

Project Completion Report Validation

Fostering Agricultural Productivity Project (FAPP)/Projet d'accroissement de la productivité agricole (PAPAM)

Republic of Mali

Date of validation by IOE: June 2019

I. Basic project data

			Approval (US\$ m)		Actual (US\$ m) ¹	
Region	West and Central Africa	Total project costs		171.08		106.19
Country	Republic of Mali	IFAD loan (% of total)	31.7	18.2%	31.0	29.2%
		IFAD grant (% of total)	0.295	0.2%	0.289	0.3%
		ASAP (% of total)	9.94	5.7%	9.94	9.4%
Loan/Grant numbers	Loan: 813-ML Grant: 1217-ML ASAP:200000442	Cofinancier 1 (World Bank-IDA)	70.00	40.1%	59.24	55.8%
Type of project (subsector)	Rural Development	Cofinancier 2 (EU)	19.50	11.2%	2.05 ²	1.9%
Financing type	Loan, grant, ASAP grant	Cofinancier 3 (GEF)	8.10	4.6%	3.67	3.5%
Lending terms [*]	Highly Concessional	Borrower (Government of Mali)	23.7	13.9%	Na ³	
Date of signature	Loan/Grant: 14/02/2011 ASAP: 21/01/2014	Beneficiaries	7.84	4.6%	Na	
Date of effectiveness	Loan/Grant:13/10/2011 ASAP: 21/01/2014					
Loan amendment	20/12/2013 ⁴	Number of beneficiaries ⁵	Direct ⁶ : 60,000 households +65,000 farmers		Direct:25,828 households+ 78,259 farmers Total people: 207,399	
Financing closure extensions	7 months (31/01/2019)	Project Completion date	31/12/2017		31/07/2018	
Country programme manager	Benoit Thierry (current country director) Leopold Sarr (previous) Philippe Remy (previous)	Financing closing date	30/06/2018		31/01/2019	
Regional director(s)	Lisandro Martin (current) M. Beavogui (previous) I. De Willebois (previous)	Mid-term review:			22/01-05/02/2015 (813;1217-ML)	
Project completion report reviewer	Chiara Calvosa	IFAD loan and grant disbursement at project completion (%)			26/09/2016 (ASAP) 97.76% (813-ML) 98.01% (1217-ML) 100% (ASAP)	
Project completion report quality control panel	Fumiko Nakai	Date of the project completion report			30/10/2018	

Source: Project completion report (PCR) (2018), Adaptation for Smallholder Agriculture Programme (ASAP) President Report (2013), PAPAM President Report (2010), project appraisal document (2010), ORMS and Flexcube.

* IFAD loans granted on highly concessional terms are free of interest. A service charge of three fourths of one per cent (0.75 per cent) per annum and a maturity period of forty years, including a grace period of ten years are applied, starting from the date of the approval by the Executive Board.

¹ Percentages are calculated against the total of co-financiers. Figures provided in PCR for co-financiers are updated as of September 2018 (ref. Annex 7 PCR). As for IFAD financing, actual disbursements at closing date have been derived from flexcube: SDR20,528 million for the loan, SDR196,021 for the grant and SDR6,499 million for ASAP.

² Withdrawn in 2013 due to 13 months effectiveness lag.

³ Figures provided in PCR for US\$2.68 million only account for tax-exemption therefore has not been considered in the analysis. Total contribution is missing.

⁴ To include the grant financing from the Adaptation for Smallholder Agriculture Programme Trust Fund.

⁵ Outreach is reported in terms of smallholder for the ASAP interventions and households for the IFAD-loan and grant.

⁶ Source: PAPAM PR 2010 and ASAP/PAPAM PR 2013. The average five members per household is used to derive the indirect number of beneficiaries as in project documents. Inconsistencies are noted with the assumption reported in ORMS of nine members per household.

II. Project outline

1. **Introduction.** The Fostering Agricultural Productivity Project (FAPP or PAPAM⁷) is a programme of the Government of Mali financed by multiple donors, including IFAD.⁸ PAPAM was approved by IFAD's Executive Board on 16 September 2010 and became effective on 13 October 2011, with 31 December 2017 and 30 June 2018 as the initial completion and closing dates respectively. IFAD's initial contribution to PAPAM was through loan and grant financing; then, on 11 December 2013 IFAD's Executive Board approved additional grant financing from the Adaptation for Smallholder Agriculture Programme (ASAP) Trust Fund with completion and closing dates aligned to the existing financing.
2. PAPAM was conceived as a response to the government's request to move towards a sector wide approach (SWAp) in the agricultural sector. IFAD and other donors jointly financed the project and, as per the design and related financing agreement,⁹ each donor funded a set of activities and was responsible for its implementation and supervision. Consequently, the project completion report (PCR) being validated basically covers only IFAD investment under the whole project, except for the project costing data which are provided also for other donors (table 1).
3. The project was designed to be implemented in a fragile context characterized by high vulnerability to environmental and man-made shocks. Intermittent conflicts in the northern part of the country caused an overall security crisis and in 2012 deteriorated into armed conflicts. The main rural poverty challenges in the area included: poor infrastructure, low agricultural yields, low access to markets and financial services, natural resources degradation and vulnerability to climate change, food insecurity and malnutrition. In this context, PAPAM aimed at increasing the agricultural productivity of smallholder agricultural and agribusiness producers by improving agricultural technologies, increasing arable land and providing capacity-building for stakeholders at all levels.
4. **Project area.** At design the project area covered, to different extents, all eight regions of the country, and focused on 22 production basins targeting the following production systems: irrigated rice and vegetables, rainfed cereals, cowpea, fodder, and livestock. However, after the 2012 political turmoil and the armed conflicts in the northern regions of the country, the project area was restricted to the southern regions of Kayes and Sikasso.
5. **Project goal, objectives and components.** According to the president's report the project goal was to improve food security in its area of intervention. This was meant to be achieved through its key development objective of increasing the productivity of smallholder agricultural and agribusiness producers in the targeted production systems and project areas. The intended outcomes were: (i) fostered modernization of smallholder farming systems and value chains through improved technologies and practice; (ii) improved water management through irrigation and protection of soil and water resources; and (iii) evolution towards a programmatic approach in the agricultural sector through institutionalized policy dialogue and monitoring and evaluation (M&E). The ASAP financing complemented the above by mainstreaming adaptation to climate change at all levels.
6. **Components.** The project had three components: (i) technology transfer and service provision to agricultural producers; (ii) small and large irrigation

⁷ From French *Projet d'accroissement de la productivité agricole*.

⁸ The Project Appraisal Document (PAD, 2010) used as a source of this review refers to the overall programme of work financed by the World Bank, IFAD, EU Food Crisis Rapid Response Facility Trust Fund and GEF. The PAD qualitative and quantitative data on the project outline, its objectives and components as well as the targets refer to the joint initiative. This review extracted information specific on IFAD's-funded interventions and compared them with other internal documents (i.e. President Report, Mid-term Review (MTR) and supervision reports, PCR).

⁹ Signed on 14 February 2011.

infrastructure; and (iii) comprehensive programmatic approach and sector monitoring.

7. *Component 1: Technology transfer and service provision to agricultural producers.* This component aimed to: (i) modernize the agricultural production systems and related value-chains; (ii) build capacities of producers' organizations (POs) and service providers; and (iii) improve access to financial services. With the ASAP financing access to innovative renewable energy was added.
8. *Component 2: Small and large irrigation infrastructure.* IFAD-funded interventions focused on small irrigation aiming at increasing agricultural production by expanding the area under irrigation in the targeted production basins. The ASAP financing was specifically directed to small-scale irrigation systems enabling the development of climate change adaptation activities and providing related capacity building.
9. *Component 3: Comprehensive programmatic approach and sector monitoring.* This component aimed at facilitating policy dialogue and coordination in the agricultural sector as well as improving the delivery of core public services, mainly through the support of the Rural Engineering National Directorate.¹⁰ The ASAP financing aimed at complementing the above by mainstreaming climate change adaptation.
10. **Target group.** The IFAD-financed activities under the project initially targeted 60,000 households or a total of 300,000 people, which included small-holder farmers, local producers' organizations as well as women and youth. The financing made available through ASAP allowed the project to directly target additional 65,000 smallholders, bringing the total target population at appraisal to 365,000.¹¹
11. **Financing.** At approval the total IFAD financing of the PAPAM was US\$31.99 million, comprising a highly concessional loan of US\$31.70 million and a grant of US\$294,729. In 2013, IFAD's Executive Board approved an additional financing of US\$9.9 million from the ASAP Trust Fund, bringing the total IFAD financing to US\$41.9 million. Other sources of financing are reported in table 1 here below. The total project cost at approval was US\$174.55 million over approximately seven years.¹² As noted earlier, albeit the project costing data combining all financiers in design and in the PCR, the activities and results discussed in the PCR and this PCR are limited to those financed by IFAD (with associated counterpart funding).

¹⁰ From French: *Direction nationale du génie rural.*

¹¹ Under the assumption of five people per household.

¹² Source MTR and PCR. The 2010 President Report refers to total project cost of US\$163.5 million which does not include the ASAP.

Table 1

Project costs

Source of Funding	Type of financing	Estimated amount (US\$ m)	Estimated amount (% of total)	Actual expenditure (US\$ m)	Expenditure (% of total)	Disbursements (% of estimated amount)
IFAD	Loan	31.7	18.5%	31.00	29.2%	97.8%
IFAD	Grant	0.295	0.2%	0.289	0.3%	98.0%
IFAD/ASAP	Grant	9.94	5.8%	9.94	9.4%	100%
WB/IDA	Loan	70.0	40.9%	59.24	55.8%	84.6%
EU	Grant	19.5	11.4%	2.05	1.9%	10.5%
GEF	Grant	8.1	4.7%	3.67	3.5%	45.3%
<i>Total co-financiers</i>		<i>139.5</i>	<i>81.6%</i>	<i>106.19</i>	<i>62.1%</i>	<i>76.1%</i>
Government		23.7	13.9%	Na		
Beneficiaries		7.84	4.6%	Na		
Total		171.08	100.0%	106.19		62.1%

Source: 2010 and 2013 President Reports for estimated amount; flexcube and PCR for the actual expenditure.

Table 2

Costs by component

Components	Planned ¹³ (US\$ m)	Planned amount (% of total)	Actual amount ¹⁴ (US\$ m)	Actual (% total)
Technology transfer and service provision	61.29	36%	40.60	38%
Investments in small-and large-scale irrigation infrastructure	73.35	42%	44.67	42%
Comprehensive programmatic approach and sector monitoring	29.45	17%	20.93	20%
Unallocated + PPF refinancing ¹⁵	7.00	5%	0.00	0%
Total	171.08	100%	106.19	100%

Source: the project appraisal document (PAD) and President Report for planned; PCR and flexcube for actual.

12. **Project implementation.** The project was designed under the broad logic of a sector-wide approach and the Ministry of Agriculture was the overall project's lead implementing agency through its Planning and Statistics Unit for Rural Development (CPS/SDR¹⁶). Regional units were intended to be formed in each region to facilitate activities in the field. The above structure was meant to replace the typical implementation approach with the establishment of a project coordinating unit. Strategic coordination was under the responsibility of a national steering committee within the Ministry of Agriculture. Steering committee members included representatives of other ministries and government agencies, private sector and POs. The underlying principle of project implementation was *faire-faire* built on service contract and partnership agreements as well as the active

¹³ Data from PAD adjusted with data from 2013 President Report to include ASAP.

¹⁴ Actual amount derived by combining figures in flexcube for IFAD and PCR for co-financiers. However, while flexcube was updated at project completion, PCR's figures are as of September 2018.

¹⁵ Unallocated and project preparation facility refer only to initial financing as in 2010 PAD.

¹⁶ From French: *Cellule de planification et de statistique du secteur du développement rural*.

participation of involved parties throughout the project activities. To this effect, public-private partnerships were foreseen for the implementation of most project activities, through contracts with agribusiness entrepreneurs, POs and other private sector service providers. However, core public functions linked to the project implementation remained under the responsibility of the Ministry of Agriculture.

13. **Changes and developments during implementation.** Several changes occurred during implementation, including the following:¹⁷
- *Adjustments in project implementation.* CPS/SDR project coordination and management role has been reinforced by hiring several technical specialists, some of them reporting directly to IFAD.¹⁸ In addition, the World Bank financial management procedures have been adopted instead of the national principles;
 - *Additional grant financing.* In 2013 grant financing through the ASAP Trust Fund was approved by the Executive Board to complement the project's activities by fostering adaptation to climate change in the project area. The PAPAM financing agreement was amended accordingly on 20 December 2013;
 - *European Union withdrawal.* Because of the implementation delays mentioned above, in 2013 the European Union withdrew approximately US\$18 million of its original financing;
 - *Project restructuring.* Following the armed conflicts in the country, the northern regions became inaccessible. Project activities were considerably scaled-down, including the following changes: (i) focus on financing irrigation infrastructures linked to three value chains - rice, cowpea and milk; (ii) reduced geographical focus from 22 production basins to 10; and (iii) stronger involvement of local agricultural development institutions in the project implementation as well as refined M&E and coordination mechanisms among development partners;
 - *2015 Mid-term review (MTR) adjustments.* Significant changes were introduced, including: (i) adjustments in the implementation arrangements; (ii) a substantial review of project objectives and downscaling of targets within a revised project area; and (iii) reallocation of the total unallocated budget of US\$3.1 million to component 1.
 - *Project completion date extension.* A seven-month extension was approved to align IFAD's financing completion to World Bank/IDA's and facilitate implementation of some on-going activities, bringing the completion date to 31 July 2018.¹⁹
14. **Intervention logic.** The intervention logic responded to the government request to develop the agricultural SWAp by promoting institutional reforms, donor coordination and policy dialogue in the agricultural sector. PAPAM was designed to be integrated in a nation-wide multi-donor development initiative aiming at addressing three key constraints of the agricultural sector: (i) low agricultural productivity; (ii) inadequate irrigation infrastructure; and (iii) lack of coordination in the interventions. Since design, each donor addressed the above issues throughout a specific set of activities.
15. Activities from the development and dissemination of new technologies and services were expected to increase production and productivity of the selected agricultural systems, mainly through better access to financial services, support to micro-projects (MPs) and capacity building. Activities deriving from the investment

¹⁷ Source: PCR.

¹⁸ This was mainly due to the reported inadequacy of CPS/SDR in managing the project as well as the frequent changes of its team, causing significant delays in the execution of activities.

¹⁹ However, World Bank further extended project completion date to 31 July 2019.

in irrigation infrastructures and water management were designed to expand and modernize irrigated land. Finally, activities planned within the comprehensive programmatic approach and sectoral monitoring framework were intended to move towards a logic of shared financing, efficiency of service delivery and improved monitoring performance in the agricultural sectors. ASAP-funding completed the above by mainstreaming the adaptation to climate change at all levels.

16. Finally, synergies were expected to be established with other projects in the country, particularly IFAD's rural youth vocational training, employment and entrepreneurship support project²⁰ approved by the Executive Board in 2015 and the Rural Microfinance Programme²¹ approved in 2009 by the Executive Board.
17. **Delivery of outputs.** This section presents the delivery of the main outputs reported in the PCR (ref. to Annex III for details). Given the significant changes deriving from the project restructuring, targets and outputs were reviewed by the MTR. The PCR assesses completion rates vis-à-vis the revised targets for the loan and grant while targets set at appraisal have been maintained in the ASAP additional financing given its later approval.²² Overall, delivery of outputs shows that most of the outputs under the adaptation to climate change window have been met while a diverse performance was reported under the other components, with a weak delivery for the access to credit and better performances for technology transfer and water management.
18. *Component 1- Technology transfer and service provision to agricultural producers.*
 - *Subcomponent 1.1 - Modernization of smallholder farming systems and supply chains:* the project improved 597 land plots out of 600 targeted and registered increased production yields in all targeted production systems;
 - *Sub-component 1.2 - Capacity building to POs and service providers:* the project provided training and capacity building to POs, established 155 management committees out of 182 targeted and formalized 105 cooperatives out of 180 targeted;
 - *Sub-component 1.3 - Facilitating rural credit development.* The project contributed to develop three financial instruments suited to beneficiaries living in the project area as per targets (i.e. *warrantage*, micro-leasing and micro-insurance) but the overall financing of loans application was weak (i.e. two out of the 400 targeted for a total of approx. US\$5,000);
19. The project also promoted *access to renewable energy*:²³ 645 bio-digestors and 288 solar panels have been installed (against 600 planned for each technology) with a total of 18,364 people benefitting out of 16,350 targeted.
20. *Component 2 - Small- Irrigation infrastructure.* 3,508 ha have been irrigated out of 3,640 ha targeted and 170 ha of lowlands regulated (out of 500 targeted).
21. *Component 3 - Comprehensive programmatic approach and sector monitoring.* Given the nature of this component, the project's delivery is presented in the following section (ref. Effectiveness).

III. Review of findings

A. Core criteria

Relevance

22. **Relevance vis-à-vis IFAD and Government policies and strategies.** The PAPAM goal and objectives were aligned with the objectives of the government and

²⁰ From French: *Projet de Formation, Insertion et Appui à l'entrepreneuriat des jeunes ruraux.*

²¹ From French *Programme de microfinance rurale.*

²² Which took into account the above-mentioned changes.

²³ Inconsistencies have been noted between the summary table in the PCR and the detailed outputs in the annotated log-frame.

the other donors.²⁴ It was in line with the following government strategic plans and policies: (i) Growth and Poverty Reduction Strategic Framework 2012–2017 (CSCR); (ii) Strategic Framework for Economic Recovery and Sustainable Development (CREDD); and (iii) National Development Plans, specifically, the programme for investing in the rural sector.²⁵ More precisely, the project is in line with the CSCR's second pillar of promoting accelerated, sustainable and pro-poor growth as well as the promotion of intensive, diversified and sustainable agriculture outlined in the CREDD. Further, the SWAp is in line with government-led development plan outlined in its Agricultural Development Policy (2011-2020),²⁶ moving from a project-oriented to a sector-wide development approach in agriculture.

23. As for IFAD's strategies and relevance to the needs of the rural poor, PAPAM's objectives were coherent with IFAD's Strategic Framework and the 2007 COSOP in that they intended to improve food security and reduce rural poverty by: (i) increasing poor rural peoples productive capacities; and (ii) supporting poor rural peoples sustainable development and capacity building.²⁷
24. **Relevance vis-à-vis project design.** The internal logic of the project design among outputs, activities and components was coherent and adequate to meet the intervention's outcomes. Component 1 combined the development and dissemination of improved agricultural technologies and techniques with activities to improve access to financial services, thus linking finance directly with agricultural productivity. The design of component 1 was partially linked with activities under component 2 for the irrigation infrastructure, showing coherence and internal logic in the project structure. In addition, investments in irrigation under component 2 as well as the elaboration of community plans for adaptation to climate change were reported to be relevant to the target population. However, it is worth mentioning that the design did not develop a proper strategy to access the market, which, together with access to finance and production inputs, would have harmoniously tackled agricultural constraints.
25. As for the design of component 3, the SWAp and planned capacity building activities directly responded to government needs for coordination. However, as highlighted both by the PCR and the CPE a thorough assessment of the government's implementation and coordination capacity at design would have avoided some bottlenecks at implementation through different institutional arrangements.
26. Financial allocations were coherent with the project's objectives and institutional arrangements. Nevertheless, given the total magnitude of the project (US\$170 million total project costs), the project design could have foreseen the difficulties in having the project managed directly by the Ministry of Agriculture with the CPS/SDR who did not show previous record in managing a project of this complexity, both in terms of the financial package and the mix of activities. Also, the design presented some weaknesses with regards to its M&E system and knowledge management/sharing activities which were not adequately articulated in the PAD.²⁸

²⁴ Mainly outlined in the Mali Country Assistance Strategy (CAS 2007-2011) for the World Bank and, more broadly, for development community the Millennium Development Goals (specifically MDG1,2,5 and 13).

²⁵ From French: *Cadre Stratégique pour la Croissance et la Réduction de la Pauvreté (CSCR)*, *Cadre stratégique pour la relance économique et le développement durable (CREDD)*, *Plan national de développement et le Programme national d'investissement du secteur rural (2014-21)*.

²⁶ From French: *Politique de Développement Agricole, PDA*.

²⁷ As noted in the 2013 IFAD's country programme evaluation, the project did not contribute to the second COSOP objective of supporting basic social services, showing a change to a thematic approach in the country strategy starting with this project.

²⁸ As highlighted by MTR, accountability of these activities was not clearly attributed at design among partners and the COSTAB did not show a detailed budget for the M&E activities to be implemented.

27. Although the design presented some weaknesses, the adjustments made during project implementation (ref. Chapter II above), show the responsiveness and flexibility of the project to retain relevance. The overall project relevance is rated *satisfactory* (5) by the PCRV in line with PCR.

Effectiveness

28. Even though the design followed the government request to move towards a sector wide approach, the project was articulated under components and subcomponents specifically financed by donors. This allowed for the collection of data to be attributed directly to IFAD-supported interventions. The assessment of effectiveness takes into account the downsizing of the project area and the related project outcomes revised by MTR and it is constrained by the initial weakness of the M&E system.
29. **Objective 1: foster modernization of smallholder farming systems and value chains through improved technologies and practices.** This objective was meant to be reached through the following: (i) development and dissemination of improved agricultural technologies and practices; (ii) improved access to rural finance and economic opportunities for youth; (iii) access to renewable sources of energy; and (iv) resilience to climate change.²⁹ Overall, the achievement of this objective appeared to be closely related to the pace of development of irrigation infrastructure which contributed especially to the second project objective.
30. With reference to the development and dissemination of improved agricultural technologies and practices, in terms of outputs, a total of 239 micro-projects (MPs) out of 400 targeted were supported and 597 land plots were distributed out for the 600 targeted. The moderately satisfactory success rate for the MPs financing was explained in detail by the PCR as resulting from an inadequate targeting strategy as well as MPs submission delays. It is worth noting that most MPs were financed during the last three years of implementation, raising some doubts on the ownership and overall achievement of the objective, and less than 20 per cent focused on the post-production activities which are reported to be critical for IFAD target group.³⁰
31. Regarding access to financial services and economic initiatives by rural youth, several output indicators are presented in the PCR, including: 55 submitted financial proposals out of 400 targeted, and 60 service points opened out of 15 targeted. Figures on outstanding loans and deposits were reported with low success rate (i.e. 0.3 per cent and 4 per cent of the targets respectively) mainly due to delays in the agreement with the Rural Microfinance Programme. This was explained by lack of joint programming at project design as well as PAPAM internal dynamics – with no detailed explanation provided.
32. Finally, with reference to the improved access to renewable energy sources, several targets are listed in the PCR related to the delivery of bio-digestors (107 per cent target met) and solar panels (48 per cent targets), the latter due to delays experienced by service providers. In terms of outcomes, the following is reported: creation of local employment opportunities for 82 rural youngsters (39 per cent completion rate), more than 7,700 CO2 tons avoided from the use of new technology (adopted by 3,468 people out of 3,875 targeted) and 60 per cent reduction in women's working time (71 per cent of target). A description of behavioral changes deriving from the above, namely how women used the additional available time, would have been relevant to assess project's effectiveness.

²⁹ Last two to be achieved specifically under the ASAP financing.

³⁰ Specifically, activities related to processing and transformation are often considered to be more profitable and suited for youth and women, at the centre of the IFAD's targeting strategy. Perhaps, this could have been avoided at design stage by ensuring more stringent criteria and categories for MPs financing.

33. **Objective 2: improved water management through irrigation and protection of soil and water resources.** The ASAP financing added **resilience to climate change**. At output level, according to the PCR 3,509 ha were rehabilitated out of 3,640 ha targeted.³¹ At outcome level, the average rate of actually cultivated areas was however 44 per cent.³² This rate was explained by the implementation delays, lack of capacity of the construction company, constraints in the participatory process for infrastructure management with the local communities and lack of adequate water supply due to technical difficulties with solar-pumps.
34. Additional output data were provided in the PCR with reference to the development of management committees: 155 committees established (out of 182 targeted) and 108 organizations set up as cooperatives. At outcome level, their capacities were assessed to be weak mainly for the delays in their implementation. However, a more articulated explanation of the reasons behind this weakness was missing in PCR.
35. Finally, it is difficult to assess whether the activities carried out and the outputs delivered contributed to the resilience of the target population to climate change. The investments for adaptation to climate change (208 per cent) and the hectares strengthened vis-à-vis climate change (110 per cent) show very positive results. However, they are moderately satisfactory with reference to the number of low-land hectares protected (34 per cent) and the low for activities against soil erosion (15 per cent). Yet, the participatory process put in place to achieve the above should contribute to the project effectiveness.
36. **Objective 3: evolution towards programmatic approach in agricultural sector through institutionalized policy dialogue and monitoring and evaluation (M&E).** Objectives added by the ASAP financing were **to mainstream the adaption to climate change and introduce the M&E system for climate change impact**. A qualitative assessment of the PCR narrative shows that significant efforts to a better coordination in the sector have been made at national level. In the two regions of interventions the project contributed to the development of the regional programmes for the socio-economic development. At national level, it contributed to the formulation of the national policy for agricultural development, the land tenure policy and it included the communal plan for adaptation to climate change (PCA) in the National Agricultural Sector Investment Program. Unfortunately, the PCR does not provide the related formulation process and reference to the content is available only for the climate change component.
37. As for the climate change dimension, outputs refer to the number of rain-gauges installed (1,067 against the 1,000 targeted). Notwithstanding the satisfactory output delivery, their use is reported to be limited due to the lack of capacities in data collection as well as logistical constraints. Nevertheless, behavioural change at the level of producers who started to consider rain forecasts in planning their farm activities positively contributes to the effectiveness analysis.³³
38. **Summary.** At completion, achievements were reduced due to the significant implementation delays as well as the armed conflicts in the north of the country. The implementation difficulties in terms of the access to finance and economic activities, negatively affected the overall achievement of the development objective. However, the project performed better in improving water management, mainstreaming adaptation to climate change and, more broadly, in moving towards a programmatic approach in the agricultural sector with significant contribution to the policy dialogue. Based on the above, the effectiveness is rated *moderately satisfactory (4)* by the PCR in agreement with PCR rating.

³¹ Articulated as it follows: 2,802 ha for lowland against the target 2,500 ha; 563 ha for irrigated village land against 1,000 ha; and 563 ha for small cultivated plots out of 1,000 ha targeted.

³² 33 per cent, 100 per cent and 75 per cent respectively.

³³ At output level, it is reported that 13,260 farmers benefitted from agro-climatic information out of 30,000 targeted.

Efficiency

39. **Efficiency in the pace of implementation.** Implementation during the first three years was particularly slow, as reported by the PCR. However, the second half of the project's life was characterized by significant adjustments which helped to speed up implementation progress (68 per cent implementation rate in December 2017) and disbursement rates (ref. section below).³⁴ The PCR noted that the multiplicity of actors involved in the implementation did not generate operational synergies throughout the project life and that inadequate national financial management and procurement procedures led to considerable inefficiencies. Despite the changes introduced by MTR addressed these issues, the significant delays in investment in irrigation infrastructure under component 2 led to delays in the implementation of component 1 and overall, the pace of implementation was slower than planned and negatively affected project efficiency.
40. **Project financing and disbursement.** In line with the pace of the implementation described above, the PCR reported an atypical disbursement path: 22 per cent after three years, with a significant acceleration from year four, with 62 per cent of funds disbursed during the last two years.³⁵ Regarding **project management costs**, they are difficult to estimate given the multi-donor approach and the way the component was conceived. PCR, however, reported that expenditures for coordination and M&E accounted for 15 per cent of IFAD-financing.
41. **Economic rate of return (ERR).** Economic and financial analysis carried out at appraisal referred to the overall multi-donor programme. It was only at MTR that the analysis was carried out on the IFAD-supported intervention.³⁶ The efficiency assessment in this PCR is therefore expressed vis-à-vis MTR targets. At completion, the ERR was 12.5 per cent without the ASAP financing and 13.8 per cent when benefits deriving from the adaptation to climate change interventions are included in the overall project economic performance.³⁷ In both cases, however, project performance is lower than the 15 per cent at mid-term.
42. Finally, it is worth mentioning that the MTR downscaling of project beneficiary targets from 60,000 households to 30,000, without reducing the financing, also had a negative impact on efficiency. Efficiency is rated *moderately unsatisfactory* (3) in the PCR, in line with the Programme Management Department (PMD).

Rural poverty impact

43. **Availability of data.** The weak³⁸ M&E system and the lack of an ex-post impact study, as reported by the PCR, constrain the assessment of rural poverty impact limiting the degree of certainty to attribute impacts directly to project activities. In addition, considering that most of the infrastructure was developed during the last two years, it would have been difficult to adequately capture the impact from those investments given the limited time of analysis.
44. **Household incomes and assets.** The PCR assessment suffered from the lack of adequate log-frame indicators to measure impacts on the household assets and incomes³⁹ and was based on data collected during three supervision missions and summarized in the 2018 report.⁴⁰ Nevertheless, net additional household incomes are presented in the ex-post financial analyses and in the PCR narrative for the

³⁴ After two years disbursement rate was 5 per cent for IFAD and 52 per cent for World Bank/IDA. PCR highlighted how the approval of ASAP financing boosted the project's implementation and disbursement rates due to synergies among the activities and additional technical expertise provided to the project management.

³⁵ Out of which, almost half (i.e. 48 per cent) during the last seven months of project's life.

³⁶ Excluding benefits and costs deriving from ASAP funds.

³⁷ ERR estimation at design for the ASAP interventions was 20.8 per cent.

³⁸ More precisely, moderately unsatisfactory till approx. mid-term and moderately satisfactory in the second half.

³⁹ Specific indicators to measure household incomes had not been set at appraisal.

⁴⁰ *Synthèse de (2015/16, 2016/17 and 2017/18) trois campagnes d'accompagnement des exploitants de la zone d'intervention du PAPAM* carried out by the National Agricultural Directorate (*Direction nationale de l'agriculture*).

production systems. Specifically, incomes increase per household per annum from producing each targeted crop after project activities are reported, as it follows: 288 per cent increase for households involved in cowpea production (FCFA 9,019 or US\$16 without project, FCFA 34,997 or US\$63 with project), 156 per cent for low-land rice (FCFA 29,595 or US\$51 without project, FCFA 75,787 or US\$130 with project), 127 per cent for small-irrigation scheme rice (FCFA 75,413 or US\$129 without project, FCFA 170,970 or US\$293 with project), 231 per cent for small market garden products (FCFA 12,323 or US\$21 without project, FCFA 40,770 or US\$70 with project), 49 per cent for wheat (FCFA 156,040 or US\$268 without project, FCFA 231,850 or US\$398 with project) and 56 per cent for households involved in the sorghum and millet project's activities (FCFA 39,884 or US\$68 without project, FCFA 62,413 or US\$107 with project). According to the PCR, overall the households' income increase was not very high mainly because of the relative small size of cultivated land which affected the household income increase in real terms,⁴¹ the limited support to post-harvesting activities provided by the project and the high level of self-consumption equal to approx. two thirds of agricultural production. In addition, the project lacked a market access strategy and did not provide enough support to processing or storing techniques thus limiting the marketing of agricultural products as well as the overall project impacts on rural poverty.

45. **Human and social capital and empowerment.** Project impacts on capacity building of producers' organizations have been described in terms of farmers' capacities in irrigation and agricultural production techniques as well groups' capacities to manage their accounts and proceedings and better understand their role and responsibility vis-à-vis local institutions. A positive impact is reported with the introduction of the community approach to climate change (PCA) which contributed to the active involvement of project's beneficiaries in project activities. As for the POs, data available show, inter alia, that 75 per cent of the irrigation infrastructure management committees set-up by the project (out of 152 targeted) are reported to be functioning and 94 groups (equal to 62 per cent) acquired the status of cooperative; while maintenance funds existed in about half of the committee.⁴² Despite the above positive outputs, in terms of impact, given the delays in infrastructure development, insufficient training had been provided to farmers and POs which limited their capacities development and overall empowerment.⁴³ POs are reported to be overall fragile and in need of further support, thus questioning their sustainability over time. In addition, PCR narrative does not provide sufficient information to assess project impacts on the most vulnerable groups, especially youth and women.
46. **Food security and agricultural productivity.** Increases in crops' yields and agricultural production systems targeted by the projects have been reported, including the following average yields for rice and vegetable production: 2,26 t/ha in low-land areas (vs 1,5 t/ha in the without project scenario and 2.7 t/ha targeted) and 6.34 t/ha in the village irrigation schemes (vs 4 t/ha in the without project scenario and 6 t/ha targeted). As for the cowpea the productivity increased to 732 kg/ha vs 250 kg/ha in the without project scenario and 700 kg/ha targeted. Despite the above, according to the PCR, production and productivity levels could have been higher and were mainly weakened by: (i) the limited availability and access to high quality seeds, adapted to local agro-ecological conditions and climate change dynamics; (ii) inadequate dissemination strategy to farmers; and (iii) fragile structure of the agricultural management committees.

⁴¹ It is possible to have more than 200 women cultivating 1 ha of land.

⁴² However, sometimes (data missing), other sources of households' revenues (i.e. cotton) were used to cover operation and maintenance (O&M) expenses.

⁴³ It is reported that farmers received training during one crop year only, or not at all, depending on the area of intervention.

47. A comprehensive assessment of the impact on food security cannot be made because of the lack of indicators in the M&E system. The qualitative information deriving from interaction with beneficiaries during supervision missions indicates increased dietary diversity at household level and access to potable water for approx. 25,000 people. National data on food security have shown an improvement in the multidimensional poverty assessment tool from 86.9 in 2015 to 90.3 in 2018. Also, statistics on child nutritional levels show a positive trend with a 5 per cent reduction in chronic malnutrition. While it is possible that project contributed to the above improvements in the national statistics, a direct link cannot be made.
48. **Institutions and policies.** Project impact on the design and implementation of national policies has been reported in the PCR, including: land tenure policy and regional investment plans for agricultural development as well as several national policies through the inclusion of climate change issues.⁴⁴ According to the PCR, the project, particularly through the PCA development, strengthened the capacities of: administrative and municipal authorities, technical services, village leaders, *Chambre Régionale d'Agriculture* as well as the *Assemblée Permanente des Chambres d'Agriculture*. Given the nature of this intervention and the limited time of analysis, project direct impacts on rural poverty are hard to assess at this stage.
49. Overall, rural poverty impact is rated *moderately unsatisfactory (3)* in both the PCR and PCR.V.

Sustainability of benefits

50. **Sustainability of the project's investments.** Despite the viability of the project's investments, significant implementation delays⁴⁵ negatively affected their sustainability mainly due to the delays in training and capacity building provided to beneficiaries. PCR reported that several agricultural techniques were not fully mastered by beneficiaries thus limiting their potential impact as well as the sustainability of the benefits. The cost-sharing approach supported by the project through the matching grant is considered as a positive step towards the sustainability of MPs but the reported lack of co-financing in approx. 50 MPs approved⁴⁶ show their weak ownership and sustainability. The availability of water resources has been reported to be sustainable following the investments in irrigation as well as the capacity building activities to end users. However, the provision of maintenance funds recorded in 51 per cent of the management committees is not deemed adequate to ensure sustainability over time.⁴⁷ In addition, the technical sustainability of specific investments in the framework of climate change (namely solar pumps and biodigesters) was reported to be limited by the high maintenance costs, degree of specificity of the technical knowledge required and erratic inputs supply over the year. The PCR did not provide information regarding government commitments after the project closing date to provide funds or human resources in support of project's investments, but it acknowledged that the risk that project investments will not be maintained is high.
51. **Social sustainability.** It refers to the producers' organizations set-up and trained by the project. According to the PCR, active beneficiaries' participation throughout the project activities varied a lot and despite the satisfactory achievements (ref. to rural poverty impact section), POs were assessed to be fragile and their sustainability weak and reliant on additional capacity building.
52. **Political and institutional sustainability.** The project's contribution to national laws and policies (ref. rural poverty impact section) are expected to contribute to

⁴⁴Particularly for the *Stratégie nationale de développement durable* and the *Politique nationale de la protection de l'environnement*.

⁴⁵ More than half of project's investment took place during the last year of project life.

⁴⁶ Source: Supervision mission, January 2018. Reasons of lack of co-financing not explained.

⁴⁷ Specifically, it was reported that almost half of management committees performed O&M and, in some cases, an O&M fund has been open to cover these costs. However, sometimes (data missing), other sources of households' revenues (i.e. cotton) were used to cover O&M expenses.

the sustainability of project benefits. Satisfactory results are reported with regards to the dissemination of the PCA approach and its continuity over the time, supported by several agreements with local institutions. Nevertheless, the inefficiencies reported in the public services in terms of counselling and advice negatively affect the overall institutional and political sustainability.

53. **Environmental sustainability.** The assessment of project's environmental sustainability is supported by several factors, including: (i) mainstream of adaptation to climate change and natural resource management concepts in national policies (ref. rural poverty section); (ii) reported behavioral changes in the use of pesticides in agriculture; and (iii) development of soil erosion prevention activities. However, the limited access to production inputs coupled with the fragility of POs poses questions to the sustainability of the above benefits.
54. Overall, the sustainability is rated as *moderately unsatisfactory (3)* by this PCR in line with the PCR.

B. Other performance criteria

Innovation and scaling up

55. **Innovation.** Innovation is assessed in this PCR in terms of technology and approach. Through its grant component, PAPAM piloted several innovations modernizing targeted agricultural production systems and introduced bio-digestors and photovoltaic kits. At the level of innovative approaches, two main innovations are reported: (i) the participatory approach for PCA development which was subsequently used by the government for its national programme for investing in the agricultural sector;⁴⁸ and (ii) the demand-driven approach to support the MPs in the production basin. Innovation is rated *moderately satisfactory (4)* by the PCR, as in the PCR.
56. **Scaling up.** PCR reported that PCA and MPs approaches as well as the new agricultural irrigation techniques and crops have been replicated in other IFAD-financed project areas. More precisely, the information provided shows the use of PCA Plans approach by the rural municipalities in Mali as planning tools for integrating climate adaptation. Beneficiaries' demand for certain approaches, namely the small-irrigation schemes and their management set-up, is reported along with several adoption challenges. However, it is worth noting that replication in other project areas does not necessarily constitute scaling-up as per the IFAD definition.⁴⁹
57. According to the PCR, the government promoted the use of bio-digestors at national level. However, PCR acknowledged that several challenges will condition this scaling up: (i) the complexity of the technology; (ii) the accessibility and availability of agricultural inputs and building materials; (iii) the high investments and maintenance costs; (iv) its limited use at household level; and (v) limited results from previous biogas experiences in and outside the country. Notwithstanding the above, biodigesters are expected to be scaled up through the most recent IFAD-financed programme in Mali still under design, Multi-energy programme for resilience and integrated territorial management (MERIT).⁵⁰ In addition, MERIT is expected to scale up other results achieved through the project. While the prospects for scaling-up were outlined, the scaling-up pathways to overcome the above critical challenges were not presented in the PCR. In addition,

⁴⁸ From French- *Programme National d'Investissement dans le Secteur Agricole*.

⁴⁹ "Expanding, adapting and supporting successful policies, programmes and knowledge, so that they can leverage resources and partners to deliver larger results for a greater number of rural poor in a sustainable way" (IFAD operational framework for scaling up results, 2015). It further noted that "scaling up results does not mean transforming small IFAD projects into larger projects", but rather it is about "how successful local initiatives will sustainably leverage policy changes, additional resources and learning to bring the results to scale".

⁵⁰ A total of approximately US\$52 million over five years from 2019 to 2024 including GEF co-financing for approximately US\$2 million and the remaining US\$10.41 to be determined. In French: *Programme multi-énergies pour la résilience et la gestion intégrée des terroirs (MERIT)*.

the narrative section does not provide substantive evidence on whether IFAD proactively engaged with the other donors or the private sectors to facilitate innovations uptake in other contexts.

58. Based on the information available, the scaling-up is rated as *moderately unsatisfactory (3)* by this PCRV, one point lower than moderately satisfactory rating on "potential" for scaling-up provided by the PCR.

Gender equality and women's empowerment

59. At appraisal, a clear budget allocation to gender equality and women's empowerment was not provided and the gender analysis was reported to be weak.⁵¹ At completion, figures provided are limited⁵² and do not allow for a thorough assessment. It is reported, for instance, that women's income increased and, in some cases, doubled with the project's interventions.⁵³ Yet, the traditional dynamic of men wanting to get involved in the more profitable activities was described to take place also during project implementation, questioning project's achievements in gender equality and empowerment as well as the sustainability of the intervention directly benefitting women.
60. Furthermore, PCR reported several significant weaknesses affecting the project's achievements in terms of promoting gender equality and empowerment, including: (i) lack of gender analysis and gender strategy during implementation; (ii) limited attention to gender throughout the overall implementation; (iii) lack of gender expert and women in the project team; and (iv) weak targeting approach. The reasons why the project failed in the above, particularly in hiring a gender expert who would have helped to mainstream gender equality and women's empowerment, are not elaborated.
61. The above could explain also the reason why the qualitative analysis in the PCR does not provide enough information to assess project's impacts in terms of contribution on improved gender relations within the household and/or targeted communities, women's influence in decision making or women's skills. The rating of the PCRV is *moderately unsatisfactory (3)*, lower than the PCR rating (4).

Environment and natural resources management

62. Environment and natural resources management was given prominence in the project design and subsequently reinforced through the additional ASAP financing. PCR presented a detailed environmental analysis carried following the IFAD social, environmental and climate assessment procedures. PCR reported several environmental benefits mainly related to the sustainable land and water management, including inter alia: 88,747ha of woodland not cut and improved groundwater and soil quality. The latter has been achieved mainly through the reduction in the use of pesticides and soil erosion management practices including reforestation (80 per cent success rate vs targets), soil erosion control bunds and capacity building at local level. PCRV rates the environment and natural resources management as *satisfactory (5)*, in line with PCR.

Adaptation to climate change

63. According to the PCR, small producers' vulnerability to changing climatic conditions has reduced because of the following main project's results: (i) improved access to underground water; (ii) adoption of sustainable land management techniques; and (iii) utilization of locally available pesticides. The 100 per cent disbursement rate

⁵¹ PAD was very weak and only the Annex 20 prepared by IFAD added some elements (2013 CPE).

⁵² Include: (i) women and youth participation in the irrigation schemes and land plot allocations which varied from 33 per cent (dried culture parcels) to 90 per cent (cowpea) with an average of 58 per cent women beneficiaries; (ii) 60 per cent reduction in women's working time in the household and related increase in the household income has been reported following the biodigesters' use for cooking and additional time used for agriculture; and (iii) 70 per cent increase in households food supply in low-land cultivation which is mainly under women's responsibility.

⁵³ Income is reported to double in small irrigation agricultural schemes, but detailed figures are not provided to understand the impact on women life.

along with exceeding most of the design targets shows the positive project performance under this category. Adaptation to climate change is rated *satisfactory* (5) in both the PCR and PCRV.

C. Overall project achievement

64. The PAPAM's design paved the road for the development of a sector-wide approach in Mali. However, its institutional and implementation arrangements led to significant weaknesses in the project management compromising the overall project implementation and its efficiency. Nevertheless, adjustments made at MTR tackled the main issues and challenges faced during the implementation and positively affected the overall project performance.
65. The improved agricultural technologies and techniques introduced by the project contributed the development of local farming systems and increased production yields of all target crops. Capacities have been built at field level with the development of the producers' organizations and the involvement of project's beneficiaries in the activities, mainly through the introduction of the community approach. Project achievements vis-à-vis the adaptation to climate change and natural resource management have been reported, especially in terms of improved resilience, development of soil and water sustainable management practices and access to renewable sources of energy. Finally, throughout the policy dialogue, the project specifically contributed to the national policy on land tenure and the regional investment plans for agricultural development as well as the mainstream of climate change in the national development agenda.
66. Nonetheless, activities promoting access to financial services and economic opportunities did not achieve the expected results showing a missing opportunity in translating the achievements in productive activities into stronger economic gains for households and, particularly the youth. Finally, project's achievements in terms of promoting gender equality and empowerment could have been more satisfactory if supported by a better design and, perhaps, the presence of an expert at project level able to provide attention to gender throughout the implementation.
67. Overall project achievement is assessed as *moderately satisfactory* (4), in line with the PCR.

D. Performance of partners

68. **IFAD.** PAPAM was initiated by the World Bank and IFAD's contribution was designed to be complementary to the interventions supported by the other co-financiers. At the same time, as per design,⁵⁴ IFAD had full responsibility for supervision of its supported activities. IFAD's performance at design and during the first year of implementation was assessed as moderately unsatisfactory by the 2013 country programme evaluation. Main issues raised by the CPE included inter-alia: (i) IFAD full endorsement of the project's institutional arrangements proposed by the World Bank at design; (ii) IFAD's inability to significantly change the project design following the issues raised by its internal quality control processes; and (iii) financial and human resources constraints vis-à-vis intended objectives. However, changes and adjustments introduced by the MTR and supervision missions⁵⁵ proven to be adequate tackling some key issues. According to PCR, IFAD's performance was characterized by: (i) proactivity and frequent interaction with CPS/SDR; (ii) timely processing of the withdrawal applications; and (iii) provision of technical assistance and adequate recommendations. Support was reported to be provided by the IFAD country programme officer based in Bamako throughout the implementation, although PCR narrative does not explain the type of support provided. In addition, IFAD's collaboration with the other development partners in

⁵⁴ Source: President Report.

⁵⁵ According to PCR, IFAD undertook 11 supervision missions, some in collaboration with the World Bank. However, inconsistencies are found with ORMS where six missions are reported.

the country is outlined in the PCR, specifically with the Food and Agriculture Organization, West African Development Bank and World Bank, also regarding the organization of joint supervision missions.

69. Based on the above and taking into account the developments of IFAD's performance throughout the project life, the rating is *moderately satisfactory (4)*, lower than the PCR (*satisfactory, 5*).
70. **Government.** Government's performance is reported to have faced several challenges, including: (i) weak project coordination; (ii) inadequate national financial management and procurement procedures which were subsequently replaced with World Bank financial management procedures; and (iii) insufficient internal control. Also, M&E was reported to be weak, especially in the first half of project life, and additional staff has been hired by the project to provide required technical support. As for the counterpart financial resources, reported figures refer exclusively on tax-exemption for a total of US\$2.68 million, though the expected government financing at appraisal was estimated at US\$27.67 million. As no other information is provided on counterpart financial resources it is not possible to assess whether the governments' contribution was in line with the agreement at design stage. During implementation, the government managed to involve several key national actors (i.e. institutes and directorates) in the project activities, especially for the activities under component 1 and 2. It also signed several partnership agreements with local service providers, NGOs and decentralized offices to speed up project implementation following IFAD's recommendations after initial delays.
71. Government's performance is rated *moderately unsatisfactory (3)*, in line with the PCR.

IV. Assessment of PCR quality

72. **Scope.** The scope of the PCR is considered *satisfactory (5)*. It contains all chapters, sections and annexes outlined in the 2015 Guidelines for Project Completion Review except for Annex 4 (Results and Impact Management System data).
73. **Quality.** The PCR was prepared in September 2018 and considered outcomes of two regional stakeholders' workshops held in August and September 2018 and one national workshop held in Bamako in September. Relevant stakeholders included farmers and POs, local service providers and representatives of local and national public institutions involved in the project and, more broadly, agricultural development. Qualitative and quantitative results have been collected during the supervision missions, but as acknowledged by the PCR, the weak M&E system did not provide adequate data and affected the PCR assessment. The rating by the PCR is *moderately satisfactory (4)*.
74. **Lessons.** Lessons presented in the PCR (see Section V) have been drawn from the review of the institutional arrangements set at project design as well as from the project implementation. The lessons appear reasonable and presented in a coherent manner and paved the way to present the joint decision taken by IFAD and the government to jointly plan MERIT. The rating by the PCR is *satisfactory (5)*.
75. **Candour.** The PCR narrative is objective and reports both positive as well as less positive results. This PCR rates the candour for the PCR as *satisfactory (5)*.
76. Based on the above, the **overall** rating of the PCR quality is *satisfactory (5)*.

V. Lessons learned

77. The following main lessons can be gleaned from PCR and its validation, with reference to *the design*: (i) the design and management of co-financed project with

other donors, specifically with the World Bank, should have been further discussed at appraisal with a clear definition of roles and responsibilities building on partners' own strengths and comparative advantages. The institutional arrangements did not facilitate efficiency and synergies of interventions financed by different financiers. On the contrary, the way the ASAP additional financing was designed allowed close interaction and positive exchanges which led to a smooth implementation; (ii) the design of the project management arrangements should have included, inter alia, capacity building at the level of Ministry of Agriculture of the staff involved in the CPS/SDR and competent technical staff dedicated to project implementation as well as a strong decentralised presence at field level;⁵⁶ and (iii) design of activities under component 1 and 2 was coherent in the sense that it linked investments in infrastructure, agricultural production and access to financial instruments. However, this PCRV finds that the project lacked a clear strategy to ensure access to market to target groups which is important to ensure the sustainability of project interventions. In addition, emphasis had been put on production aspects of the value chain with very limited attention to the processing which might have been more suitable to target young people.

78. Additional lessons can be drawn from the *project implementation*, including: (i) the geographic dispersion of the project activities contributed to high implementation costs and difficulties in exploiting the full potential of the targeted value chains. A better defined and limited geographic focus would have reduced the above; (ii) the original participatory approach under the logic of the *faire-faire* became *faire-pour* limiting the sustainability and ownership of project's achievements. In order to truly develop a participatory approach, greater attention (and related budget) should be given to the capacity building of local organisations, service providers and partners; (iii) weaknesses in the M&E system hampered the proper assessment of project's effectiveness and rural poverty impacts. In order to avoid it, the PCR suggests a set of measures to be taken into account in the future;⁵⁷ and (iv) unreliability of input supply and high start-up investment costs were described in the PCR as two critical aspects for the affordability and sustainability of bio-digestors. According to this PCRV, a lesson learned to tackle the above is to ensure stronger linkages between the renewable sources of energy (like the bio-digestors), the production activities required to ensure a reliable supply of inputs, and access to financing sources required for start-up.

⁵⁶ The importance of a decentralized approach during the implementation had been also highlighted in the 2013 IFAD's country programme evaluation.

⁵⁷ Including carrying out a baseline survey and a comprehensive ex-ante analysis, participatory self-evaluation of all parties involved at local to allow collection of qualitative and quantitative data as well as involvement of technical experts throughout the process.

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 and 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 (PCR) rating</i>	<i>Net rating disconnect (PCR-PMD)</i>
Rural poverty impact	3	3	0
Project performance			
Relevance	5	5	0
Effectiveness	4	4	0
Efficiency	3	3	0
Sustainability of benefits	3	3	0
Project performance^b	3.75	3.75	0
Other performance criteria			
Gender equality and women's empowerment	4	3	-1
Innovation	4	4	0
Scaling up	4	3	-1
Environment and natural resources management	5	5	0
Adaptation to climate change	5	5	0
Overall project achievement^c	4	4	0
Performance of partners^d			
IFAD	5	4	-1
Government	3	3	0
Average net disconnect			-0.25

^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 and 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 PCR rating</i>	<i>Net disconnect</i>
Candour		5	
Lessons		5	
Quality (methods, data, participatory process)		4	
Scope		5	
Overall rating of the project completion report		5	

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.

Delivery of main outputs

<i>Produits</i>	<i>Indicateurs</i>	<i>Cibles</i>	<i>Réalisations</i>	<i>Taux de réalisations en %</i>
Composante 1 : Transfert de technologies et de prestation de services aux producteurs agricoles				
Produit 1.1 : Des technologies et pratiques culturales améliorées sont développées et disséminées	Nombres de SP financés et exécutés	400	239	60
	Nombre de parcelles de diffusion	600	597	99.5
Produit 1.2 : Amélioration de l'accès aux services financiers	Nombre de dossiers de prêt financés	400	2	0.5
	Montant encours de crédit (Millions FCFA)	1100	3	0.3
	Montant encours d'épargne (Millions FCFA)	135	5.6	4
Produit 1.3 : Accès des ménages aux sources d'énergie renouvelable (ASAP)	Nombre de Bio-digesteurs installés	600	645	107
	Nombre de panneaux solaire	600	288	48
	Nombre de personnes équipées	16 350	16 931	103
Produit 1.4 : Accès des jeunes ruraux à des initiatives économiques	Nombre de jeunes ayant bénéficié d'un appui MER et AGR	4 260	1 924	45
Composante 2 : Infrastructures d'irrigation				
Produit 2.1 : Aménagements hydroagricoles	Nombre d'hectares aménagés	3 640	3 508	96
Produit 2.2 : Augmentation de la résilience au niveau du terroir (ASAP)	Plans communaux d'adaptation élaborés et mis en œuvre par les communautés	30	30	100
	Nombres de bénéficiaires	16 250	57 732	355
	Superficie des bas-fonds désenclavés et protégés	500 ha	170 ha	34
Composante 3 : Approche programmatique, compréhensive et suivi sectoriel				
Produit 3.1 : La coordination sectorielle est améliorée et les interventions de terrain consistantes	Pourcentage des conventions ont été exécutées de manière satisfaisante	100	80	80
Produit 3.2 : Un système de suivi/évaluation de l'impact des changements climatiques est mis en place	Nombre d'exploitants qui bénéficient de données agro météo	30 000	35 760	119
	Nombre de Producteurs qui bénéficient de services d'information climatiques	1 000	1 067	107

Source: PCR.

Abbreviations and acronyms

ASAP	Adaptation for Smallholder Agriculture Programme
CPE	Country Programme Evaluation
CSP/SDR	Planning and Statistics Unit for Rural Development (from French: <i>Cellule de planification et de statistique du secteur du développement rural</i>)
CSCR	Growth and Poverty Reduction Strategic Framework 2012–2017 From French: <i>Cadre Stratégique pour la Croissance et la Réduction de la Pauvreté</i>
IFAD	International Fund for Agricultural Development
ERR	Economic Rate of Return
FAPP	Fostering Agricultural Productivity Project
CREDD	Strategic Framework for Economic Recovery and Sustainable Development From French: <i>Cadre stratégique pour la relance économique et le développement durable</i>
MERIT	Multi-energy programme for resilience and integrated territorial management
MTR	Mid-term review
M&E	Monitoring and evaluation
MP	Micro-project
O&M	Operation and Maintenance
ORMS	Operational Results Management System
PAD	Project Appraisal Document
PAPAM	Fostering Agricultural Productivity Project From French: <i>Projet d'accroissement de la productivité agricole au Mali</i>
PCA	communal plan for adaptation to climate change From French: <i>Plan communal d'Adaptation au changement climatique</i>
PCR	Project Completion Report
PCRV	Project Completion Report Validation
PO	Producers' Organisation
PMD	Programme Management Department
SWAp	Sector Wide Approach
World Bank/IDA	World Bank/ International Development Association

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