



1. Project Data

Project ID P112635	Project Name CM-Agricultural Competitiveness Project	
Country Cameroon	Practice Area(Lead) Agriculture	
L/C/TF Number(s) IDA-46120	Closing Date (Original) 30-Nov-2015	Total Project Cost (USD) 82,000,000.00
Bank Approval Date 18-Jun-2009	Closing Date (Actual) 31-Dec-2016	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	60,000,000.00	0.00
Revised Commitment	59,399,672.94	0.00
Actual	59,940,270.80	0.00

Prepared by Hassan Wally	Reviewed by John R. Eriksson	ICR Review Coordinator Christopher David Nelson	Group IEGSD (Unit 4)
------------------------------------	--	---	--------------------------------

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) in the Project Appraisal Document (PAD, p. 4) was identical to the one in the Financing Agreement (FA, p. 5) and aimed to:

"increase the competitiveness of eligible producer organizations working on Target value chains."



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

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included four components.

1. Rehabilitation of Key Rural Infrastructure (appraisal cost: US\$30.00 million, actual cost: US\$17.70 million). The component would finance the rehabilitation of key rural infrastructure. It included two sub-components:

1.1. Rural Roads. The Project would finance the rehabilitation of about 500 km of rural roads (100-150 km of heavy rehabilitation, 350-400 km of light rehabilitation), and related studies, with the main purpose of connecting high-potential production areas to markets.

1.2. Irrigated perimeters. The project would finance the rehabilitation of about 11,500 hectares of existing irrigated schemes with the purpose of supporting national rice production. Target areas would include about 10,500 hectares at Maga and Yagoua (Far North Region), and possibly about 1,000 hectares on the sites of the Upper Nou Valley Development Authority in the North- West Region. Rehabilitation of irrigated perimeters would be accompanied by capacity building and investment activities, (as per Components 2 and 3) specifically targeted to the rice Producer Organizations (POs). At the first restructuring, the irrigation rehabilitation aspect of Component 1 was transferred to an emergency operation (the Cameroon Flood Emergency Project), and the focus shifted to institution building for the irrigation authority, introduction of land preparation equipment, as well as use of agricultural inputs by POs, and strengthening of their organization.

2. Economic Partnerships (appraisal cost: US\$32.70 million, actual cost: US\$31.70 million). This component would support POs working on target value chains and areas in establishing and implementing investment sub-projects linked to Economic Partnerships (EPs). The component would finance economic projects intended to address production, marketing and/or processing bottlenecks in the target value chains. It included two sub-components:

2.1. Support to the establishment of Economic Partnerships. This sub-component would support the development of linkages and coordination between different groups of stakeholders and help them analyze, and propose solutions to, specific bottlenecks to the development of competitive value chains. This would include technical assistance, training, and operational support for market and value-chain studies, information and communication campaigns, and coordination between different stakeholders.

2.2. Co-financing of PO investment projects. This sub-component would co-finance (on a matching-grant basis) POs' investments concerning production, collection, marketing, processing, and/or other services along a value chain. Co-financing from the Project can reach 70% of the total cost of the subproject and a maximum of FCFA30 million (about \$60,000 equivalent).

3. Institutional Support and Capacity Development (appraisal cost: US\$5.70 million, actual cost: US\$3.20 million). This component would develop the capacity of actors at different levels and would include three sub-components:

3.1. Developing the capacity of apex producer organizations. Support would include capacity building



of PO leaders and officers, preparation of institutional and organizational audits, preparation of strategic plans, elaboration of procedural and organizational guidelines, as well as limited support in terms of logistical and office equipment. This sub-component would also provide support to multi-stakeholders' value-chain associations for the targeted value chains, particularly in terms of facilitating the exchange of information and the collaboration between the different actors involved in each value chain (POs, private and public sectors, NGOs) at different geographical levels (departmental, regional and national).

3.2. Strengthening core functions of sectoral public services. To support smallholders' productivity and access to the markets (seeds certification and control, formulation and analysis of sectoral policies, food safety standards, veterinary services, monitoring of sectoral resources). Under this sub-component 3.2 (in particular its veterinary services dimension), unforeseen targeted assistance was provided by the project during its last six months of implementation to assist the Government in its response to the outbreak of avian influenza in May 2016 which had affected poultry production in Cameroon, particularly in the western part of the country. This was the subject of the (fourth) restructuring (extension and reallocation), together with the extension of the implementation period for the rural roads rehabilitation.

3.3 Supporting the establishment of sectoral legal and regulatory framework. The sub-component would support technical assistance, studies, workshops, and training aimed at supporting the development and/or the implementation of specific regulatory instruments conducive to the sustainable development of agricultural value chains including: the fertilizers act, seed legislation, regulation of the veterinary profession, agricultural tax code, duties on agricultural inputs.

4. Project coordination, monitoring and evaluation (appraisal cost: US\$9.20 million, actual cost: US\$15.90 million). This component would support the establishment, equipment and operations of the Project coordination team, at both national and regional levels, responsible for project implementation, procurement, financial management and overall monitoring and evaluation (M&E). The component would also support the establishment and operations of an M&E system, including a baseline study and an impact evaluation study, as well as the operational costs of the national Project Steering Committee.

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

Project Cost. The project total cost was expected to be US\$82.00 million. Actual cost reported in the ICR (Annex 1) was US\$69.2 million or 84.4% of the appraisal estimate. The difference stemmed from lower than expected disbursements under components 1 and 3 where disbursements were 59% and 56% of their appraisal estimates, respectively-due to scaling down of activities. It is worth noting that the cost of component 4 (Coordination and M&E) reached US\$15.90 million representing 172.8% of its appraisal estimate of US\$9.20.

Financing. The project was to be financed through an IDA Specific Investment Loan (SIL) worth US\$60.00 million over a period of six years. Actual amount disbursed according to the ICR (Annex 1) was US\$57.60 million or 96% of the expected amount at appraisal.

Borrower Contribution. The Government was expected to commit US\$12.50 million to the cost of the project, including taxes. Also, local beneficiaries were expected to contribute US\$9.50 million. Actual



amounts per the ICR (Annex 1) were US\$6.60 million (52.8% of the appraisal amount) and US\$5.10 million (53.70% of the appraisal amount) for the Government and local beneficiaries, respectively.

Dates. The project was expected to be completed by November 30, 2015, but it was extended twice, its actual completion date was 13 months later on 31 December 2016. The project was restructured five times (all level 2) as follows:

1. On October 10, 2013, when the amount disbursed was US\$31.77 million, in order to scale down the rehabilitation of rice irrigated perimeters and reallocate funds to institutional support for the irrigation authorities. Results framework was modified accordingly.
2. On July, 10, 2015, when the amount disbursed was US\$64.61 million, in order to extend the closing date from end November, 2015 to end March 2016.
3. On March 29, 2016, when the amount disbursed was US\$58.50 million, in order to extend the closing date to June 30, 2016 and reallocate funds.
4. On June 29, 2016, when the amount disbursed was US\$60.25, in order to extend the closing date to December 30, 2016 and reallocate funds.
5. On December 23, 2016, when the amount disbursed was US\$59.68 million, in order to allow partial cancellation of undisbursed balance of SDR 440,755 (equivalent to US\$605,016.70) due to persistent implementation delays in the rural road rehabilitation.

The Mid-term Review was carried out on December 3, 2012 compared to a planned date on November 12, 2012.

3. Relevance of Objectives & Design

a. Relevance of Objectives

Agriculture in Cameroon is a key element for both growth and poverty reduction. It contributes more than half of Cameroon non-oil export revenues and employs almost 60% of the economically active population. 90% of all rural households are to some extent engaged in agriculture and approximately one third of them earn their living from export crops. Increasing growth in agriculture would play a pivotal role in reducing poverty, sustaining growth, and achieving food security, in a country that also needs to reduce its dependency on volatile oil revenues, which accounts for more than 50% of the value of exports. Agriculture faces a number of constraints including: poor infrastructure (production, marketing, and transportation), limited organization of producers, weak linkages to markets, limited financial resources, and poor coordination of interventions.

At project appraisal, objectives were highly relevant and in line with the Government's growth and poverty reduction strategy. The second pillar of the Poverty Reduction Strategy Paper (2003) highlighted the importance of economic diversification with a strong focus on agricultural development as the key income generating activity and the main source for future economic growth and poverty alleviation in rural areas. Objectives were also in line with the National Rural Sector Development Strategy (2007) that specifically targets four key challenges: poverty reduction; food security and self-sufficiency; sustainable management of natural resources; and increased regional and international trade. Objectives were in line with the Bank's Agricultural Value Chain Analysis ESW (2008) which recommended actions aiming to increase the



technical, managerial and logistic capacity of producer organizations, increase access to agricultural inputs and high-yielding plant material, and improve the network of feeder roads and wholesale markets. Objectives were also in line with the Bank's Interim Strategy Note (2006) which featured making agriculture more productive and sustainable as a priority objective.

At project completion, objectives continued to be highly relevant and in line with the Government's Growth and Employment Strategy for the period 2010-2020. The strategy covered several objectives pertaining to agriculture, among which were growth of the agriculture sector, increase in rural revenues, rural employment, and increase in the share of agricultural products in exports. Objectives were also in line with the Rural Sector Development Strategy (2012) which focused on institutional development, the modernization of rural infrastructure, and productivity enhancement of agricultural value chains. Objectives were in line with the Bank's Country Assistance Strategy (CAS, FY10-FY13) which included among its strategic pillars support to agriculture and the promotion of high potential value chains. Also, the objectives are in line with the current Country Partnership Framework (CPF, FY17-FY21) where the first objective of the first focus area called for increasing productivity and access to markets in the agriculture and the livestock sectors in an environmentally sustainable way (CPF, p. 26).

While the statement of objectives was focused, the eligibility criteria for targeted value chains needed more clarity. The PAD (p. 44, footnote11) listed three eligibility criteria: "POs should have been in operation for at least three years immediately preceding effectiveness, be legally established, and satisfy a technical and institutional audit." However, it was not clear what technical and institutional aspects that the POs needed to satisfy to become eligible beneficiaries of the project.

Rating

High

b. Relevance of Design

The Results Framework reflected clear links between project inputs, outputs and expected outcomes. However, the causal link between road rehabilitation and reducing post-harvest losses was weak. To achieve the stated objectives, design focused on the promotion of competitive value chains and market-based development. The project aimed to finance economic projects intended to address production, marketing and/or processing bottlenecks in the six targeted value chains (rice; maize, plantain, palm oil, pig farming, and poultry). These chains were considered strategic both for food security and for their comparative advantage on the regional markets. The project also sought to address gaps in infrastructure through investing in the rehabilitation of rural roads and irrigation perimeters. Improving roads would connect high-potential production areas to markets while rehabilitation of rice perimeters would improve rice yields in targeted areas. Design would also provide capacity building and institutional development in order to create an enabling environment for producer organizations, who constitute the main beneficiaries of the project. These activities were relevant and directly connected to the objectives of the project and were expected to lead to increased value of marketed production through increased productivity, quality, and marketing of targeted chains. However, design focused more on the production side of the value chains and should have put more emphasis on strengthening processors.



Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

PDO: to increase the competitiveness of eligible producer organizations working on target value chains.

Rationale

Outputs

- 250 Km of rural roads were rehabilitated compared to a target of 500 Km (achievement rate: 50%). The ICR (p. ix) noted that cost estimates were underestimated due to lack of necessary engineering studies.
- 1,555 Producer Organizations (target: 1000) were engaged in economic partnerships. 100% of Producer Organizations had contracts with input suppliers, 22 % with marketing bodies, and 32 % with agricultural credit institutions.
- 89.76% of Producer organizations (target:80%) held regular meetings, recorded their decisions, opened and managed a bank account and have had regularly elected officials.
- 267 Producer Organizations (target: 500, achievement rate: 53%) were receiving support services through apex organizations. The ICR (p. xi) noted that the outreach capacity of apex organizations, while improved under the project, was still limited. Only 39.40% (target: 80%) of Producer Organizations in targeted areas were satisfied with support services received from apex organizations.
- 1,250 sub-projects applications (target: 2000) were presented. Resources allocated to sub-projects were exhausted as of 2014. Therefore, the number of sub-project applications remained at 1,250 (ICR, p. xi).
- 1,500 tons (target: 500 tons, achievement rate: 300%) of certified seeds were produced as a result of the collaboration with the Seed Certification Department.

Outcomes

- Increasing the competitiveness of targeted value chains (rice, maize, plantain, palm oil-dropped at MTR, pork, and poultry) was expected to be achieved through increasing productivity, improving quality, and increasing marketing, all of which would be expected to lead to increased value of marketed production.
- To improve service delivery to farmers, the project supported two apex POs, namely Concertation Nationale des Organisations Paysannes du Cameroun (CNOPCAM) and Plateforme Nationale des Organisations Professionnelles Agro-sylvo-pastorales du Cameroun (PLANOPAC) to strengthen their



organization and service delivery capacity. However, the ICR (p. 40) reported that the afore mentioned organizations were not sufficiently established and their services were not well developed to carry out their mandate. In addition, they suffered from weak absorption capacity with regards to the project funds earmarked to their support. The ICR (p. 41) reported that institutional support was scattered across different organizations, with limited indication on how improved institutional capacity benefitted the value chain actors in real terms.

- The project financed and implemented 831 sub-projects supporting production, collection, and marketing along the targeted value chains. However, most sub-projects related to the improvement of production (as the target beneficiaries were organizations of agricultural producers). Further development of the value chain required strengthening business linkages with processors (ICR, p. 38). The value of marketed production from beneficiary POs increased by 69% compared to a target of 20% (ICR, p. viii). This increase was achieved through increased production and productivity and increased marketed volumes and enhanced access to market by Producer Organizations (ICR, p. 12). The ICR (p. 13, table 3) compared value of production marketed in POs surveyed between 2009 and 2014 for three value chains (rice, maize and plantain). However, baseline figures for beneficiary POs were already significantly higher than for non-beneficiary POs, which raises a question about the consistency of the data. In a further communication, the project team explained that "a large part of the implementation of subprojects was delayed until late 2011", and "the first sale by beneficiary POs after project intervention should be in 2012, or late 2011 for some value chains. Therefore, the 2010 data serves as baseline for the analysis."
- The ICR (p. 12, table2) reported that average marketed quantities of rice, maize, banana plantain, poultry and pork in targeted regions all saw increments when comparing 2009 to 2014 figures, for example, rice increased from 63.8 tons to 185.13 tons, maize increased from 1.48 to 1.78 tons, banana plantain increased from 4.21 to 5.12 tons, poultry increased from 13.73 tons to 17.03 tons, and pork increased from 2.78 tons to 3.36 tons. Average yields for target value chains were calculated based on performance averages of all POs/subprojects by value chain and by region. Except for rice it seems the marketed quantities for the targeted value chains remained overall low, and the ICR did not report on the situation in non-project areas. Therefore, it is difficult to assess the contribution of the project given the absence of a relevant control. In a further communication, the project team shared with IEG results of the final impact analysis study that included a comparison to non-beneficiary POs for the targeted value chains. The results revealed that targeted POs showed an overall increase in the value of marketed production compared to non-beneficiary POs through the period starting from 2010 up to 2014. The team also explained that the project contributed to productivity improvements through increasing access of beneficiary farmers to improved irrigation and technologies, farmer training and capacity building of POs in terms of the technical aspects of production and farming practices.
- The project supported rice production and productivity through improving maintenance for 6,500 hectares instead of irrigation perimeter rehabilitation in 11,500 hectares as originally planned. The irrigation rehabilitation aspect of Component 1 was transferred to an emergency operation (the Cameroon Flood Emergency Project). The focus of the project shifted to institution building for the irrigation authority, introduction of land preparation equipment, as well as use of agricultural inputs by POs, and strengthening of their organization. The ICR (p. 14) reported that farmers in the project areas achieved an average yield of 6.9 t/ha for rice exceeding the target of 6.1 t/ha from the baseline of 5.2t/ha. The ICR (p. 12) attributed



improvements in rice productivity to "better technical packages promoted by the two rice irrigation authorities (i.e. application of recommended fertilizers as well as adherence to the timetable for crop management) positively affected the overall production as well as the productivity of rice production by related POs." That said, the attribution of improvements in rice productivity to project activities was not clear, specifically in relation to the 71 sub-projects financed by the project. The ICR (p. 33) stated that reporting did not include information on the actual utilization of the equipment purchased for the two rice irrigation authorities, such as proportion of the irrigation perimeter under production or length of canals maintained since the arrival of the equipment. In a further communication, the project team explained that "yield increasing and sustainable cultivation techniques have been promoted through a series of trainings supported by PACA through the two irrigation authorities. As a result, beneficiary POs' compliance with post-harvest operations and other technical aspects of rice production and farming practices have improved significantly." For example, 100% of the rice farmers in the funded sub-projects (beneficiary POs) applied the recommended doses of fertilizers at the recommended rate compared to 60% for non-beneficiary POs.

- According to the ICR (p. 13) the impact assessment study found that post-harvest losses incurred by POs with access to rehabilitated roads were reduced by 30% relative to the 2009 baseline and exceeding the target of 20% reduction. More specifically, for rice, post-harvest losses were reduced by 94% in 2014 against a 20% reduction forecast at the end of the project; for maize, this reduction was 82% against a forecast of 20%, the mortality rate reduction was around 4% to 7% in egg laying farms, less than 5% in broiler farms, and about 5% in pig meat farms (ICR, p. 13). Comparison was not available for banana plantain. While these achievements in the reduction of post-harvest losses were encouraging, they were not attributable to rehabilitation of rural roads. Among the targeted POs less than 6% benefitted from road rehabilitation, and these revealed in a survey that post-harvest loss happened primarily on-farm (weight loss due to spoilage and other on-farm factors), rather than during transport. In addition, 86% of the surveyed POs could not comment on the usefulness of rehabilitated roads in terms of post-harvest reduction. Furthermore, only 50 km of the targeted roads were completed in 2013 and the remaining 200 km were completed after extension of closing date towards the end of the project in 2015-16 (ICR, p. 31). Based on this information, it is evident that the impact of rural roads on reduction of post-harvest losses was minimal; and that achievements in this area were possibly due to other project activities. In a further communication, the project team explained that "96.3 % of rice POs adopted post-harvest storage as a post-harvest reduction technique compared to 0% prior to PACA. Beneficiary POs, through Economic Partnerships with buyers, signed delivery agreements for marketing their production. These supply contracts eased product flow and saved time in marketing, which can also contribute to reducing post-harvest losses associated with more organized sales and delivery arrangements."

- Based on the afore mentioned information, efficacy is rated substantial despite some shortcomings.

Rating



Substantial

5. Efficiency

Economic and Financial Efficiency

ex ante

- **Financial analysis.** The financial analysis showed net profitability for project beneficiaries, which confirms the soundness of activities identified for project support along the selected supply chains. Additional gross margins on rice production range from:US\$48 to US\$98 per ha on already cultivated areas; US\$620 to US\$970 per ha on extended cropped areas thanks to the rehabilitation of perimeters that would allow the application of water to currently unexploited land. Financial internal rates of return (FRR) of livestock activity models are given as examples of sub-projects ranging from 13 to 339%.
- **Economic analysis.** A cost-benefit analysis was carried-out to assess the economic viability of the proposed project. The analysis was conducted over a 25-year period. Financial prices and costs were transformed into economic values eliminating taxes and calculating import parity price for rice and fertilizers. Quantified economic benefits are mainly derived from: (i) the increased value added of rice production through the rehabilitation of irrigated schemes (which represents 57% of total benefits); (ii)economic cash-flows from sub-projects (29%); and (iii) benefits from rural roads rehabilitation (14%). Taking into account all costs, the project would yield an Economic internal rate of return (ERR) of 26% and a Net present value (NPV) of US\$52 million (at a 12%discount rate). The ERR and NPV were estimated at 31% and US\$61 million, respectively, if only the costs of components 1 (infrastructure) and 2 (economic partnerships) were considered.
- The sensitivity analysis indicates a good resilience to important changes in costs or reduction in benefits, with the project maintaining an ERR of 20% in case of a diminution of benefits by 30%.

ex post

- The ex-post economic and financial analysis relied on a sample of 108 sub-projects spread over the rice, maize, poultry and pork farming subsectors. The analysis covered the project period 2011-2016, including projections up to 2020. The Economic Rate of Return (ERR) was estimated at 3.7%.
- The analysis showed a major variation between the NPV of crops and livestock production value chains covered by the project. The maize, plantain and rice value chains each had positive NPV of respectively 17.70 million FCFA, 127.00 million FCFA and 143.00 million FCFA. However, NPV was negative for both the pig farming and poultry value chains due to the occurrence of animal diseases that resulted in the loss of animals and reduction in production benefits.
- Comparing the results under the project to the situation prior to the project intervention was not possible



due to the lack of data on the situation prior to project.

- The Economic and Financial Analysis (EFA) showed a cost-benefit ratio of 2.7% for the period 2011-2020 as regards the support under Component 1 (rural infrastructure); as regards Component 2 the average cost-benefit was below 1 (0.95) yet estimated to be positive as of 2017; for Component 3 this average ratio was below 1 (0.40), yet estimated to be positive primarily as of 2017; finally, regarding Component 4 the ratio was 1.23.
- No quantitative data were available to calculate the economic impact of the project's support to avian flu emergency response, such as, in terms of avoided loss of animals.

Administrative and Institutional Efficiency

The project closed thirteen months later than expected. The lack of engineering studies at appraisal stage resulted in underestimation of costs for sub-components 1.1 and 1.2 and delays in actual rehabilitation works. Lengthy procurement procedures affected the ability of the project to reach its targets within the given time frame especially for activities under Component 1. There were also delays in the availability of counterpart funding. Finally, an amount equivalent to about US\$0.61 million was cancelled as a result of persistent implementation delays in the rural road rehabilitation (ICR, p. 3). Finally, the cost of Component 4 (Coordination and M&E) reached US\$15.90 million representing 172.8% of its appraisal estimate of US\$9.20.

Overall, efficiency is rated modest due to substantially low ERR and underestimation of costs for component 1 and delays in procurement. Implementation efficiency was also negatively impacted due to a series of disease outbreaks in the livestock sector.

Efficiency Rating

Modest

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	26.00	76.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	3.70	45.80 <input type="checkbox"/> Not Applicable

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

6. Outcome

Relevance of objectives was rated high while relevance of design was rated substantial. Efficacy was rated substantial, despite some shortcomings, because the evidence provided in the ICR and later by the project team



revealed that the project contributed to improvements in productivity and sales of the targeted value chains. The project also contributed to reducing post-harvest losses. However, there were shortcomings on achieving the target on road rehabilitation and shortcomings in developing the capacity of apex producer organizations. Efficiency was rated modest due to a substantially low ERR and underestimation of costs for component 1 and delays in procurement.

a. **Outcome Rating**

Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

Risk to the Development Outcome is rated substantial based on the following issues raised in the ICR (p. 22 & p. 23):

- **Sustainability of sub-projects at the level of individual Producer Organizations (POs).** The project helped the POs through cost sharing arrangements that made the POs the actual owners of the sub-projects in which they have invested. While the sustainability of the efforts at the level of individual POs is likely, there are several factors that could affect the degree to which the business of the POs continues to grow. First, conflicts could arise among PO members about the distribution of growing benefits particularly with the absence of project oversight (post completion) of POs activities. Second, it might be challenging for the POs to secure reliable markets for their increased production due to weak contractual arrangements. This would lead to eventual reduction in sales prices as a result of increased supply as well as limited processing capacity. Third, weather related factors such as drought could negatively impact crop yields particularly in the North of the country.
- **Avian flu and swine flu outbreaks.** The outbreak of avian flu in May 2016 negatively impacted the poultry sector. This was reflected in lower demand for end products, supply of day old chicks, as well as lower demand for animal feed. Also, poultry producers were negatively impacted by the disease due to the loss/destruction of their animal stock, higher costs incurred from farm disinfection and forgone income as farm buildings need to remain vacant for a period before restarting production. This situation also impacted POs in this sector as they operated at much lower capacity with new buildings financed in the context of sub-projects remaining unused or under-utilized for some time. Despite the project efforts to combat the avian flu, new cases were recorded in 2017. The same risks apply to pig farming given recurrent outbreaks of swine flu.
- **Low sustainability of the support delivery mechanisms under the project.** The multi-sectoral apex Producer Organizations demonstrated limited capacity to deliver effective services to their members and the inter-profession organizations such as these for pig farming still need strengthening. Support delivery through Local Support Operators was not institutionalized and therefore, was not expected to continue post completion.
- **Maintenance of rehabilitated roads and irrigation infrastructure.** 250 km of rehabilitated roads are



expected to be maintained as part of the national road maintenance scheme. However, it is not clear whether the national road maintenance scheme has enough budget allocation to cover the necessary maintenance operations. Maintenance of irrigation infrastructure depends on the ability of the POs to improve their payments for services rendered by the irrigation authorities.

a. Risk to Development Outcome Rating

Substantial

8. Assessment of Bank Performance

a. Quality-at-Entry

- The Government of Cameroon considered the agriculture sector crucial for its growth and was particularly interested in receiving financial and technical support from the Bank. The Bank prepared the project as a logical follow-up to the Agricultural Value Chain Analysis ESW realized in FY08. This report identified several value chains (palm oil, maize, plantain, cassava, rice, onions, fruits and vegetables, dairy, poultry) that could develop their considerable growth potential if structural constraints and weaknesses in market linkages were adequately addressed.
- The project design was based on the findings and recommendations of the Agricultural Value Chain Analysis conducted in 2008. These included: technical assistance to producer organizations (POs) to coordinate their demand and purchase of inputs and planting material; expansion of the rural transport system by investing in the rural roads network; and provision of organizational and managerial training for farmers.
- The project was prepared in less than 8 months from the Concept Review to Board approval compared to an average processing time of 17 months from concept to approval in Cameroon. This rushed preparation process might have played a role in undermining the project design in some aspects (see below).
- Design benefitted from lessons and experience of past Bank-funded and other donor operations in the agriculture and rural development sectors in Cameroon and other countries and regions. Notable lessons reflected in the project design included: complementing capacity-building with investments and designing and implementing clear mechanisms and transparent processes.
- Design suffered from notable shortcomings including: poor preparation of the rural infrastructure component as it lacked important aspects of design prior to project effectiveness, for example, plans for preliminary studies that were needed for rehabilitation of rural roads and rehabilitation of irrigated perimeters were not included in the implementation plan prior to effectiveness. Also, assessments of the institutional capacity of the two irrigation development authorities were not carried out. These failings in design resulted in underestimated costs and unrealistic timelines (ICR, p. 4). Also, the benefits expected from road rehabilitation were overlooked in design because these would only materialize when the road



segments selected for rehabilitation were in the proximity of the targeted POs. Finally, the availability of local service providers for POs and institutional capacity of apex organization were not pre-identified.

- Nine risks were identified at the preparation stage, all of which were rated substantial. While the risk of poor sectoral coordination was identified, the suggested mitigation action that "the project would stimulate inputs from the sectoral ministries by creating a multisectoral steering committee and defining clear mechanisms and decision making processes" (PAD, p. 13) was not adequately carried out in the project implementation. This resulted in limited inter-ministerial coordination and collaboration. Also, complex procurement guidelines and the weak capacity of the Project Coordination Unit (PCU) and Producer Organizations to comply was identified as a substantial risk, however, the design lacked a clear strategy to build capacity and monitor the procurement process. Finally, disease outbreaks such as swine fever and avian influenza were not clearly factored in among the risks identified at appraisal despite recorded outbreaks in the Country.
- M&E suffered from design shortcomings and weaknesses at the implementation stage (see section 10 for more details).

Quality-at-Entry Rating Moderately Unsatisfactory

b. Quality of supervision

Supervision missions were carried out at regular intervals. The project benefitted from posting a TTL in the country from the end of 2010 until mid-2014. This arrangement improved proactivity and continuity in task management. During this period, the team met every two weeks with staff of the PCU and other stakeholders to follow up on project implementation and address any issues. The team also ensured that the PCU staff would carry out necessary field visits to the Regional Coordination Unit and visit sub-project sites of Producer Organizations. The project benefitted from the recommendations of the MTR with regards to irrigation rehabilitation sub-component, and reallocation of resources among disbursement categories. The supervision team leveraged resources from a trust fund to implement some activities including organizing local fora for the mobilization of credit from micro-finance institutions, and implementing two pilots for fully washed coffee and cassava processing in collaboration with international agricultural research institutions.

While monitoring environmental safeguards was consistent, social safeguard issues (especially with regards to the indigenous peoples plan) did not receive the expected attention by the Bank team (ICR, p. 24). A notable shortcoming on behalf of supervision was the ineffective supervision of the road component due to the lack of technical knowledge and expertise in the team. The ICR (p. 24) stated that "the Bank was not candid in admitting this deficiency of skills and did not examine the team composition critically." The ICR (p. 41) reported that there was no effective link between Bank supervision missions and National Steering Committee meetings; and that by 2015 the Bank and PCU seemed more focused on preparation of the next round of WB-funded projects rather than on adequately closing the project. Finally, M&E suffered from implementation weaknesses and procurement issues contributed to significant implementation delays.

Quality of Supervision Rating Moderately Satisfactory



Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

According to the ICR (p. 25) the Government fulfilled its obligations at the start of project implementation including the establishment of the Regional Coordination Units, Regional Selecting Committees, and Field Focal Points. However, there were delays in the availability of counterpart funding, and the volume of counterpart funding was significantly lower than expected (52.8%). The Ministry of Public Works (MINTP) and its Rural Roads Department (DRR) was not fully committed to road rehabilitation, paid insufficient attention to its implementation, and was unable to prevent the long delays. Also, inter-ministerial coordination and collaboration was less effective than was needed for successful implementation of the project (ICR, p. 5). Finally, the agreement to support indigenous people was signed by the Ministry of Social Affairs in October 2013, limiting the time available for implementation of the planned activities to only two years towards the end of the project.

Government Performance Rating

Moderately Unsatisfactory

b. Implementing Agency Performance

The project implementation mechanism was comprised of a Project Steering Committee, a Project Coordination Team, and a Project Coordination Unit (PCU) at the national level, and at regional levels included Regional Coordination Units (RCUs) and Regional Selection Committees for the approval of sub-projects and partnership agreements. Focal points were selected among the field staff of the sectoral ministries and Local Support Operators supported the implementation at the field level. The PCU was expanded as additional M&E staff was hired to support the monitoring of the 831 sub-projects. The PCU experienced some staff turnover and two RCUs had a change in core staff members based on misconduct - which was reported to the Bank (ICR, p. 25). The PCU and POs suffered from weak capacity and the project lacked a clear strategy for building capacity. The implementation of sub-projects involved multiple actors, however, division of labor among them was unclear in actual operations. Implementation of the rehabilitation of rural roads was weak and suffered from lengthy delays. The social action plan was not implemented due to inter-ministerial non-collaboration and limited funding. Finally, procurement capacity was weak and contributed to considerable implementation delays.

Implementing Agency Performance Rating

Moderately Unsatisfactory

Overall Borrower Performance Rating

Moderately Unsatisfactory



10. M&E Design, Implementation, & Utilization

a. M&E Design

- The M&E of the project was overseen by the Project Coordination Unit (PCU) through an M&E specialist. All data related to sub-projects was collected by Local Support Operators at the field level and sent to regional coordination units and then consolidated at the PCU level. The Project was expected to carry out specific results studies, as well as a baseline study before the beginning of field implementation and an independent impact assessment not later than at midterm, and six months before project completion.
- The Results Framework (RF) included baseline and target values for the indicators described in the PAD. These were based on a baseline study (2009) covering data on 360 POs and 15 apex organizations. The RF included four key outcome indicators. These PDO indicators measured the degree in which the project activities translated into increase in yields, in value of marketed products as well as in reduction in post-harvest losses. However, quality as an aspect of competitiveness was not captured by any of the indicators. While these indicators were relevant and linked to the PDO, yields and value could also be influenced by other factors beyond project control including weather conditions and price fluctuations. Therefore, progress on achieving targets on yield and value (or lack thereof) may or may not be fully attributable to project interventions. Also, the causal link between road rehabilitation and reduction of post-harvest losses was weak.
- The RF included also fourteen intermediate outcome indicators. Most of these were relevant to assess the different activities supported by the project. However, there were no indicators to cover some aspects targeted by the project including irrigated perimeters, core functions of public services, and establishment of legal and regulatory framework. Also, it was not clear in the RF how some indicators would be measured, for example, average yields for target value chains would be established through sample surveys or through averages of aggregate performance of all POs/sub-projects by value chain and by region. Indicators for component 3 were input based except for the quantity of certified seeds produced.

b. M&E Implementation

The software purchased to facilitate M&E activities faced problems and its usage was not consistent across regions. As a result, the software was not used and data was collected in Excel sheets. Average yields for target value chains were calculated based on performance averages of all POs/sub-projects by value chain and by region. Data was checked for validity at the level of samples of POs. The ICR (p. 8) reported that explanations were required in case of data deviations. However, it was not clear whether data with deviations were fed into the project's M&E system. According to the ICR (p. 8), two impact studies were conducted in 2012 and 2015, two PO satisfaction surveys in 2012 and 2013, two environmental and social audits in 2014 and 2015, and the Borrower's completion report was prepared in June 2016. Monitoring of rehabilitated roads was expected to be carried out through GIS under the Ministry of Public Works. However, this was not implemented due to lack of capacity and commitment on behalf of the Ministry of Public Works (ICR, p. 8). Rehabilitation of rural roads was reported only in terms of the number of kilometers covered with no information on the proportionate degree of complexity of the road works (heavy or light rehabilitation, as specified in the PAD).



c. M&E Utilization

The data collected through the projects M&E system fed into annual consolidated project reports. Local media was used to communicate project achievements to beneficiaries and to the public. Implementation benefitted from the lessons learned from financing in terms of the under-estimation of costs in the preparation of sub-projects during the first batch of POs. This resulted in reviewing and adjusting reference costing for new sub-projects.

Overall, M&E suffered from major design shortcomings and implementation weaknesses, therefore M&E is overall rated modest.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

- The project was classified as environmental category B. It triggered the following safeguard policies: Environmental Assessment (OP/BP 4.01), Pest Management (OP 4.09), Involuntary Resettlement (OP/BP 4.12), Indigenous Peoples (OP/BP 4.10), and Projects on International Waterways (OP/BP 7.50).
- To limit the environmental impact of the project infrastructure activities were limited to rehabilitation of existing infrastructures. Potential negative environmental impacts of project activities were likely to include: water and soil pollution due to construction activities, increased use of pesticides and herbicides, and agro-processing activities such as milling and processing of palm oil; loss of trees and water pollution due to land clearing and fruit processing for palm oil production; soil erosion and silting due to the rehabilitation of water management structures for irrigated schemes, as well as to poor agricultural practices; and loss of flora and fauna due to the use of quarries as sources of construction materials.
- To address these issues effectively, the Borrower prepared an Environmental Management Framework and a Social Management Framework (ESMF), both dated March 16, 2009; a Pest Management Plan dated March 11, 2009; an Indigenous People Planning Framework dated March 31, 2009; a Resettlement Policy Framework (RPF) dated April 1, 2009. All of the five documents were approved and disclosed in Cameroon and at the Bank's Infoshop on April 9, 2009 and April 10, 2009, respectively. Consistent with OP 7.50, the riparian states were notified on February 27, 2009, and no objection was raised by the deadline of March 31, 2009.
- **Environmental safeguards.** According to the ICR (p. 9) "the project achieved 100% compliance with environmental and social safeguards requirements." All 831 sub-projects implemented under the Project were screened for environmental and social impacts before implementation. The risk of water and soil pollution occurring due to land clearing and fruit processing for palm oil production did not materialize



because the oil palm value chain was dropped during the MTR and there were no oil palm sub-projects implemented.

- **Social.** There was no incidence of displacement and OP 4.12 (involuntary resettlement) did not materialize and only very few benefited from the project with regards to indigenous communities (OP 4.10) (ICR. p. 9). However, the social action plan was not implemented as planned due to inter-ministerial non-collaboration and inadequate budget.

b. Fiduciary Compliance

Financial Management. The financial management unit at the PCU benefitted from well trained and professional staff whom according to the ICR (p. 9) were "adequate for the tasks." However, there were initial delays due to the decentralized nature of the project. A total of 28 financial statements were produced during the life of the project on a regular basis and within acceptable time limits. Only two audits were qualified one in 2010, and another in 2011. In both cases, the qualifications were due to the existence of unjustified expenditures. Both incidences were resolved after the borrower provided acceptable documents in time for the next audit.

Procurement. Procurement activities were problematic and contributed to considerable implementation delays. Sub-component 1.1 (rural roads) and sub-component 1.2 (irrigated perimeters), experienced procurement problems due to poor definition of plans for both sub-components combined with the absence of preliminary and final engineering studies. Also, the selection of bidders and bid awards took much longer than expected for rural roads and in some cases the bidding process was repeated because the selected bidders failed to perform their obligations. Procurement of goods and services also face delays because Producer Organizations and Local Support Operators were not familiar with World Bank procurement procedures. This situation improved overtime with adequate information and training.

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings



Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Substantial	Substantial	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Unsatisfactory	Government Performance and Implementing Agency performance suffered from significant shortcomings.
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006. The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

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

- **Assessment of the availability and sustainability of service providers and key stakeholders is a necessary step prior to launching a decentralized support delivery model in agriculture.** It is important to assess the availability of the appropriate service providers; and the likelihood of sustainability of the approach. Based on these assessments, the project should select the key stakeholders based on their mandate and capacity.
- **To ensure the success of project implementation there is a need for a clear definition of respective roles and responsibilities of the different parties and their inter-linkages.** The project's experience showed that involving a multitude of players (among which were National/Regional Coordination Units, teams of experts, OALs and Focal Points) added to the project's complexity. In this context, an unambiguous division of labor would have eliminated the possibility of mismatching skills with tasks.
- **Successful rehabilitation of rural roads needs to follow a thorough plan from identification to maintenance.** The project's experience demonstrated that it is important to concentrate on the roads that are priorities in a limited geographic area; and carefully assess the type of rehabilitation needed and the capacity of local contractors (depending on the state of the road, commensurate with its actual/expected use to connect producers to inputs and markets). Also, ensure that engineering studies are ready at the start of projects that include road rehabilitation works; and formally involve a road engineer in the Bank's supervision team. Finally, define modalities for medium and long-term maintenance.



14. Assessment Recommended?

Yes

Please explain

To verify results on the ground and assess the success of the value chain approach.

15. Comments on Quality of ICR

The ICR is well written. It reported thoroughly on project activities and candidly on most shortcomings. However, discussion of outcomes was centered around achieving outcome indicators rather than achieving the PDO. Most sections of the ICR were well structured and concise. The ICR also included five lessons that reflected the project's experience. Finally, the ICR did not sufficiently report on improvements in quality as an aspect of competitiveness.

a. Quality of ICR Rating Substantial