Report Number : ICRR0021109

1. Project Data

Project ID	**Project Name**
P094692	KE-FMSCEDP (Coastal CD) GEF (FISH)
Country	**Practice Area(Lead)**
Kenya	Environment & Natural Resources

L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
IDA-48010,IDA_-48010	29-Oct-2016	77,000,000.00
Bank Approval Date	**Closing Date (Actual)**	
27-Jul-2010	30-Jun-2017	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	35,000,000.00	0.00
Revised Commitment	30,054,758.52	0.00
Actual	29,704,528.86	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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Project ID	**Project Name**
P108845	KE-FMSCEDP (Coastal CD) GEF (FISH) (P108845)

L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
TF_1-97578		40,000,000.00

Bank Approval Date
27-Jul-2010

Closing Date (Actual)

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	5,000,000.00
Revised Commitment	0.00	4,953,531.00
Actual	0.00	4,953,531.00

2. Project Objectives and Components

a. Objectives

The two objectives of the project, according to the Sector Investment Loan (SIL) grant agreement in 2010, were to "promote an environmentally sustainable management of Kenya's coastal and marine resources by (i) strengthening the capacity of existing relevant government agencies and, (ii) enhancing the capacity of rural micro, small and medium-sized enterprises in selected coastal communities" (Financing Agreement, SIL 2010, p 5).

The objective of the project, according to the Global Environmental Facility Trust Fund (GEF) financial agreement in 2010, was substantively similar to the SIL Agreement but without directly specifying the capacity enhancement activities: "to strengthen conservation and sustainable use of marine and coastal biodiversity" (Financial Agreement, GEF 2010, p 6).

The project went through a Level 1 Restructuring in 2012 and a Level 2 Restructuring in 2015. The objectives were revised in 2012. According to the Financial Agreements of the SIL and GEF in 2012, the new objectives of the project, focused more on the means to the ends, were: "(i) to improve management effectiveness and (ii) enhance revenue generation of Kenya's coastal and marine resources" (Amendment to Financial Agreement, SIL 2012, p 1 and Amendment to Grant Agreement GEF 2012, p 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

12-Sep-2017

c. Will a split evaluation be undertaken?

Yes

d. Components

The original project as it was designed in the Program Appraisal Document had 4 components:

Component 1: Sustainable Management of Fisheries Resources. (Appraisal costs were estimated at US$8.88 million, at closing the total cost was US$8.56 million) This component aimed at supporting governance reform of fisheries management in the Kenyan Exclusive Economic Zone through: (i) legislation and regulatory review, capacity building and the strengthening of monitoring, control and surveillance (MCS) of fishing activities, (ii) research on near-shore fish stocks, fish value addition, and market chain management, and (iii) improvements in fish production in near fish fisheries through sustainable and profitable fishing practices (PAD, p ii and p 8 and ICR, para 8).

Component 2: Sound Management of Natural Resources. (Appraisal costs were estimated at US$9.04 million, at closing the total cost was US$6.93 million) This component aimed to (i) improve sound management and regeneration of natural resources and biodiversity; and (ii) identify biodiversity products and markets to assist in promoting eco-tourism and spin-off industries. (PAD, p ii and p 9, and ICR, para 8).

Component 3: Support for Alternative Livelihoods. (Appraisal costs were estimated at US$12.2 million. The new appraisal estimate after the restructuring in 2012 was US$20.64 million. This component was merged with Component 4 after the restructuring in 2015. At closing the total cost was US$18.72 million). This component aimed to: (i) promote spatial planning and land capability mapping to identify environmentally and socially sensitive areas; (ii) integrate Coastal (environmental) Management (ICM); and (iii) comply with environmental regulations and safeguards. This component also aimed at supporting sustainable rural development in geographically focused pilot areas in coastal districts (PAD, p ii and p 9-10; ICR para.8)

Component 4: Capacity Building, Monitoring & Evaluation System, Project Management. (Appraisal financing was estimated at US$11.35 million. This component was merged with Component 3 after the restructuring in 2015. Therefore, as noted above at closing the total for Component 3 and 4 was US $18.72 million). This component sought to: (i) build the project's coordination and implementation team's capacity, (ii) promote dialogue amongst national partners and regional stakeholders, (iii) develop a communication strategy for development outreach and implementation of a Coastal Village Fund (PAD, p iii and p10-11, and ICR, para 8).

In 2012 and in 2015, the project was restructured and components and activities were modified through these processes. The final composition of the components were:

Component 1: Sustainable Management of Fisheries Resources. This component aimed at promoting long-term management effectiveness of fisheries resources and enhance the benefit and revenue generation derived from coastal fisheries through: (i) promoting and developing fisheries governance including support for increased capacity to undertake monitor, control, surveillance and optimizing the use of deep sea resources, (ii) promoting and developing fisheries management and research capacity including assessments and co-management plans, and (iii) developing value addition of fish catches in coastal fisheries and affected communities (Restructuring Paper 2012, p 10-11, and Restructuring Paper 2015, p 13).

Component 2: Sound Management of Natural Resources. The component aimed to improve management of natural resources and eco-tourism related industries by: (i) improving management and regeneration of natural resources and biodiversity, (ii) improving research capacity and information systems for natural resource management, (iii) identifying biodiversity products and markets, and (iv) conducting institutional and local community awareness and capacity building (Restructuring Paper 2012, p 11 and Restructuring Paper 2015, p 13).

Component 3: Building Coastal Capacity for Sustainable Natural Resource Use and Management. As noted above, in 2015, the Restructuring process combined the original Components 3 and 4 and renamed it. As a result, component 3 aimed at promoting sustainable livelihood, including investment in village-based economic activities with an improved governance framework. The component aimed to achieve this through: (i) promoting the development of micro small and medium enterprises (MSMs), (ii) building capacity; and (iii) providing grants to communities, including support to Vulnerable and Marginalized Groups (VMGs) through Development Fund of the Coast or Hazina Ya Maendeleo Ya Pwani (HMP) - (Restructuring Paper, 2012, p 13-14 and Restructuring Paper 2015, p 13).

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost. At appraisal, the total cost of the project was estimated at US$ 41.47 million (PAD, p i). At closing the total project cost was US$ 36,644,350 (ICR, p 2).

Financing. The bank agreed to provide the Kenyan government with an equivalent of 23.8 million in Special Drawing Rights (SDR), approximately US$ 35 million. (Financial Agreement 2010, p 1). In addition, the Kenyan government received a Global Environmental Facility Trust Fund (GEF) in the amount of US$5 million (PAD, p 18 and ICR, p 2).

During the Level 2 Restructuring of 2015, there was a cancellation of US$4.59 million from the SIL (Restructuring Paper 2015, p 10), for a total revised amount of US$ 30,054,759 (ICR, p 2). There were no amendments to the financing of the Global Environmental Facility Trust Fund (GEF).

The actual disbursement at the end of the project was US$ 29,704,529 from the SIL loan and US$4,953,531 from the GEF grant; for a total of $34,658,060 (ICR, p 2 and p 45).

Borrower Contribution. The legal agreement in the Sector Investment Loan in 2010 stipulated that the borrower contribute 30% of the total income-generation initiatives in cash or in kind (Financial Agreement 2010, p. 14). At appraisal, it was estimated that the borrower would contribute US$ 1.47 million (PAD, p i). By the end of the project, the borrower had contributed US$ 1,986,290 (ICR, p 2). In the borrower's response letter in the ICR, the Kenyan government states that the borrower's in-kind contribution was approximately US $5.8 million (ICR, p 51).

Dates. The project was approved on 07/27/2010 and became effective on 07/30/2011. A midterm review took place, very late, on 04/25/2015 (ICR, p 2). In September 2016, the closing date was extended by 8 months from 31/10/2016 to 06/30/2017 (ICR, p 10).

The project also underwent three significant restructures. This first restructuring took place in September 2012, 15 months after the project start-up. The Level 1 Restructuring sought to (i) streamline activities in order to expedite implementation, (ii) simplify the objective, results framework, budget allocations, and outcome indicators, and (iii) changed institutional arrangements (ICR, para 10).

In October 2015, as a result of a Mid-Term Review (MTR), a Level 2 Restructuring took place which led to: (i) cancellation of US$ 4.59 million from IDA credit, (ii) reallocation of funds between and among components and categories, (iii) revision of outcome indicators, and (iv) realignment of implementation arrangements (ICR, para 11).

In September 2016, the project was granted an eight-month extension (ICR, para 12).

The split rating applied to get the final outcome rating uses the date of the first restructuring.

3. Relevance of Objectives

Rationale

Country Context: Almost half of the population of Kenya is living below the poverty line. The Kenya Vision 2030 (2008-2030) is a document created by the government of Kenya. It provides an economic and social development vision that includes improving governance, addressing social inequalities, and providing the poor with opportunities to enhance income and standard of living. Tourism is identified as a key sector to advance economic growth. However, little guidance is given in the Kenya Vision 2030 on how to implement a sustainable economic development strategy.

The Coastal province is the second poorest of Kenya's eight provinces. This area of the country experiences inequitable land tenure regimes, prolonged droughts combined with intense precipitation periods, and weak institutionalization of urban and rural planning. The fishery sub-sector is an important contributor of GDP. It provides livelihood to many coastal and inland lake residents. The biodiversity of the region is diverse and it includes coral reefs, seagrass beds, and mangrove forests. The Coastal province is in need of economic development, while also improving environmental conditions that have deteriorated due to long-term neglect, resource overuse, and poor management and planning. To effectively attain this dual goal, the Coastal province needs to: improved biodiversity and wildlife conservation; attaining financial stability; modernizing institutional quality; and strengthening partnerships with clients, communities and the private sector. (PAD, para 8).

Alignment with Country Strategy: The objectives of the project aligned with the Kenya Country Partnership Strategy (CPS) 2010-2013, which supported sustainability through economic, environmental, and social principles (CPS 2010). In particular, the objective of the project is relevant to achieving Pillar 3 of the CPS "Managing Resource Constraints and Environmental Challenges" and CPS's outcome of "improved management of key natural resources" (CPS, 2010, p 46).

Kenya's Country Partnership Strategy (CPS) 2014-2018 has three domains: growth to eradicate poverty, human resource development for shared prosperity, and delivering a devolution dividend. The current strategy contains a new outcome "improved capacity to manage the risk of climate change" (CPS Annex 2014-208, p 8). Parts of the objective of this project contribute to that outcome. The project also contributed to the competitiveness and sustainability pillar by supporting Kenya's marine and coastal fishery economy. Therefore, the project's objectives are also in alignment with the current Country Partnership Strategy.

Previous Sector Experience: The World Bank had previously implemented similar projects in Tanzania, South West Indian Ocean, Lake Victoria, East Asia, and Sri Lanka (PAD, para. 36). It had experience working in Kenya in several sectors, including the agriculture sector. In fact, the Kenya Arid Lands Resources Management Project II (ALRMP II) was supposed to be responsible for implementing the Coastal Village Fund (ICR, p 27) but the project closed in 2010. As a result, in the 2012 Restructuring, an alternative mechanism was developed to fund the Coastal Village Fund.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1
Objective
To promote an environmentally sustainable management of Kenya's coastal and marine resources by (i) strengthening the capacity of existing relevant government agencies.

Rationale
The achievements of the objective, based on the first 15 months of the project, are rated Negligible due to lack of evidence in the ICR of attributable benefits over the life of the project. However, the ICR indicates that between June 2011 and September 2012, only 10 % of the project funds had been disbursed (ICR, para. 20).

Rating
Negligible

Objective 1 Revision 1
Revised Objective
To improve management effectiveness of Kenya’s coastal and marine resources.

Revised Rationale

The restructuring documents did not define "management effectiveness". As a result, and given the components as listed in the Restructuring document of 2012 and 2015, management effectiveness is defined as the following:

- promote long-term management effectiveness of fisheries resources through developing (i) fisheries governance, and (ii) fisheries management and research capacity (component 1),
- promote improved management of natural re=sources and eco-tourism (component 1),
- raise communities awareness for sustainable natural resource management (component 2).

Outputs:

The key outputs that were achieved in the following four areas of project activity during the life of the project (ICR, para.23, p 31-42) were:

Developing Fishery Governance

- A Legal review and gap analysis of the legal framework of Kenya's Fisheries Sector was completed.
- 13 Beach Management Units (BMU) have co-management agreements.
- Four management plans were created including: the Mangrove Management Plan, the Witu Forest Management Plan, the Kisite Mpunguti and Malindi Marine Management Plans.
- Construction of modern facilities for the Kenya Marine Fisheries Research Institute.
- Construction of a Fisheries Monitoring, Control, and Surveillance (MCS) Center at the Kenya Fisheries Services in order to house the Vessel Monitoring System (VMS).
- Eighty-four of the targeted eighty-five officers were trained in Environmental Impact Assessments (EIA) and Integrated Coastal Zone Management (ICZM) (Target met; ICR p 37).

Developing Fishery Management and Research Capacity (component 1)

- Relevant biodiversity conservation infrastructure supported by the project included: the Sheldrick Falls nature trail and the Lukore fence at Shimba Hills, the Shimoni jetty at Kisite-Mpunguti Marine Area, and boundary demarcation buoys in five priority.
- All six protected areas also received comprehensive biodiversity assessments (expected to feed into the Integrated Coastal Biodiversity Information Management System (ICBIMS)) and monitoring in three marine protected areas (Mombasa, Watamu, and Kiunga).
- Six land capability assessments were prepared for the entire coastal region, including: Kilifi and Lamu Counties, and Bomeni, Pongwe Kikoneni and Kipini areas.
- Three environmental and social audits for the project's supported sub-projects were completed, and approved, with one of them having being on tree promotion activities (Target met; ICR p 37).

Improving Management and Regeneration of Natural Resources and Biodiversity

- Seed stands covering an estimated 50 hectares were established in several locations in Kilifi County (Gede), Lamu County (Mpeketoni and Witu), and Mombasa County (Comensum and Amani Jipange Mangrove Conservation community-based organizations) (Target met).
- A pilot restoration program of seagrass and degraded coral reefs was initiated in 2014 and implemented successfully in the Wasini CMA by the local Beach Management Unit (BMU).
- Training and equipment for diving and coral transplanting on concrete blocks and sea grass restoration for the Beach Management Unit.
- Completion of marine frame surveys.
- A Biodiversity Information System for the coastal region was developed and installed.
- The identification of stock status of key species and the subsequent development of management plans for lobster, prawns, small purse seine, and aquarium species.
- Adaptive research was conducted by Kenyan Marine Fisheries Research Institute (KMFRI) to improve fishing gear, including basket traps, prawn gear, and dropline.
- An integrated spatial planning and land capability mapping (at regional, county and ward levels).
- Six coastal land capability plans/maps were developed including (i) the coastal region land capability mapping; (ii) county land use plans for Kilifi and Lamu; and (iii) action area plans for Pongwe Kikoneni, Bomeni, and Kipini East. In addition, 26 tree species capability mappings were completed (Target met: ICR, p 37).
- Catch Assessment Survey (CAS) and improved catch-related data quality and coverage, and database management associated with catch statistics on over-exploited native species, expected to include up to 15,000 new entries per year.

Raising Community Awareness for Sustainable Natural Resource Management

- A need assessment in eight community-managed areas along the coastal areas was completed.
- A comprehensive short-term training program for project beneficiaries, formal training on NRM management and environmental degrees was provided to a total of 183 individuals, of which 130 (mostly youth) were from coastal communities and 53 were staff from the project's seven implementing agencies (ICR, p 40).
- Capacity building trainings were organized on the topics of: awareness creation, governance, development of business plans, business and financial management and governance, book keeping and record keeping.
- Infrastructure for enterprise development and for community services provided.
- Support to communities in the establishment and development of socially and environmentally friendly commercial enterprises.
- Indirect beneficiaries are estimated at approximately 350,000 people accruing benefits from various training provided in a number of topics, including SMEs development, BMU organization, tourism services, Integrated Coastal Zone Management (ICZM) and Environmental Impact Assessment (EIA), and

biodiversity assessments.

- 121 young students from coastal communities were sponsored to participate in Bachelor's and Master's Degree courses in several universities as well as certificate courses at the Kenya Forestry College (KFC) and the Kenya Wildlife Service Training Institute (KWSTI).

Outcomes:

As a result of the project, the Management Effectiveness Tracking Tool (METT) scores of three national or marine protected parks improved compared to baseline data. For the Shimba Hills National Reserve, the score increased from 54 to 58; for the Kisite/Mpunguti Marine National Park the score improved from 51 to 58; and for the Kwale County, Malindi Marine Park Reserve the score increased from 52 to 56 (Target Met; ICR, para 23 a and p. 31). According to the project team, the national parks utilized the METT methodology not only to assess improvement but also as a planning and budgetary tool.

As a result of trainings and engagements, different fishery governance structures have developed co-management plans. For example, the Mangrove Management Plan was integrated into County Integrated Development Plans, and is being implemented by the government through the Kenya Forest Service. In addition, two conservation and management strategies were developed for Coral Reef and Sea Grass Beds, and Sable Antelopes (Target met, ICR, p 35). The co-management plans had implementation communities and will be funded at the county level (World Bank Staff Interview). The ICR did not offer much evidence on the extent to which the co-management plans were implemented.

The midterm review highlighted that only a small portion of the coastal region was under protection, hence additional activities were introduced to improve management effectiveness in non-protected areas. At project closure, the management of 50 hectares of land outside the protected areas improved through the establishment of seed strands and rehabilitation/restoration of degraded areas (Target met: ICR, para. 23b and p 32). The ICR reports that KEFRI has taken up the costs of maintaining seed sources (seed stands and orchards) (ICR, para 23b). This is an important step to institutionalize and sustain the regeneration of natural resources. A pilot restoration program of sea grass and degraded coral reefs was also implemented, but as the ICR points out "the ecological or socio-economic value of these initiatives still has to be proven" (ICR, para 23b).

As a result of the project, Kenya's fishery institutions were strengthened by receiving improved infrastructure, software, and know-how to monitor coastal fishery. The advanced Vessel Monitoring System (VMS), established in the last year of the project, has enabled Kenyan institutions to register vessels. This will potentially enable Kenya to reduce illegal fishing, enhance regional compliance, and improve scientific data (ICR, para 23c). Kenya also has improved its participation and compliance with several international initiatives such as the Fish-i Africa, IOTC, Fish Crime and Interpol's Environmental Security Programs. Unfortunately, parliamentary approval of a key research activity on the status of Kenya's legal system related to the fisheries sector is still pending approval (ICR, para 23c).

The project funded several research and management activities listed above. As a result of these activities, 3 fish management plans, including ring net management, lobster, and aquarium, were completed (Target met:

ICR, p 34). Moreover, the project helped select and prioritize key commercial species (lobster, aquarium, small and medium pelagic, seganus suta, and prawns). For each species, standard operation procedures for stock assessments were developed and completed (Target met; ICR, p 34). Finally, biodiversity assessments in 25,000 hectare of protected and outside protected areas has led to the collection of geo-referenced biodiversity data and an accompanying biodiversity information system (Target met: ICR, p 35). The system was completed towards the end of the project, but was not updated on an annual basis as expected. (ICR, p 36.)

Community and private sector support for the effective management of natural resources and eco-tourism were considered important to achieve sustainable growth. The project supported a total of 231 community subprojects through the HNP (162 subprojects) and Vulnerable and Marginal Groups (VMG) (69 subprojects) schemes. Predominant HNP community subprojects included: water supply (54), waste and sanitation (28), woodlots (26), and health and education facilities (25), while VMG subprojects were mostly demanded the provision of small ruminants (61) (Target Met: ICR, p 38). The ICR states that ten community-based interventions were reported. Some of the interventions include waste management activities, mangrove conversation, or turtle rehabilitation (Target met: ICR, p 36). The project also provided 121 scholarships to students to study, but the ICR does not provide information on employment rates, completion rates, or how the students used the information acquired through the scholarships.

Notwithstanding concerns about risk, on balance, this objective is rated Substantial due mainly to the improved METT scores, the plans developed, the expansion of focus to areas outside the protected areas, the new vessel monitoring system, and the progress co-management with communities.

Revised Rating
Substantial

Objective 2

Objective
Enhancing the capacity of rural micro, small and medium-sized enterprises in selected coastal communities.

Rationale
The achievements of the objective, based on the first 15 months of the project, cannot be assessed due to lack of evidence in the ICR of the attributable benefits over the life of the project. However, the ICR reports that between June 2011 and September 2012, only 10 % of the project funds had been disbursed (ICR, para 20).

Rating
Negligible

Objective 2 Revision 1

Revised Objective

To enhance revenue generation of Kenya's coastal and marine resources.

Revised Rationale

Outputs:
Note that this second revised objective was an entirely different objective to the original second objective. Key outputs that were achieved during the life of the project to meet objective 1 (ICR, para.23, p 31-42) included:

- Installed and operationalized Vessel Monitoring System (VMS) registered six local and 38 foreign vessels (Target 20 vessels, Baseline zero, Total: 44; Target met, ICR, p 34).
- Frame survey information used to enhance licensing of vessel used.
- Enforcement patrol and sensitization program (ICR, p 33).
- Training to over 521 small-scale entrepreneurs (SMEs), of which 213 developed business plans.
- Community livelihood interventions (HMP) included training and capacity building especially in business management. Financial support was granted through small grants to groups within local communities, which also included demand driven social welfare and local environmental management interventions.
- Financing provided for the implementation of 231 community subprojects, including 69 targeted Vulnerable and Marginalized Groups (VMG).

Outcome:
The project aimed at increasing public and private revenue by producing several revenue-generation initiatives. The main public sector revenue activity arose from the infrastructure and know-how to license fishing vessels. The expected revenue sources included: (i) foreign vessels fishing in the 200-miles EEZ (ii) fish exports and imports, (iii) fishing registration, (iv) local fishermen, and (v) fish processing and aquarium dealers. (ICR, para 28). At closing, the cumulative revenue from these sources was estimated at US$ 4.09 million (baseline of US$ 0.68 million in June 2011) (Target met).

The project also included private sector revenue generation activities and outcomes. The project aimed at providing technical and financial assistance to local communities to initiate and expand commercial ventures. The ICR states that at the end of the project, while "all SMEs activities and initiatives were reported as operational, the revenue generated has not been quantified, while their long-term viability will require further training and technical support" (ICR, para 29). The ICR also states that the long-term sustainability of the SMEs could be affected by several factors including commercial viability, limited access to markets and financing, and inadequate skills regarding business planning, financial arrangement and record-keeping (ICR, para 26). More specifically, the livelihood improvement initiatives through the community livelihood interventions (HMP) generated US$ 660,000. The ICR was unable to provide evidence on the revenue generation for the development and implementation of co-management plans; fish landing and marketing infrastructure, and development of community SMEs aquaculture projects. A total of 642 households earned US$50 or more annually from commercial natural resource management activities which were supported by the project (Target 1000 households; partially met, ICR, para 29). These activities included selling seaweed, shrimp and artemia farming, milkfish, wood poles, tree nurseries, or waste management and eco-tourism (ICR, p 33 and p 41).

Private infrastructure for income generation through value addition was supported in Shimoni (fish banda and ice plant), Faza (ice plant) and Kibuyuni (fish banda), as well as 39 community ponds for various aquaculture ventures, also facilities for seaweed harvesting and processing. (ICR, p 41) Suitability Maps were prepared for 26 tree species adapted to coastal conditions, expected to be valuable tools for County government planning and commercial feasibility assessments by private investors (ICR, p 37).

Overall, achievement of this objective is rated Substantial because of the registration revenue, the private sector revenue, and the livelihoods improvements for communities. However, there remain concerns about sustainability, especially of SMEs.

Revised Rating

Substantial

Rationale

Summarizing, and splitting the rating between the before and after restructuring objectives, the efficacy of the program from the first 15 months of the project investment could not be assessed due to lack of information in the ICR to measure and differentiate the attributable project benefits. As a result, for the first 15 months, efficacy is rated Negligible. However, this is attributable to only 10% of the disbursement and therefore plays a minor role in the aggregation for the overall rating.

Once the restructuring was finalized in 2012, there were substantial achievements in the improvement of the overall management effectiveness of coastal and marine resources through the improvement of fishery management, management of natural resources; increased research; co-management plans; and community engagement. That said, according to the ICR many of the activities took place in the latter part of the project and the outcomes could not be fully verified (ICR, para 38) and there remain questions about sustainability. While the project reached a substantial number of direct and indirect beneficiaries, the ICR failed to show the impact on the community as a whole from these initiatives including the outcome of key capacity strengthening activities.

The project aimed at increasing public and private revenue by developing a number of revenue-generation initiatives. The government was more effective at capturing revenue from licensing of vessels. This yielded a substantial increase in public revenue. The ICR did not quantify the increase in private revenue through SMEs, student scholarship, or other private sector initiatives.

On balance, and not without concerns about sustainability, somewhat alleviated by the expectation of a follow-on project, Efficacy is rated Substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

At project closure, efficiency was determined by comparing the Net Present Value (NPV) before and after the project as it related to the revenue generation activities. In the without project scenario it was estimated that the revenues from fisheries development would be US$ 800,000. With project activities, which included a more efficient system of licensing and offshore patrols, the total revenue was projected to increase to approximately US$2.1 million (ICR, p 46). Therefore, the project was found to have a NPV at a discount rate of 12 percentage rate of US$ 1.3 million and an internal rate of return (IRR) of 31 percent (ICR, p 46).

By the end of the project, the ICR reports a revenue increase to US$ 4.09 million, approximately double the projection. Using the same rate of 12 percent discount rate and project revenue flows, the NVP was equivalent to US$2.8 million and the IRR of 47 percent (ICR, p 46).

The ICR used the same methodology as the PAD in order to arrive at the analysis described above. However, upon closer inspection, much of the reported increase in revenue does not represent an economic benefit to Kenya because it is an internal financial transfer within the economy. The revenue increase was primarily derived from improvement in the government's ability to collect fishing license fees. In other words, the reported revenue increase is an improvement in public sector revenue but it does not directly demonstrate growth in the economy. Although higher revenue may lead on to second order effects on growth, the fees alone represent simply a transfer within the economy from businesses and private citizens to the state, although the portion of the financial revenue from foreign boats may count as a true economic gain (arguably, minus their impact on fish stocks but plus any derived processing incomes within Kenya). From the limited information provided in the ICR, including the Annex on Efficiency, the ICRR has been unable to recalculate the true net present value accommodating these adjustments.

The project also expected to generate community and household income. The HMP (Hazina ya Maendeleo Ya Pwani) window supported community-identified and micro-projects. Grants were given to groups, who provided cash or in-kind contributions (including labor, time, materials, or cash). A total of 151 HMP sub-projects were granted, which generated an estimated total of US$660,000 from the sale of seaweeds, finfish, Casuarina tree poles, tree seedlings, waste management, and eco-tourism. Approximately 642 households earned at least US$50 from these commercial natural resource management activities. The project also aimed to establish micro-credit access and sustainability of SMEs. While 213 SMEs were trained and developed business plans, this component needed more rigorous commercial viability criterion, and, for sustainability, partnership with local banks (ICR, p 47).

Operational Efficiency: The project was delayed by 15 months and project implementation only accelerated after the quite late mid-term review. The significant project delays produced economic inefficiencies in the project through delayed benefit streams over what could have been achieved. The restructuring processes that the project undertook helped simplify and modify the results framework and eventually improved the rate of project implementation (ICR, p 47 and para. 35). Absorption rates also increased from 30 percent in 2015 to 88 percent in 2017 (ICR, p 47). The Daily Subsistence Allowance (DSA) was considered high by the ICR (ICR, p 48).

Efficiency Rating

Modest

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		0	0 ☐Not Applicable
ICR Estimate		0	0 ☐Not Applicable

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

6. Outcome

The outcome of this project is rated moderately satisfactory. This is assessed based on a split rating and takes into account the original and formally revised targets, weighing pre- and post-restructuring performance by the share of actual disbursements before and after. At the time of restructuring, only 10% of funds had been disbursed so the impact on the weighting is small, leaving the post-restructuring weighting dominant. For this reason, the formal weighting of ratings in a table as presented in the ICR is superfluous.

Overall there was a high degree of alignment of the project's objective with the country context, strategy, and Government development priorities at the time of appraisal and throughout the project. The relevance of the project remained substantial throughout the life of the project.

The efficacy of the program attributable the investments made over the first 15 months was negligible due mainly to lack of attributable benefit stream information in the ICR. As a result, the pre-restructuring project achievement is rated as negligible.

Once the restructuring was finalized in 2012, there were substantial achievements, including improvement of the overall management of coastal and marine resources, management of other coastal natural resources; increased research; co-management plans; and community engagement. That said, according to the ICR many of the activities took place in the latter part of the project and the outcomes could not be fully quantified and verified (ICR, para 38). While the project reached a substantial number of direct and indirect beneficiaries, the ICR was not able to demonstrate the overall community impact of these initiatives and the results of the key capacity strengthening activities, although, arguably, it was too early to do so quantitatively.

An important project aim was to increase public and private revenue through new revenue-generation initiatives. The state became much more effective at capturing revenue from the licensing of vessels and therefore experienced an increase in public revenue well beyond what was projected. The ICR did not quantify an increase in private revenue arising from SMEs, student scholarship, or other private sector initiatives although in many cases it was very early to achieve measurable benefits.

However, the ICR could not demonstrate efficiency as it related to the revenue of the project. The increased revenue reported from fishing is a financial transfer within the economy not, directly, an incremental contribution to growth, except for any income from foreign vessels. From the information provided in the ICR, the ICRR has been unable to calculate the true economic efficiency of the project. The ICR offered limited evidence to demonstrate efficiency as it related to the other activities outside the license fee gains. The project experienced an initial 15-month delay and also experienced procurement delays, indicating weak administration efficiency.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

Government Commitment - The project experienced significantly delayed implementation with much of the investments being made in the final two years. However, the government and the counties showed commitment to the sustainability of project outcomes. The National Treasury allocated US$380,000 towards the VMG subproject. The Kenya Forestry Research Institute (KEFRI) has also taken up the costs of maintaining seed sources (seed stands and orchards), which is another activity in support of sustainability. More importantly, the government of Kenya has decided to continue to invest in the objectives through the follow-on World Bank's Kenya Marine Fisheries and Socioeconomic Development Project (KEMFSED), currently under the initial stages of preparation.

Political - Political uncertainty at the national level could produce effects in the economy and could impact continued implementation.

Financial - The World Bank's Kenya Marine Fisheries and Socioeconomic Development Project (KEMFSED), once approved, could continue to provide financial and technical support. The sustainability of the outcome may be partially secured through the improved income generation from the vessel licensing although this would depend on how these funds are applied.

Technical Capacity - Apart from the anticipated Bank follow-on project, there are several other coastal initiatives funded by bilateral partners that are likely to continue to build technical skills in the management of coastal and marine resources.

Stakeholder Ownership - A large number of people were directly and indirectly engaged throughout this project. However, the project did not provide adequate governance infrastructure or systems to ensure the continuous engagement of communities in natural resource management. This is now a task for the follow-on project to consolidate.

Environmental - The ICR does not report any anticipated but in such coastal areas there is typically potential for natural hazard risks.

8. Assessment of Bank Performance

a. Quality-at-Entry

Despite a three-year preparation process, there were still important weaknesses in the quality of entry. The Bank was unable to fully adapt previous Bank experiences in coastal development projects to the operational and institutional context of Kenya. There was also limited borrower ownership of the project design and inadequate operational instruments to support implementation. Additional shortcomings included: a poorly articulated development model or theory of change, an unrealistic project timeline, and a lack of readiness for implementation, as illustrated in the inclusion of six conditions of effectiveness (ICR, para 46 and para 62).

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The Bank worked towards identifying and resolving the emerging constraints that affected the project. In particular, the Bank spent significant time and effort in the preparation and processing of two major restructuring changes. The first restructuring focused on addressing overall weaknesses in the project design, while the second was a result of an independent midterm review to incorporate substantial operational and fiduciary adjustments to accelerate implementation.

The Bank undertook 12 full supervision missions and additional fiduciary and technical missions. The project was led by two different Task Team Leaders. According to the ICR, the Bank's supervision helped resolve implementation bottlenecks and improved project performance and achievement (ICR, para. 64). Quality of supervision could have been enhanced by in-country presence of the TTLs. More support could have been provided to procurement, infrastructure development, entrepreneurship, and community development activities (ICR, para 64).

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

At appraisal, the project's theory of change and associated results framework had critical gaps, including the linkage between activities/components, outcomes, and the project development objectives. Partly as a result of this, it underwent two restructuring processes to simplify, clarify, and improve the framework and accompanying indicators. This process improved implementation and monitoring and evaluation. That said, the restructuring process could have better defined the objectives; either through narrative explanation of "management effectiveness" or through more qualitative PDO indicators.

The PDO indicators related to improvement in management efficiency of Kenya's coastal and marine resources did not yield sufficient evidence to fully assess all aspects of the outcomes of the objective. The PDO indicator in the result framework for this objective was "number of conservation areas bought under effective management as defined by the Management Effective Tracking Tool (METT scores) (score of at least 55). While this indicator could have measured part of the objective, the METT targets were set at improvements of 3 points, a relatively low bar considering the METT scoring protocol. Moreover, the PDO indicator of objective 1 and the intermediate results indicator did not adequately capture key outcomes as they related to developing fishery management and research capacity, improving management and regeneration of natural resources, and raising community awareness for sustainable natural resource management.

The monitoring and evaluation plan included a midterm evaluation and a final evaluation. A M&E Specialist was hired quite late, not before 2014 (ICR, para 52).

b. M&E Implementation

The M&E Specialist produced quarterly and annual reports, which included quantitative and qualitative assessments for each of the indicators (ICR, para 51). The ICR did not include substantive qualitative evidence regarding the indicators. For instance, there was little data on the dissemination and use of research studies and initiatives such as the Catch Assessment Surveys and Biodiversity Information System. Student scholarship completion rates, employment rates, or changes in capacity where support was given were also not available. This information could have been used to better assess the outcomes of the objectives and facilitate evidence-based decisions.

An independent midterm review led to a restructuring process and improvement of the M&E system. According to the ICR, the M&E system enabled the provision of quality and accurate information to report on indicators in key documents, including the Borrower Completion Report. However, it is clear that this quality information came quite late in implementation. The M&E Specialist also provided support to establishing the monitoring systems to monitor vessels fishing (VMS) - important for the improved licensing activity - and fish species and biodiversity (ICR, para 52).

c. M&E Utilization

As is evident from the ICR, the M&E system improved gradually. An example of use of the evidence for decision making is reported to be the implementation of a 2104/2015 internal evaluation recommendation. The Evaluation recommended that business skills be introduced for sub-projects and HMP sub-components given the community's lack of such skills. As a result, 200 enterprises received additional business development service training (ICR, para 52).

In summary, early performance was poor but improved considerably. The project began with critical design gaps but these were corrected during subsequent restructuring. Further improvements in the PDO indicators could have yielded better information and evidence to demonstrate the outcome of the first objective. Qualitative information and data could have also added depth and impact to the results framework and subsequent reporting. The midterm review provided useful information to enable a restructuring.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as Environmental Category B. At appraisal, an Environmental and Social Management Framework (ESMF) was prepared. It triggered the following safeguards: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forests (OP/BP 4.36), Cultural Resources (OP 4.11), Indigenous People (OP/BP 4.10), and Involuntary Resettlement (OP/BP 4.12) (PAD pp 32-34).

During the life of the project, no safeguard related issues were reported (ICR, para 54). Compliance with environmental safeguards was reviewed annually through environmental and social audits and these were conducted in line with the country's Environmental Management and Coordination Act (EMCA) Cap387 and the Environmental and Social Management framework (ICR, para 54). The environmental and social audits took place in 2015, 2016, and 2017. The 2015 and 2017 audits focused on all the project's sub-projects, while the 2016 audit focused particularly on the environmental impacts of the woodlots (ICR, para 54).

b. Fiduciary Compliance

The Financial Management of the project had adequate control procedures in place, according to the ICR. The PMU had a Financial Management staff assisting the project, with support from accountants in each of the implementing agencies (ICR, para 58). The quarterly Interim Unaudited Financial Reports and annual audited financial statements were submitted (ICR, para 58). The Project had a comprehensive FM Procedures Manual and complied with Kenya's Public Financial Management (PFM) laws and regulations.

The project was in compliance with the audit covenants. The auditors from the Auditor's General office raised minor issues in the management letter related to omissions. These did not result in any loss or misuse of project funds. The project experienced one case of ineligible expenditures in the amount of US$28,000 and the funds were returned by the government of Kenya (ICR, para 60). There were no outstanding audit issues at project closure. Implementing agencies addressed any internal or external audit recommendations in a timely manner (ICR, para 60).

There were some procurement delays during the project which caused bottlenecks. The factors that contributed to the delays included: limited staff capacity in the procurement unit, limited technical staff in the implementing agency to develop procurement documents (TORs, etc), and poor coordination of activities by the PMU (ICR, para. 57). There were initiatives to improve and address the procurement delays, including staff training, hiring more staff, and reorganization and centralization of key functions. The Level 2 restructuring added Force Account and Community Participation as procurement methods (ICR, para 10). These efforts led to improvements in late 2015, but a year later the project was still experiencing delays (ICR, para 57). Procurement delays were a major contribution to slowing implementation of the project, particularly during the first two years. These implementation delays, including key products and instruments, had an impact on the project's efficacy.

At the beginning of the project, disbursement of project funds reflected the slow implementation progress. By the end of the project, and following some cancelation of funding, over 99 percent of both the IDA credit and the GEF grant had been disbursed.

c. Unintended impacts (Positive or Negative)

None

d. Other

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11. Ratings

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

12. Lessons

The following three lessons come from the ICR with some adjustment of language:

1. **Private Sector engagement and financing through the private sector or microfinancing organizations is an important factor in supporting SMEs and community subprojects.** In this case, while the project trained over 200 SMEs and provided them with business skills, the training had modest impact and most SMEs

were not commercially viable by project closing. According to the ICR, an engagement strategy and involvement of microfinancing organizations and other private sector actors could have better facilitated the SMEs with gaining access to markets and financial resources (ICR, para 42). This will be important in the follow-on project.

2. Communication strategies can be important in ensuring collaboration, particularly when there are multiple institutions and a broad and diverse stakeholder base. In this case, the project benefited from a communication strategy and tools (video, website) to create a project brand and identity. This served as an incentive for strong collaboration (ICR, para 67c). However, it needs to be sustained. In this case, the website was no longer active at the time of the ICRR.

3. Early restructuring is important to address early roadblocks but needs to build on strong early M&E. In this case, the early project restructuring was instrumental in reversing severe quality at entry limitations, weak borrower ownership, and inadequate institutional arrangements. However, the early restructuring was still handicapped by weak early M&E and weakness in indicators.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was well written with a logical outline. It was candid and detailed in discussing the areas and aspects of the project that needed improvement.

It could have provided more evidence to justify the project's outcomes in the efficacy section. More qualitative information would have added depth and insight into ICR's efficacy section. In particular, qualitative outcome data would have helped as it related to improved management efficiency and the results of community and institutional training. Lessons learned could have been somewhat better linked to the findings and evidence presented in the ICR.

The Efficiency analysis referred correctly to the methodological error at appraisal related to the difference between the financial transfers and the economic benefits of the licensing revenue stream but only in a footnote that seems to have been added an afterthought. The ICR chose to ignore this in the economic analysis. An incorrect methodology at appraisal should not be repeated at completion simply for consistency, unless purely and explicitly for comparative purposes, and then only provided it is accompanied by a methodologically correct analysis.

a. Quality of ICR Rating

Substantial