Report Number: ICRR0021287

1. Project Data

BRD-79210,TF-93089 31-Dec-2015 41,517,246.21				
BRD-79210,TF-93089 31-Dec-2015 41,517,246.21	P086660 Country	TN-Second Natural Resources Manage Practice Area(Lead)		nagement
17-Jun-2010 26-Dec-2017 IBRD/IDA (USD) Grants (USD) Original Commitment 36,100,000.00 999,710.00 Revised Commitment 36,100,000.00 23,508.96 Actual 33,012,639.67 23,508.96 Prepared by Reviewed by ICR Review Coordinator Group		• • • • • • • • • • • • • • • • • • • •		Total Project Cost (USD) 41,517,246.21
Original Commitment 36,100,000.00 999,710.00 Revised Commitment 36,100,000.00 23,508.96 Actual 33,012,639.67 23,508.96 Prepared by Reviewed by ICR Review Coordinator Group	• • •	_ , , , , , , , , , , , , , , , , , , ,		
Revised Commitment 36,100,000.00 23,508.96 Actual 33,012,639.67 23,508.96 Prepared by Reviewed by ICR Review Coordinator Group		IBRD/I	DA (USD)	Grants (USD)
Actual 33,012,639.67 23,508.96 Prepared by Reviewed by ICR Review Coordinator Group	Original Commitment	36,100,000.00		999,710.00
Prepared by Reviewed by ICR Review Coordinator Group	Revised Commitment	36,100,000.00		23,508.96
	Actual	33,012,639.67		23,508.96
Pellekaan	Prepared by Francesco Cuomo	J. W. van Holst	ICR Review Coordi Christopher David Nel	

Project ID P112568	Project Name TN:GEF Second Natural Resources Mgt (P112568)	
L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
TF-97703	31-Dec-2015	8,845,183.14

Bank Approval Date 17-Jun-2010	Closing Date (Actual) 26-Dec-2017		
	IBRD/IDA (USD)	Grants (USD)	
Original Commitment	0.00	9,730,000.00	
Revised Commitment	0.00	8,845,183.14	
Actual	0.00	8,845,183.14	

2. Project Objectives and Components

a. Objectives

The original project development objective (PDO) was to "to improve living conditions for rural communities in the Project Area" (Loan Agreement, page 5). The legal agreement goes on to enumerate activities that would contribute to the objectives such as "fostering increased access to basic infrastructure and services, sustainable increase of income, improved natural resource management practices and promotion of an integrated approach to community-based development among various stakeholders". The PAD defined a slightly different PDO: "to improve the living conditions of rural communities in three governorates in terms of access to basic infrastructure and services, sustainable increase in income, and improved natural resource management practices by fostering an integrated approach to community-based development" (PAD, para 14). As per IEG guidelines, the objective in the loan agreement will be used in this review against which to assess the project's achievements.

The original Global Environment Objective (GEO) was to "reduce the threat of land degradation and climate change to vulnerable agricultural production systems in the target areas while developing options to address land-based pollution affecting the Mediterranean Sea" (PAD, para 15). According to IEG guidelines the extent to which the GEO is achieved is not assessed separately if it is not part of the IBRD loan agreement.

The project development objective and the Global Environment Objective were revised and combined through a Level 1 restructuring approved on February 5, 2013 to read: "improve access to basic infrastructure and production means, and to improve management of natural resources, using a participatory approach in the project area" (Restructuring Paper, January 2, 2013, Table 1).

b. Were the project objectives/key associated outcome targets revised during implementation? Yes

Did the Board approve the revised objectives/key associated outcome targets? Yes

Date of Board Approval 05-Feb-2013

c. Will a split evaluation be undertaken?
Yes

d. Components

The ICR calculated components financing only for IBRD/GEF resources to "maintain clarity and meaningfulness" (ICR, Annex 3). The following costs are reflective of only IBRD/GEF commitments and actual costs.

Component 1 - Support to Participatory Development Plan (PDP) Investments (original cost US\$47.91m, actual cost US\$39.9m). This component was designed to support priority investments in infrastructure (water access and management, feeder roads) and sustainable agricultural production systems. Funding was also allocated for technical assistance in "agricultural, pastoral and sylvo-pastoral production practices, proliferation of climate-resilient farming, diversification of rural economic activities, and mainstreaming of soil and water conservation" (ICR, para 12).

Component 2 - Support to the Development of Treated Wastewater Use for Agriculture (original cost US\$2.06m, actual cost US\$0). The objective of this component was to support the National Program for Wastewater Reuse through the transfer of treated wastewater from the Greater Tunis area towards the interior of the country (ICR, para 13). This component was cancelled following the level 1 restructuring in February 2013 (ICR, para 18).

Component 3: Institutional Strengthening and Awareness Raising (original cost US\$9.59m, actual cost US\$2.55m). The objective of this component was to support the mainstreaming of the integrated participatory approach (IPA) within project areas. Activities focused on Agricultural Development Groups (ADGs) and Expanded Development Committees (EDCs) at the Imada (district) level; Regional Agricultural Development Commissariats (RADC) and the Regional Coordination Units (RDCs) at the regional level; and the staff of the Ministry of Environment and Sustainable Development (MESD), and the Agriculture, Water Resources and Fisheries (MAWRF) and the Central Coordination Unit (CCU) staff at the national levels (ICR, para 14).

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates
Project cost. Total project costs were estimated at US\$67.66m at approval in 2010, revised to US\$45.8m in 2013 during a level 1 restructuring, and actual project cost was US\$45.6m at project close (ICR, page 2). This difference was driven by the Government of Tunisia request to reduce its contribution (from US\$9.8m to 0) and a US\$4m lower contributions from local communities (from US\$7.4m to US\$3.1m).

Financing. At approval, the World Bank committed to an IBRD loan of US\$36.1m, a GEF Grant of US\$9.7m, and another GEF grant of US\$999 thousand for project preparation (TF-93089). During restructuring, the initial grant of US\$999 thousand was reduced to US\$23 thousand. At project close, the World Bank financed US\$33m from IBRD (91% of committed financing), the GEF grant was US\$9.4m (96% of committed grant) and US\$23 thousand (23% of committed financing).

Borrower Contribution. At project approval, the Government of Tunisia (the borrower) agreed to finance US\$14.6m (PAD, page v) and beneficiaries were supposed to contribute US\$7.2m (PAD, page v). During the 2013 restructuring, these amounts were reduced to US\$0 following the Government of Tunisia request

to "to increase the financing percentages of projects supported by the Bank in the post revolution Tunisia to 100%" (ICR, para 20). According to the ICR, the increased Bank financing percentage was approved due to "the country's extremely difficult fiscal situation in the post-revolution environment" (ICR, para 24). At project close, the Government of Tunisia contributed US\$0 (0% of expected contributions), while beneficiaries contributed US\$3m (41% of expected contributions).

Dates and Restructuring. The project was approved in June 2010, became effective in February 2011, and was closed in December 2017 (compared with the original closing date of December 2015). The project was restructured four times as follows:

- A level 1 restructuring in February 2013, and three level 2 restructurings in 2015, 2016 and 2017. The level 1 restructuring in February 2013 revised the PDO and the GEF objective, altered the Results Framework and dropped component 2 to "ensure full alignment and consistency with the revised PDO and new component structure" (ICR, paras 15-18). The National Sanitation Utility was excluded from the revised project as it was not relevant, and the role of the Ministry of Environment and Sustainable Development (MESD) was reduced to the implementation of activities under the new subcomponent 2.3 (Environmental Knowledge Management). At the local level, the role for the validation of the participatory development plans was transferred from the Local Development Councils (LDC) and Regional Development Councils (RDC) to Regional Agricultural Development Commissariats, as the LDCs and RDCs ceased to exist (ICR, para 19).
- The second restructuring extended the project closing date to December 2016
- The third restructuring reallocated proceeds among categories and extended the project closing date to December 2017.
- The fourth restructuring adjusted the target value of selected indicators "for realism and meaningfulness" and increased the financing percentages for works under the GEF grant "to scale up the activities of the Project to the benefit of vulnerable communities" (ICR, para 22, 26).

Given the changes in both the PDO and Results Framework, this review will proceed with a split evaluation of the overall outcome.

3. Relevance of Objectives

Rationale

Relevance of Objectives at project approval. At approval, the project development objective "to improve living conditions for rural communities in the project area" was relevant to the Government of Tunisia 2007 National Development Plan (NDP) and the Bank's 2009 CPS. The project development objective was relevant to axis two of the NDP (comprehensive development approach that guarantees sustainable growth and a harmonious balance among economic, social and environmental priorities) and axis five, namely the transformation of agricultural system (CPS, para 44). The PDO was also relevant to the 2009 Bank Country Assistance Strategy (CAS) pillar two (sustainable development and climate change) and pillar three (improving the quality of service delivery) (CPS, para 71, 90, 93, 101). Nevertheless, it was not clear what was meant by either "improve" or "rural communities".

Relevance of Objective at project close. At project close, the project development objective had been amended but in principle it remained highly relevant to the Government of Tunisia and Bank strategies. In particular, three pillars of the Government of Tunisia Strategic Orientations for 2016–2020 were relevant to the project: pillar 1 focused on improved governance and structural reforms; (ii) pillar 4 aimed to tackle regional disparities and support the ambitions of lagging regions by building economic infrastructure and supporting entrepreneurship; and (iii) pillar 5 aimed to promote green growth and ensure the sound utilization of natural resources, with an emphasis on rationalizing water and energy consumption, while promoting modern agricultural systems (ICR, para 29; CPS, para 35). The Systematic Country Diagnostic (SCD) dated June 2015 for Tunisia highlighted the need to promote inclusive growth through policies aimed at addressing spatial inequalities in relation to access to basic services and infrastructure in lagging areas (in particular, water) and improve people's employment opportunities and quality of life (pages 27-29, 30-35). The CPF emphasized the need for a greater focus on community engagement of those left behind and territorial planning approaches through Pillar 2 (reducing economic disparities in regional development between coastal and internal lagging regions), and Pillar 3 (need for enhancing social inclusion and directing the Bank's assistance to particularly vulnerable segments of society) (CPS, paras 36,60-61, 63). Project development objective after restructuring. The ICR presented several reasons why the Bank project's team and the Government of Tunisia decided to amend the project development objective. It was aimed to address low disbursement rates and miniscule results/achievements and reflect changes in country priorities brought about by the revolution of 2011 (ICR, para 24). This review notes that the project's amended level of achievement and ambition were lowered as a result of the level one restructuring and that the level of ambition has been downgraded because of a shift from an outcome ("improving living conditions") to an input to the discarded outcome ("improve access to basic infrastructure and production means, and to improve management of natural resources"). Again, the meaning of "improve" was not defined and "access" was also not defined. In summary, the relevance of the revised objective was marginally relevant to the Government and Bank's strategies because of its weak formulation while still being relevant to some of the activities included in those strategies.

Conclusion: The relevance of the original objective to Government and Bank strategies at project approval was high but demanding in terms of measurability. On the other hand, after restructuring (and consequently at the project's close) the revised objective was weak (without any definition of the meaning of "improve" or "access" and also one which was difficult to measure) and only modestly relevant to Government and Bank strategies. Therefore the relevance of the project's objective at the project's close is rated modest.

Rating Modest

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To improve living conditions for rural communities in the project area

Rationale

This is the original objective of the project, before its revision in 2013. The theory of change was that this objective was to be achieved "by fostering increased access to basic infrastructure and services, sustainable increase of income, improved natural resource management practices and promotion of an integrated approach to community-based development among various stakeholders" (PAD, para 14). The project area covered the Governorates of Jendouba, Kasserine and Madenine. These are areas representative of a major agro-ecological zones and socio-economic system: the humid and diversified North, the dry agro-pastoral Center, and the predominantly arid pastoral South. The selection criteria for the governorates also included high poverty levels, vulnerability to land degradation including desertification, and increased drought risk (with water scarcity expected to worsen as a result of climate change).

Outputs:

Infrastructure and land ownership

- Margins per hectare increased to TND15,000 (US\$5,400) from TND8,000 (US\$2,900) from land reparceling, small irrigation (ICR annex 1), and rain water collectors saved TND250 per hectare on additional irrigation costs leading to TND1,500 (US\$540) per hectare of extra earnings on plantation (ICR Annex 1).
- According to the ICR, calculations done using available data showed an incremental net benefit of about 2,700 TND (US\$980) per cistern/year. According to crop production data from the 4th Northwest Mountainous and Forested Areas Development Project (PNO4), which the ICR used in lieu of missing data from this project (ICR, Annex 5, para 3), there were incremental net benefits per hectare for leguminous species, 100 TND (US\$36) for wheat and 260 TND (US\$94) for olives, and increases in yields varying between 25 percent for wheat, and 27 percent for olives and 13% for fodder crops (ICR, Annex 4, para 3). The ICR does not, however, justify the relevance of the results measured in a different project in a mountainous region in Tunisia (PNO4) to this project, which despite being supervised jointly and programmatically, it was operating in other 7 regions.
- 1,312 cisterns for rain water collection were constructed over the project investment period (ICR, Annex 4, para 7). These cisterns benefited some 1,312 households (and served about 1,400 ha of agricultural land).
- Land ownership was consolidated on 15,243 hectares (target 9,000 hectares), so that individual farmers own fewer, larger, more compact and more contiguous land parcels. This activity interested 11,334 farmers (ICR, Annex 1 page 32).

Access to water. Providing access to water has resulted in a reduction in the average distance travelled to fetch water from 3.0 to 0.5 kilometers and reduced the amount of time women and children spent supplying the household with water by an estimated three hours per day (ICR, para 38).

Income Generating Activities. Income generating activities supported by the project yielded average net earnings of TND1,300 per year, ranging from TND450 for poultry and TND1,000 for beekeeping to TND2,270 for greenhouse and TND3,000 for sheep fattening.

- The project supported 3,691 income generating activities. The most common activities were sheep fattening: 38%, beekeeping: 28% and poultry: 27%. Others (greenhouses, rabbit, etc.) accounted for the remaining 7% (ICR, Outcome 2, page 32).
- 4,474 beneficiaries received technical advice on investment projects, of which 1,402 beneficiaries trained in livestock production, and more than 1,000 livestock producers received regular technical and management advice.

Outcomes:

- Investments in small irrigation, land re-parceling and rain water collector led to significantly improved margins per hectare for beneficiary households. According to the Bank's project team, due to data limitation at baseline and project end, it is impossible to clearly assess the project's impact on improved incomes for beneficiaries. Nevertheless, the project had a positive impact on the living conditions in some of the poorest areas of Tunisia, mostly landlocked and areas to the south.
- Based on a beneficiary survey more than 50% of beneficiaries from income generating activities stated that they experienced a 20% increase of their incomes. 34.5% stated that they had a significant positive impact on food consumption and self-sufficiency, 9% on education, and 7.5% on the value of household assets (ICR, Annex 1).
- Income generating activities increased margins on average by TND 9,500 per hectare. In the project areas, the poverty lines are 1703 TND/per year per person for Communal areas and 1501 TND per year per person in Noncommunal.
- Project beneficiaries reported in 2016 that rehabilitation of feeder roads brought about improvements in access to medical services, schools and other public services outside community boundaries (ICR, para 38).

Conclusion: While the objective of improved living conditions was not defined in the project documents, based on the evidence above, the project was substantially associated with measurable improvements in the welfare and economic activities in rural communities and the services available to those communities.

Rating Substantial

Objective 1 Revision 1

Revised Objective

To improve access to basic infrastructure and production means [in the project area]

Revised Rationale

The original project objective was restructured and divided in two parts. This is the revised objective 1. According to this objective the project aimed to improve access to basic infrastructure and production means by financing the construction of several infrastructure (roads, water, etc.) and supporting income generating

activities via training and financing. Hence, the theory of change for this revised objective was to provide access to infrastructure and production means to support the achievement of long-run improvements of in living conditions "in concert with the continued focus on applying participatory approaches to identifying local development priorities" (ICR, para 27).

Outputs

Improved access to infrastructure.

- 210 kilometers of rural feeder roads covering around 8 percent of the population in target areas (about 10,620 households or about 64,000 people considering 6 people per households) were built or rehabilitated (original target 90 km, revised target 150km) (ICR, para 34).
- 1,339 water supply points, including for domestic-use, were built (original 400, revised 900) (ICR, para 34). Of these, 1,312 cisterns for rain water collection were constructed over the project investment period (ICR, annex 4, para 8). These cisterns benefited some 1,312 households (and served about 1,400 ha of agricultural land).
- 64 districts (Imadas) were provided with new/improved irrigation or drainage services covering 55% of the population of the 3 Governorates (ICR, Outcome 1, page 31)

Improved access to production means

- 5,554 ha of irrigated land were developed or rehabilitated (target of 3,500 ha) representing a 30% increase of irrigated areas in the Project targeted *Imada*s (ICR, Outcome 2, page 32).
- The project supported 3,691 income generating activities. The most common activities were sheep fattening: 38%, beekeeping: 28% and poultry: 27%. Others (greenhouses, rabbit, etc.) accounted for the remaining 7% (ICR, Outcome 2, page 32).
- The project also supported 4,474 beneficiaries with technical advice on investment projects, 1,402 beneficiaries trained in livestock production, and more than 1,000 livestock producers received regular technical and management advice (ICR, Outcome 2, page 32).

Outcomes:

- The project provided improved access to basic infrastructure to roughly 76,000 beneficiaries, which represented around 12,700 households (original target 21,000, revised target 50,000) (ICR, para 34). The project achieved so by financing the construction of infrastructure mentioned above. According to the Bank's project team, households were estimated based on proximity to Bank financed investments, based on a clear methodology developed during the first Natural Resource Management project.
- The project improved access to production means to 19,700 direct beneficiaries (original target 17,500, revised target 18,000) by supporting income generating activities, agricultural extension and technical consultations, construction and rehabilitation of small-scale irrigation schemes mentioned above (ICR, para 35).

Conclusion: The project substantially improved access to basic infrastructure and production means for beneficiaries in the project area.

Revised Rating Substantial

Objective 2

Objective

To improve management of natural resources [in project areas] - this objective was added after the project restructuring.

Rationale

The original project objective was restructured and divided in two parts. This is the second part of the revised objective

According to this objective the project was designed to support investments in sustainable land management, including: construction of dry-stone gabions and catchments, land re-parceling and consolidation, investments in improvements of pastures and local forests, conservation of deteriorated pasture tracks, etc. That said, the ICR indicates, that although there is little evidence "on the impact of the project's extensive water and soil conservation activities" positive impacts "can be plausibly-assumed from literature" which is the basis for the theory of change that would achieve this objective (ICR, para 40).

Outputs:

- 36,000 trees were planted; 3,157 ha of improved pastures and 40 ha of forestry access rehabilitated.
- 67,370 cubic meters of gabions in Kasserine and Jendouba and 14 aquifer recharge units in Médenine were built,
- 3,000 cubic meters of gabions were restored and 1,000 ha were consolidated
- 1,050 ha of olive terraces and 90 ha of basin plantations were rehabilitated
- According to the Bank's project team, most the 6,000 beneficiaries from training activities in national
 institutions were trained by the Ministry of Environment on mainstreaming natural resource management.
 The training covered organizing demonstration and field schools for demonstration purposes, capacity
 building with local leaders in small communes and study tours and workshops in the Ministry of
 Environment and Agriculture.
- According to the Bank's project team, these were direct natural resource management investments that stemmed from a very narrow definition of natural resource management activities. On top of these, there were other activities performed along infrastructure rehabilitation (such as small barrages and dikes on the side of the roads), irrigation activities and land re-parceling. These activities contributed to improve the state of natural resources and protect farmland, particularly considering that land in project areas is steep.

Outcomes:

• Approximately 33,600 hectares were covered by natural resource management investments and practices (compared with a revised target of 20,000 hectares, and an original target of 34,000 hectares in 2017).

- The ICR acknowledges that the project did not produce strong evidence to substantiate the claim of improved management of natural resources, and no outcomes are provided (para 59). It is understood, however, that it is nearly impossible to present robust evidence on outcomes of natural resource management activities due to the long period before these outcomes materialize.
- According to the Bank project's team, there is limited understanding in Tunisia of soil conservation, multi- or inter-cropping and consequently the soil is plowed, and exposed to sun and rain to the point that rain water is often not absorbed because the soil is too compacted. Considering that there has also not been a robust focus in government policy on improving natural resource management and that on the other hand there has been a strong incentive to cultivate land unsustainably because of large crop subsidies, this project arguably took action to improve the management of natural resources in Tunisia since it promoted the adoption of sustainable farming practices. For example, "nearly 5,500 hectares of small-holder plots under irrigation coverage (on- and off-farm systems), and the IGAs have been an essential tool in ensuring diversification of agricultural activities away from climate-risky field crop cultivation, to sustainable animal husbandry, climate-resistant arboriculture, and protected agriculture (e.g. the proliferation of 150 green houses in Medenine, one of the most water-stressed regions" (ICR, paragraph 40).

Conclusion: The project did not present sufficient evidence in terms of outcomes to establish the achievement of its objective of "improved management of natural resources." Such outcomes will only be evident in the longer term. There was evidence, however, that during implementation the project took action to introduce a number of mechanisms and strategies specifically directed at improving the management of natural resources in Tunisia. The efficacy of this objective has therefore been rated substantial.

Rating Substantial

Rationale

In conclusion, the efficacy of the original objective is rated Substantial because it achieved its objective of improving the living conditions of beneficiaries in project areas.

The efficacy of the revised objective is also substantial as revision 1 of the first objective is rated Substantial because the ICR showed evidence of improved access to basic infrastructures and production means. The efficacy of the new Objective 2 is also rated substantial because of the evidence of improved management of natural resources during project implementation.

Overall Efficacy Rating Substantial

5. Efficiency

The PAD provided an ex ante analysis of the likely efficiency of the project by examining at the introduction of improved agricultural practices and rural infrastructure. The Economic Rate of Return (ERR) was estimated at 16 percent over 20 years (PAD, paras 38-40). However, the ICR indicated that there were questions regarding the validity of the ex-ante analysis in the PAD because of "methodological and project-specific impact data constraints" and the exclusion of income generating activities from the analysis (ICR, paras 42, 46).

The ICR, examined efficiency against the efficiency of the participatory development plans (the main tool used to disburse project funds), and the project administrative efficiency of the project's administration. **Efficiency of participatory development plans**. These groups/committees were the system for communities to develop and implement Participatory Development Plans, which was the "main tool for engaging local communities" (ICR, para 33). 84% of ADGs/EDCs participatory development plans were executed compared with a target of 90%. Due to the lack of robust quantitative evidence, the ICR attempts to establish efficiency for the Participatory Development Plans by using rural roads and income generating activities as a proxy. According to the ICR, benefit streams comprised results from a rural roads model (the largest sub-component of the Project by cost), as well as the budgets of the Project's most representative income generating activities. The base-case Economic Internal Rate of Return was estimated at 17% over twenty years (ICR para 44).

Project administrative efficiency. According to the ICR, "in terms of unit costs, project's activities have

been implemented efficiently, well-within comparable cost ranges for similar types of activities across Tunisia" but no verifiable evidence is presented in terms of project management costs as they are allocated within components (ICR, para 44). There were 2 years of delays due to political events happening in country and changing priorities, which eventually led to the restructuring of the project in 2013.

Not mentioned in the ICR, is that the average cost of the project per household was \$295 or perhaps \$59 per capita (assuming an average household size of 5), based on an actual cost of \$45.6 million and 154,000 households reached. These investments led to improvement in average net incomes for beneficiaries from income generating activities of TND1,300 (US\$468). Thus, the project was in the end efficiently administrated, considering that the poverty line per person is TND1,704 per person per year.

Conclusion: This review agrees with the ICR that there was limited evidence on the project's efficiency due to methodological and project-specific impact data constraints. Nevertheless, considering the project's

achievements in providing beneficiaries with substantial benefits in terms of enhanced living conditions and

better services, with net income gains of at least US\$468 per household, at an average cost of \$295 per household, efficiency is rated substantial.

Efficiency Rating Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	16.00	0 ☑Not Applicable
ICR Estimate	✓	17.00	0 ☑Not Applicable

^{*} Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objectives is rated modest because of the diluted and weak revised project objective, efficacy for both the original and revised objectives is rated substantial and efficiency is also rated substantial because of the net gains achieved by households in project areas at a limited cost for the project. Thus, the outcomes of the project objective before and after restructuring was Moderately Satisfactory. As such, the project had moderate shortcomings and hence the overall outcome rating is Moderately Satisfactory.

a. Outcome Rating Moderately Satisfactory

7. Risk to Development Outcome

The main risks to development outcome concern the sustained capacity of various institutions supported by the Project to maintain infrastructure and support income generating activities.

- First, according to the ICR, "It remains an open question to what extent and how adequately the Tunisian institutions in charge of the local infrastructure created by the project can manage it effectively to ensure its long-term functionality and viability" (ICR, para 70).
- Second, the sustainability and continuity of investments and economic activities initiated with the Project's financial and technical support remain unclear. As the ICR notes: "a significant part of the income generating activities have been implemented towards the end of the project and not enough support has been provided to ensure that these essential activities are robust enough to stand on their own. As these small businesses carry on, or perhaps attempt to grow, questions about access to finance and markets continue to persist" (ICR, para 71).
- Finally, the ability of regional authorities, RADCs, specialized technical entities (such as the Office of Pastures and Animal Husbandry), and Agricultural Development Groups to sustain the project's local participatory development is unclear.

8. Assessment of Bank Performance

a. Quality-at-Entry

- This project was largely a replica of the first NRMP which closed in 2004. The PAD for this second phase reviewed the lessons from the first project that highlighted the need to strengthen institutions particularly the capacity building of Agricultural Development Groups (ADGs) which were at the center of supporting their communities to design and implement participatory development plans (PDPs). However, the team did not analyze what major changes happened between 2004 and 2010, and in case what design modification would have best addressed these changes.
- However, the identified local partners (local municipalities and Regional Agricultural Development Commissariats), had no prior experience in implementing Bank project, and this was not taken into account at the design stage. According to the Bank project's team, this was also one of the key reasons why the project stagnated for so long, and by the original project closing date there was still a significant share of commitment that remained undisbursed.
- The original PDO was, however, ambitious given the risky environment of the project area described in the PAD as having "high poverty levels, vulnerability to land degradation including desertification, and increased drought risk with water scarcity expected to worsen as a result of climate change" (para 5). Moreover, the project would focus on degraded zones in the project areas. The assessment of these and other risks facing the project as "medium" in the PAD was probably too optimistic (PAD, paragraph 33). Indeed, the ICR also noted that the project design also lacked an adequate recognition of the potential risks for implementation, as well as a frank assessment of the readiness/realism for successful implementation (ICR, para 66).
- The original Results Framework described in the ICR "was ineffectual in capturing the project's implied theory of change" (ICR, para 66). The core weakness of the Framework was that it was merely a listing of objectives and expected outcomes and their indicators. Here was also no mention of the roles that the project's institutions or the private sector would play in achieving the project's objectives and outcomes.
- The potential lack of local private contractors for small-volume works, particularly for construction/reconstruction of remote feeder roads and other civil works, was not taken into account at appraisal. Due to the high regionalization and fragmentation of the project's interventions, it was a challenge to identify adequately qualified (technically and financially) private sector suppliers, thus causing disruptions and delays in the project's implementation. Eventually, this was overcome through aggregation of civil works packages, which led to a better supply response from the private sector (ICR, para 54).
- According to the ICR, the original M&E design had "overconfidence in the ability of implementing partners, both central and regional, to understand, internalize and sustain the project's M&E efforts" (ICR, para 57).

Quality-at-Entry Rating Moderately Unsatisfactory

b. Quality of supervision

- When this project's launch workshop was held at the end of May 2011 (in the wake of the Jasmine Revolution), it faced additional difficulties to those already outlined above with respect to the project's quality at entry.
- The Bank's project team identified the implementation issues in the immediate aftermath of the
 Revolution and with the Government of Tunisia, restructured the project in order to improve its prospects
 for effective implementation and impact. In the even the ICR reports that the project was turned around
 from the brink of cancellation to a relative success (ICR, para 67). While before restructuring only US\$2
 million were disbursed, by project close 93% of projects funds were disbursed.
- The Bank's project team supported the project with significant efforts and, together with the Government of Tunisia, several rounds of restructuring in order to improve implementation results. However, according to the ICR, the Bank should have attempted to avoid two back-to-back closing date extensions (a year apart), and instead undertake just one extension of 18 months (ICR, para 56). Furthermore, the revised objective of the restructured project was significantly weakened in its ambition, as discussed in section 3.
- The ICR noted that the project was supervised jointly with PNO4, which had similar objectives and approaches to implementation. Bank project teams were adequately staffed and, when necessary, relied on FAO and outside consulting expertise (ICR, para 68)
- According to the ICR, the Bank project's team supported through constant capacity building and supervision effort support of the RADCs staff for screening subproject activities and properly reporting on compliance and application of safeguard mitigation measures.

Quality of Supervision Rating Moderately Satisfactory

Overall Bank Performance Rating Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

• The initial formulation of the M&E design framework was inadequate to assess the original PDO and the GEO. Rather the PDO indicators were output or input/implementation variables as opposed to outcomes (ICR para 57). According to the ICR, the complexity of the original M&E design and excessive layering of objectives was caused by a poorly flowing Results Framework (ICR, para 57)

- After restructuring, the results framework was also revised to better align with the new PDO, and the monitoring system became more relevant (ICR, para 57). However, one needs to consider that the PDO was significantly lowered in its level of ambition to measure only access to basic services and production means.
- Due to the weak revised objectives, no outcome oriented PDO indicators were introduced, leaving the results chain focused on measurements of physical achievements for all indicators (ICR, para 57). Furthermore, indicators for the revised objective 2 ("to improve management of natural resources") were still not adequate to track evidence that showed an improved management of natural resources in project areas.

b. M&E Implementation

- The Ministry of Agriculture, Water Resources and Fisheries was responsible for project implementation, and chaired by the National Coordination Committee. This committee was designed to be supported by the Central Coordination Unit (CCU), established within the Directorate General of Financing, Investments, and Professional Organizations (DFIPO).
- The Central Coordination Unit was responsible for M&E of the project. Data were to be gathered and handled by the three Regional Agricultural Development Commissariats (RADCs) and then sent to the CCU as well as to the Ministry of Environment and Sustainable Development, specifically to the General Directorate of Environment and Quality of Life (DEQL) and National Sanitation Utility (NSU). The computer M&E system was to be implemented in the first year of the Project. A consulting firm was selected to be responsible for developing the system, designing the data base, training personnel, and ensuring technical assistance over the initial period. Data collection and recording would be carried out by the institution responsible for the data base (CCU, the RADCs, the DEQL and the NSU). After project restructuring in February 2013, the NSU was excluded from project implementation as it was no longer relevant because component 2 was dropped at restructuring.
- According to the ICR, "The RADCs through the Regional Coordination Units and the CCU made significant efforts in collecting and systematizing implementation monitoring data throughout the life-cycle of the project" (ICR, para 58). This allowed for efficient corrective action, including identifying solutions to problems with contractors and alerting the higher-level decision makers.
- Despite the lack of appropriate outcome/impact variables even after restructuring, several thematic studies were commissioned in 2016-2017 and yielded some information on impact. The Government of Tunisia's final evaluation report of NRMP2 included a few basic elements of evaluation, further informing the discussion on impacts of increased access to infrastructure and production means (ICR, para 59).

c. M&E Utilization

• According to the ICR, "there is scant evidence of broad and specific utilization of data, information and knowledge generated by the Project" (ICR, para 60).

• On the other hand, it is salutary to read in the ICR that the Ministry of Agriculture, Water Resources and Fisheries has adopted the project M&E data collection system for various other projects under its implementation

M&E Quality Rating Modest

10. Other Issues

a. Safeguards

According to the ICR, the project was compliant with the social safeguards requirements (ICR, para 62).

- According to the ICR this project was at the forefront of piloting the use of 'borrower systems' for environmental and social safeguards under OP 4.00. It triggered OP/BP 4.01 on Environmental Assessment, OP/BP 4.36 on Forests, and OP/BP 4.12 on Involuntary Resettlement.
- No major or pervasive environmental safeguards issues were flagged during implementation.
- The acquisition of land for project activities was done on a voluntary basis and conformed with the requirements of OP 4.12 and national legislation (ICR, para 62). There were delays in registering land transfers, but this shortcoming were resolved before project closed, and no conflicts related to land issues were registered

b. Fiduciary Compliance

Procurement. According to the ICR, significant problems persisted with respect to aspects related to procurement, which was not managed up to standard throughout implementation. According to the Bank's project team, the reason for this was the original identification of local municipalities and Regional Agricultural Development Commissariats that had no implementation experience and required significant capacity building. As a consequence, these project implementation entities were not able to ensure timely settlement of all outstanding payments for the goods and works delivered under the Project. (ICR, para 64). Furthermore, fiduciary aspects related to procurement (from TORs to award), contract management and settlements remained a constant issue, and, while eventually resolved with assistance from the Bank's project team, they required the Bank's maximum allowable two-month extension of the grace period for disbursements/payments to clients and vendors. This concerned specifically the settlements for works and goods delivered as there were systemic delays in the final acceptance/certification of works by specialized domestic authorities and local contractors were unable to secure warranty bonds to have final payments authorized and released in a timely manner (ICR, para 55).

Financial Management: According to the ICR, the financial management arrangements were reviewed regularly by the local Tunisian body for reviewing public spending, as it is the case with all Bank project. The

reviews provided accurate financial information and reasonable assurance that project funds were being used for the purpose intended (ICR, para 63). One audit resulted qualified: a small amount (US\$7,000) was found as ineligible expenditure under the GEF Grant (misattribution to category) by the external auditor and this was regularized on time by the CCU (ICR, para 63).

c. Unintended impacts (Positive or Negative)

- According to the ICR, gender was given significant attention in the project as well as efforts to ensure specific targeting of women. This resulted in achieving a rate of 38 percent inclusion of women (ICR, para 48).
- The Project had a significant institutional development dimension and reached nearly 6,000 individuals with capacity enhancement activities in key institutions such as the Ministry of Environment, the Ministry of Agriculture and local municipalities (ICR, para 50).

d. Other

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR		Substantial	

12. Lessons

The ICR concluded that six lessons emerged from this project. Some lessons were focused exclusively on the situation in Tunisia and others provided minimal new insights. This Review has selected three lessons from the ICR as being novel and relevant to broader operational interests than this project in Tunisia. They are as follows with some re-arrangement of emphasis and editing by IEG:

Following the deteriorating political environments, the continued relevance of the project objectives, design implementation modalities should be re-assessed at the first available opportunity. In the case of this project Bank management took appropriate action to launch a review of the project's future with the new Government very soon after the political transition had taken place which avoided the risk of the project's cancellation due to its very low disbursement percentage and lack of progress on implementation. As the ICR

noted, such reviews can "determine the necessity for and scale of changes required to reset projects on the course of successful implementation (or alternatively cancellation)".

Natural resource management projects should provide a methodology at appraisal for an accurate measurement of the impact improved natural resource management. The ICR provided an example, namely "the case of land consolidation activities where preliminary assessments indicated a significant increase in the profitability of farms whose land was consolidated". Increased values of land holdings, particularly in conjunction with the resulting access to feeder roads, was observed. Nevertheless, the ICR cautioned against generalization of such conclusions based on small samples. On the other hand, in this project no methodology or indicators were provided to understand and assess the effectiveness and efficiency of natural resource management activities, particularly as they related to GEF's global mandates.

Effective promotion of income-generating projects requires more than start-up support. The ICR noted that access to finance and markets are an indispensable element for implementing income generation activities (IGAs). It agreed that, "while providing training, technical support and assets to IGA beneficiaries were an essential first phase, lack of access to finance and markets as they grow dampened their growth prospects and affected sustainability". Agricultural finance instruments and linkages for farmers to markets are therefore important necessary conditions for supporting IGAs in the agricultural sector.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is well written, concise and outcome oriented. It provided a clear and logical story line for the project using data to support its conclusion. The ICR also identified shortcomings in the data when they existed.

 a. Quality of ICR Rating Substantial