

Project Completion Report Validation

On-farm Irrigation Development Project in Oldlands

Arab Republic of Egypt

Date of validation by IOE: February 2021

I. Basic project data

			Approval (US\$ m)		Actual (US\$ m)	
Region	Near East, North Africa and Europe	Total project costs	92.16		61.45	
Country	Egypt	IFAD loan and percentage of total	62	65%	42.77	69.6%
Loan number	1000003631 1000004479	IFAD grant	2.0	2%	0.99	1.6%
IFAD project ID	1100001447	Government of Egypt	19.3	21%	17.18	28%
Type of project	Irrigation	Beneficiaries	10.8	12%	0.51	0.8%
Financing type	Loan and Grant					
Lending terms ¹	Original loan: intermediate terms Additional financing: Ordinary terms					
Date of approval	17/12/2009					
Loan signature	16/02/2010					
Date effectiveness	16/02/2010					
Loan amendments	four extensions	No. of beneficiaries	271 635		124 149	
Loan closure extensions	30/09/2020	Project completion date	30/03/2018 (planned)		30/09/2020 (actual)	
Country managers	A. Abdouli; A. Hanafi; A. Sma; D. Saleh	Loan closing date	29/09/2020 (planned)		30/09/2020 (actual)	
Regional director(s)	N. Khouri; K. Bouzar D. Saleh (ad interim)	Mid-term review			12/01/2015	
Project completion report reviewer	Roberto La Rovere	Loan disbursement - project completion (%)			71% (IFAD)	
PCR quality control panel	Eoghan Molloy; Johanna Pennarz; Fabrizio Felloni	Date of the project completion report	6-21 October 2019 (mission)		28/10/2020 (final PCR report)	

Source: On-farm Irrigation Development Project in Oldlands (OFIDO) Project Completion Report (PCR), and President's Report.

¹ Loans on intermediate terms have a rate of interest per annum equivalent to 50% of the variable reference interest rate and a maturity period of 20 years, including a grace period of 5 years; loans on ordinary terms have a rate of interest per annum equivalent to one hundred per cent (100%) of the variable reference interest rate, and a maturity period of 15-18 years, including a grace period of three years.

II. Project outline

Country, Project	Egypt, On-farm Irrigation Development Project in Oldlands (OFIDO)
Project duration	Total project duration: 10 years; Board approval: 17 December 2009; Effectiveness Date: 16 February 2010; Completion: 30 September 2020; Actual financial closure: 30 September 2020; Four extensions granted (the last one for closing the project and delivering the reports was due to the pandemic); Effectiveness lag: two months; Time from entry into force to first disbursement of funds: from 16 Feb 2010 to 2012. This is because - due to unforeseen political events - project activities only began at the end of 2012.
Project goal, objectives and components	The primary objective of the OFIDO project was to contribute to poverty reduction and empowerment for poor rural households through improving water use efficiency at farm level, and increasing yields, productivity and income of smallholder farmers and the poor in the Oldlands. The overall goal was to improve the livelihoods of the rural poor (small farmers, landless, rural women, unemployed youth) through targeted enhancement of production potential and raising households' income. Outcomes included: (i) improving on-farm irrigation, water management and equitable water distribution; (ii) promoting demand-driven participatory farming system research and extension for crops, water, livestock and (iii) access to rural finance. The project had four components: (i) irrigation and water management; (ii) agriculture competitiveness enhancement; (iii) rural enterprise and microfinance development; (iv) project coordination and management. OFIDO aimed at improving livelihoods by (i) higher on-farm water use efficiency; (ii) improved agricultural productivity; (iii) marketing support for smallholders and landless; and (iv) promoting employment and income generation of small businesses and micro enterprises. The project was to deliver capacity building (training, technical assistance, knowledge sharing) of: (i) community-based organizations (water user's associations [WUA], community development associations); and (ii) public service providers e.g. extension, research and irrigation services, and the Social Fund for Development (SFD).
Project area and target group	The project targeted eight selected governorates in Upper and Lower Egypt: to the initial governorates, three more were added later in the project. The target group comprised landed (landowners/land users) and landless households. ² The landless are about 53 per cent of rural households. Targeting the poor was implemented through geographical targeting of governorates where poverty was high and traditional practices of irrigation were used, selection of irrigation areas that met certain technical and landholding size criteria; and self-targeted interventions of primary interest to the project's target group.
Project implementation	OFIDO was implemented by the Ministry of Agriculture and Land Reclamation (MALR). A National Project Coordination Unit (PCU) operated through Governorate PCUs. SFD, later renamed Medium, Small and Micro Enterprise Development Authority was assigned to implement the Rural Enterprise and Micro Finance Development component and extend the micro, small and medium enterprise loans to the target group through banks and intermediary institutions (community development associations/NGOs etc.). The project received a total of 16 supervision missions, including a Mid-term Review in 2015.
Changes during implementation	Due to unforeseen political events, project activities only began at the end of 2012. The Project encompassed additional governorates through new financing in 2013. The original completion date of 31 March 2018 was extended twice until September 2019 to complete some activities critical for long-term sustainability. In December 2019, the project completion date was further extended to the closing date of 31 March 2020. Due to COVID-19 pandemic, the project was again extended until 30 September 2020. There were frequent changes to mission personnel and in terms of the Country Programme Managers, with five different managers over the implementation period of the project. Changes during implementation involved payment methods, institutional arrangements on contract implementation and irrigation system management, technical arrangements and partnerships for supply of essential inputs, organization of Market Associations.
Financing	Tables 1 and 2 display project costs by funding sources and components respectively. The estimated project costs were US\$92.1 million. IFAD initially provided US\$47 million loan and US\$1 million grant based on the initial scope. That was followed by additional US\$13 million loan and US\$1 million grant to extend the Project to more Governorates, for a total of US\$2 million (US\$60 million loan; US\$2 million grant). The Government pledged to provide US\$19.3 million and beneficiaries to provide US\$10.8 million. The

² According to the PCR (paragraph 11), "the landless constituted about 53 per cent of rural households... not all landless households were poor as these included civil servants and other... employees, some entrepreneurs etc. It was estimated at design stage that 20 per cent landless households, dependent on casual... unskilled employment, and were (poor), hence representing a specific vulnerable group to be targeted. **For the rural finance component**, the target group was to include... also the landless labourers, unemployed male and female youth and female headed households with little or no access to land."

	actual final disbursement, based on the total sum of appraisal and additional loans, was 71 per cent by IFAD loan (and 49 per cent by grant), 89 per cent by Government, 5 per cent by beneficiaries. Total project disbursement from all sources was only 67 per cent over the initially estimated US\$92 million (after considering funds additionally pledged: by IFAD US\$13 million) and 85 per cent of what had been approved at design and appraisal).
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Table 1
Project costs (US\$ '000)

Funding source	Appraisal	Additional financing	Total approved costs	% total approved costs	Actual costs	% actual costs	Disbursed % actual costs
IFAD (loan)	47 060	13 000	60 060	65%	42 773	70%	71%
IFAD (grant)	1 000	1 000	2 000	2%	986	2%	49%
Government	15 300	4 000	19 300	21%	17 176	28%	89%
Beneficiaries	8 800	2 000	10 800	12%	512	1%	5%
Total	72 160	20 000	92 160	100%	61 447	100%	67%

Source: PCR Table 1. Funding Sources vs. actualized costs (US\$ '000) as of 30 September 2020; and President's Report.

Table 2
Component costs (USD '000)

Component	Appraisal	Revised approved costs	% of approved costs	Actual	% of actual costs	% disbursed
1. On-farm Irrigation and water management	50 500	69 608	76%	41 577	68%	82%
2. Agricultural competitiveness enhancement	4 270	4 270	5%	1 024	1.7%	24%
3. Rural enterprise, microfinance agreement	11 355	11 358	12%	8 939	14%	78%
4. Project Management and Coordination	6 024	6 924	8%	9 914	16%	165%
Total	72 160	92 160	100%	61 455	100%	85%

Source: Appraisal costs, Table 9, Project Design Report (November 2009), and Actual Costs from PCR Table 2 Appendix 3. (Actual expenditure figures differ slightly within the PCR e.g. compared to Table 9, Appendix 4); Revised approved costs from the Operational Results Management System.

III. Review of findings

PCR finding	Rating
A. Core Criteria	
Relevance	
1. The OFIDO project addressed very relevant issues for agriculture in Egypt, including water scarcity, the need for better linkages between agricultural research and extension, and improved access to finance and marketing. The project also recognized that Egypt is highly vulnerable to climate change impacts, the most vulnerable sectors being water resources and agriculture. The design conducted a specific socio-economic analysis to identify the poorest and most vulnerable groups. The number of households that were targeted initially (39,570) was later extended to include an additional 10,430 households during the project expansion that covered more governorates. To comprehensively address rural poverty, the project supported complementary investments including access to extension services, financing and markets.	4
2. OFIDO was well aligned with the priorities of the Government of Egypt for poverty alleviation and economic growth in rural areas and with the Strategy of Agricultural Development to 2030. The project logic was based on the premise that more efficient agriculture encourages export opportunities and	

PCR finding	Rating
<p>agricultural production, brings benefits to poor smallholders and enhances their food security, income, and creates rural on-and-off farm employment.</p> <p>3. The project design was drawn on an analysis of water scarcity and irrigation systems. This compared the experience of different approaches that promoted water use associations, enhanced cost recovery mechanisms, strengthened marketing capacities of producer associations, making market information more freely available and developing the extension role of the private sector.</p> <p>4. Although the project design drew from past experiences and models, the implementation modalities were not always appropriate for the country context and reality of the project areas: the PCR recognizes that OFIDO would have benefited from a clearer appreciation of the role of the private sector, an institutional capacity gap analysis in the MALR, and a clearer community mobilization and communication strategy. Implementation would have benefited from a much deeper initial capacity gap analysis of implementing institutions at central (MALR) and community levels (WUA). Additionally, the plans to develop research and extension and the ability of loans to address poverty were limited.</p> <p>5. Taking into consideration the relevance of the project interventions vis-a-vis the needs, but also the implementation issues and limited adaptability to the field reality, relevance is rated moderately satisfactory (4), in line with the PCR.</p>	
Effectiveness	
<p>6. OFIDO had a broad outreach, which increased when the project was expanded to include more governorates. The PCR shows a wide divergence in outputs and physical targets that were delivered under the project. Some targets set at design changed over the project duration but differ from those in the Operational Results Management System, making it unclear which targets should represent the correct results. The logframe (Appendix 1) often reports only the initial targets. Several targets were underachieved by the project and several results were not reported. For each outcome, some examples of the above include:</p> <ul style="list-style-type: none"> - Outcome 1: 25,500 farmers gained secure access to water (64 per cent of the target).³ Targets in terms of the number of irrigation committees, groups managing irrigation infrastructure, training in infrastructure or irrigation management were underachieved (despite these being the key areas of the project). The target for land area under modern irrigation systems was achieved by 76 per cent,⁴ and only 63 per cent of the targeted number of people for irrigation modernization activities.⁵ The number of people receiving services by OFIDO was underachieved (50 per cent of target). - Outcome 2: adoption of new crop and livestock technologies, production increases, and training targets were generally achieved, although targets for livestock production were not underachieved. There were further disparities within these results, as only 28 per cent of women were trained in crop production and only 7 per cent of men were trained in livestock production.⁶ - Outcome 3: targets related to the training of staff delivering financial services, and the number of marketing groups, were underachieved. Targets in terms of access to rural finance were generally overachieved; however, the project managed to disburse funds for this activity only after 	3

³ Quantified at 25,500 farmers that gained secure access to water, as opposed to a target of 39,570 farmers.

⁴ Quantified at 24,787 feddan (a local unit of measurement) of the initial 32,600 feddan target.

⁵ Of 23,544 men and 2,016 women, of a target of 32,000 men and 8,000 women. Despite that, the targeted number of groups managing infrastructure was exceeded at 127 per cent (1,834 Marwa - one type of irrigation group – Committees, 296 WUAs).

⁶ One target: 'number of researches carried out' (possibly referring to extension) is also unclear and the PCR provides no data.

PCRV finding	Rating
<p>reaching beneficiaries beyond the project area, as the absorptive capacity for loans in the targeted area was limited. Less than 20 per cent of farmers were trained in income-generating activities and in business management.</p> <p>7. Across the project components, many of the outputs (e.g. WUAs, trainings, etc.) were achieved only at the very end of the project. The PCR further notes that when training was delivered it was too late and was not always of adequate quality.</p> <p>8. The overall effectiveness of OFIDO was limited by underachievement in terms of many of the targets. Implementation delays affected many outputs, often delivered late in the project. Therefore, the effectiveness of OFIDO is rated moderately unsatisfactory (3), in line with the PCR rating.</p>	
Efficiency	
<p>9. The project's efficiency was affected by severe implementation and procurement delays, with three extensions and only 67 per cent of total project funds spent by project completion. The forced account mechanism that was put in place had to be discontinued at a point, and this affected procurement and disbursement,⁷ which remained low. The share of project management costs against total costs increased from 2 per cent at the initial appraisal to 16 per cent at completion.</p> <p>10. Procurement was affected, especially in the first years, by the low capacity of staff, delays in processes, non-compliance with IFAD guidelines (and at times limited compliance with IFAD's No Objection procedure and with the national regulations) among other issues, all of which indicates an unrealistic implementation schedule. The project managed to improve the processes only during the final years of implementation. The project's fiduciary risk was high due to issues with disbursement and flow of funds, staffing, budget preparation and monitoring, internal control, accounting and financial reporting. Audit reports were at times delayed, yet the quality of audits was sufficient and improved in later years.</p> <p>11. The financial analysis yielded a 28 per cent economic internal rate of return (EIRR) at completion, based on a discount rate of 13 per cent and a 20-year timeline beyond completion. This was higher than the 18 per cent at design, and in line with the EIRR of other IFAD projects in Egypt (Country Strategy and Programme Evaluation, CSPE, Table 3.2). The economic viability was not sensitive to moderate declines in benefits or increased cost. The PCR analysis of the EIRR, based on ten crop models and a standard approach by IFAD, is sound.</p> <p>12. The initial implementation delays due to political instability were outside the control of the project and greatly affected the start of the project. Yet the many issues that have been described affected the efficiency and disbursement, which remained low, with only part of the outcomes being achieved. Overall, the efficiency is rated moderately unsatisfactory (3), in line with the PCR.</p>	3
Rural poverty impact	
<p>13. The main PCR source of validation for this criterion is an "Impact Assessment Study"⁸ undertaken by an external consultancy firm, which is frequently cited in the PCR. The study was, in fact, a survey, rather than an impact assessment, and does not allow to infer any causality, given the absence of any significant or reliable control group. The PCR is clear about the limitations of the study and notes that some results are contradictory. In addition, the choice of statistical data and methods to benchmark the assessment of poverty changes and impacts was questioned by the PCR, while the long project duration made the baseline data (from 2007) outdated.</p> <p>14. The main results in terms of human and social capital derive from training and Farmer Field Schools. Training covered many beneficiaries (especially over the final year of project operations) on enhancing agricultural productivity, efficient</p>	3

⁷ Disbursement was comparatively much lower than all past IFAD projects in Egypt, as shown by Table 3 in the 2016 CSPE.

⁸ EcoConServe Environmental Solution. OFIDO Impact Assessment Study. 2019. (The original study could not be reviewed.)

PCR finding	Rating
<p>irrigation water management, business approaches to farming and linking Marketing Associations and institutions, but they started late in the project life and were not accompanied by the necessary strengthening of the institutions and community groups. The linkages between farmers and agriculture research priorities were not properly established or documented in the project results. Women benefited marginally from the project, as discussed in more detail under Gender equality and women's empowerment, below.</p> <p>15. There is also limited information in terms of changes in food security through improved crop production and enhanced access to markets. This is surprising given that these are the areas where the impacts of modern irrigation systems would most likely be evident, especially for farmers who earlier suffered from water shortages. Food security and nutrition impacts could therefore not be assessed upon OFIDO's completion, although - reportedly - data from MALR show productivity growth from more equitable access to irrigation.</p> <p>16. The study shows some positive changes in income, land productivity (although also negative changes were found), and land or livestock ownership, but these changes were not statistically significant. The study triangulated the data with the qualitative findings of Focus Group Discussions, revealing that changes could not be attributed to change in crop types as farmers were generally not keen to change, and instead, they prefer traditional crops that are easier to market or to use.</p> <p>17. The PCR presents the data and key arguments but is also careful in not inferring causality and properly considers other contextual factors that can explain changes in these indicators. Based on the assessment study, the PCR observes equity gains for farmers as a result of investments in piped water systems. However, while the study reports both increases and decreases in the income of both the beneficiaries and of the control group, the overall impact of the project on poverty levels cannot be discerned clearly or proven confidently.</p> <p>18. In terms of impact on institutions and policies, OFIDO was expected to contribute to the development of a nation-wide strategy to establish a replicable model of on-farm irrigation development that better understands constraints and opportunities for enhancing water productivity, equity and sustainability. Many lessons were generated about what could have been done better, but the extent to which these lessons were incorporated into the existing policy at the MALR and at the Ministry of Water Resources and Irrigation (MWRI) is not clear. One clear lesson, however, is that smooth project implementation, supervision and monitoring would have required strong institutional partnership and links between MALR and MWRI, but this became evident too late and was not realised during project implementation.</p> <p>19. Overall, there were no strong indicators of satisfactory performance across the impact domains, while changes observed cannot be wholly attributable to OFIDO. In sum, the rural poverty impact of OFIDO is rated moderately unsatisfactory (3), in line with the PCR rating.</p>	
Sustainability of benefits	
<p>20. The sustainability of OFIDO investments depends on the quality of the irrigation systems and on ensuring that farmers can properly maintain the systems. The approach for modernizing the irrigation system with high-quality pipes and hydrants is seen as more sustainable than traditional approaches. On the operational side, it was expected that once irrigation systems were operating, farmers would manage them on their land while the WUA or Marwa Committees would operate the systems in the upper reaches of the irrigation system.</p> <p>21. The long term sustainability of the irrigation system depends on the ability to engage water users from the start, yet the conditions for this to happen were never fully in place due to weak institutional capacity of WUAs, lack of proper regulation for Marwa Committees, poor quality pumps and hydrants and unclear maintenance mechanisms. OFIDO supervision missions repeatedly emphasized the need for proper training and strengthening of</p>	3

PCR finding	Rating
<p>WUAs yet strengthening the WUA was never a strong element of the project. Also, the WUAs were established only in the final year of implementation and did not receive proper training on maintenance. At the level of institutional sustainability, the PCR has moderate confidence about the fact that the Medium, Small and Micro Enterprise Development Authority (formerly known as the SFD) will support IFAD investments after the project end, which is part of their overall mandate, and that the MWRI will take over some OFIDO activities after project end.</p> <p>22. The social sustainability of the irrigation system depends on the extent to which farmers' rights are protected. Many factors limited the community's ownership of the investments and weakened the institutional arrangements to manage and maintain the system. In some areas the project had to close with no proper handover, leaving farmers in a difficult position for managing the new system.</p> <p>23. The sustainability of OFIDO is mixed with positive elements as well as areas of concern about the readiness and capacity of WUAs to operate and manage over time the irrigation systems after the project ended. This has its roots in the difficulty that the project experienced to effectively strengthen WUAs. Overall, the sustainability of OFIDO is rated moderately unsatisfactory (3), in agreement with the PCR rating.</p>	
B. Other performance criteria	
Innovation	
<p>24. The main intervention tested and refined by OFIDO was the introduction of underground piped systems of irrigation to replace the traditional earth lined system and the replacement of the diesel pumps with electric pumps in order to prevent surface evapotranspiration, although the uptake and land area covered was limited compared to the overall project scale.⁹ This also involved investing in farmer organizations and the operation and maintenance of new irrigation systems and required more institutional coordination than earlier systems.</p> <p>25. Planned project innovations included: (i) a comprehensive approach to improving irrigation systems; (ii) introducing a participatory agriculture research and extension system; and (iii) establishing a collective marketing system through Marketing Associations. The PCR outlines well the technical and institutional aspects at the basis of these approaches, the constraints limiting their wider success and adoption by local farmers, and the benefits they promised to provide to local beneficiaries and associations and in terms of water resources management. However, the 2017 CSPE noted that the improved irrigation technology at mesqa levels in the old lands was not an innovation in OFIDO, but was first introduced by the World Bank Integrated Irrigation Improvement and Management Project in Kafr El Sheikh and Beheira governorates, and the technical approach for improving irrigation systems in general was rather traditional and not innovative. Furthermore, the CSPE found that there was a missed opportunity to introduce climate-friendly (solar) technology as an innovation. The participatory/demand-led approach was never really implemented since the national PCU focused more on activities to improve the irrigation systems. The establishment of Market Associations was ambitious and innovative yet also this suffered from conceptual weaknesses and a lack of technical capacity to implement it effectively and sustainably.</p> <p>26. The institutional innovations by OFIDO were overly-ambitious and complex, requiring capacities and institutions and good implementation to support their development. Ultimately, the few innovations introduced by OFIDO were not clearly conceptualised nor fully relevant, although the experience of the OFIDO project allowed learning several lessons, well captured</p>	3

⁹ See also the below section on climate change adaptation.

PCR finding	Rating
elsewhere in the PCR. Overall, innovation is rated moderately unsatisfactory (3) , one point below the PCR rating.	
Scaling up	
<p>27. The OFIDO project was part of wider interventions to develop sustainable models of modern on-farm irrigation to be scaled up by the Government of Egypt. The Government was committed to modernizing the irrigation systems to enhance water use efficiency through a comprehensive approach to irrigation management based on principles that had been applied earlier in Lower Egypt.</p> <p>28. On-farm irrigation modernization was also the focus of a World Bank and AFD Farm-level Irrigation Modernization project, with potential to maximize returns from past investments in upstream systems in other Government programmes. This approach was tested at larger scale in Lower Egypt and was expanded to Upper Egypt through OFIDO. For this purpose, the MWRI signed a protocol with the National Bank of Egypt to establish a credit facility to finance irrigation improvement. While the approach was ambitious and comprehensive, the PCR reports that no on-going projects were scaling up the OFIDO experience yet.</p> <p>29. The overall approach of OFIDO being a vehicle for scaling up of interventions in other areas of Egypt was an important advancement, although the next steps of scaling up OFIDO itself were left in the making. No examples were provided of partners having scaled up the innovations on irrigation, and the other planned innovation areas did not progress much in OFIDO. Moreover, the limited cooperation with MWRI also limited prospects for further scaling up. Upon completion, scaling up OFIDO was only in its early stages and it is rated moderately unsatisfactory (3), in line with the PCR.</p>	3
Gender equality and women's empowerment	
<p>30. An analysis was conducted at the design stage in the project areas that revealed the vulnerability of women in terms of low wages, few opportunities, limited access to resources, asset ownership and little opportunities to become economically self-reliant. A gender mainstreaming strategy was designed in the project to address the barriers to women's empowerment, to support self-employment and employment initiatives, and to enhance participation in community decision making but it didn't have clear targets or any action plan.</p> <p>31. Despite these actions, the extent of women's participation in OFIDO activities focused on irrigation modernization was uneven: some women were involved in water user associations in Lower Egypt, but in general women were not very active in the irrigation sector in Upper Egypt. The number of women in groups managing irrigation infrastructure at project end was 2,016, only 8.5 per cent of total group membership. Women received farmer field school training on crop and livestock production. An estimated 35 per cent of the financed micro-projects were managed by women and 19 per cent of the loans amount was given to women.</p> <p>32. Group formation and skill development provided women with opportunities to meet and discuss issues of concern; that was particularly relevant for women in Upper Egypt. In general, however, the PCR recognizes that women's role in activities and groups and how women benefitted from participation, is not clear. There is little analysis in the external study about the actual impact of the project on women, with not enough gender disaggregation of results except for the total number of beneficiary males and females. The project did not recruit a gender specialist and the PCR provides limited data disaggregated by gender.</p> <p>33. Overall, women benefitted only marginally from OFIDO interventions. The limited impact on gender equality and women empowerment was determined by a context in which there is low social acceptance of participation of women in irrigation activities in Egypt, activities in which traditionally women are not</p>	3

PCRV finding	Rating
<p>much involved. Implementation delays of project activities, which were often delivered only in the final years of the project, also weakened the project focus and the impact on women. Overall, gender equality and women’s empowerment is rated moderately unsatisfactory (3), in line with the PCR.</p>	
Environment and natural resources management	
<p>34. OFIDO activities contributed in multiple ways to the improved management of natural resources: increasing the resilience of downstream farmers, providing water to tail end users, and increasing water use efficiency by underground pipes to reduce water losses from evaporation and seepage.¹⁰ Farmers still experience limited downstream control on the water supply, and social tensions were reported with the farmers operating the water pumps. Beneficiaries also reported better public health environmental conditions as the system reduced the garbage that used to end up in open water channels being used as dumps.</p> <p>35. The PCR does not discuss in enough detail the natural resources management aspects of the innovations through modernized irrigation and does not provide enough evidence and data about the sustainability and cost of fixing the pipes. On the other hand, there is good recognition of the importance of strengthening the governance systems, of the lack of proper handing over of the irrigation systems and of the technical issues with the design and quality of the systems.</p> <p>36. The project was an ESS risk Category B, but no Social, Environmental and Climate Assessment Procedures note was required or was prepared at design time. The project conducted activities to improve the management of natural resources that were mostly focused on water resources use and on irrigation. However, the natural resource management and environmental benefits were not always clearly explained or assessed against targets, and targets were often not set or monitored quantitatively. As a result, this criterion is rated moderately satisfactory (4), in line with the PCR.</p>	4
Adaptation to Climate Change	
<p>37. The objectives and design of OFIDO considered the high vulnerability of Egypt to climate impacts. The PCR seems to assume that improvements in water use efficiency were enough to ensure adaptation to water scarcity and climate change in agriculture. While the project did not comprise specific adaptation targets, the PCR states that it increased the resilience to potential climate-induced water scarcity through helping beneficiaries restore their natural resources by more efficient water use. In that sense the project considered the key actions that normally have an impact on climate, therefore some actions of the project will have contributed to climate goals. The PCR, however, presents this with little data or examples to substantiate it, except a self-reported 14 per cent increase in water savings,¹¹ and higher energy efficiency per unit of water, but the total land brought under climate-resilient irrigation practices (113 hectares, PCR Appendix 4) was limited.</p> <p>38. Some other relevant activities delivered by the project were training through Farmer Field Schools including specific sessions on how to address climate change impacts on certain crops. While the project contributed to higher energy use efficiency through the substitution of diesel by electricity, there is no clear evidence and data on impacts in terms of reduced greenhouse gas emissions.</p> <p>39. While irrigation (and in general agriculture) has important potential for climate change adaptation, the project did not make explicit its contribution to climate change adaptation targets. The indicator of climate resilience</p>	3

¹⁰ Most farmers benefited from increased energy efficiency per unit of water and lower energy costs that ranged between 8 per cent and 30 per cent as per the Food and Agriculture Organization’s (FAO) Impact Assessment. According to EcoConServ, increased water use efficiency decreased the reliance on drainage water for supplementary irrigation from 42 per cent to 13.5 per cent and disposal of wastewater.

¹¹ The PCR notes that some of the completion review team experts challenged this.

PCR finding	Rating
<p>(3.1.4) is “Land brought under climate resilience practices”. The indicators provided in PCR Appendix 4 for climate-resilient practices were not present in the original logframe. The new indicator did not define clearly the targets and does not include all irrigated land. The project did not monitor sufficiently well the key activities and results presented as evidence of the contribution to adaptation. Therefore, the data and narrative under this criterion do not prove a satisfactory achievement under climate change adaptation.</p> <p>40. The mid-term review and supervision missions paid scant attention to issues of climate change adaptation, and instead merely pointed to the assumed adaptation co-benefits of bringing more areas under irrigation in a water-stressed context. The 2017 CSPE rated OFIDO’s contribution to climate change adaptation as unsatisfactory (2), citing missed opportunities to promote climate-neutral technology in the design, such as solar pumps. Nor were issues of salinization and water excess addressed by OFIDO, according to the CSPE. A review of subsequent supervision missions, and indeed the PCR itself, show that little was done to address these shortcomings in the final years of the project.</p> <p>41. In sum, it is conceivable that the type of investments in new irrigation systems may lead to positive effects in terms of water use or climate adaptation outcomes. However, the PCR does not convincingly define, measure, report and discuss the contributions of the project to climate change adaptation. In the PCR, and throughout OFIDO’s implementation, it was assumed that achievements on climate change adaptation were an automatic outcome of the investments in improved irrigation practices. Furthermore, some of the data presented by the PCR are more related to improved natural resources management than the contribution to climate change adaptation outcomes. Overall, OFIDO’s contribution to supporting adaptation to climate change is rated moderately unsatisfactory (3), one point below the PCR.</p>	
C. Overall Project Achievement	
<p>42. The OFIDO project faced a slow start due to unforeseen political events, and multiple extensions, with the first disbursement and date of effectiveness being more than two years behind schedule. Delays persisted throughout the project implementation period, with several activities delivered mostly in the final years of implementation. The design was complex and was not well adapted to the reality on the ground. Most of the results were achieved under the improved irrigation, water management, and equitable water distribution objectives that were the core of the project, but there was limited progress towards other outcomes and intended impacts for poverty reduction and livelihoods development. The project only partially planned for proper monitoring and measuring of results, therefore impacts could not be fully assessed in quantitative ways, limiting the assessment of the project’s effectiveness and rural poverty impact.</p> <p>43. OFIDO’s overall performance was assessed as moderately unsatisfactory by the 2016 CSPE - while it was mid-way - this rating being lower than other IFAD projects in Egypt.¹² Upon completion, the project was found to be somewhat relevant, but the overall efficiency was limited by implementation constraints and other issues. The sustainability of results achieved, especially with regard to the irrigation outcomes, was partially ensured, with some technical concerns and institutional gaps that will require continued investment by the national counterparts.</p> <p>44. The PCR was very candid about the fact that OFIDO faced several difficulties and limitations, and generated several lessons learned that will also need to be taken into consideration by the government at the institutional and policy level. Considering the various limitations, the partial results achieved could be promising, but only if backed up by government commitment to ensure</p>	3

¹² Based on ratings of IFAD lending portfolio in Egypt. Annex II, Egypt, Country Strategy Programme Evaluation (CSPE), 2017.

PCR finding	Rating
<p>institutional sustainability and the right policies and if infrastructure maintenance is ensured. Some issues therefore remain about the sustainability of OFIDO results, chiefly whether implementing partners and financiers will learn from the many and insightful lessons that the PCR elaborated about the project.</p> <p>45. The overall project achievement is moderately unsatisfactory (3), in line with the PCR.</p>	
D. Performance of Partners	
IFAD	
<p>46. IFAD generally delivered on its functions to supervise the project. The early phases of the project would have required more frequent supervision and action to address the many delays through the long implementation period as a result of the four extensions. Over the final years, IFAD supported OFIDO through the development of a performance improvement plan and more frequent meetings, which greatly accelerated the delivery and implementation of irrigation works. The fiduciary responsibilities were delivered in general in timely ways, although, in the end, the disbursement and delivery were much lower than planned.</p> <p>47. An IFAD-FAO initiative to strengthen the implementation of “problem projects” (as classified by IFAD), included the OFIDO project (in 2014-15) and provided a plan to address the technical, managerial, institutional and fiduciary constraints that hampered the performance of the project. FAO’s support included technical coaching and on-the-job training. The fact that IFAD engaged in the cooperation with FAO reflects positively on its performance and confirms that the project had duly considered the recommendations from supervisions and other studies.</p> <p>48. The PCR usefully reflects on the fact that <i>“in its drive towards greater economy, IFAD has gradually reduced both the time in the field and the number of its supervision teams for supervision and design. These revealed necessary changes to the project and alerted the Government and IFAD to problems with project implementation, and suggested remedies”</i>. Remedies and lessons generated through the self-evaluation system were duly considered but they often took place too late in the project. Overall, the performance of IFAD is rated moderately satisfactory (4), in line with the PCR.</p>	4
Government	
<p>49. The role of the Government in facilitating the flow of funds to the project was timely but the follow up on the agreed actions was not always implemented adequately and the several extensions caused the delays. The PCR reports that Project Steering and supervision mechanisms in OFIDO were not very effective. These mechanisms existed but were never called upon to be used as real or effective guidance and supervision, with the result that some incorrect decisions caused further delays and inefficient resource use, thus affecting the project.</p> <p>50. The project did not seem to have any baseline data system, established by the government, to track its progress. This hampered the timely monitoring and reporting of progress and an informed disbursement of funds and discharge of procurement services. The shift from the force account - a procurement model that proved ineffective, difficult to monitor, and that resulted in the poor quality of civil works - to competitive recruitment of contractors, took place too late.</p> <p>51. A strong partnership between MALR and MWRI was identified by the project supervisions as a necessary condition for timely implementation and delivery. However, the limited coordination among some Government agencies at the required time for ensuring proper handover of the irrigation system, and the unclear institutional arrangements, affected project sustainability. There was limited implementation capacity of the national PCU to focus on the different elements of the project and inadequate technical capacity to properly supervise and to oversee activities related to agricultural research, extension and marketing.</p>	3

PCR finding	Rating
52. Considering the above limitations but also the efforts made at the end of the project to increase the delivery, the Government's performance in providing support is rated moderately unsatisfactory (3) , in agreement with the PCR, with several lessons to be learned at the level of national institutions to improve similar future projects.	

IV. Assessment of PCR quality

PCR finding	Rating
Scope	
53. The PCR covers well the various required sections and chapters and provides a good amount of data, if available, and the narrative and document are well developed. The main Appendixes are present and provide useful information, with one last Appendix (not numbered) added at the very end of the PCR that provides a very useful track of the discussion that took place within the PCR team on the content and quality of the draft PCR and ratings. The PCR also includes a useful final section on conclusions and recommendations. Overall, the PCR scope is assessed as satisfactory (5) .	5
Quality	
54. The PCR covers most topics, often in good detail and using rich evidence. In general, the data presented were analysed and discussed well and triangulated in most cases through different sources. For example, while an 'Impact Assessment' provided useful data for some indicators, the PCR was careful to note that this study was not a true impact assessment (as it lacked a reliable control group), and as such could not be used to infer causality or attribution for the assessment of rural poverty impact. There were some issues with the data reported in several tables of the PCR and in the Logframe, and it is not clear what some indicators may refer to. The Logframe annexed to the PCR includes many empty boxes, with no achievement data on important indicators and there are inconsistencies between results and targets cited in the reports and those in the Logframe. ¹³ One table reports data in Table 2 Annex 3 that differ from the same table in the "At a glance section". Meanwhile, some expenditure figures differ within the PCR and at times contradict each other. On balance, the quality of the PCR report is rated moderately satisfactory (4) .	4
Lessons	
55. The PCR presents several lessons learned by the project, throughout the document and specifically in section H. They refer to design, duration, implementation arrangements and technical aspects of project components. The lessons are not all new and apparently some were repeatedly stressed during project implementation. The type of lessons suggests that implementation modalities at design were not always appropriate for the context of the project. The lessons - and some recommendations related to the lessons - are, to a large extent, based on the PCR findings, except for a few cases where the lessons are drawn from experiences in other IFAD projects. The richness of the lessons learned suggests that they should be carefully looked at and used nationally and by IFAD since they are also applicable to other areas. The lessons reported in the PCR are rated highly satisfactory (6) .	6
Candour	
56. The report offers a fair, honest and objective account of the project, highlighting the positive results (showing the limitations or assumptions in drawing conclusions) and the negative results. The report - at times - seems already critical: that, however, is simply the reflection of what the PCR has found based on the evidence available. The ratings are mostly very coherent with the narrative. This results in very detailed, evidence-based (when credible evidence is available) findings and lessons learned. The PCR process also benefited from	6

¹³ One reason explaining the inconsistencies is that the organization of the logframe was changed during the project, from a logframe organized around components to a revised logframe around outcomes. Some indicators were also changed.

an internal review (final Annex) that made the PCR realistic and objective, avoiding producing a report that overrated many of the criteria without reason. The reflective process by the PCR team and project partners makes the report very credible and immediately usable and may be considered best practice. The candour of the OFIDO project is rated highly satisfactory (6) .	
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V. Final remarks

Issues for IOE follow up (if any)
No additional issues were identified.

Definition and rating of the evaluation criteria used by IOE

Criteria	Definition *	Mandatory	To be rated
Rural poverty impact	Impact is defined as the changes that have occurred or are expected to occur in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) as a result of development interventions.	X	Yes
	<i>Four impact domains</i>		
	<ul style="list-style-type: none"> Household income and net assets: Household income provides a means of assessing the flow of economic benefits accruing to an individual or group, whereas assets relate to a stock of accumulated items of economic value. The analysis must include an assessment of trends in equality over time. 		No
	<ul style="list-style-type: none"> Human and social capital and empowerment: Human and social capital and empowerment include an assessment of the changes that have occurred in the empowerment of individuals, the quality of grass-roots organizations and institutions, the poor's individual and collective capacity, and in particular, the extent to which specific groups such as youth are included or excluded from the development process. 		No
	<ul style="list-style-type: none"> Food security and agricultural productivity: Changes in food security relate to availability, stability, affordability and access to food and stability of access, whereas changes in agricultural productivity are measured in terms of yields; nutrition relates to the nutritional value of food and child malnutrition. 		No
	<ul style="list-style-type: none"> Institutions and policies: The criterion relating to institutions and policies is designed to assess changes in the quality and performance of institutions, policies and the regulatory framework that influence the lives of the poor. 		No
Project performance	Project performance is an average of the ratings for relevance, effectiveness, efficiency and sustainability of benefits.	X	Yes
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies. It also entails an assessment of project design and coherence in achieving its objectives. An assessment should also be made of whether objectives and design address inequality, for example, by assessing the relevance of targeting strategies adopted.	X	Yes
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.	X	Yes
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results.	X	Yes
Sustainability of benefits	The likely continuation of net benefits from a development intervention beyond the phase of external funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the project's life.	X	Yes
Other performance criteria			
Gender equality and women's empowerment	The extent to which IFAD interventions have contributed to better gender equality and women's empowerment, for example, in terms of women's access to and ownership of assets, resources and services; participation in decision making; work load balance and impact on women's incomes, nutrition and livelihoods.	X	Yes
Innovation	The extent to which IFAD development interventions have introduced innovative approaches to rural poverty reduction.	X	Yes
Scaling up	The extent to which IFAD development interventions have been (or are likely to be) scaled up by government authorities, donor organizations, the private sector and others agencies.	X	Yes
Environment and natural resources management	The extent to which IFAD development interventions contribute to resilient livelihoods and ecosystems. The focus is on the use and management of the natural environment, including natural resources defined as raw materials used for socio-economic and cultural purposes, and ecosystems and biodiversity - with the goods and services they provide.	X	Yes
Adaptation to climate change	The contribution of the project to reducing the negative impacts of climate change through dedicated adaptation or risk reduction measures.	X	Yes

<i>Criteria</i>	<i>Definition *</i>	<i>Mandatory</i>	<i>To be rated</i>
Overall project achievement	This provides an overarching assessment of the intervention, drawing upon the analysis and ratings for rural poverty impact, relevance, effectiveness, efficiency, sustainability of benefits, gender equality and women's empowerment, innovation, scaling up, as well as environment and natural resources management, and adaptation to climate change.	X	Yes
Performance of partners			
• IFAD	This criterion assesses the contribution of partners to project design, execution, monitoring and reporting, supervision and implementation support, and evaluation. The performance of each partner will be assessed on an individual basis with a view to the partner's expected role and responsibility in the project life cycle.	X	Yes
• Government		X	Yes

* These definitions build on the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) Glossary of Key Terms in Evaluation and Results-Based Management; the Methodological Framework for Project Evaluation agreed with the Evaluation Committee in September 2003; the first edition of the Evaluation Manual discussed with the Evaluation Committee in December 2008; and further discussions with the Evaluation Committee in November 2010 on IOE's evaluation criteria and key questions.

Rating comparison^a

<i>Criteria</i>	<i>Programme Management Department (PMD) rating</i>	<i>IOE Project Completion Report Validation (PCRVR) rating</i>	<i>Net rating disconnect (PCRVR-PMD)</i>
Rural poverty impact	3	3	0
Project performance			
Relevance	4	4	0
Effectiveness	3	3	0
Efficiency	3	3	0
Sustainability of benefits	3	3	0
Project performance^b	3	3	0
Other performance criteria			
Gender equality and women's empowerment	3	3	0
Innovation	4	3	-1
Scaling up	3	3	0
Environment and natural resources management	4	4	0
Adaptation to climate change	4	3	-1
Overall project achievement^c	3	3	0
Performance of partners			
IFAD	4	4	0
Government	3	3	0
Average net disconnect			-0.17

^a Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

^b Arithmetic average of ratings for relevance, effectiveness, efficiency and sustainability of benefits.

^c This is not an average of ratings of individual evaluation criteria but an overarching assessment of the project, drawing upon the rating for relevance, effectiveness, efficiency, sustainability of benefits, rural poverty impact, gender, innovation, scaling up, environment and natural resources management, and adaptation to climate change.

^d The rating for partners' performance is not a component of the overall project achievement rating.

Ratings of the project completion report quality

	<i>PMD rating</i>	<i>IOE PCRVR rating</i>	<i>Net disconnect</i>
Candour	n.a.	6	n.a.
Lessons	n.a.	6	n.a.
Quality (methods, data, participatory process)	n.a.	4	n.a.
Scope	n.a.	5	n.a.
Overall rating of the project completion report	n.a.	5	n.a.

Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

Abbreviations and Acronyms

CSPE	Country Strategy and Programme Evaluation
EIRR	Economic internal rate of return
FAO	Food and Agriculture Organization
MWRI	Ministry of Water Resources and Irrigation
PCU	Project Coordination Unit
OFIDO	On-farm Irrigation Development Project in Oldlands
SFD	Social Fund for Development
WUA	Water User's Associations

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