



Report Number: ICRR0022208

1. Project Data

Project ID

P117355

Project Name

DJ-Rural CDD & Water Mobilization

Country

Djibouti

Practice Area(Lead)

Agriculture and Food

L/C/TF Number(s)

IDA-58260,IDA-H7060,IDA-H7780

Closing Date (Original)

31-May-2017

Total Project Cost (USD)

15,408,228.17

Bank Approval Date

14-Jun-2011

Closing Date (Actual)

31-Dec-2019

IBRD/IDA (USD)
Grants (USD)

Original Commitment

5,830,000.00

0.00

Revised Commitment

15,830,000.00

0.00

Actual

15,408,228.17

0.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDO) for this Rural Community Development and Water Mobilization Project (PRODERMO) as articulated in the Project Appraisal Document (PAD, paragraph 17) was identical to the PDO as stated in the Financing Agreement (FA, page 5) and aimed to:



"increase access of rural communities to water and enhance their capacity to manage water and agro-pastoral resources in the project areas using a participatory approach to community-based development."

PRODERMO focused its interventions in two geographic regions covering in total of about 120,000 hectares: (i) the Khor Angar-Obock area in the northern region of Obock; and (ii) the Cheiketi-Hanlé area, in the southern region of Dikhl (PAD, paragraph 15).

For the purpose of this review "increasing access to water" and its "management" by communities were viewed as tightly linked objectives and their joint achievement was therefore assessed as one objective.

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

No

c. Will a split evaluation be undertaken?

No

d. Components

1. Priority Community Investment Sub-projects (appraisal cost: US\$3.46 million, actual cost: US\$11.88 million). The increased cost was due to additional financing. This component would finance priority community investments in the project areas that have been included in the Annual Water and Pasture Management Plans (SAAHPs), formulated and prioritized by the targeted communities through a participatory approach and in accordance with the project Operations Manual. Community investments were expected to be demand-driven and in the following specific sub-categories: (i) Water mobilization and soil conservation sub-projects; (ii) Agriculture and livestock sub-projects; and (iii) Income-generating activities on a pilot basis.

2. Capacity Building and Provision of Technical Assistance (appraisal cost: US\$0.73 million, actual cost: US\$2.96 million). This component would finance capacity building and technical assistance to the Implementing Agency (the Ministry of Agriculture, Water, Fisheries, Livestock, and Halieutic Resources or MAEM-RH) and its Project Management Unit (PMU), as well as to the community development committees (CPL) and grassroots organizations (such as water users associations and community groups) targeted by the project to support the formulation and implementation of participatory SAAHPs in the project areas, while fostering the application of a participatory approach to local and community-based development. This component would also support the sensitization and mobilization of beneficiary communities and other project stakeholders in order to facilitate and enhance their effective involvement in the participatory planning and project implementation process. This would be done through: (i) Enhancing the capacity of the MAEM-RH and PMU; and (ii) Enhancing the capacity of the beneficiary communities.

3. Project Coordination and Management (appraisal cost: US\$1.40 million, actual cost: US\$2.83 million). This component would support the PMU through the provision of goods, works, consultant services, training and incremental operating costs associated with project management, implementation, monitoring and evaluation, and audits.



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

Project Cost. The total project cost was estimated at US\$6.13 million which included contingencies. The actual cost reported in the ICR (Annex 3) was US\$17.67 million which is consistent with the total cost of US\$15.84 million in the ICR's Data Sheet which does not include the World Food Programme (WFP) financing valued at US\$1.82 million. The considerable increase in total project cost resulted from the project receiving two additional financing amounts that totaled US\$10.00 million plus the value of WFP contributions and those from the project's beneficiaries (see below for more details).

Financing. The project was financed by an International Development Association (IDA) Grant of US\$5.83 million equivalent. The project received two additional financings (totaling US\$10.00 million) funded by IDA: a Grant of US\$3.0 million was approved on June 12, 2012 (AF1), and on May 31, 2016 a Credit in the amount of US\$7.00 million (AF2). The actual amounts disbursed according to the ICR (page vi) were: US\$5.55 million, US\$2.86 million, and US\$6.99 million against the initial financing, AF1 and AF2, respectively. The total amount disbursed was US\$15.40 million. As noted above the WFP contributions valued at US\$1.82 million augmented the funds available.

Borrower Contribution. Contributions from local beneficiary communities were estimated at US\$0.30 million (in cash or in kind). This was revised upwards with the AF-2 to US\$0.44 million. The actual amount according to the ICR (Data Sheet, page vi) was about US\$0.44 million.

Dates and Restructuring. The project was approved on June 14, 2011 and became effective seven months later on January 19, 2012. The Mid-Term Review (MTR) was conducted on March 30, 2014. The PAD did not include a pre-set date for the MTR. The MTR was conducted about two years and three months after effectiveness, which was reasonable given the implementation time-frame at appraisal was five years. The project closed on December 31, 2019 compared to an original closing date on May 31, 2017. The extension of the closing date was necessary after the project received two AFs and activities were scaled-up.

The project was restructured three times; each of them was a Level two restructuring as follows:

1. On June 12, 2012, when the amount disbursed was US\$0.93 million, in order to approve the first AF and expand the project coverage area to six additional areas.
2. On February 11, 2015, when the amount disbursed was US\$4.41 million, in order to introduce changes to the Results Framework (RF) and reallocate funds between disbursement categories.
3. On May 9, 2016, when the amount disbursed was US\$6.88 million, in order to approve the second AF to help support the costs associated with scaled-up activities to further enhance the impact of the project, namely, *the Directorate of Livestock and Veterinary Services (DESV) received laboratory equipment and veterinary drugs to treat and vaccinate livestock, as well as the distribution of livestock feed to pastoralists affected by the drought* (based on information provided to IEG by the Bank project team). Other changes included: (a) extending the closing date by 31 months (from May 31, 2017, to December 31, 2019), (b) amending the current project location description to include the Arta Region; (c) revising and simplifying the Results Framework (RF); (d) reflecting the current categories of expenditures under a single category; and



(e) adjusting the disbursement and implementation schedules to reflect the scope and increased targets (Project Paper, paragraph 9).

3. Relevance of Objectives

Rationale

Context at Appraisal. Djibouti is an extremely water-scarce country, with conditions set to be exacerbated by population growth and climate change. Djibouti averages 150 mm of rainfall per year and has no perennial surface freshwater flow. Due to the climate, less than five percent of total rainfall reaches the water table, with the remainder lost to either evapotranspiration or flow to the sea due to flash floods. The project's objective, namely to "increase access of rural communities to water and enhance their capacity to manage water and agro-pastoral resources in the project areas using a participatory approach to community-based development" aimed to target some of the geographic areas not yet benefiting from the Program for Mobilization of Surface Water and Sustainable Land Management (PROMES-GDT). The project would introduce innovative approaches, such as the emphasis on enhancing added-value of agricultural and livestock production to increase the resilience, reduce the food insecurity, and improve the nutrition of households living in these water-scarce areas.

At appraisal, objectives were in line with the Government's National Program for Food Security (NPFS, 2010-2020). The NPFS identified thirteen priority projects grouped under six main themes: (i) water resource management; (ii) agricultural development in the oases; (iii) livestock development and improved health; (iv) fisheries development; (v) capacity building and human resource development; and (vi) studies. Objectives were also in line with the Government's initiative for water mobilization under the Program for Mobilization of Surface Water and Sustainable Land Management (PROMES-GDT). The PROMES-GDT aimed to improve the living conditions of the pastoral communities while promoting the sustainable management of the natural resources.

Objectives were also in line with the Bank's Country Assistance Strategy (CAS) for Djibouti (CAS FY09-FY12). The CAS was prepared with the explicit objective of helping the implementation of the Government's INDS. Also, the CAS Outcome 2.3 which called for strengthening social protection and direct support to the poor.

Context at Completion. At completion, objectives continued to be in line with the Government's NPFS as stated above. Objectives were also in line with the Government's Vision 2035 to consolidate human capital and the corresponding action plan (Strategy of Accelerated Growth and Promotion of Employment 2015–24), notably Pillars 1 "economic growth" and 4 "sustainable development." Objectives were also in line with Bank's Country Partnership Framework for Djibouti (CPF 2020–24). The CPF called for launching an Advisory Services and Analytics activity in FY2020 to seek sustainable solutions for rural development with an emphasis on improving water availability and livelihoods in rural areas.

Conclusion. The statement of objectives clearly targeted relevant beneficiaries namely "rural communities" and stated the potential benefits of the project interventions (increase access to water and capacity enhancement). However, the PDO statement lacked an explicit connection to higher level objectives, such



as improving food security, reducing poverty, increasing rural prosperity, and enhancing resilience of rural communities to climate change.

Based on the above-mentioned assessment, the relevance of this project's objectives to the water supply challenges facing rural communities in Djibouti is rated Substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase access of rural communities to water and enhance their capacity to manage water and agro-pastoral resources in the project areas using a participatory approach to community-based development.

Rationale

Theory of Change (ToC).

To achieve the stated objective, the project would support community-based development and planning for water management and soil conservation activities, including the rehabilitation and construction of water infrastructure. The project would also support income generating activities through financing agriculture and livestock sub-projects. These activities were expected to result in the implementation of a local development plan in an integrated manner, which would strengthen participatory approach to community development. Also, the activities would result in improved availability of water for human, livestock and agriculture consumption, which would lead rural communities to achieve higher standards of living and increased agricultural productivity. At the same time, the project would support capacity building activities for grass-root organizations and the staff of the Ministry of Agriculture. These activities were expected to improve the capacity of grass-roots organizations and the technical staff of the Ministry of Agriculture to support community-based development and agro-pastoral resource management. This would in turn result in enhancing the capacity of rural communities to manage water and agro-pastoral resources. Longer term impacts include: improved livelihoods for the poor, benefits for women and youth, improved food security, empowered local communities and enhanced resilience of rural communities to climate change related shocks such as erratic rainfall and drought.

The ToC was underpinned by the following assumptions: (a) local communities are willing to participate, develop and monitor the implementation of local development plans, (b) water and pasture management



committees are formalized; and (c) the project does not experience severe drought that would impact water availability.

Overall, the ToC depicted in the ICR included activities that were linked to the stated objectives. The stated assumptions were logical and realistic.

Outputs

The outputs below were reported by the ICR (Annex 1) and targets are provided where available.

Water mobilization and soil conservation

- The project constructed or rehabilitated 116 water mobilization units, including 54 cisterns, 12 open reservoirs, 10 boreholes, 36 wells, and 4 weirs (water-spreading micro-dams) (102% of the revised target).
- The total volume of water mobilized reached 1,985,300 cubic meter (m3), for both human and animal consumption (199% of the revised target).
- Cisterns. The project supported the construction of 54 cisterns (52 new and 2 rehabilitated), each with a capacity of 100 m3, serving a total of 3,325 households (62 households per cistern on average).
- Reservoirs. Eleven open-air reservoirs with a nominal individual capacity of 20,000 m3 (compared to 10,000 m3 planned at appraisal) were constructed, and one was rehabilitated.
- Boreholes. The project constructed seven boreholes and rehabilitated three existing ones, and equipped them with a photovoltaic pump, a tank with a capacity of 100 m3, a drinking fountain, and water troughs for animals. All were functional when the project closed. The total volume of water pumped annually is estimated at 460,800 m3
- Pastoral wells. The project supported construction of 12 pastoral wells, each equipped with a concrete tank of 13 m3, a drinking fountain, and a watering trough. These wells mobilize 194,400 m3 of water annually
- Agricultural wells. The project constructed 24 agricultural wells in the Dikhil and Tadjourah regions that each provide water to grow vegetable crops (2 cycles per year) and fodder on about 22 ha. Each well pumps 33–35 m3 daily, of which 90% is used for irrigating crops.
- Weirs (water spreading micro-dams). The project supported the construction of four new weirs. Weirs spread floodwater upstream, improving the recharging rate of the water table, increasing deposits of fine, fertile sediment in the flooded area, and ultimately improving the quantity and quality of vegetation and pasture. The recharge capacity of each weir is estimated at 234,075 m3; each weir spreads water over 1,290 ha of pasture that directly benefits 580 households.
- Grazing set-aside and improved sites. The project supported 21 units of pasture of 400 ha each (8,400 ha in total) that were protected from grazing for 17–22 months and improved through soil and water conservation works (CES) to increase pasture productivity. These sites are now benefiting 1,235 pastoral households.

Agriculture Development

- The project provided support for the Directorate of Agriculture and Forestry (DAF) to acquire and distribute seed and fertilizer to 870 small-scale farmers.



- 60 micro-irrigation kits were distributed to 50 gardens covering 25 ha, and two tree nurseries were established in Obock and Tadjourah Regions.
- Irrigation networks developed by coating concrete ditches from the above-mentioned wells allowed the extension of irrigated area to 30 ha, bringing the total irrigable area developed through project support to 84 ha.
- A 178-m² greenhouse with an anti-heat veil was installed at the Directorate of Agriculture and Forestry (DAF) greenhouse site and equipped with 8 production modules. Thirteen lettuce production cycles (each approximately 40 days) were carried out between October 2018 and March 2019; lettuce yields were 0.4– 2.8 kg/m².

Fisheries Development

- Eight priority sites were selected by the project to distribute to small-scale fishing gear to traditional fishing associations, and organized training sessions in the use of that equipment.
- Nine warehouses for fish were built, and the fish market and the ice unit in Obock were both rehabilitated.
- 33 income generating activities (IGAs) related to fish production, handling and marketing were financed buy the project.
- The project financed the purchase of a refrigerated truck for the fish marketing in the Tadjourah Region, and equipped the Goubet association with a solar ice unit.
- To improve capacity, the project organized a study tour to Morocco to benefit from the rich fisheries experience of that country.

Livestock Development

- The project supported livestock mainly through provision of inputs, for example, the project financed the acquisition of laboratory equipment and veterinary drugs to treat and vaccinate livestock, as well as the distribution of livestock feed to pastoralists affected by the drought. Also, the project provided office and computer equipment to the Directorate of Livestock and Veterinary Services and covered its operating costs.

Income Generating Activities (IGAs)

- The project supported the implementation of 110 IGA sub-projects, exceeding the target of 97, of which 33 focused on animal production, mainly goat farming; 30 focused on agriculture (30 sub-projects); 14 focused on handicrafts; and 33 focused on fish production (the acquisition or repair of boats, engines, and fishing gear), fish handling, and marketing. Individuals who participated in income-generating sub-projects were required to open a bank account and deposit a cash contribution of a minimum of 10% of sub-project costs to access matching funding.

Capacity Building and Technical Assistance

The project supported three types of community-based institutions/associations:

- **Strengthening the capacity of Local Steering Committees (CPLs).** CPLs were *"community-based structures, for each of the 18 grazing area (parcours) of the project, after consultation with the communities and the designation of CPL members by community leaders. The CPL is representative*



of a group of villages and communities possessing traditional grazing rights over a common area of rangeland (parcours). Each CPL comprised about 12 members, representatives of communities living in the parcours, including 20% of women. Specific roles of the CPL include: (i) representing the beneficiary communities vis à vis the PMU; (ii) participating in participatory diagnostics and preparing the indicative list of needs and potential investments to be included in the preliminary SAHPs; (iii) validating and signing the approved SAHPs; and (iv) overseeing the work of the CGEPs (project team)." For each of the 18 pasture sites, a CPL was established and received hands-on technical, organizational, and management training to fulfill its role and prepare a multi-year Water and Pasture Management Plan (SAHP). One SAHP was prepared for each grazing site, with the support of regional and local project teams, which then followed up on implementation with the CPLs.

- **Strengthening the capacity of Water Point and Pasture Management Committee (CGEPs).** CGEPs were "community-based structures, which were reinforced and/or established around each water point and were responsible for: (a) the regular maintenance of water mobilization subprojects in terms of labor and tools directly undertaken by the water management committees; (b) the organization of the water supply for human and animal consumption; (c) the monitoring of water quality in water mobilization subprojects; (d) the maintenance of rangelands and set-aside areas; (e) the enforcement of set-aside rules and (f) general mobilization of community participation (project team)." For each identified water mobilization unit or grazing improvement site prioritized in SAHPs, a management committee (CGEP) which had benefited from capacity building was established as a condition for works to start. CGEPs handled O&M activities.
- **Strengthening the capacity of associations.** IGA associations were "associations supporting Income Generating Activities, to benefit to a larger number of persons, in accordance with eligibility criteria and procedures set forth in the Project Operations Manual (project team)." All IGA associations received organizational and managerial training delivered to set up simple systems for accounting and monitoring activities. Artisanal fishermen and women's associations were also trained to use fishing gear, to add value and preserve fish, and to manage their association (ICR, page 34, paragraph 16).

Participatory Approach for Community Development

- 18 territorial SAHPs (one per targeted common grazing area) prepared in a participatory, iterative, and bottom-up way.
- 18 CPLs and 106 CGEPs elected under fair and transparent mechanisms.
- 18 CPLs trained to prepare SAHPs in a participatory way and monitor their implementation in close coordination with CGEPs and associations benefitting from IGAs and other types of direct support.
- SAHPs used by CPLs as communication and resource mobilization and negotiation instruments vis-à-vis the administration, Regional Councils, NGOs, and donors.

Outcomes

Increased access of rural communities to water in project areas. The project supported the construction or rehabilitation of 116 water mobilization units (102% of the revised target). This resulted in the availability of a total of 1,985,300 cubic meters (m³) of water (199% of the revised target) for humans, animals, and irrigation (ICR, paragraph 24). As result of the project support, 9,942 (133% of the revised target) rural households had more secure access to drinking water within a reasonable travel time (two hours roundtrip) in project areas, and 140,459 (168% of the revised target) heads of livestock had more secure access to water within a reasonable distance (20-km radius) in the project areas.



Enhancing the capacity of rural communities to manage water and agro-pastoral resources in project areas using a participatory approach to community-based development. The project established a Local Steering Committee (CPL) for each of the 18 pasture areas covered. The project also provided each CPL with technical, organizational, and hands-on management training to prepare them to implement their Water and Pasture Management Plans (SAHPs). Training was also provided to each of the 116 Water Point and Pasture Management Committees (CGEPs). Also, all Income-generating activity (IGA) associations received organizational and managerial training to set up simple systems for accounting and monitoring activities. The project also provided training for artisanal fishing associations to use new fishing equipment, add value to fish products, preserve fish, and manage their associations (ICR, paragraph 31). The impact of the provided training was not captured by the project due to the absence of relevant indicators to assess enhanced capacity. That said, the ICR (Box 2) reported that a qualitative survey by the PMU in September 2019 provides evidence on the development and engagement of CGEPs to manage local water resources. The survey showed that 100% of CGEP members had participated in several training sessions, 56% held a General Assembly every year, 76% meet every month to take stock of prior actions and discuss and plan future activities, and 92% regularly developed monthly or bimonthly activity schedules.

The evidence provided in the ICR verifies the success of the project in increasing access of rural communities to water in project areas. Outcome and intermediate outcomes for this this element of the PDO were either fully achieved or significantly exceeded. It is also plausible to conclude that the project-supported capacity building activities which contributed positively to enhancing the capacity of the three community-based organizations mentioned above to manage water and agro-pastoral resources.

In a further communication to IEG, the Bank project team explained that *"Local Steering Committees (CPLs), Water Point and Pasture Management Committees (CGEPs), Fishermen and women cooperatives and associations as well as Income Generating Sponsors (IGA) benefited from intensive information campaigns and capacity building program on technical, organizational and managerial aspects. Enhanced capacity of rural communities to manage water and agro-pastoral resources in the project areas can be assessed for various groups at various levels through: the collective capacity of rural communities to apply a participatory approach to Community Based Development through the CPLs; the capacity to operate and maintain each water mobilization unit or grazing site supported by the project through CGEPs; the capacity of grassroots organizations to better advocate for the needs of the community vis-à-vis other stakeholders; and the capacity of the staff at the PMU and in the MAEPERH technical directorates on water mobilization, watershed management, fisheries, environmental safeguards, application of the Environmental and Social Management Framework (ESMF), climate change and sustainable development, fiduciary management, results-based M&E, use of the ARCGIS software was enhanced."*

Based on the above-mentioned evidence, this review concluded that the efficacy with which the project's PDO was achieved was High.

Rating



High

OVERALL EFFICACY

Rationale

The evidence provided in the ICR verified the success of the project in increasing access of rural communities to water in project areas. Outcome and intermediate outcomes for this this element of the PDO were either fully achieved or significantly exceeded.

While the M&E design lacked adequate qualitative PDO/Intermediate level outcome indicator(s) to assess the extent to which the capacity of rural community organizations was enhanced, the ICR and the Bank project team provided plausible evidence to support a conclusion that the project's capacity building activities positively contributed to enhancing capacity of grass roots community organizations to manage water and agro-pastoral resources. The indicators used to assess enhancement in capacity did not provide information on whether rural communities became stronger, better and more resilient as a result of the project intervention. On the other hand, the results in terms of improved water supply infrastructure and water delivery were sound and reflected a sound capacity of the various rural institutions involved.

Therefore, the overall efficacy with which the PDO was achieved was rated High.

Overall Efficacy Rating

High

5. Efficiency

Economic and Financial Efficiency

ex ante

- Based on the estimates of the quantified benefits from investments in underground cisterns, open-air water reservoirs, construction or rehabilitation of boreholes, construction of shallow wells, establishment of grazing set-aside areas, and the promotion of income-generating activities the project ERR over 20 years was estimated at 12%.
- The economic analysis included the costs of Component 1 (Priority Community Investment Sub-projects) plus the part of those in Component 3 (Project Coordination and Management) that are related to the implementation of Component 1. Benefits of component 2 (Capacity Building and Provision of Technical Assistance) were explained in the PAD but not included in the analysis.
- No Sensitivity analysis was included at appraisal.

ex post



- The economic internal rate of return (EIRR) estimated for the project at completion was 18% compared to an appraisal estimate 12%. This was also significantly higher than the economic opportunity cost of capital (6% per year). The benefit/cost ratio was 1.78.
- The analysis at completion followed the same approach as mentioned above at appraisal, except for using actual values from the project M&E system and PMU surveys in addition to updated technical, price, and cost data.
- A sensitivity analysis showed that the benefits of water management infrastructure are very resilient under a range of challenging scenarios. Scenarios examined in the analysis included a reduction in benefits, an increase in recurrent costs after the project implementation period, a delay in accruing benefits, and a combination of a reduction in benefits and increase in recurrent costs. The EIRR and net present value (NPV) were robust under all scenarios.
- Cost Effectiveness. When compared to similar projects, this project was cost effective. For example, unit costs of boreholes and pastoral wells installed under the project were 16% and 40% lower, respectively, than the same technology installed under the Soil and Water Management Programme (PROGRES), an IFAD-financed project, in Djibouti. Also, the unit costs of micro-dams (weirs) were ten times lower per cubic meter of recharge capacity and four times lower per hectare of water-spreading capacity than costs of dams constructed under PROGRES. While cisterns constructed by the Surface Water Mobilization and Sustainable Land Management Project (PROMES-GDT- also an IFAD-financed project in Djibouti - cost about the same, those constructed under this project (PRODERMO) incorporated additional features to increase durability and harvested more water (ICR, paragraph 39).

Administrative and Institutional Efficiency

The project closed on December 31, 2019 compared to an original closing date on May 31, 2017, i.e. two years and seven months beyond the original closing date. The extension of the closing date was necessary after the project received two AFs and activities were scaled-up. According to the ICR (paragraph 40) the project did not "face any major procurement nor financial management issue and disbursements were made on a regular basis." The project's implementation benefited the stability of project staff on both sides, the Government and the Bank.

Overall, Efficiency is rated Substantial. This rating reflects a higher EIRR at completion compared to appraisal (18% compared to 12%), high cost effectiveness, and timely implementation of project activities.

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	✓	12.00	64.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	18.00	78.00 <input type="checkbox"/> Not Applicable

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

6. Outcome

Relevance of Objectives was rated Substantial. Overall efficacy was rated High. The evidence provided in the ICR point to the success of the project in increasing access of rural communities to water in the project areas. Outcome and intermediate outcomes for this element of the PDO were either fully achieved or significantly exceeded. While the M&E design lacked adequate PDO/Intermediate level outcome indicator(s) to assess enhanced capacity of rural communities, supplementary evidence from the World Bank task team (along with evidence of the attributable results of enhanced capacity building) established that project-supported capacity building activities positively contributed to enhancing the capacity of communities to manage water and agro-pastoral resources. Efficiency was rated Substantial based on a higher EIRR at completion compared to appraisal (18% compared to 12%), high cost effectiveness, and timely implementation of project activities.

Based on these results this review concluded there were no shortcomings in the project's achievement of its objectives, relevance or efficiency and its Overall Outcome is therefore rated Highly Satisfactory.

a. Outcome Rating

Highly Satisfactory

7. Risk to Development Outcome

The following three risks could potentially impact the development outcome:

1. The risk that Local Steering Committees (CPLs) and Water Point and Pasture Management Committees (CGEPs) will not continue to operate after project completion, despite the heavy investment in training for CPL and CGEP members and field technicians. It is important to finalize the formalization of these committees. In addition, as rural populations are semi-nomadic, some members of these committees may relocate, so refresher training must be provided regularly (ICR, paragraph 65). In a further communication, the project team explained that *"refresh training was provided to the Local Steering Committees (CPLs) as well as to Water Point and Pasture Management Committees (CGEPs), by the Ministry of Agriculture and the Secretary of State for Decentralization, after the closing of the PRODERMO."* According to the ICR (Box 4), the secretary General of the Ministry of Agriculture, Water, Fisheries, Livestock, and Halieutic Resources stated that: "The technical departments (DGT, DHR) are now in charge of PRODERMO's water mobilizing units and are supporting the water point committees. After the end of the project, the technical departments are responsible for supervising the management committees and making the repairs. because it has produced simple and robust infrastructure to guarantee longevity and ease of maintenance."



2. There is a risk that the achievements of the first element of the PDO (Increased access of rural communities to water in the project areas) might not be sustained as currently intended. To further ensure the sustainability of the financed infrastructure, aside from finalizing the formalization of CGEPs, it is recommended by the ICR to give them more responsibilities within the decentralization agenda (ICR, paragraph 66).
3. The risk of climate change. Sustaining improvements in access to water could be negatively impacted if protracted droughts occur. This would result in a reduction in the efficacy of surface water mobilization infrastructure, most notably the infrastructure for providing drinking water (ICR, paragraph 66), and perhaps aquifers.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project built on the successful participatory approach of the Government's Program for Mobilization of Surface Water and Sustainable Land Management (PROMES-GDT) that aimed to address the thirst problem in the country. The project used the same central implementation unit for PROMES-GDT, which according to the ICR (paragraph 61) allowed the project "to initiate activities on the ground and achieve results very quickly." The project design featured support for developing agriculture, livestock, and fisheries. Also, the design aimed to diversify income sources and reduce pressure on pasture land by supporting income generating activities (IGAs) through a matching grant initiative. Design also included nutrition education; and greater social accountability through beneficiary feedback and a grievance redress mechanism (ICR, paragraph 48). The project benefited from the geographic and thematic complementarity with the IFAD-supported PROMES-GDT, which enhanced learning, and enhanced coordination between the Bank and IFAD (ICR, paragraph 48).

According to the ICR (paragraph 48), the project benefited from high implementation readiness with a detailed project manual available before project effectiveness. However, there were some design limitations including the reliance on consultants for the functioning of the project management unit (PMU) rather than building the capacity of local staff. Also, the institutional anchoring of the PMU was not clearly defined whether in the Office of the Secretary General, Ministry of Agriculture, Water, Fisheries, Livestock, and Halieutic Resources or the Project Management Bureau (ICR, paragraph 49). Another limitation was the limited visibility over the five-year horizon of the project provided by the local development plans (SAAHPs) as they initially covered only one year (SAAHPs). Sixteen risks were identified at the preparation stage relating to the implementation agency and overall project risks, as well as environmental risks, with the overall risk rated High. The PAD (Annex 4) included detailed mitigation measures. The ICR (paragraph 56) reported that an environmental risk related to poor quality of drinking water materialized and the mitigation measure was successfully implemented. Other than this, the ICR did not report on other risk(s) that materialized, and whether the suggested mitigation measure(s) worked as expected. M&E design had minor shortcomings, most notably the lack of indicators to assess enhanced capacity (see section 9 for more details).

This Review rates Quality at Entry as Satisfactory. The rating reflects high implementation readiness and a generally robust project design, and M&E design shortcomings.



Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

Over the eight years implementation period, the Bank carried out 20 implementation support missions. Missions regularly carried out field visits to the three project areas. According to the ICR (paragraph 62) "mission teams had high levels of expertise in rural infrastructure engineering, agronomy, M&E, financial management (FM), procurement, environmental and social safeguards." However, according to the ICR (paragraph 62) the project could have benefited from better expertise and advice on income generating activities. As noted already, the project benefited from the stability of the task team with one TTL from start to completion. Implementation also benefited from regular audio conferences in-between the support missions to address any implementation bottle necks. The Bank addressed some design limitations including extending the timeframe of the local development plans to cover multiple years rather than one year, and strengthening social accountability mechanisms through requiring a 10% beneficiary contribution to qualify for IGA match grants. The Bank also introduced hydroponic agriculture on a pilot scale, a promising technology for water-scarce countries. The project team followed up on environmental and social safeguards, and fiduciary compliance.

This Review rates Quality of Supervision as Satisfactory. The rating reflects successful implementation of the project and continued support by the team to address implementation challenges, including the several droughts experienced during implementation.

Based on the above-mentioned assessment for sections 8a and 8b, Bank Performance is rated Satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project appraisal document (PAD) did not include a Theory of Change (ToC) as it was not mandated at appraisal. Nonetheless, the ICR (page 2) included one which reflected the relation between the planned project activities, its outputs, outcomes and long-term impacts. The achievement of the PDO was to be assessed through four PDO level indicators: #1. Increase of the number of rural households with more secure access to drinking water within a reasonable travel time (two hours roundtrip) in the project areas, #2. Increase in the head of livestock with more secure access to water within a reasonable distance (20 km radius) in the project areas, #3. Increase in available grazing biomass in the targeted rangelands in the



project areas, and #4. The number of the communities in the project areas organized in community-based structures that actively prepare and implement the local development plans. Indicators 1, 2 and 3 address the first part of the PDO (*increase access of rural communities to water*). However, Indicator #3 was dropped as part of AF-2 in February 2015, as it was assessed to be not directly linked to the PDO (ICR, paragraph 14). Indicator #4 was intended to assess "enhancing the capacity of rural communities to manage water and agro-pastoral resources in the project areas using a participatory approach to community-based development." Indicators #1 and #2 were specific, measurable, achievable, relevant, time-bound and included realistic targets. However, indicator 4 was qualitative and not comprehensive enough to assess enhancement in capacity, which was part of the PDO.

The Results Framework (RF) included ten intermediate results indicators to assess the different activities supported by the project. All intermediate indicators were quantitative, measurable and with clear targets. M&E design called for a baseline study, a mid-term review, and an end-of-project evaluation of outcomes and results.

Overall, M&E design was sound. However, a notable shortcoming was the lack of adequate qualitative PDO/Intermediate level outcome indicator(s) to assess enhanced capacity of rural communities. The indicators used to assess enhancement in capacity did not provide information on whether rural communities became stronger, better and more resilient as a result of the project intervention. On the other hand, the Bank task team provided additional evidence of capacity building in the project (see Section 4 in this review). The results in terms of improved water supply infrastructure and water delivery were sound and reflected a sound capacity of the various rural institutions involved.

b. M&E Implementation

The PMU had the overall responsibility of M&E implementation. M&E capacity improved after the first two years of implementation when a deputy coordinator with extensive experience in M&E was hired (ICR, paragraph 52). Also, M&E implementation benefited from an international M&E specialist who supported the operation of the project's M&E system, clarified procedures and responsibilities, and developed data collection forms for community organizations to track activities in the field. The PMU monitored project activities through a Geographic Information System (GIS), which allowed spatial monitoring. A baseline study was conducted in 2013, a mid-term review in April 2014, and a second-level 2 restructuring in 2015 to update the Results Framework. As part of the project completion process, two types of assessments were produced. First, a qualitative assessment to assess the performance of the community organizations, IGAs, and nutrition activities as well as an assessment of beneficiaries' perceptions of project achievements and shortcomings. Second, a quantitative end-of-project evaluation by an independent agronomist.

Revisions/Changes to the RF. The 2015 restructuring included updating the RF by adding baseline values for the three PDO-level indicators, changing the targets of some indicators to reflect scaling-up of project activities. Also, core sector indicators were included along with other additional indicators to assess the results of project support for the fisheries sub-sector, accountability, and beneficiary feedback.

c. M&E Utilization



According to the ICR (paragraph 54) "the M&E system was used successfully to inform project management and stakeholders of progress and identify additional actions required to achieve the PDO." The M&E system was successfully used to track project activities and update the RF. This enabled the project management and the Bank to address any implementation bottlenecks promptly. M&E information also provided the basis for the 2015 restructuring. By project completion, the M&E system accumulated an extensive amount of data that informed the ICR, the economic and financial analysis as well as the Borrower Completion Review (ICR, paragraph 54). However, the PMU could have improved documentation of knowledge production and dissemination.

Overall, M&E Quality is rated Substantial. This rating reflects a sound design, an implementation that produced most deliverables despite initial delays, and effective utilization of M&E findings.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as an environmental Category B. The safeguard operational policy for Environmental Assessment (OP 4.01) was triggered. An Environmental and Social Impact Assessment (ESIA), including an Environmental and Social Management Plan (ESMP) was prepared. The project activities (sub-projects) were expected to result in positive impacts on the environment and living conditions of affected populations. However, construction and operation activities under Component 1 were expected to have some negative impacts. According to the PAD (paragraph 75) "the environmental assessment established that the project will not create significant or irreversible negative impacts on the environment." The Environmental and Social Impact Assessment (ESIA) was disclosed at the World Bank's Infoshop before project appraisal and disclosed in Djibouti on January 29th, 2011.

Environmental Compliance. According to the ICR (paragraph 56) the project "complied with all required World Bank environmental safeguards." Each sub-project for which funding was requested was required to submit a simple environmental and social screening form. However, a water quality analysis conducted in 2019 found that water samples collected primarily in cisterns were contaminated with coliform bacteria. To address this problem, the project worked with the National Public Health Institute of Djibouti (INSP) under the Ministry of Health for a water treatment campaign to sensitize communities to the issue, distribute water treatment kits, and train CGEPs to use them. According to the ICR (paragraph 56) "no gastrointestinal or other water-borne illness was reported at any site covered by the project, and no complaints were reported."

Social Compliance. While the project did not trigger any social safeguard policies, it implemented a number of activities related to addressing social inclusion. These included: (a) activities to strengthen the technical and managerial capacities of women's groups and associations; (b) supporting IGAs for women; (c) promoting gender inclusion in decision-making and planning by gaining active participation by women in operating and maintaining water infrastructure and improved pastures; and (d) addressing malnutrition among pregnant women and stunting in children through nutrition education (ICR, para 57). Also, a



grievance redress mechanism (GRM) was established in 2017 and communities were trained to use it (ICR, para 57).

b. Fiduciary Compliance

Financial Management (FM). According to the ICR (paragraph 58) the project had "sound fiduciary arrangements and complied with all World Bank financial management (FM) requirements." FM benefited from a qualified administration, a finance manager and an accountant funded by the Surface Water Mobilization and Sustainable Land Management Project (PROMES-GDT). FM also benefited from training provided by the Bank's FM support missions. Audit reports and Interim Financial Reports were filed in a timely with the Bank and were found to be of acceptable quality. However, the ICR did not mention whether the audit reports were qualified or unqualified. In a separate communication, the Bank project team advised IEG that "*all audit reports were received and were unqualified.*"

Procurement. According to the ICR (paragraph 60) "the borrower complied with World Bank procurement requirements, with no major shortcomings in procurement and improved performance over the years." That said, procurement processing started slowly due to poor record keeping. Procurement activities improved with support from the Bank and after hiring a competent procurement officer at the MTR stage.

c. Unintended impacts (Positive or Negative)

d. Other

Food security. The World Food Program (WFP) food security indicators (Coping Strategy Index (CSI) Food and CSI Asset Depletion) showed positive trends over the course of the project. The percentage of food-deficit households (CSI Food) fell continuously from 21% to 5%. The CSI Asset Depletion indicator also decreased from 50% to 30%. The proportion of households that adopted emergency coping strategies because they lost savings or productive assets such as gardens, and production equipment also decreased. Results of the two most recent Food Survey Monitoring System surveys in project areas were also positive and could according to the ICR be attributed to the effects of the project (ICR, paragraph 46).

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Highly Satisfactory	
Bank Performance	Satisfactory	Satisfactory	



Quality of M&E	Substantial	Substantial
Quality of ICR	---	Substantial

12. Lessons

The ICR included four lessons. The following three are emphasized with some adaptation of language:

- **There is a need to ensure that the enabling environment for specific project interventions is assured.** For example, in this project the regeneration of vegetative cover, particularly tree cover, was introduced to reverse desertification to ensure the feasibility of micro dams, soil and water conservation works. Such interventions are more essential than ever in the context of climate change in Djibouti and alike countries.
- **Accessible innovation, advisory services and access to markets are key elements for sustainable agriculture and livestock development.** The project focused mainly on water mobilization units and less on agriculture and livestock development. The adoption of advanced agricultural technologies (e.g. micro-irrigation, greenhouses, hydroponics), requires cutting-edge skills compared to more traditional agriculture. Such skills can be acquired through well-trained, and experienced teams providing agricultural and management advice. However, marketing advice to producers to improve their economic performance in the newly irrigated areas was not an objective of the project. Nevertheless, the lesson from this project is that producers who adopt advanced agricultural technologies require commercial partnerships with buyers and input suppliers (along the lines of productive alliances) to generate sustained profits.
- **Beneficiaries' contributions to income-generating activities (IGAs) strengthened their ownership of these activities and the likelihood of success.** IGAs are a high-risk project component that requires careful planning, preparation, selectivity, and strong complementary support such as business skill development; participatory preparation, review, and monitoring of business plans; and market analysis). The 10% contribution requested to access matching grants for IGAs was accepted by all participants in this project. Even the poorest found the means to meet this threshold for disbursement of the matching grant. The lesson is that this requirement prevented distortions in eligibility and provide an incentive to be successful. Indeed most IGA participants were successful, which was attributed to a large extent to the requirement for 10% contribution, which instilled a sense of ownership among beneficiaries.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



Quality of Evidence. The ICR benefited from a sound M&E system that provided important inputs to the ICR and efficiency analysis. Since the M&E design lacked adequate indicators to assess the enhanced capacity of communities, the ICR's coverage of this issue was supplemented for this review by an exchange with the Bank's project team.

Quality of Analysis. The ICR provided clear linking between evidence and findings. However, the evidence on enhanced capacity was limited.

Lessons. Lessons reflected the project experience and were based on evidence and analysis.

Results Orientation. The ICR included a good discussion on outcomes. However, the connection of some sections to the PDO was not clear, for example, food security.

Internal Consistency. Various parts of the ICR were internally consistent and logically linked and integrated. However, the sections on hydroponics and food security might have fitted better under section E (Other Outcomes and Impacts) rather than being discussed as part of section B (Achievement of PDOs).

Consistency with guidelines. The ICR used the available data to the extent possible to justify the assigned ratings. Discussion of outcomes was thorough, and the efficiency analysis was reasonable.

Conciseness. The ICR was well written and provided thorough coverage of the implementation experience and candidly reported on shortcomings. There was enough clarity in the report's messaging. The ICR could have discussed whether the recommended risk mitigation measures worked. Also, the ICR did not report on the status of audit reports, whether qualified or unqualified.

The Bank's project team provided comprehensive responses to questions from IEG about the project's performance. These responses were very much appreciated and many were used in this review to elaborate the outcome of the project.

Overall, the Quality of the ICR is rated Substantial.

a. Quality of ICR Rating
Substantial

