will face no challenges in sustaining the good work they could undertake during implementation. However, after close of the project, the sustainability of some of the other such societies is uncertain.

Justification of Overall Efficacy Rating

21. The overall efficacy rating is **Modest**, as the intended objectives and outcomes were only partly achieved.

- **New conservation models were developed through project support and piloted at a scale smaller than what was envisaged in the original project design.** As such, these models were not fully tested and technically documented at the scale needed to confirm their success. This also limited the full adoption of these models in other landscapes and thus did not allow promotion and full adoption of these models under and beyond the project.
- **Gains were made through proactive mobilization of community stakeholders but limited by insufficient project support.** Financial resources for implementing the microplans activities remained substantially low. On an average, the project received only 30% to 40% funds against what were required for a full-scale implementation. This resulted in fragmented gains/results at piloted landscape sites.
- **Innovative Landscape Societies were successfully established but their roles in project implementation could be further strengthened.** Currently, the societies established were mostly subjected to State Government rules and regulations, which slowed implementation. Some of these Societies may face issues related to their sustenance beyond the project period.

C. EFFICIENCY

Assessment of Efficiency and Rating

Rating **Modest**

22. **The economic and feasibility analysis conducted at the appraisal stage did not monetize the biodiversity benefits and Internal Rate of Return (IRR).** No baseline data and counterfactuals were established in the beginning of the project for quantifying the benefits and no methodology was applied for assigning weights to various benefits that the project envisaged. The estimation of economic benefits for the efficiency analysis is

difficult to contextualize with the incremental cost analysis done at appraisal. The ICR notes that lack of adequate data on project performance against results framework and other indicators hinders the full assessment of efficiency of the project and makes it difficult to analyze the project outcomes in economic terms. The efficiency analysis, therefore, looks into benefits that can and cannot be monetized and estimates the NPV and IRR for specific investment activities with measurable outputs.

23. **The IRR is estimated at around 14 percent for the benefits considered for this efficiency analysis.** The efficiency analysis quantifies the benefits and come up with an IRR for the funds invested on a certain set of activities for which outcome data is available confirming livelihood improvements. In terms of expenditure, only 40% of committed funds were disbursed (about 23% of IDA credit and about 65% of GEF grant). The scale of outcomes achieved is lower than anticipated at appraisal. Some of the assumptions made in the efficiency analysis factors in the disbursement figures in discounting the monetized outcomes. Based on the projections for the next 10 years and a discount rate of 12%, the Net Present Value (NPV) is INR 3.03 crores (US$0.44 Million) for which the economic efficiency can be considered modest. The IRR and NPV are based on four investment activities – (i) cash crops; (ii) honey production; (iii) revenue realized from park entry fee; and (iv) job placements following skill training. The details of efficiency analysis are provided in Annex 4.

24. **Protected Areas within project landscapes provide valuable ecosystem services, some of which can be monetized.** Protected areas in India are known to provide a range of ecosystem services that underpin the economic growth in their geography. These services include water provisioning to downstream areas, water purification, carbon sequestration, refugia for wildlife, soil amelioration and productivity, pollination services, fodder services in buffer areas, recreational and cultural services etc. A recent study[6] in India provided quantitative and qualitative estimates for as many as 25 ecosystem services from six such protected areas. It estimated the monetary value of flow benefits to be in the range of INR 50,000 to INR 190,000 (US$725 to US$2758) per Ha per year. The economic value of provisioning of water to downstream regions from Kanha Tiger Reserve is estimated at approximately INR 4000 (US$58) per Ha per year. Since investments to improve habitats and PA Management were made under BCRLIP, using the Benefits Transfer Method[7], a similar value could be assumed emanating from the PAs within project landscapes, which brought 600,000 Ha under better management. However, adjusting the monetary value against low disbursement of 40%, water provisioning services of about INR 1600 (US$25) per Ha per year {or a total economic value of INR 96 crore (US$14.0 Million)} could be actually derived from PAs within BCRLIP landscapes. Since actual valuation of flow of benefits was not estimated from project sites, the figures arrived above have not been considered for estimating the NPV and IRR.

[6] Verma, M., Negandhi, D., Khanna, C., Edgaonkar, A., David, A., Kadekodi, G., Costanza, R., Singh, R. Economic Valuation of Tiger Reserves in India: A Value + Approach. Indian Institute of Forest Management. Bhopal, India. January 2015.

[7] The benefits transfer (BT) method was used to estimate economic values for ecosystem services by transferring available information from studies already completed in another location and/or context. For example, values for recreational fishing in a particular state might be estimated by applying measures of recreational fishing values from a study conducted in another state. The basic goal of benefit transfer was to estimate benefits for one context by adapting an estimate of benefits from some other context. Benefit transfer is often used when it is too expensive and/or there is too little time available to conduct an original valuation study, yet some measure of benefits is needed. It is important to note that benefit transfers can only be as accurate as the initial study. One limitation of using the BT method is that values are typically non-linear at the margin – meaning that they are highly sensitive to changes in site attributes across sites. The recent ICR from October 2017 for the "EU Natura 2000 Integration Project" (P111205) for Republic of Croatia has also deployed the BT method.

25. **The project resulted in some other ecological/biodiversity benefits that are difficult to monetize.** The project generated a variety of benefits by investing in habitat improvement, wildlife census and inventory, watershed protection and erosion control, ecological mapping of biological resources, introducing participatory conservation approaches, training in managing human-wildlife conflict and other thematic areas, improvement in tourism, reduction in drudgery for women, developing technical training manual and related educational and interpretation materials, preparing a national curriculum on landscape conservation, etc. It succeeded in bringing 600,000 Ha under improved biodiversity management across four landscapes and an additional 50,000 Ha managed as biodiversity friendly outside the formal PA network. The project was successful in converging with other government schemes to augment shortfall of project financing for various livelihood works in two of the landscapes. The project also resulted in investments from individual beneficiaries and attracted some private investments in tourist resorts in at least one of the landscape. There were public benefits from project investments by way of more informed decision making. Improved biodiversity management and livelihood gains resulted in adoption of elements of project design for two additional landscapes in the State of Gujarat from their budget resources. Training of a large number of stakeholders in technical, social and operational aspects improved performance of specific tasks across the country where the trained personnel were deployed.

Efficiency of design and implementation

26. **The design and implementation arrangements were made to be efficient but suffered due to limited investments and delays during implementation.** Project design assigned clear roles and responsibilities to participating stakeholders and with direct transfer of funds from MOEFCC to the IAs, reduced transaction tiers. An estimated US$6.59 Million was the Government's contribution for managing a credit and grant of US$23.5 Million. This included the cost of official staff time and other incidentals used for managing the project both at MOEFCC and IAs. While exact amounts are not available, all planned inputs and resources were not deployed by the Government. For instance, a full-time Assistant Project Director was not deployed in the last two years and no dedicated office space was created for PMU staff. After running its length, the project could disburse only about 40%, indicating at best modest efficiency of design and implementation. Cancellation of the unspent credit reflects inefficiency of managing the project, more so, as India has graduated out of IDA and will not be able to redeploy the cancelled credit.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

Rating **Moderately Unsatisfactory**

27. The rating is based on the combined rating of Relevance, Efficacy and Efficiency. While the PDO was highly relevant, it achieved modest outcomes with modest efficiency.

- The project is closing with a large unspent IDA credit (only 22.57% disbursed) and GEF grant (only 65.62% disbursed). Delays, slow implementation progress and resource constraints limited the testing, promotion and scaling up of new models of conservation at the landscape level.

- Throughout the project implementation only meager allocation, against demand for funds[8] raised in the Annual Plan of Operations (APOs), were made. As a result, the spread of financial resources for implementing the project was thin and resulted only in minimum impact on livelihood as well as habitat improvement works.
- Agreement to mobilize an additional INR 20 crore (approximately US$2.9 Million) reached during the ninth ISM in June 2017 and endorsed by the DEA did not materialize.
- Several of the agreed actions during implementation support missions remained incomplete[9] or only partially acted upon or completed with delays reflecting, on the one hand sub-optimal project management and monitoring and on the other, limited institutional capacity strengthening for mainstreaming biodiversity conservation outcomes.

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

28. The project had considerable gender outcomes. Over 50% project beneficiaries are women indicating their stronger participation and flow of benefits. In addition, the project focused on bringing structural changes to the existing social and institutional norms that limit women empowerment. At Agasthyamalai landscape in Tamil Nadu, the project supported economic empowerment of women by working through self-help groups and ensured that about 80% project benefits went to women. At Satpura landscape in Madhya Pradesh, exclusive skill training was designed for tribal women beneficiaries and over 50% trained women secured jobs. For many, it is the first time in their family that a woman became the breadwinner of the household. This has encouraged several other women in the landscape to make similar efforts in empowering themselves. The project consciously designed and organized meetings with adequate women participation and ensuring that they have an equal share in taking community level decisions. Project investments specifically targeted issues of women drudgery. As discussed in the efficiency section (see Annex 4), investments in Askot landscape on cultivating fodder within village commons resulted in substantial reduction of time with fewer trips to distant forests and steep slopes for collecting fodder.

Institutional Strengthening

29. The project had a positive outcome on institutional strengthening of the three FLCs and WII. This is evidenced from:
    - **Upgrading of infrastructural facilities:** Development of training halls, dormitory, presentational equipment and training aides strengthened capacity to effectively deliver capacity building programs/trainings.
    - **Enhanced access to knowledge resources:** Subscription to online scientific journals, knowledge exchange with other international universities of repute, contracting of technical experts improved institutional capacity in developing national level courses on landscape conservation approaches.

[8] In the last year of implementation, the PMU could only manage a budget of INR 17 crore (US$2.46 Million) against a demand of INR 52 crore (US$7.5 Million)

[9] As against a total of 131 agreed actions reached during project implementation, 21 agreed actions were pending at project closure (refer Annex 5 of the Aide Memoire of the tenth ISM, dated April 04, 2018)

- **Institutional capacity for delivering technical training:** Developing high quality technical content and training materials and manuals, delivering of over 500 technical training sessions benefitting more than 10,000 participants.
- **International exposure:** Both the Government staff and consultants benefitted from international and visits trainings offered on landscape approaches, which contributed in enhancing institutional capacity for PA management.

Mobilizing Private Sector Financing

30. The project did not directly support greater financing from the private sector. However, it has played an enabling role in attracting private sector financing. Three new resorts opened around LRK in Gujarat and private investors confirmed their interest to invest in developing and running tourist facilities once the eco-park in Munshyari in Askot landscape opens up for visitors. Besides, the project also mobilized individual capital (farmer contribution) for cash crop farming.

Poverty Reduction and Shared Prosperity

31. The project has had some positive impact on poverty reduction and shared prosperity. It mobilized and supported some of the poorest communities in remote areas having representation of indigenous peoples. It reduced disparities, and promoted inclusiveness approach for sustainable income generating opportunities as well as for accessing natural resources. The following directly contributed to poverty reduction and shared prosperity:
    - Through empowerment of women and other vulnerable sections of the society by mobilizing them and ensuring their voice in collective decision making and in passing community level resolutions.
    - Through the job-oriented training imparted to youth, including women, and placement in private companies.
    - Through skill upgrading for selected livelihood practices to be sustainable that are undertaken as traditional household businesses and will continue as such.
    - Through establishing revolving funds for improving access to credit for remunerative business at community level and for urgent household needs[10].

Other Unintended Outcomes and Impacts

32. **The project succeeded in Convergence with other government programs and schemes.** Based on the data available from two landscapes, the project achieved a 137 percent convergence, which is quite impressive, as it exceeded project financing. This directly contributed in bringing complimentary investments in support of livelihoods, particularly when project funding was limited and delayed. This helped in delivering related developmental assistance to targeted communities and also led to financing of some of the activities identified in the village microplans. This convergence directly benefitted the relationship between the Forest Department and local communities. Table 1 gives the convergence details at the two landscapes.

[10] At Agasthyamalai Landscape (Tamil Nadu), the microplan funds were revolved more than once, and at project closure about 61% funds were in circulation to the Micro VFC members.

Table 1: Investments and Convergence at Two Landscapes (in US$)

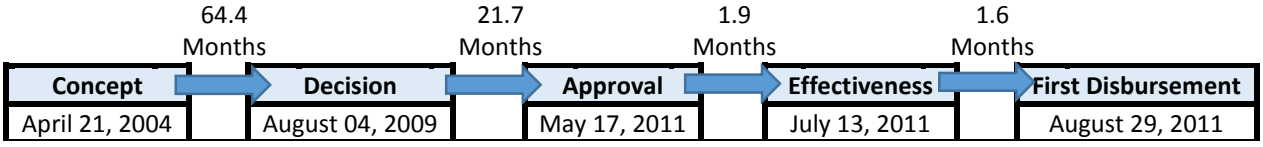
Landscape	Investments on Livelihoods	Funds mobilized Through Convergence	Ratio of Convergence to Project Investment
LRK	419,509.00	1,086,370.00	2.59
Satpura (MP)	857,222.00	656,827.00	0.77
Total	**1,276,731.00**	**1,743,197.00**	**1.37**

33. **The project succeeded in fostering a deeper economic and social connection of people with biodiversity.** The project was instrumental in reviving and making remunerative the traditional economic activities that are closely linked with natural resources and biodiversity. Over 100 youth were trained as nature-guides, about 500 individuals were provided assistance for bamboo plantations, a few medicinal plant nurseries were established, and fodder banks were created within village premises. This will lead to mainstreaming of biodiversity in the production landscapes and encourage the local communities to adopt sustainable harvesting practices.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

34. **The project had a long preparation phase due to the delay in the selection of targeted landscapes.** Initial project preparation focused on seven landscapes, including three with tiger reserves. However, the inclusion of tiger reserves was seriously debated among stakeholders, which resulted in a change and reduction in project scope, a change of its national implementing agency and a delay of over five years in project preparation. The redesigned project was initially rolled out in two 'non-tiger' landscapes and the Component 3 was introduced to allow for expanding the project in two additional landscapes.



35. **Despite time delays, the PDO and project design responded to the Government priorities and had realistic objectives.** The PDO was robust in crafting a forward-looking vision for balancing the development needs while focusing on building capacities, institutions, knowledge for conservation of biodiversity rich landscapes. Being a pilot project, the design allowed for taking measured risks in attempting to mainstreaming biodiversity in the wider landscape, where, unlike PAs, many species do not have legal protection. Adequate and sound background analysis was undertaken in the form of site-specific studies and indicative plans for landscapes. Several multi-stakeholder consultative workshops were undertaken during preparation that contributed to the design. As a result, selection of landscapes and identification of target beneficiaries was appropriately done.

36. **Project design was complex as it was innovative and piloted new approaches for conservation at the national level.** The project followed good design principles and housed piloting of investments in

landscapes and knowledge management in clearly structured components with well-defined scope and geographies for implementation. Stakeholders were appropriately selected with clearly identified beneficiary groups. There were eleven Implementing Agencies rendering a complex implementation mechanism. The project piloted several innovative approaches that were 'firsts' in the country.

- ***Landscape Atlas*** – Geospatial mapping of distribution of ecological, biological, geological and socio-economic characteristics of the landscapes were mapped and consolidated.
- ***Bioindicators*** – Research was undertaken on identifying bioindicators for assessing landscape quality such that these indicators could be reported on by local communities.
- ***Conservation-Development Collaborative Platforms*** – New institutional arrangements were explored for integrating conservation in district development plans.

37. **Despite a long preparation phase and adequate background analysis, the project design did not adequately address key parameters that impacted its implementation.** The design placed too much emphasis on government capacity to own, lead and implement. It disregarded the reality that an innovative project requires an efficient implementation mechanism. Following were the shortcomings that went unnoticed during preparation:

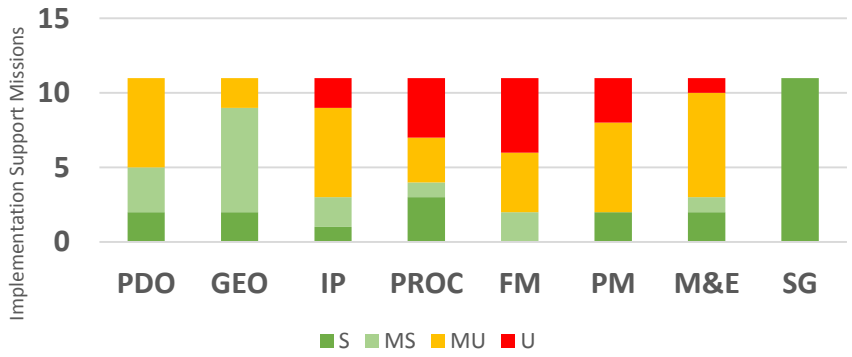
- ***Lack of a well-designed results framework.*** Several indicators were difficult to measure and were subjective. As designed, they were easy to achieve but had little or no impact on the intermediate, PDO level and long-term outcomes.
- ***Appropriate plans for monitoring were missing.*** The project did not design adequate resources for monitoring. Only one position for an M&E expert was created at MOEFCC, whereas, bulk of the implementation was through the Landscape Societies at the state level.
- ***Risks were inadequately assessed and mitigation measures were inappropriately designed.*** The overall risk of 'moderate' for the project was low, particularly when the FM and Procurement risks were assessed high before mitigation. These risks remained high as the designed mitigation measures could not resolve the key implementation challenges.
- ***Readiness for implementation was low.*** Given that the preparation phase was rather long, the readiness of the implementing agencies was low. Even though the PMU in MOEFCC and the landscape societies were established, the staff was not available at start. The implementation capacity remained low throughout implementation.

38. **The choice of financing instrument blending International Development Association (IDA) credit and Global Environment Facility (GEF) grant created flexibility.** This aligned well with GOI approach of reconciling development and conservation. It put in place appropriate incentive mechanisms for local stakeholders to benefit from conservation and sustainable use of biological resources. The GEF grant supported testing innovations by way of expanding conservation efforts to the landscape level, improving rural livelihoods, and promoting more biodiversity-friendly development in the surrounding production landscapes around protected areas. It consolidated and build on past experiences and demonstrated the effectiveness of new multi-stakeholder partnerships in managing high biodiversity landscapes. The IDA credit supported testing new institutional approaches to participatory conservation and provided important lessons for the GOI strategies and plans in this direction.

B. KEY FACTORS DURING IMPLEMENTATION

39. **Implementation progress was affected by a number of factors, ranging from weak implementation capacity and sub-optimal coordination to slow administrative processes and poor budget management.** Throughout the implementation period, the PDO was rated twice as Satisfactory, thrice as Moderately Satisfactory and six times as Moderately Unsatisfactory (including the last implementation support mission in Jan-Feb 2018). Figure 2 gives the status of project ratings.

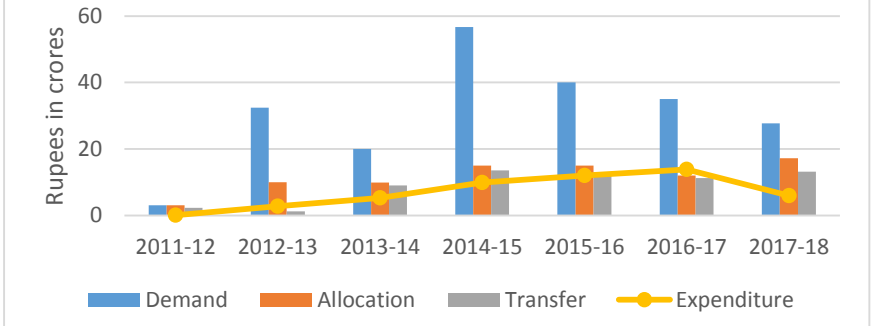
Fig. 2: Status of various project ratings during implementation



Factors subject to government and/or implementing entities control

40. **Implementation and administrative capacity.** The PMU at MOEFCC could not resolve the issue of low budgetary allocation throughout the implementation phase reflecting its weak implementation and administrative capacity. Figure 3 gives a year-wise snapshot of budget allocation and expenditure. Inadequacy of budget became the primary administrative barrier resulting in meager investments that were thinly spread on planned project activities, such as, habitat and livelihood improvement[11].

Figure 3: Year-wise status of budget



[11] At LRK, about INR 2.5 Lakhs(US$3,628) were spent against an expected average investment cost of INR 10 Lakhs (US$14,515) for each microplan

41. **Budget releases at the central and state levels.** The challenge of low budgetary allocation was further compounded due to delay in release of funds. Firstly, the funds from MOEFCC were released in tranches and the second tranche was often released in the last week of the last month of the financial year. In 2014-15, the fund flow arrangements were unilaterally modified by the central ministry (refer para #16-17) and funds were routed to IAs through the State Government budget, resulting in additional delays. Table 2 presents an analysis of delay in fund flow for Periyar FLC. While the capacity of the IAs to spend matched the available resources, there was a lag in expenditure due to delayed releases from the center and state.

Table 2: Time Delays in Fund Flow – Analysis from Periyar Field Learning Center (Kerala)

Financial year	Installment	Time taken by MOEFCC (from start of FY)	Time taken by State (Since receiving from GOI)	Total delay
2013-14	First	4 months	0	4 months
	Second	7 months	0	7 months
2014-15	First	4 months	9 months	13 months
	Second	10 months	24 months	34 months
2015-16	First	12 months	11 months	23 months

42. **Commitment and leadership.** An innovative pilot project needed strong technical and administrative leadership support from the PMU in terms of guidance, handholding and overall supervision on a project mode, which was missing. The PMU remained non-committal for restructuring the project, as was recommended at MTR. Barring organizing a few thematic workshops, PMU did not contract any resource agency to support the landscape societies. On the other hand, there was mixed experience of commitment and leadership at the IAs. IAs could not contract the services of technical agencies in support of cluster-based livelihood improvement approach. At the same time, some IAs[12] were strong champions of piloting the landscape approach for conservation by borrowed funds from other projects for implementation.

43. **Human resource, organizational capacity and M&E.** The provisions for boosting human resources at MOEFCC and across the IAs were not fully utilized. There was an initial delay of over one year in contracting staff for establishing the PMU in MOEFCC. The position of Communications Specialist remained vacant throughout the project life. The M&E specialist was onboard for less than two years and after 2015, this position too remained vacant. At the level of the landscape societies, there was a high turnover of specialist staff and technical resource agencies could not be contracted. Inability of the PMU to contract key staff and other critical consultancies, including impact assessment at the MTR and before close of the project contributed to the low performance level. The PMU did not plan neither participated[13] in Bank missions. Results/outcomes were not tracked and not even one progress report was produced throughout implementation. Monitoring

[12] Wildlife Institute of India and FLC Periyar ensured continuation of project activities by borrowing funds from other sources. This was noted in the Sixth Implementation Support Mission Aide Memoire (dated November 24, 2014) – para #6 & #11 and in the Management Letter (dated March 18, 2015) and Aide Memoire para #7 of the MTR

[13] The Assistant Project Director joined one field visit during MTR. The Additional Secretary of MOEFCC visited two landscape sites.

was limited to annual physical and financial targets and achievements for releasing of grants to IAs. There were delays in approving APOs and granting other clearances in the initial few years. The task team presented an analysis of slow pace of transactions in the Aide Memoire (dated March 18, 2015)) following the MTR. The provisions for international exposure and learning visits remained underutilized, as only one such visit was organized to University of British Columbia, Canada. It was an extremely useful learning visit and eventually led to the establishment of a Landscape Visualization Laboratory at the WII[14]. MOEFCC was able to organize three thematic workshops at the national level. IAs, particularly FLCs, organized several trainings and workshops.

44. **Fiduciary capacity.** Low fiduciary capacity contributed to underperformance of the project. The project had large number of small value procurement activities, well below the prior review threshold of the Bank and procurement was geographically dispersed across four landscapes and three FLCs making the role of the PMU in MOEFCC extremely critical. Similarly, the Financial Management (FM) system was simple with clear fund flow but proved challenging due to low FM capacity. Some of the following issues could have been easily managed for better implementation progress:

- Except for one year, MOEFCC did not avail the services of an internal auditor resulting in poor oversight.
- Submission of quarterly IUFRs was generally delayed so was the submission of annual audit reports.
- There were frequent changes of procurement focal person in IAs.
- Administrative delays in decision making, inordinate delays in procurement, lack of proactivity in seeking/providing guidance and oversight from the PMU could have avoided frequent delays in completion/execution of procurement activities.
- Inconsistency in use of standard bidding documents, delays in payments to contractors/vendors, poor record keeping.

45. **Citizen engagement.** A concerted effort by the IAs and the strategy to deploy Social Mobilizers led to good community mobilization and beneficiary participation. This significantly contributed in reducing local conflicts on use of natural resources. An example of robust community mobilization was evidenced when the boundary rationalization of the Askot Wildlife Sanctuary in 2015-16 did not result in any community protests and opposition. The boundary rationalization was successfully endorsed by the Central Empowered Committee (CEC) of the Supreme Court of India.

Factors subject to World Bank control

46. **Adequacy and quality of implementation support.** The Project benefitted from the continuity of Task Team Leaders (TTLs), one for preparation up to Board approval and the other from effectiveness to completion. Implementation Support Missions were undertaken every 6 months and the MTR was advanced for early detection of challenges and course correction. The presence of Procurement, FM and Environmental and Social Specialists was very helpful in providing timely

[14] Proposal to establish the Landscape Visualization Laboratory was submitted by WII in 2016, but not approved by MOEFCC; it was eventually established from another grant from the Department of Science and Technology, Government of India.

resolution to fiduciary issues. Adequate budget was made available to provide implementation support and the Bank task team included internationally experienced staff. A Co-Team Leader was also introduced two years prior to closure for seamless working between the Country Office and Headquarters.

47. **Reporting of key issues and technical inputs.** The task team candidly reported the issues as they arose both in the timely ISRs and during the Tripartite Portfolio Review Meeting (TPRM) between the Bank, MOEFCC and DEA. The key issues of inadequate budget and delay in fund release were well-reflected in the aide memoires, management letters and TPRMs. Both the senior Bank management and senior bureaucrats in the government were appraised of the budget and fund flow issues. The need to restructure the project for resolving the key issues was recommended by the Bank[15] at MTR and beyond, but the PMU did not agree to either change the implementation arrangements or partially cancel unspent credit. Given that the PMU did not undertake any performance assessment for the project, it did not foresee the benefits of a restructuring and, therefore, remained non-committal. As a result, any proactive action for improving project performance did not materialize. Each aide memoire presented the status of agreed actions from previous missions. The Bank team provided several technical inputs and recommendations[16] in developing the knowledge products, designing of training manuals, organizing thematic workshops and consultations, and facilitating development of action plans[17] for improving project performance.

Factors outside the control of government and/or implementing entities

48. A major natural disaster at the Askot landscape in 2013 setback the implementation by over 12 months. The recovery from it was slow and the focus of the state administration shifted to providing immediate relief to those affected. No other noticeable factors were outside the control of the government. The macroeconomic environment remained stable and there was no civil unrest, conflict and insecurity in project landscapes.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

49. The project's M&E system designed at the beginning was complex and unclear/ambiguous. It was designed as a reporting tool against the Results Framework rather than as a management tool for systematically tracking progress and demonstrate results on the ground. This limited embedding the M&E design institutionally. The indicators do not lend clearly to the theory of change, as the PDO-level, and intermediate indicators were not

[15] The Bank team helped organize a restructuring workshop on August 29-30, 2016.
[16] The Aide Memoire of MTR mission (dated March 18, 2015) included fifteen technical and implementation arrangement related recommendations.
[17] (i) Ten-Month Action Plan in the first Aide Memoire (dated January 31, 2012); (ii) FY12-13 Action Plan for overcoming slow progress in the second Aide Memoire (dated August 13, 2012); (iii) Follow up and status of first action plan in the third Aide Memoire (dated February 26, 2013).

well defined and posed challenges in evidenced-based data collection and measurement during implementation. At times the assessment of indicators is based on interpretation and not on unit-based or objective assessment. Some of the key indicators reported against preparation of documents/reports rather than assessing the outputs and outcomes. As a result, they were achieved but there were no measurable outcomes to report against. No comparators were selected during designing of the results framework.

M&E Implementation

50. The M&E staff position in the PMU remained vacant for most of the project period. This not only impacted tracking of project implementation progress against yearly targets, but also prevented the PMU in recording any positive outputs and outcomes under the project. Not all indicators were equally tracked. Without a proper M&E system, the PMU failed to submit even a single project progress report until the last year of the project. The external monitoring tool, Management Effectiveness Tracking Tool (METT) was not used. The task team regularly reported on the results framework from the third Implementation Support Mission (January 02-30, 2013) onwards. The reporting was based on the field visit observations and interactions with the project beneficiaries, implementing agency staff and other stakeholders. The PMU did not commission a mid-term and an end-term evaluation by an independent third party to capture some of the social benefits/impacts due to project interventions. The need for revision and strengthening of the Results Framework, to better measure the outputs and outcomes at midterm review (MTR) was well understood and recommended by the task team. However, the borrower did not agree for project restructuring, due to which the results framework remained unchanged. At project close, the PMU tasked the WII with the preparation of the Project Completion Report. While, the project's M&E system is unlikely to be sustained, GOI is mulling to subject all PAs to its own Management Effectiveness Evaluation (MEE) tool[18].

M&E Utilization

51. M&E utilization remained poor and did not contribute to important decisions and/or management strategy for improving project performance. No systematic data collection was undertaken by the borrower. Some of the implementing agencies prepared annual progress reports, which included physical and financial progress, but did not measure, document and report on project outputs and outcomes. M&E data remained fragmented, non-uniform and did not help in any stocktaking and/or for determining any corrective action at the project level. The M&E system did not inform investment decisions during the process of APO approvals.

Justification of Overall Rating of Quality of M&E

Rating **Negligible**

52. The absence of the M&E specialist in the PMU, inability to collect M&E data and develop the project level MIS, low participation by PMU in project activities and field visits for systematically tracking progress and not preparing any project progress report throughout implementation has resulted in this rating.

[18] The MEE is developed separately by MOEFCC with technical assistance from WII

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

Environmental and Social Safeguards

53. **No significant and irreversible environment and social safeguards impacts, risks and issues were observed.** The four safeguard policies triggered were OP/BP4.01 Environmental Assessment, OP/BP4.09 Pest Management, OP/BP4.10 Indigenous Peoples and OP/BP4.36 Forests. There were no waivers from the Bank's safeguard policies and procedures. The project remained in compliance with all the triggered safeguard policies and with the legal covenant[19]. Throughout implementation the project investments remained low and geographically spread out resulting in negligible impacts. Most investments were socially acceptable and environmentally benign, as these were small investments on livelihoods spread across a wide geographic area. Habitat improvement works, however limited in scope, had a positive impact on biodiversity.

54. **The project implementation promoted citizen engagement by organizing multiple consultations with key stakeholders.** Beneficiary communities comprising salt pan workers, small and marginal farmers, fishers, traditional grazers, forest fringe dwellers including women and tribal communities were frequently consulted with. Formation and orientation of inclusive village conservation committees (VCCs) followed a participatory process. Microplans were prepared based on regular consultations with the communities and use of participatory rural appraisal methodology, with greater focus and outreach to women and the key target groups. A range of livelihood interventions benefitted the landscape communities, especially women, marginal farmers and SC and ST households. Regular interaction with and support to the VCCs and EDCs provided important platforms for engagement between landscape societies and forest departments and the beneficiary communities. This interaction resulted in greater community engagement in issues of biodiversity conservation.

Fiduciary Compliance

55. **The project remained in compliance but fiduciary oversight was poor.** As noted earlier under Section B on 'Key Factors During Implementation" para #42, there were several shortcomings in fiduciary performance. Prominently, there were delays in submission of annual audits, IUFRs, list of contracts etc. Several rounds of FM and Procurement trainings were arranged by the Task Team to resolve the issue of low fiduciary capacity.

C. BANK PERFORMANCE

Quality at Entry

56. **The Bank's inputs and facilitation during preparation were adequate, but shortcomings remained in achieving planned development outcomes.** As noted under Section III (para #37), the Bank was able to identify conservation challenges and responded to government priorities by crafting a forward-looking PDO. Adequate

[19] Refer PAD Section C6 para #46 (d) and (e) – page #15

emphasis was placed on consultative workshops, supporting background studies and preparing indicative investment plans for the identified landscapes. Fully consistent with its fiduciary role, the Bank developed a Governance and Accountability Action Plan (GAAP) and a Project Process Framework. The design considered policy and institutional experiences from previous operations and established landscape societies as part of implementation arrangements. To this extent, Bank's technical and financial inputs and approach was of strategic relevance as it focused on poverty aspects, sustainability of livelihoods as well as gender and social dimensions. However, as explained in (para #34), extraordinary delays impacted the preparation process and warranted redesigning that reduced the project size and affected its ownership. As a result, the design could not carry out an elaborate economic analysis, develop a robust results framework and M&E strategy and identify risks appropriately.

Quality of Supervision

57. **The Bank provided regular implementation support throughout project implementation.** From the start, the Bank's implementation support strategy focused on developmental impact, as the intended development of new conservation models could have country-wide implications as well as could contribute to global knowledge pool and inform other countries. The Bank also provided adequate technical inputs in designing the methodological tools, documenting lessons and defining emerging conservation models that could inform future policy in India. For this, the Task Team regularly highlighted innovative efforts as well as identified implementation bottlenecks and made a sincere effort to resolve them. Following are the key aspects of implementation support and quality:

a) Ten Implementation Support missions and one Mid Term Review mission was undertaken covering all the four Landscape Sites, the three Field Learning Centers and the WII. Each mission included adequate focus on fiduciary and safeguards due diligence. Mission wrap-up meetings were held with MOEFCC and DEA.
b) Several interim technical missions were also fielded on specific topics, such as, preparing the landscape atlas and the Bank technically supported thematic workshops.
c) Post Procurement Review (PPR) was carried out every year based on the list of contracts provided and the major systemics findings were shared with the client in the PPR report. To overcome the identified gaps, the Bank organized and provided procurement trainings at regular intervals to MOEFCC and IAs as well as supported the IAs in complaint handling for better internal controls.
d) The Bank team regularly provided technical and operational recommendations to help resolve implementation issues and duly recorded these in the management letters, aide memoires and ISRs.
e) The Bank team constantly appraised the senior management and the Borrower (DEA) of the issue of insufficient budget and delayed release by flagging these concerns at TPRMs and recording in the management letters, aide memoires and ISRs. The candor and realism of performance reporting was high.
f) The Bank team recommended project restructuring at MTR and since then at every mission, but could not persuade the PMU to agree to restructure the project.
g) Every mission encouraged a detailed discussion of the Results Framework to maintain continuity not just to encourage adequate reporting but also to discuss the substance of the indicators.

Justification of Overall Rating of Bank Performance

Rating **Moderately Unsatisfactory**

58. This is based on a combined rating for the quality at entry and supervision by providing equal weightage to both the phases. Despite extensive effort of the Bank during implementation, key constraints of inadequate budget allocation and delayed fund release remained unresolved.

D. RISK TO DEVELOPMENT OUTCOME

Rating **Substantial**

59. **The likelihood of achieving intended project outcomes is gaining ground at project completion but remains uncertain.** The MOEFCC has taken a bold step of continuing the project as a Central Sector Scheme funded out of its own budget by merging it with two other schemes of the ministry. A total allocation of INR 14 crore (approximately US$2.0 Million) has been made in the budget provisions for the year 2018-19. The ministry has also commissioned an impact assessment now, which will identify potential areas and activities where investments from the GOI budget can continue to support the unfinished activities, consolidate the outputs and replicate the outcomes. This confirms the renewal of government's ownership of the project, albeit after project completion. This will also galvanize the stakeholders, who are already significantly motivated to continue build on conservation-linked livelihood opportunities. However, at the time of this ICR, the persistent risk of slow budget transfer and disbursement that continue challenge actual implementation of these new GOI actions was not summarily addressed. Further, as noted in Paragraph 21, there is a risk that some project supported Landscape Societies may not continue their operations beyond the project, which may undermine results achieved at targeted landscapes.

V. LESSONS AND RECOMMENDATIONS

60. **Lesson 1: Landscape conservation approach calls for new institutional models with innovation, autonomy and convening capacity.** The landscape approach holds promise that can bring together different stakeholders, create possibilities of convergence, and support aspirational goals of communities. The new institutional models (landscape society) promoted by the project showed the potential of helping create a common vision for integrating production and protection landscapes towards conservation objectives. However, its independence and autonomy as well as its convening power were insufficient to ensure success of the landscape conservation approaches.

61. ***Recommendation:*** The Bank should experiment the landscape conservation approaches with new institutional models in diverse sectors, including infrastructure investments in biodiversity rich landscapes. This will help further explore creative ways of developing wider stakeholder engagement and effective partnership arrangements towards a common landscape conservation vision with differentiated outputs and outcomes for each stakeholder group.

62. **Lesson 2: Presence of champions with strong ownership is key to successfully implanting innovative**

pilot projects. A technically sound and forward looking innovative pilot project may not yield desired results if it is not driven by strong leadership and ownership. The project showed emergence of new conservation models where state level champions could lead and innovate.

63. ***Recommendation:*** Bank task teams working with central ministries, multiple states and creating new institutional models should identify a leader who would champion the project. In absence of a strong leadership, there is a need to carefully analyze the institutional mandates, technical capacity and administrative capacities and identified risk mitigation measures should be developed and deployed early in project implementation.

64. **Lesson 3: For investments in conservation-linked livelihoods to become pathways out of poverty, partnerships with technical agencies should be a pre-requisite.** A shifting of focus from protection-centric approach to sustainable use of biodiversity resources can help lift remotely situated communities out of poverty while mainstreaming conservation in the production landscape. There are significant opportunities to innovate and reposition biodiversity resources through sustainable production and harvesting, integrated agriculture-horticulture-biodiversity farm cultivation models, price realization through market linkages and unlocking new generation of livelihood opportunities. However, this requires partnerships with technical agencies, going beyond the staff available with traditional departments entrusted with implementing innovative projects.

65. ***Recommendation:*** Future investments in improving livelihoods through Bank's social, rural, agriculture and environment global practices should explore technical partnerships with good resource agencies early in the project cycle.

66. **Lesson 4: Evidence based project design is needed to generate convincing results for policy actions.** Good economic data from measurable indicators, evidence from benefits assessment and impact analysis increases the possibility of policy action for biodiversity conservation, which is currently pivoted on its existential value. Seeing the results of beneficiary engagement and potential gains for the communities, the Government of Gujarat took a policy decision for replicating the project design from their own budget.

67. ***Recommendation:*** Bank financed projects should explore measuring economic values of the natural systems that they finance or use. For this, part of the loan/credit/grant proceeds should be deployed for building national and sub-national capacity for monetizing flow benefits from biodiversity and natural ecosystems.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: Objective/Outcome 1: Develop New Models of Conservation at the Landscape Level

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Landscape conservation approach successfully adopted in two landscape sites	Number	0.00 13-Jul-2011	4.00 13-Jul-2011	4.00 31-Mar-2018	4.00 16-Mar-2018

Comments (achievements against targets): This Indicator contributes to the first part of the PDO. It is assessed as partially achieved. It is difficult to assess the achievement in percent, as the measurement of outcomes is highly subjective. The indicator was measured by the number of sites where landscape approach is implemented and successfully adopted. By design the indicator seem to be achieved, as project was implemented in two sites and additional two sites were added later during implementation. However, it is difficult to establish successful adoption of the landscape approach, as the scale of implementation remained low and several project activities that would have contributed to successful adoption were implemented partially. For example sector plans incorporating biodiversity outcomes were successfully tested only in one of the 4 landscapes. The confirmation of adoption was done through the field visits and the documentation in the various aide memoires.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Population of key indicator species/umbrella species stable or improving within PAs	Text	No regular surveys of key indicator species, except Wild Ass (3,863 in 2004) 10-Dec-2012	Regular monitoring to assess population status 10-Dec-2012	Regular monitoring to assess population status 31-Mar-2018	Regular monitoring of key indicator species undertaken across all landscape sites; Wild Ass estimated at 4451 in 2014 census 16-Mar-2018

Comments (achievements against targets): This indicator contributes towards the second part of the PDO. The indicator is fully achieved (100%). The population of all key indicator species across all project landscapes are showing stable and/or increasing trend. In addition to the regular wildlife census undertaken by the PA management, the project supported the use of modern approaches for the census of key species at LRK, which showed an increasing trend; through a project-supported census in 2014, the Wild Ass population at LRK is estimated at 4451 against the baseline of 3863 in 2004. At another landscape site, the project supported camera-trap approach remarkably reported the presence of tiger from Askot landscape, which is not known to use these areas.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Institutional and methodological framework and guidelines for landscape conservation approaches developed and tested in high biodiversity landscapes	Text	No framework for landscape conservation exists 13-Jul-2011	Formal approval of guidelines and procedures by MOEF based on field testing 13-Jul-2011	Formal approval of guidelines and procedures by MOEF based on field testing 31-Mar-2018	Framework under consultation for finalization 16-Mar-2018

Comments (achievements against targets): This Indicator contributes to the second part of the PDO. This indicator is partially achieved. There was no such framework at project start. While it has been developed, it has not been field tested and formally approved by the MOEFCC. At the time of ICR, the framework was under finalization. It was not adopted formally within the project implementation period. This is first of its kind of framework developed globally and will provide strong foundation for implementing the landscape approach globally.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Areas brought under enhanced biodiversity protection (ha)	Hectare(Ha)	0.00 10-Dec-2012	500000.00 10-Dec-2012	500000.00 31-Mar-2018	550000.00 16-Mar-2018

Comments (achievements against targets): This Indicator is a corporate indicator that was added in December 2012 during project implementation to meet the corporate requirements. It was not part of the Results Framework at project approval. The indicator is fully achieved (100%). The area measured under this indicator is same as the area measured under the interim indicator 'At least two protected areas covering 550,000 hectares with strengthened management and protection (40% increase in management effectiveness)'. Results observed under the GEO indicator 1 on population of key indicator species confirms the achievement of this indicator. The data for this indicator came from the pubished management plan, expenditure vouchers for habitat improvement works and population census reports.

Objective/Outcome: Objective/Outcome 2: Promote New Models of Conservation at the Landscape Level

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Forest area brought under management plans	Hectare(Ha)	300000.00 10-Dec-2012	600000.00 10-Dec-2012	600000.00 31-Mar-2018	600000.00 16-Mar-2018

Comments (achievements against targets): This Indicator is a corporate indicator that was added in December 2012 during project implementation to meet the corporate requirements. It was not part of the Results Framework at project approval. The indicator is fully achieved (100%). It measures exactly what is measured in the PDO indicator "At least 600,000 hectares within landscapes more effectively managed for conservation outcomes". It is achieved through the preparation, adoption and implementation of the Management Plan for the Wild Ass Sanctuary in the LRK landscape and additional area brought under effective management at other project landscapes. Confirmation for adoption of the Management Plan came from the statutry approval accorded to it by the State and Central Government.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 600,000 hectares within landscapes more effectively managed for conservation outcomes	Hectare(Ha)	300000.00 13-Jul-2011	600000.00 13-Jul-2011	600000.00 31-Mar-2018	600000.00 16-Mar-2018

Comments (achievements against targets): This Indicator contributes towards both parts of the PDO. The indicator is fully achieved (100%). This was measured through the successful preparation and adoption of the PA Management Plan for the Wild Ass Sanctuary in the LRK landscape. Almost 500,000 Ha area of the sanctuary is now subject to better and effective management with financial resources allocated through the State Government budget. An additional 100,000 Ha across all the other project landscapes is also effectively managed for conservation outcomes through habitat works, sustainable resource use approaches, reducing dependence on PA resources and wildlife rescue and rehabilitation. Data for confirmation effective management is based on the expenditure vouchers for habitat improvement works, use of camera traps for wildlife monitoring and census reports, statutory approval of the Management Plan and for field visits for following up on microplan implementation.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Governmentt institutions provided with capacity building to improve management of forest resources	Number	0.00 10-Dec-2012	6.00 10-Dec-2012	6.00 31-Mar-2018	6.00 16-Mar-2018

Comments (achievements against targets): This Indicator contributes to the second part of the PDO. This Indicator is a corporate indicator that was added in December 2012 during project implementation to meet the corporate requirements. It was not part of the Results Framework at project approval. The indicator is fully achieved (100%). The indicator is measured by the number of government institutions whose capacity was built for improved management of forest resources. The Forest Departments of Madhya Pradesh, Uttarakhand, Gujarat, Tamil Nadu and Kerala and the Wildlife Institute of India were recipient of capacity building measures. There are reports confirming the use of skills acquired through project support, particularly in the areas of wildlife management, rescue and rehabilitation of wild animals, nature based livelihood improvement and community mobilization and use of geospatial approaches. In addition, officers from other line departments were also trained on issues related to convergence and sustainable utilization of

forest resources.

A.2 Intermediate Results Indicators

Component: Component 1: Demonstration of Landscape Conservation Approaches in Two Pilot Sites

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	0.00 10-Dec-2012	5000.00 10-Dec-2012	5000.00 31-Mar-2018	25000.00 16-Mar-2018
Female beneficiaries	Percentage	0.00 10-Dec-2012	2500.00 10-Dec-2012	2500.00 31-Mar-2018	14000.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO. This indicator was achieved and exceeded (500%). Investments covering direct and indirect beneficiaries that improved access to opportunities for enhancing their capacities for sustainable biodiversity-based livelihoods contributes to the success of this indicator. About 25,000 individuals benefitted from investments made under the project. Both Agasthyamlai landscape in Tamil Nadu and Askot landscape in Uttarakhand have reported over 7000 direct beneficiaries each. Across all landscape sites, over 50% were women beneficiaries (14,000 female beneficiaries). The inclusion of women beneficiaries is an important measure, as the practices of harvesting nature and tending to domesticated biodiversity centers around their role. The benefits accrued to beneficiaries, including women were confirmed through direct interactions with the beneficiaries by the task team.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least two protected areas covering 550,000 hectares with strengthened management	Percentage	0.00 13-Jul-2011	40.00 13-Jul-2011	40.00 31-Mar-2018	20.00 16-Mar-2018

and protection (40% increase in management effectiveness)					

Comments (achievements against targets): This indicator contributes to the second part of the PDO and is linked with one of the GEO indicators and measures the same areas. It is partially achieved. The management effectiveness certainly increased due to improved management practices supported under the project (also reflected in increased population trend of wildlife species). However, no METT scoring was undertaken so it is not possible to establish the percent increase in management effectiveness. The preparation of the Management Plan and its approval for LRK and habitat works undertaken in other Protected Areas have contributed to the outcomes under this indicator. The data for this indicator came from the pubished management plan, expenditure vouchers for habitat improvement works and population census reports.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 20% of target user groups adopt alternate and/or sustainable resource use practices	Percentage	0.00 13-Jul-2011	20.00 13-Jul-2011	20.00 31-Mar-2018	10.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO. This indicator is only partially achieved (50%). Anecdotal reporting indicates that about 10% user groups have adopted sustainable use practices but no proper and final assessment was done by the landscape sites to estimate the percent achievement for this indicator. Several sustainable resource use practices, such as, production and use of organic fertilizers, gravity-based water storage and harvesting, sustainable forestry management practices, medicinal herbs cultivation etc. contributed to the achievement of this indicator. Beneficiaries at Askot have adopted sustainable farming practices and horticulture crops and at LRK salt-mining is carried out through the use of solar powered pumps. At Satpura (MP), beneficiaries are engaged in Bamboo plantations that is yielding sustainable harvesting opportunities. The successful adoption was confirmed based on beneficiary feedback and field based observations.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 75% of targeted	Text	0	20% increase in	20% increase in	Income increases

villages or user groups completed and successfully implementing micro-plans with conservation benefits		13-Jul-2011	incomes for VPs/user groups where microplans are prepared in Year 1-3 13-Jul-2011	incomes for VPs/user groups where microplans are prepared in Year 1-3 31-Mar-2018	reported for limited beneficiaries but not measured 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO. The indicator is partially achieved. Though 75% of targeted villages or user groups were completed through 400 microplans across the 4 project landscapes, the implementation of microplans remained partial. Investments made on livelihoods were much less than originally envisaged in the project. Only a small number of activities identified in the microplans could be implemented due to lack of funds. While some beneficiaries through skill training and job placement, the project did not measure both conservation benefits and income increases.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 20% of targeted populations in landscapes have improved cash or non-cash improved incomes from project-supported interventions	Text	Current baselines vary depending on source of income and dependency [e.g., salt mining, Rs 40,000-50,000 /HH/year; fishing and grazing (supplement incomes) and much higher for wild plant trade 10-Dec-2012	10% increase in incomes for VPs/user groups where micro-plans prepared in Year 1 10-Dec-2012	10% increase in incomes for VPs/user groups where micro-plans prepared in Year 1 31-Mar-2018	Income increases not measured and cannot be varified 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO. It is only partially achieved. Large part of the population benefitted from non-cash incomes through sustainable access and use of natural resources, agro-forestry, improved pastures etc. Real income

increase was not measured/estimated and the reported results are based on only anecdotal evidence available. Beneficiaries in Askot benefitted with cash incomes through project supported investments in horticulture and agriculture cash crops. Non-cash benefits also accrued through reduction of drudgery for women who now harvest fodder from within the village pastures as against going to forests and spending 3-5 hours per visit.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Adoption of landscape management approaches or specific elements of it in three additional sites with GOI funding	Text	0 13-Jul-2011	Landscape conservation funded by GOI in 3 or more additional landscape 13-Jul-2011	Landscape conservation funded by GOI in 3 or more additional landscape 31-Mar-2018	In 3 landscapes from State Government budget 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the part 2 of the PDO. It is fully achieved (100%). While GOI did not fund any additional sites, the State Government of Gujarat funded two additional landscape based on the design of BCRLIP during project implementation, thereby promoting landscape management approaches. Forest Department of Kerala decided to follow the landscape approach through in Agasthyamalai (Kerala) landscape from own funds. GOI is continuing BCRLIP as a Central Sector Scheme under the MOEFCC and has allocated some budgetary resources for the financial year that started after project closure. This is a good outcome and will help sustain the landscape approach beyond the project period.

Component: Component 2: Strengthening Knowledge Management and National Capacity for Landscape Conservation

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
National curriculum for landscape conservation developed and training institutionalized through five new annual training courses	Number	0.00 13-Jul-2011	5.00 13-Jul-2011	5.00 31-Mar-2018	5.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to both part 1 and 2 of the PDO. It is fully achieved (100%). The national curriculum has been developed and five trainings for different levels (policy-making, mid-career and frontline staff) of officers was conducted at WII. It is expected that the developed courses will be offered continuously by WII after project closure.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Key stakeholders from at least five national priority landscapes trained in landscape conservation approaches	Number	0.00 13-Jul-2011	250.00 13-Jul-2011	250.00 31-Mar-2018	1000.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO. This is achieved and exceeded (400%). There is good documentation for confirming this. Several stakeholders (0ver 1000) from more than five national priority landscapes received training on various aspects of landscape approaches. These trainings were imparted at the three FLCs and WII.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 10 new documents on good practice prepared and knowledge dissemination events sponsored	Text	A number of good practice notes from previous projects exist 13-Jul-2011	+10 new dissemination notes 13-Jul-2011	+10 new dissemination notes 31-Mar-2018	15 16-Mar-2018

Comments (achievements against targets): This indicator contributed to both part 1 and 2 of the indicator. The indicator is achieved and exceeded (150%). Fifteen new documents were prepared at WII and the three FLCs that included research reports, training manuals, guidelines, landscape atlases, management plans etc. Several knowledge dissemination events were organized.

Component: Component 3: Scaling Up and Replication of Successful Models of Conservation in Additional Landscape Sites

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least 50,000 ha of targeted production areas outside PAs managed for conservation outcomes	Hectare(Ha)	0.00 13-Jul-2011	50000.00 13-Jul-2011	50000.00 31-Mar-2018	50000.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to the second part of the PDO, as it contributes to mainstreaming of conservation outcomes. This indicator is fully achieved (100%). It is measured through a combination of investments that targeted community areas for pasture development, water harvesting structures for habitat improvement, support to individual farmers for sustainable farm forestry, promotion of organic farming and skill training for alternate livelihoods. All four landscapes contributed to this indicator. At Askot, beneficiaries have reduced their reliance on natural resources through sustainable agricultural practices resulting in increase in conservation value of the landscapes. Similarly, beneficiaries at LRK are supporting wildlife movement with increased awareness and participating in annual census. Data sources for this indicator comprises of feedback from direct beneficiaries, presentations made by landscape societies, procurement contracts and visual observations made during various field visits.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
New areas outside protected areas managed as biodiversity-friendly (ha)	Hectare(Ha)	0.00 10-Dec-2012	50000.00 10-Dec-2012	50000.00 31-Mar-2018	50000.00 16-Mar-2018

Comments (achievements against targets): Comments (achievements against targets): This indicator contributes to the second part of the PDO. This indicator is fully achieved (100%). This Indicator is a corporate indicator that was added in December 2012 during project implementation to meet the corporate requirements. It was not part of the Results Framework at project approval. It measures the same parameters and the areas as in the indicator on “At least 50,000 ha of targeted production areas outside PAs managed for conservation outcomes”. Data sources for this indicator comprises of

feedback from direct beneficiaries, presentations made by landscape societies, procurement contracts and visual observations made during various field visits.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Adoption of landscape management approaches in two additional sites with project funding	Number	0.00 13-Jul-2011	2.00 13-Jul-2011	2.00 31-Mar-2018	2.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to part 1 of the PDO. This indicator is partially achieved. Even though the landscape approach in the two additional landscapes was taken up, it could only be partially implemented due to delayed and inadequate project funds. As a result, a full adoption of the landscape management approaches is not seen. It is also difficult to measure the implementation in quantitative terms.

Component: Component 4: National Coordination for Landscape Conservation

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Effective and well-staffed national coordination unit within MOEF actively supporting landscape approaches	Number	0.00 13-Jul-2011	11.00 13-Jul-2011	11.00 31-Mar-2018	5.00 16-Mar-2018

Comments (achievements against targets): This indicator contributes to both the parts of the PDO. It is partially achieved. Staffing remained a critical issue throughout the project period. There was an initial delay of over one year in recruiting the staff for PMU. The full complement of 11 staff was never in place throughout the implementation. Some key positions, such as, communications expert was never appointed. The position of M&E specialist also remained vacant for the major part of the project. During most of the implementation phase, a full time Assistance Project Director was not assigned in

the PMU for focused project management.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
On time completion of key project outputs against implementation plan	Text	Weak capacity 13-Jul-2011	Bi-annual progress reports, annual work plans approved in time, quarterly FMRs and annual audit reports submitted, procurement plans updated 13-Jul-2011	Bi-annual progress reports, annual work plans approved in time, quarterly FMRs and annual audit reports submitted, procurement plans updated 31-Mar-2018	Consolidated bi annual progress reports not submitted; updated procurement plans not shared and uploaded on to STEP platform; IUFR submission is generally delayed 16-Mar-2018

Comments (achievements against targets): This indicator contributes to both parts of the PDO. This is assessed as not achieved. Throughout the project implementation period, the various outputs, such as, bi-annual progress reports, annual work plans approved, quarterly FMRs and annual audit reports, procurement plans updated were not done in a timely manner. There remained a significant delay in meeting these milestones. The PMU took a long time for approvals of the Annual Plan of Operations and other administrative decisions. Updated procurement plans were not shared on time neither uploaded on to STEP platform.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Design of landscape sites for Component 3	Text	0	Landscape activities initiated	Landscape activities initiated	This indicator was achieved as landscape activities were initiated but with a

		13-Jul-2011	13-Jul-2011	31-Mar-2018	delay of over 1 year 16-Mar-2018

Comments (achievements against targets): This indicator contributes to both parts of the PDO. This is partially achieved. This indicator was to be achieved by the third year of the project but there was a delay of over one year in initiating the activities for this indicator, including in identifying, finalizing and designing the landscape sites for component 3.

B. KEY OUTPUTS BY COMPONENT

Objective/Outcome 1 Develop new models of conservation at the landscape level	
Outcome Indicators	1. Landscape conservation approach successfully adopted in two landscape sites 2. Institutional and methodological framework and guidelines for landscape conservation approaches developed and tested in high biodiversity landscapes 3. Population of key indicator species/umbrella species stable or improving within PAs 4. Areas brought under enhanced biodiversity protection
Intermediate Results Indicators	1. National curriculum for landscape conservation developed and training institutionalized through five new annual training courses 2. Adoption of landscape management approaches in two additional sites with project funding 3. Effective and well-staffed national coordination unit within MOEF actively supporting landscape approaches 4. Design of landscape sites for Component 3
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	***Component 1*** 1. Over 125 PRA, several stakeholder consultations and FGDs conducted 2. 158 microplan documents developed, printed and adopted in *Gram Panchayats* 3. Entry Point Activity in over 150 villages, including water trough for livestock, reconstruction of public infrastructure, repair of causeway, deepening of village pond, plantation with tree guard, bird feebding platforms, pump house, purchase of community asset, etc.

	4. Concessional loans given to individuals for livelihood improvement (honey production, vermi-compost units, *agarbatti* manufacturing), petty business (photography shop, tailoring center, fodder depot etc.) 5. Habitat improvement works undertaken (check-wall, earthen bunds, water points, soil mounds etc.) 6. In Askot landscape, about 467 small water reservoirs developed, 150 drinking water springs rehabilitated, 570 small check dams constructed, native tree plantations in 450 Ha, bamboo plantation in 445 Ha, removal of invasive species from 710 Ha, establishing two nurseries, horticulture promotion through distribution of 100,000 high quality walnut samplings, 250 SHGs established for livelihood activities etc. ***Component 2*** 7. Draft Institutional and Methodological Framework and Guidelines for Landscape Conservation Approach Prepared (to be approved) 8. Two national consultations for finalizing the framework conducted in 2016 and 2017 9. National course on landscape conservation developed and five trainings delivered 10. One international learning visit to University of British Columbia, Canada completed; seven WII and one MOEFCC scientists participated ***Component 3*** 11. Two additional landscape sites added 12. At Satpura landscape farm forestry (over 100 farmers), job-oriented alternative skill development training given to over 1000 youth, particularly women, training on agriculture practices, Lac cultivation, furniture making from *Lantana*, bamboo plantation, provisioning of solar fencing, nature education camps held etc. 13. At Agasthyamalai landscape (TN), awareness programs for community mobilization (folk songs and dances, street drama etc.) – 149 VFC and 1780 Micro VFC formed – support for improving access to credit, revolving fund, energy conservation measures, skill building, biomass generation, biofertilizer, Azolla, mushroom, poultry etc. ***Component 4*** 14. Some accounting and support staff deployed at PMU 15. National workshops on Strategies for Conservation and Management of Large Landscapes held (July 2013)
Objective/Outcome 2 Promote new models of conservation at the landscape level	
Outcome Indicators	1. At least 600,000 hectares within landscapes more effectively managed for conservation outcomes 2. Government institutions provided with capacity building to improve management of forest resources 3. Forest area brought under management plans
Intermediate Results Indicators	1. Direct project beneficiaries disaggregated by gender

	2. At least two protected areas covering 550,000 hectares with strengthened management and protection (40% increase in management effectiveness) 3. At least 50,000 ha of targeted production areas outside PAs managed for conservation outcomes 4. New areas outside protected areas managed as biodiversity-friendly 5. At least 20% of target user groups adopt alternate and/or sustainable resource use practices 6. At least 75% of targeted villages or user groups completed and successfully implementing micro-plans with conservation benefits 7. At least 20% of targeted populations in landscapes have improved cash or non-cash improved incomes from project-supported interventions 8. Key stakeholders from at least five national priority landscapes trained in landscape conservation approaches 9. At least 10 new documents on good practice prepared and knowledge dissemination events sponsored 10. Adoption of landscape management approaches or specific elements of it in three additional sites with GOI funding 11. On time completion of key project outputs against implementation plan
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	***Component 1*** 1. Protected Area Management Plan for LRK approved by the statutory authority and adopted by the park management 2. Geospatial Landscape mapping of LRK completed by GEER Foundation 3. Annual wildlife census conducted in 2014 and report published at LRK ***Component 2*** 4. Research studies undertaken at WII – (i) Vegetation Structure and Dependence of Locals on Forests of Askot Landscape; (ii) Socio-economic Aspects of Askot Landscape; (iii) Evaluation of Birds as Potential Indicator Species for Long-Term Monitoring; (iv) Evaluation of Mammals as Potential Indicator Species for Long-Term Monitoring; (v) Evaluation of Fish Species as Potential Indicator Species for Monitoring Aquatic Ecosystems 5. Several technical workshops organized by WII – 3 regional workshops, 1 workshop for policy and decision makers (34 participants), 3 courses each for mid-level forest (156 participants) and range officers (137 participants) 6. Eight technical documents prepared at Gir FLC – (i) Management Plan for Wild Ass Sanctuary (LRK); (ii) Management Plan for Gir Protected Area; (iii) Management Plan for Barda Wildlife Sanctuary; (iv) Management Plan for Black Buck National Park; (v) Management Plan for Porbandar Bird Sanctuary; (vi) Manual for Wildlife Rescue and Rehabilitation; (vii) Manual on Ecodevelopment Initiatives in Gir Landscape;(viii) Document on Action Plan for the Management of Asiatic Lion Landscape 7. About 200 youth trained as Ecotourism guides at Gir FLC ***Component 3***

	8. From Satpura (MP), three staff participated in a Landscape course in Malaysia and another six in an international course on Think Landscapes in Netherlands and Germany 9. Satpura (Maharashtra) attempted to merge the project with the State Scheme "Shyama Prasad Mukherjee Jan-Van Yojana" ***Component 4*** 10. Project Steering Committee formed (in the last year of the project) 11. Task for preparing the Project Completion Report given to WII

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Supervision/ICR	
Anupam Joshi, Jiang Ru	Task Team Leader(s)
Priti Jain, Andrew Zakharenka	Procurement Specialist(s)
Krishnamurthy Sankaranarayanan	Financial Management Specialist
Radha Narayan	Team Member
Varun Singh	Social Safeguards Specialist
Sharlene Jehanbux Chichgar	Environmental Safeguards Specialist

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US$ (including travel and consultant costs)
Preparation		
FY05	13.007	30,515.28
FY06	38.255	140,351.35
FY07	19.564	91,936.10
FY08	22.742	81,390.92
FY09	27.763	107,627.46
FY10	14.132	36,016.90
FY11	2.749	3,732.94
FY12	0	0.00
Total	**138.21**	**491,570.95**

Supervision/ICR		
FY12	16.009	84,486.64
FY13	18.730	46,584.97
FY14	8.825	28,040.99
FY15	9.907	33,250.71
FY16	9.510	29,693.59
FY17	21.087	58,778.30
FY18	22.875	82,775.35
FY19	3.888	20,866.32
Total	**110.83**	**384,476.87**

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US$M)	Actual at Project Closing (US$M)	Percentage of Approval (US$M)
Demonstration of Landscape Conservation Approaches in Two Pilot Sites	0	13.11	0
Strengthening Knowledge Management and National Capacity for LandscapeConservation	0	6.22	0
Scaling Up and Replication of Successful Models of Conservation in AdditionalLandscape Sites	0	7.57	0
National Coordination for Landscape Conservation	0	4.12	0
Total	**0.00**	**31.02**	**0.00**

ANNEX 4. EFFICIENCY ANALYSIS

1. The assumptions made in the ICR for quantifying benefits are quite conservative the NPV of which is arrived by assuming discount rate of 12 percent. The flow of benefits included those arising out of (i) cash crops; (ii) honey production; (iii) revenue realized from park entry fee; and (iv) job placements following skill training. The following efficiency assessment is based upon the actual outcome results/data provided by the IAs and collected during ICR mission.

Cash Crops

Table 4: Benefits from Cash Crop Cultivation (in '000 US$)

Year	Investments			Realized Market Value	Discounted Investment Amount	Discounted Net Profits
	BCRLIP Investments	Individual Contributions	Total Invested			
2014-15	4.0	15.0	19.0	34.3	26.7	21.5
2015-16	6.1	15.0	21.0	39.6	26.4	23.2
2016-17	6.3	15.0	21.3	42.7	23.8	24.0
2017-18	12.7	15.0	27.6	66.0	27.6	38.4
Total	**29.1**	**59.8**	**88.9**	**182.6**	**104.5**	**107.2**

Honey Production

2. The project provided concessional loan for honey production. An investment of INR 6 lakhs (US$8,709) was loaned for honey production to 15 beneficiaries, who purchased 150 honey bee boxes. Each box is providing an income of INR 750 (US$10.88) per month to the beneficiaries based on a production rate of 5 Kg honey per box per month being sold at INR 150 (US$2.1) per Kg. Total reported income from this livelihood activity is INR 9 Lakhs (US$13,064) for the entire year thereby providing a net profit of INR 705,000 (US$10,234) based on the input costs of INR 195,000 (US$2831) as per the estimates provided by the honey producing farmers.

Revenue Realized from Park Entry Fee

3. Tourism in India has been growing steadily with both domestic and international arrivals are improving. Average annual growth of international arrivals is 7.9% from 2011 to 2016. Within the tourism sector, Nature Based Tourism is one of the fastest growing sub-sector. In one of the landscapes, LRK, investments under the project has contributed to a steady growth in tourism. Improved PA management, good social mobilization, organization of exposure visits, linking with local nature interest groups, participatory census and a high degree of convergence boosted visitor numbers to LRK. Bank missions received good media coverage that raised awareness about the PA within and outside the State. In comparison, number of

visitors did not register a steady growth in other PAs within the State of Gujarat, indicating the project investments and association helped LRK become a potential nature tourism destination.

Table 5: Year-wise Growth in Tourists/Visitors and Entry Fee Collected during Project Implementation

Year	Number of tourists (LRK)	Total revenue (in '000 US$) (LRK)	NPV of total revenue (in '000 US$) (LRK)	Number of tourists in another PAs within Gujarat	
				Gir	Nal Sarovar
2011-12	5467	9.8	19.3	115951	53479
2012-13	9807	17.1	30.1	394203	82316
2013-14	11711	17.9	28.1	172574	81419
2014-15	14159	20.6	29.0	181772	75936
2015-16	16238	41.7	52.4	313422	68098
2016-17	15691	39.3	44.0	132261	69816
2017-18	16506	46.8	46.8	126844	34312
Total	**89579**	**193.2**	**249.7**	**1437027**	**465376**

Job Placement Following Skill Training

4. The project tied up with skill development agencies and training institutes under which alternative skill training was provided, specifically to young women. Around 1326 people were trained out of which 533 people are employed with private firms while 413 are pursuing self-employment. Those employed are primarily in the tourism sector working in departments, such as, housekeeping, food and beverage, transportation etc. As per feedback from the employed youth, an average monthly salary of INR 10,000 (US$145) is being earned.

Reduction in Drudgery

5. Selected investments made at Askot landscape resulted in reducing drudgery, particularly for women. Development of fodder banks and drinking water facilities within or nearby village commons reduced the need to visit the forests and steep slopes for collecting grass and drinking water resulting in saving of 8 to 10 hours per week. The saved time is reportedly used in various livelihood activities as well as for educational and health needs of the family. Even though a detailed analysis of the time saved is not undertaken, it translates to one man-day of work per week (4 man-days per month). Based on the assumption of a daily wage rate of INR 200 (approximately US$3) per day, a total of INR 800 (approximately US$ 12) per month is the assumed livelihood gain. Since actual valuation is not done by the project, this is not considered for IRR and NPV.

Projections of flow of economic benefits

6. Projections of the flow of benefits are made for the next 10 years for cash crops, honey production and improvement in visitor arrivals. For skill improvement and jobs projections are

made for five years only. The following assumptions are made:

a) For cash crops, investment and market value is assumed to be based on CAGR of 13.3% and 24.3% respectively, based on the actual data of last 4 years.
b) For honey production, 20% increment in investment for every year is considered with the assumption that a part of profits is reinvested for purchasing the next set of honey bee boxes to increase production.
c) For revenue from park entre fee, CAGR of 30% for last five years is used.
d) For youth employed via skill trainings, an average monthly salary of INR 10,000 (US$145.84) with a growth rate of 5% every year is considered. Skill training provided through BCRIP support was of entry level that ensured a job, but after a few years would require reskilling or advanced training to continue in the jobs and for career growth. In such a scenario incomes/salary cannot be reliably predicted after five years. Therefore, projections are made for five years only.

Table 6: Projections of the flow of benefits (in '000 US$)

Year	Cash Crop Distribution Benefits			Honey Bee Production			Tourists data			Skill Development	
	Investment	Market Value	NPV of Net Profits	Investment	Market Value	NPV of Net Profits	Number of tourists	Total revenue collected	NPV of total revenue	Total Income	NPV of Incomes
Y1	31.3	82.1	45.4	10.5	12.3	1.6	0.3	60.7	54.2	1730.2	1544.9
Y2	35.5	102.2	53.2	12.5	14.7	1.7	0.3	78.8	62.8	1816.7	1448.3
Y3	40.2	127.1	61.8	15.1	17.7	1.9	0.4	102.3	72.8	1907.6	1357.8
Y4	45.5	158.0	71.5	18.1	21.2	2.0	0.5	132.7	84.4	2003.0	1272.9
Y5	51.6	196.6	82.3	21.7	25.4	2.1	0.6	172.3	97.8	2103.1	1193.4
Y6	58.4	244.5	94.3	26.0	30.6	2.3	0.7	223.6	113.3	-	-
Y7	66.2	304.0	107.6	31.2	36.6	2.5	0.9	290.2	131.3	-	-
Y8	75.0	378.2	122.4	37.4	44.0	2.6	1.0	376.6	152.1	-	-
Y9	85.0	470.3	139.0	44.9	52.8	2.8	1.3	488.7	176.2	-	-
Y10	96.3	585.0	157.3	53.9	63.4	3.0	1.5	634.3	204.2	-	-
Total	**584.9**	**2647.9**	**934.8**	**271.3**	**318.7**	**22.7**	**7.6**	**2560.2**	**1149.0**	**9560.6**	**6817.2**

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

ICR was shared with the borrower but comments have not been received at the time of submission of this ICR.

ANNEX 6. SUPPORTING DOCUMENTS (IF ANY)

Project Related Documents

1. Project Appraisal Document
2. Project Implementation Plan
3. Management Letters and Aide Memoires for ten Implementation Support Missions and one MTR Mission
4. Twelve Implementation Status Reports filed during the project period
5. Various performance reports, presentations and workshop proceedings received from Implementing Agencies
6. Landscape Atlas for Askot and five research reports published by WII
7. Landscape Atlas for LRK published by GEER Foundation
8. Various Utilization Certificates, Interim Unaudited Financial Reports, Contract lists and Procurement Post Review reports
9. Beneficiary Feedback Survey conducted by the Bank Task Team at MTR and end of project

Other Documents

10. Bank Guidance: Implementation Completion and Results Report (ICR) for Investment Project Financing IPF) Operations; Effective July 1, 2017
11. ICR for the “EU Natura 2000 Integration Project” (P111205) for Republic of Croatia (Report No. ICR00004150), The World Bank, October 2017
12. Economic Valuation of Tiger Reserves in India: A Value + Approach. Indian Institute of Forest Management. Bhopal, India. January 2015.