



1. Project Data

Project ID P112623	Project Name CORAF Trust Fund	
Country Western Africa	Practice Area(Lead) Agriculture	
L/C/TF Number(s) TF-99769	Closing Date (Original) 30-Sep-2015	Total Project Cost (USD) 34,603,152.00
Bank Approval Date 19-May-2011	Closing Date (Actual) 30-Dec-2016	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	21,829,514.00	21,829,514.00
Revised Commitment	21,538,117.00	21,538,117.00
Actual	21,538,117.00	21,538,117.00

Prepared by Ranga Rajan Krishnamani	Reviewed by Peter Nigel Freeman	ICR Review Coordinator Christopher David Nelson	Group IEGSD (Unit 4)
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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) as stated in the West and Central Africa Council for Agricultural Research and Development (CORAF - the French Acronym) Multi-Donor Trust Fund (MDTF) Grant Agreement (Schedule 1, page 6) was:

"To support integrated agricultural research for development within West and Central Africa, through the implementation of the Recipient's Medium Term Operational Plan (MTO), with the aim of contributing to sustainable improvements in the productivity, competitiveness and markets of the agricultural systems in West and Central Africa."



The PDO as stated in the Project Appraisal Document (PAD, page 6) was:

"To support agricultural technology generation and dissemination within Central and West Africa through the implementation of the CORAF MTOP and with the aim of contributing to sustainable improvements in the productivity, competitiveness and markets of the agricultural systems in West and Central Africa."

This review is based on the assessment of the PDO as stated in the Grant Agreement.

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

No

c. Will a split evaluation be undertaken?

No

d. Components

There were three components.

1. Research for Development Programs. Appraisal estimate US\$11.16 million. Actual cost at closure US\$14.40 million. This component aimed at developing and delivering technologies in eight major research programs that had been identified in Medium Term Operational Plan (MTOP) as priorities at the regional level. The eight research programs were in: (i) Livestock, Fisheries and Aquaculture: (ii) Staple Crops: (iii) Non-Staple Crops: (iv) Natural Resource Management: (v) Biotechnology and Biosafety: (vi) Policy, Markets, Trade, Institutions and Socio-economic Research: (vii) Knowledge Management: and, (viii) Capacity Strengthening. Activities included a program aimed at strengthening the capacity of the Research Program Management Units in the areas of monitoring and evaluation, coordination, planning, management of sub-grants and technical assistance.

2. Governance, Administration and Change Management. Appraisal estimate US\$10.67 million. Actual cost at closure US\$7.14 million. Activities included: (i) Activities aimed at strengthening the capacity of the West and Central Africa for Agricultural Research and Development's (CORAF's) executive secretariat to undertake its technical, fiduciary, administrative and governance functions under the project, maintenance of the CORAF's Secretariat Headquarters and a monitoring and evaluation system: and, (ii) technical assistance for implementing CORAF's change management plan for 2009-2010 in the areas of internal operational procedures, financial management, procurement, human resources development and maintenance of information and communication capabilities, training and sensitization of CORAF's constituents at the National Agricultural Research Systems (NARS) level.

3. Management, Administration and Supervision of the Multi-Donor Trust Fund (MDTF). The ICR does not provide the appraisal estimate and actual cost at closure of this component. This component financed the costs incurred by the Bank for managing, administering and supervising the project.

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

Project cost. Appraisal estimate US\$21.83 million. Actual cost at closure US\$21.54 million.

Project Financing. The regional project was financed by a Multi-Donor Trust Fund administered by the



Bank. Appraisal estimate US\$21.83 million. Amount disbursed at closure US\$21.54 million. There was parallel financing for complementary regional level activities from the IDA supported sub-regional West Africa Agricultural Productivity program.

Borrower Contribution. None was planned.

Dates. There were two Level 2 restructurings. The following changes were made through the first restructuring on 08/25/2015: (i) The results framework and key outcome indicators were modified and new indicators were included : (ii) The new baseline was set at 2013: (iii) There was a reallocation of funding between project components: and, (iv) The closing date was extended by a year from September 30, 2015 to September 30, 2016 to complete the ongoing activities. These changes were made through the second restructuring on July 21, 2016. (i) Funds were reallocated between components: and, (ii) The closing date was extended by three months from September 30, 2016 to December 31, 2016 to complete the beneficiary impact assessments. The project closed 15 months behind schedule on December 31, 2016.

3. Relevance of Objectives & Design

a. Relevance of Objectives

The agricultural sector is the single largest economic sector in the West and Central Africa sub-region, accounting for about 35% of GDP, 65% of employment and over 15% of exports on average in the member states. Agricultural productivity at appraisal in the member states was low for a combination of factors including, dominance of small holders who relied on rain-fed production systems, inadequate access to markets and limited use of inputs such as irrigation, fertilizers, improved seeds and machinery.

The PDOs was relevant in the regional context. The pillar four of the New Partnership for Agricultural Development's (NEPADs), *Comprehensive African Agricultural Development Program (CAADP)* highlighted the importance of research, technology generation, dissemination and adaptation in the agricultural sector. The three themes of the *West African Agricultural Policy* of the Economic Community of West African States (ECOWAS) in 2004 were, increasing productivity and competitiveness of West Africa, implementing a trade regime within West Africa and adopting the trade regime *vis-à-vis* countries outside the region. In 2005, ECOWAS signed an agreement with the West and Central African Council for Agricultural Research and Development (CORAF) as the technical lead for conducting agricultural research and CORAF was also mandated to implement NEPAD's CAADP. In addition to ECOWAS, CORAF also served the other three Regional Economic Commissions: Central African Economic and Monetary Community (CEMAC), *Communaute Economique des Etats l'Afrique Centrale (ECEAC)* and the West Africa Economic and Monetary Union (UEMOA in French).

The PDO was relevant to the Bank strategy, given that IDA was the single most important external supporter of the pillar four of NEPAD, aimed at improving agricultural research and technology dissemination for Sub-Saharan Africa. The PDO was also relevant to the Bank strategy for the member countries, given that the Multi-Donor Trust Fund was expected to complement the national level portfolio by providing a sub-regional dimension focused on generating synergies among country programs and allowing for more efficient use of resources for technology generation and adaptation.



Rating
High

b. Relevance of Design

The causal links between the project activities and their outputs were clear. Component one activities aimed at developing research and delivering technologies in the identified priority sectors (including livestock, fisheries and aquaculture, staple and non-staple crops, natural resource and knowledge management, biotechnology and biosafety and capacity building). This in conjunction with activities aimed at strengthening the capacity of the West and Central Africa for Agricultural Research and Development's (CORAF) in the areas of governance, administration and change management could be expected to contribute to implementing the CORAF's Mid Term Operational Plan (MTO). The activities undertaken at the regional level could help in generating synergies among country programs and thereby allow for more efficient use of resources for technology generation and dissemination.

There were shortcomings in the original results framework. The intended outcomes were ambitious. given the project timelines. It is not clear how the original intended outcomes (such as, average annual increase in GDP from the agricultural sector, increase in agricultural incomes of farmers, reduction in resources required for basic food purchases in the households of vulnerable groups and a reversal in the downward trend in natural resource base biodiversity, forest, land and water) could be realistically realized within the project timelines. These factors contributed to the modification of the results framework and better specification of the outcome indicators during project implementation. The results framework spelt out high level development objectives through five key indicators that could not be realistically achieved in or attributed to a four year project.

Rating
Modest

4. Achievement of Objectives (Efficacy)

Objective 1
Objective

To support integrated agricultural research for development within West and Central Africa, through the implementation of CORAF's Medium Term Operational Plan (MTO).

Rationale
Outputs.

The following outputs were produced (ICR, pages 37-45).

The following Innovation Platforms (IPs) were developed in the identified priority sectors of West and Central



Africa. (The ICR (page 11) reports that IP was a process created to bring together the different value chain actors for exchange and transfer of agricultural technology and other innovations): These IPs were established as targeted:

- Nine IPs for improving the competitiveness of the dairy sector around four themes (artificial insemination, hygiene and quality of milk products, improved feed of dairy cows and improvement in cow reproduction);
- Eight IPs for enhancing farming systems through integrating aquaculture, rice and poultry.
- Two IPSs for increasing productivity through integrated rice, piggery and fish farming;
- 15 IPs for improving the productivity of family fish farming;
- One IP for adopting intensive cocoa farming systems in Cameroon, Cote d'Ivoire and Ghana, respectively:
- Five IPs in the groundnut value chain:
- One IP for developing an integrated pest management strategy;
- One IP for increasing the production and consumption of traditional African vegetables;
- Seven IPs for promoting development of policies and programs for the management of non-timber forest products.
- Three IPS for strengthening the technical and industrial capacities of the beneficiary enterprises

17 research sub-projects were supported at project closure as targeted and as compared to the baseline of four.

170 technologies or innovations were disseminated as compared to five at the baseline. This exceeded the revised target of 88.

255 technologies were demonstrated in project areas at closure as compared to five at the baseline. This exceeded the revised target of 89.

The information for 113 technologies or innovations was publicly available as compared to five at the baseline. This exceeded the revised target of 64.

53 strategic policy options were submitted by CORAF for approval to the Regional Economic Commissions (RECs) and national governments. This exceeded the revised target of 42.

130 Innovation Platforms in commodity value chains were functional at as compared to 11 at the baseline.

This exceeded the revised target of 100. 18,911 women participated in IPs as compared to 1,480 at the baseline. This exceeded the revised target of 8,949.

99,070 days of training was provided by project closure as compared to 212 at the baseline. This exceeded the revised target of 47,368.

55,422 people benefitted from training as compared to 373. This exceeded the revised target of 15,450. 51% of the people trained were women at project closure as compared to the revised target of 32%.

The certification of CORAF by the International Organization for Standardization (ISO) was not completed at project closure as per the revised target.

Ten joint programs between weaker and stronger countries in the sub-region were implemented. This was slightly short of the target of 11.

Outcomes.

38,223 (42% women) clients adopted an improved agricultural technology promoted by the project as compared to 282 at the baseline. This exceeded the revised target of 36,678 (27% women).



12,091 (46% women) clients adopted an improved innovation promoted by the project as compared to 227 at the baseline. This exceeded the revised target of 10,441 (40% women).
69,637 (38% women) clients had access to technologies/innovations supported by the project as compared to 793 at the baseline. This exceeded the revised target of 60,397 (26% women).
83% of the targeted clients were satisfied with access to technologies and innovations supported by the project. This exceeded the target of 80%.
100,240 beneficiaries (44% women) benefitted from the project at project closure as compared to 1,250 at the baseline. This exceeded the revised target of 81,630 (27% women).

Rating
Substantial

5. Efficiency

Economic Analysis. The activities financed by the project were mainly technical assistance activities not easily amenable to traditional economic cost-benefit analysis.

The ICR (page 46) reports that the research by Fugile and Rada 2013 indicated positive economic benefits associated with research and extension investments in Sub-Saharan Africa and that the internal rates of return (IRR) ranged from 17% to 43% and the discounted benefit - cost ratios from 1.6 to 4.4, from small (economy) size to large (economy) size countries. The ICR (page 47) reports that research showed that integration of poultry with fish-rice enterprises contributed to increase in farm income through better resource utilization (Source: Oben, B.O., Molua, E.L. and Oben P. (2015). *Profitability of small scale integrated fish-rice poultry farms in Cameroon*. Journal of Agricultural Science Volume 7 (11); 12-24). The ICR (page 47) reports that an economic analysis was done at closure for the integrated aquaculture sub-project titled "Sustainable Integrated pond based aquaculture with rice and poultry production" and covering Nigeria, Benin, Cameroon, Cote d'Ivoire, Liberia and Sierra Leone. The analysis showed that fish production capacity of farmers running integrated fish farming in the sub-project areas increased by 40%, to an average fish production capacity of 5 tons per acre. 60% of farmers trained in the improved practice recorded over 50% increase in profitability. A production cycle (four months) for a full integrated poultry, fish and rice system cost on average US\$18,400 per acre of land and returned a total revenue of US\$29,950 implying a benefit cost ratio of 1.6 on average. The ICR however provides little details what percentage of the overall program this sub-component represented.

Administrative and Operational Issues. There were no cost overruns. Although the difficulties associated with coordinating activities in countries with unequal capacities contributed to the initial implementation delays and actual activities started 18 months after approval, most activities were completed by project closure. Although the project closed about 18 months behind schedule, these were partly due to exogenous factors over which the project had no control such as conflict and political instability which rendered several locations off limits in the affected countries (so called "red zones" in Northern Mali, Nigeria and Cameroon) and large pockets in the Central African Republic (CAR) and Democratic Republic of Congo



(DRC)). There were also disruptions in travel due to the Ebola outbreak from March 2014 to March 2016.

Efficiency Rating

Substantial

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

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

6. Outcome

The relevance of PDO for Regional Economic Commission's (RECs) and the Bank's strategy for the sub-regional countries was rated as High. Relevance of design was rated as Modest in view of the shortcomings in design. Efficacy of the single objective - To support integrated agricultural research for development within West and Central Africa, through the implementation of CORAF's Medium Term Operational Plan (MTOPlan)- was rated as Substantial, as the revised outcome targets were exceeded in all cases. Efficiency was rated as Substantial. The overall outcome is therefore rated as Satisfactory.

a. Outcome Rating

Satisfactory

7. Rationale for Risk to Development Outcome Rating

Institutional Risk. Although many new technologies and innovations were generated, disseminated and adopted and number of people were trained under the auspices of this project, it is not clear if there would be continued institutional support from beneficiaries and extension services for ongoing research. This is particularly so given that a number of countries included are still subject to political instability.

a. Risk to Development Outcome Rating

Modest



8. Assessment of Bank Performance

a. Quality-at-Entry

The project was prepared based on the lessons from CORAF's own experience (such as, involving other Regional Economic Commissions), from prior Bank projects (such as, involvement of strong research institutions and universities and training of participants at all levels of production chain) and from regional programs (such as, the need for stakeholder consultation during design, seeking support from regional institutions and including activities aimed at dissemination of technology). Several risks were identified at appraisal (including high risk associated with delay in production of technologies or technologies may not correspond to the needs of farmers) and mitigation measures were adopted. The overall project risk was rated as Modest at appraisal. Appropriate arrangements were made at appraisal for safeguards and fiduciary compliance (discussed in section 11).

The project design underestimated the difficulties associated with coordinating activities across countries with unequal capacities across as well as within the regional countries. This contributed to the initial delays of about 18 months from grant approval to implementation.

As indicated in Section 3b, the original indicators were unrealistic with respect to the project timelines and this necessitated modification of indicators (discussed in section 10a).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

Eight implementation Status Reports (ISRs) were filed over a four year period, implying supervision missions of twice a year. Following a change of Task Team Leader (TTL) made early on March 20, 2012, the core supervision team was maintained throughout the project. The core team was proficient in both French and English and this aided in avoiding the language barrier. Supervision missions were conducted jointly with CORAF and representatives of other donor organizations. The supervision missions were proactive and this was demonstrated by the modification of the results framework and identifying the need for a specialist to track the gender dimension of the project.

Although the results framework was modified, this was done only on August 2015 just one month before the originally scheduled project closing date.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory



9. Assessment of Borrower Performance

a. Government Performance

The project was implemented at the regional level by the West and Central African Council for Agricultural Research and Development (CORAF). CORAF had experience with implementing regional projects. Despite the overall environment including persistent armed confrontations in some countries, lingering political strife in others and the Ebola epidemic, CORAF implemented activities across 20 countries. CORAF's inadequate guidance to implementers in contract negotiations and provision of too little training M&E trainings contributed to the delays during implementation.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

At the regional level, the West and Central African Council for Agricultural Research and Development (CORAF) was in overall charge of implementing the project and the CORAF secretariat was responsible for planning, coordination and providing supervisory support to the sub-projects implemented at the country level. The sub-projects at the country level were implemented by the National Agricultural Research Systems and Institutions, Non-Governmental Organizations, agricultural extension agencies and service providers, agricultural training and education providers, producers organizations, sub-regional organizations and International Agricultural Research Organizations. The implementing agencies established the Innovative Platforms (IPs). There was compliance with fiduciary issues (discussed in section 11). The implementing agencies unfamiliarity with Bank's fiduciary requirement contributed to delays in the initial years of the project.

Implementing Agency Performance Rating

Moderately Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The four key outcome indicators envisioned at design - 6% annual increase in GDP from agricultural sector by 2015, 6% increase in the agricultural incomes of rural and other small-holder farmers by 2015, 50% reduction in resources required for basic food purchases in the households of poor and vulnerable groups by 2015 and downward trend in the natural resource base diversity - were clearly ambitious and unrealistic, given the project timelines. Some of the original M&E indicators had neither a baseline nor targets.

The M&E system was to be administered by CORAF's Planning and Impact Orientation Unit. The design envisaged sharing of information with stakeholders through the Management Information System (MIS)



established under the auspices of this project.

b. M&E Implementation

In the absence of a baseline, delays associated with developing the M&E manual and delays in recruitment, implementation of M&E had been delayed for a whole year. The indicators that were reformulated following the MTR were more appropriate. Baselines were introduced in March 2014.

c. M&E Utilization

The performance monitoring plan developed by the M&E system was utilized for monitoring project performance.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

The project was classified as a Category B project for environmental purposes. Other than Environmental Assessment (OP/BP 4.01), two safeguard policies were triggered: Pest Management (OP 4.09): and, (Forests OP/BP 4.37). An Environmental and Social Management Framework (ESMF) covering the requirements for the three triggered by the project was prepared and publicly-disclosed at appraisal (ICR, page 22).

The ICR (page 15) notes that although monitoring and reporting on safeguards implementation was inconsistent following the departure of the safeguards focal staff in 2016. This was however rectified and the ICR (page 15) notes that safeguards compliance was deemed to be satisfactory.

b. Fiduciary Compliance

Financial Management. An assessment made of the implementing agency's to address financial management issues at appraisal, concluded that financial management arrangements were appropriate (PAD, page 21). CORAF had implemented a prior Bank financed project and its staff had experience with Bank's financial management requirements and policies (PAD, page 55). The ICR (page 16) reports that during implementation, CORAF had developed a manual of administration, accounting and financial procedures, which was used for all projects. The ICR (page 16) also notes that financial monitoring reports and financial audits certified by an external firm in Senegal were submitted by CORAF to the Bank in a timely fashion. The current accounting standards in use in Senegal for ongoing Bank-financed projects were applied for this project as well.



Procurement. An assessment of the implementing agency's capacity to implement procurement issues was conducted at appraisal (PAD, page 63). The assessment noted the insufficient experience of the staff with Bank's procurement and recommended corrective measures such as, hiring qualified and experienced consultants and close supervision by the Bank team. The ICR (page 16) notes that there were no procurement issues and compliance with procurement was deemed to be satisfactory during implementation.

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
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 draws the following main lessons from the experience of implementing this project, with some adaptation of language.

(1) Under some circumstances, delays could be avoided by resorting to modifying the results framework and revising the indicators, even before a MTR. In the case of this project, the results framework was modified after the recommendations of the MTR, which occurred just one month (August 2015) before the original closing date (September 2015).

(2). Functional Innovation Platforms (IPs) which bring together all stakeholders can help in facilitating the implementation of Integrated Agricultural Research for Development activities. The experience with



this project demonstrated that although establishment of IPs take time, they help in facilitating implementation of integrated activities and such investments pay dividends.

IEG adds the following lesson.

- Even though training and technical assistance-related activities are not easily amenable to traditional cost-benefit analysis, it is still important to set up a methodological framework for assessing efficiency of project activities.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR is concise and reasonably well-written and provides a good analysis of the problems that were encountered during the implementation of this project. It is candid when discussing the issues with M&E. The ratings provided in the ICR are not consistent with OPCS guidelines. It rates the relevance of objective and design as Moderately Satisfactory, while the appropriate ratings for relevance of objective and design is High, Substantial, Modest, Negligible and Not Rated/ Not Applicable.

a. Quality of ICR Rating Substantial