



## 1. Project Data

<b>Project ID</b>	<b>Project Name</b>		
P096648	NG-Commercial Agriculture Development		
<b>Country</b>	<b>Practice Area(Lead)</b>	<b>Additional Financing</b>	
Nigeria	Agriculture	P130826	
<b>L/C/TF Number(s)</b>	<b>Closing Date (Original)</b>	<b>Total Project Cost (USD)</b>	
IDA-45390	31-Dec-2014	185,000,000.00	
<b>Bank Approval Date</b>	<b>Closing Date (Actual)</b>		
15-Jan-2009	31-May-2017		
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>	
Original Commitment	150,000,000.00	0.00	
Revised Commitment	147,050,555.81	0.00	
Actual	141,397,375.41	0.00	
<b>Prepared by</b>	<b>Reviewed by</b>	<b>ICR Review Coordinator</b>	<b>Group</b>
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## 2. Project Objectives and Components

### a. Objectives

The **Project Development Objectives** (PDOs) of the Commercial Agriculture Development Project (CADP) as stated in the Project Appraisal Document (PAD) were to: strengthen agricultural production systems and facilitate access to market for targeted value chains among small and medium scale commercial farmers in the five participating states (PAD, p. 4).

The Project objectives as reflected in the Financing Agreement dated May 5, 2009 (p. 4) were the same but with specific information on targeted value chains: (i) to strengthen agricultural production systems, and (ii) to facilitate access to market for small and medium scale commercial farmers engaged in targeted agricultural



value chains including aquaculture, cocoa, dairy, fruit trees, maize, palm oil, poultry, and rice in the participating states.

The ICR Review is based on the assessment of the objectives as stated in the Financing Agreement as it is the legally binding document.

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

Yes

**Did the Board approve the revised objectives/key associated outcome targets?**

Yes

**Date of Board Approval**

25-Jul-2014

**c. Will a split evaluation be undertaken?**

No

**d. Components**

The Project had three components, which were revised in the restructuring of 2014.

**1. Agricultural Production and Commercialization** (*estimated cost at appraisal was US\$84.4 million, including US\$69.4 million of IDA financing and a US\$15 million contribution from the Government of Nigeria (GoN). The actual disbursement of IDA loan was US\$74.4 million and of the GoN and beneficiaries' contribution was US\$17 million. The increase in component cost was due to reallocation of the IDA funding from the Component 2 after the restructuring in 2014, and subsequent increase of the counterpart funding contribution*). This component had four sub-components:

Sub component 1.1: Technology Demonstration and Adoption (*allocation of IDA funds at appraisal was US\$17.76 million, it was increased to US\$60 million at the restructuring in 2014*). This sub component aimed to finance the demonstration and dissemination of new knowledge and transfer of technologies identified and requested by the participating farms/farmers. The packages included seeds and seedlings of new varieties of high quality and yields; chicks, breeds and fingerlings; various feeding, processing and packaging technologies; branding and quality control practices. In order to facilitate the adoption of these technologies, the Project provided matching grants for investments which had to be co-financed by beneficiaries at the ratio from 20 to 50 percent. The target was to transfer 100 technologies.

*The sub component was revised in the restructuring of 2014, the funding for matching grants was increased with reallocated funds from Component 2 and due to merger of activities from sub component 1.2 with activities of this sub component.*

Sub component 1.2: Support to Staple Crop Production Systems (*estimated cost at appraisal was US\$50 million, including US\$41.14 million of IDA funding*). This sub component aimed to remediate the



consequences of the global financial crisis and drought in Northern Nigeria, which caused a spike in food prices in the country. This sub component was aimed to support the production of staple crops such as rice and maize by transferring improved technologies through extension services, advancing seed multiplication, and providing machinery, processing and post harvesting facilities.

*This sub component was dropped in the restructuring in 2014 and most activities were integrated into sub component 1.1 to unify approaches along all value chains.*

Sub component 1.3: Market Facilitation (estimated cost at appraisal was US\$7.9 million, including US\$6.5 million of IDA funding. After the restructuring the IDA allocation was reduced to US\$5.5 million). The sub component aimed to support the establishment and development of markets, information and knowledge sharing through a market information system, as well as to improve financial products and linkages, various marketing activities, and food safety.

*The sub component 1.3 was revised at the 2014 restructuring with added activities to include support to two commodity marketing corporations.*

Sub component 1.4: Capacity Building (estimated cost at appraisal was US\$4.9 million, including US\$4 million of IDA funding. The IDA allocation was increased to US\$8.9 million at the 2014 restructuring). The sub component aimed to finance the strengthening of beneficiary organizations, such as commercial Commodity Interest Groups (CIGs) and Commercial Agriculture Development Associations (CADAs) to implement sub projects. The sub component also was intended to generate new financing products and to provide brokerage support to farmers to access loans from commercial banks for co-financing of the matching grants program.

*Activities focusing on the empowerment of youth and women were added to this sub component at the 2014 restructuring.*

**2. Rural Infrastructure** (estimated cost at appraisal was US\$80 million, including US\$68 million of the IDA financing and US\$20 million of GoN financing. The IDA allocation was reduced to US\$60.5 million). Component 2 had two sub components:

Sub component 2.1: Network of Farm Access Roads (estimated cost at appraisal was US\$50 million, including US\$42.5 million of IDA financing. IDA financing was increased to US\$42.7 million at the 2014 restructuring). This sub component was aimed to finance construction, rehabilitation, and maintenance of about 500 kilometers of roads and their drainage structures using the Output and Performance based Road Contract (OPRC) method.

*The requirement to use the OPRC method for contracting companies for road rehabilitation and maintenance was canceled during the Project restructuring in 2010 due to the lack of response from local companies to participate in tenders with pre- financing requirements. It was decided to go back to traditional contracting for road rehabilitation and maintenance.*

Sub component 2.2: Rural Energy (estimated cost at appraisal was US\$30 million, including US\$15.5 of IDA financing). This sub component was designed to provide commercial farms with electricity through



rehabilitation, electrical maintenance and linking farms to electrical grids.

*As the result of the restructuring in 2014, the sub component 2.2 was dropped and support to farms with access to energy supply was mainstreamed into Component 1 as part of the farms' business plans. The Project started to support various schemes of energy supply. New activities were added on post-harvest management with the allocation of the US\$13.5 million at the 2014 restructuring.*

**3. Project Management, Monitoring, Evaluation and Studies** (estimated cost at appraisal was US\$19.6 million, including US\$11.6 million to be financed by IDA. IDA financing was increased to US\$14.1 million at the 2014 restructuring. The actual total cost of the component was US\$18.5 million). US\$8.8 million was allocated to cover the Project's incremental and operational expenses, procurement of vehicles and equipment, and some civil works. US\$2.8 million was aimed to be spent on Monitoring and Evaluation activities, including the establishment of the Management Information System (MIS), and also to conduct various impact assessment studies, and the implementation and monitoring of the Environmental Management Plan (EMP), Environmental and Social Management Framework (ESMF), Pest Management Plan (PMP) and Resettlement Policy Framework (RPF).

The Project allocated US\$5 million for activities, aimed at strengthening state institutions, such as the Federal Ministry of Agriculture and Water Resources, the National Food Reserve Agency, and the Federal Ministry of Finance, as well as branches of these agencies and other organizations in the target state through Technical Assistance, and a capacity building program. The Project allocated US\$3 million to finance technical studies.

*The activities under this component were streamlined in the 2014 restructuring.*

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

**Project cost.** The estimated total cost of the Project at appraisal was about US\$185 million. The actual cost was US\$181.5 million.

**Financing.** The original allocated IDA financing was US\$150 million, which was reduced to US\$147,050,556 million with US\$3 million canceled as the result of the restructuring in November 2016. The Project disbursed a total of US\$141,324,236 of IDA financing or about 97 percent of the total allocation, with the undisbursed amount of about US\$ 5.7 million.

**Borrower contribution.** It was expected at the appraisal that the GoN's contribution would be US\$35 million. By the end of the Project, the Federal Government of Nigeria contributed US\$5.24 million out of a committed US\$8 million, state governments contributed US\$18.37 million out of a committed US\$18.8 million, and beneficiaries contributed US\$21.4 million against US\$8.2 million projected at the appraisal.

**Dates.** The Project was approved on January 15, 2009 and became effective about six months later, on July 30, 2009. The original closing date was December 31, 2014. However, the actual closing date was on



May 31, 2017, two and a half years later than originally planned.

**Restructurings.** The Project was restructured three times without the revision of the PDOs.

- Level 2 restructuring on March 5, 2010, less than a year after the Project's effectiveness date, was conducted to revise method of contracting companies for road rehabilitation from the Output and Performance based Road Contracting (OPRC) method to traditional contracting for rehabilitation and maintenance (see Section 12 below for more discussion).
- Level 2 restructuring on July 25, 2014 was undertaken to extend the Project's closing date by 15 months from December 31, 2014 to November 30, 2016. Several changes were also made to the Project's design such as merging sub components 1.1 and 1.2, adding and revising activities under Component 2, and reallocating funds between components. The targets and indicators were revised, with the number of targeted direct beneficiaries reduced from 50,000 to 45,000.
- Level 2 restructuring on November 18, 2016 canceled US\$3 million from the IDA loan funds, and extended the Project closing date by six months to May 31, 2017.

While the 2014 restructuring resulted in the revision of the number of direct beneficiaries, since the PDOs were not revised, the IEG did not apply the split evaluation method.

### 3. Relevance of Objectives

#### Rationale

The Project objectives of strengthening production systems and facilitating access to markets for selected value chains were well aligned with the Government of Nigeria's strategic vision and the WB's Country Partnership Strategies. The 2004 National Economic Empowerment and Development Strategy (NEEDS) of the Government of Nigeria recognized the importance of agriculture for economic growth, poverty reduction, and employment, and aimed at increasing productivity through: i) technical improvements by enhancing the research and transfer of knowledge and technologies, and improving inputs supply; and ii) improving connectivity, linkages and access to markets through the rehabilitation of infrastructure, and by establishing post-harvest facilities.

The State Economic Empowerment and Development Strategies (SEEDS) developed by each state also prioritized agriculture, small and medium-size enterprises, and infrastructure rehabilitation and maintenance (especially roads) for public support.

A new President elected in 2007 continued the reform agenda built on the NEEDS and aimed at "transforming Nigeria into a modern economy and an industrial nation by 2015 and one of the world's top 20 economies by 2020". The Seven Point Program kept the emphasis on agricultural development through the use of modern technology to boost higher yields and production. The later Government's Vision 20:2020 and its medium-term strategy Transformation Agenda 2011-2015, maintained agricultural productivity increase as a pathway to reduce a still high level of poverty.



The Project was prepared and implemented within three Country Partnership Strategy (CPS) periods. It responded to the priorities and directions of the Joint World Bank Group and Department for International Development (UK) CPS FY06-09 for the Federal Republic of Nigeria at the appraisal stage. It aimed at supporting the implementation of the NEEDS and SEEDS in a selective manner by focusing on a sub set of issues identified as Government's priorities, including strengthening the non-oil sector for rapid growth. It also intended to support unlocking the potential of agriculture, which was an economic base and the largest sector in Nigeria in 2008. Agriculture was also a source of livelihood for most rural households, contributing to the income of about 75 percent of the population. At the same time, poor productivity reflected by low yields, inefficient processing enterprises, and unsustainable practices undermined competitiveness of Nigerian agricultural products, especially at the global market level. The CPS FY06-09 aimed at increasing agricultural productivity in selected value chains to improve livelihoods and boost economic growth.

The Project's objectives remained highly relevant and in line with the CPS FY10-13, which continued focusing on three Government of Nigeria priorities: (i) improving governance; (ii) maintaining non-oil growth; and (iii) promoting human development. It also was geared toward supporting Nigeria in recovering economically after the global financial crisis of 2008. The Project was completed under the CPS FY14-17, and its objectives were still well in line with the main directions of the Bank support, aimed at facilitating the diversification of Nigeria's economy and job creation, and improving the linkages between smallholder farmers and aggregators, processors, and markets.

**Rating**  
High

#### **4. Achievement of Objectives (Efficacy)**

##### **Objective 1**

###### **Objective**

Objective 1: To strengthen agricultural production systems

###### **Rationale**

The Project design in general was in line with Theory of Change logic, seeking to support economic diversification (non-oil) and poverty reduction efforts by improving agricultural production. The key constraints targeted by the Project in strengthening agricultural production were linked to the low penetration of and underinvestment in new technologies (PAD, para 4). The Theory of Change was based on a correct assumption that productivity and production increases would come from the wider use of improved technology and inputs, especially from new transferred knowledge, and better quality and higher-yield planting and breeding material, feed and other improved inputs. Project design aimed to link farmers and processors to knowledge and practices which have been researched and tested by local research and extension organizations. The demonstrations and matching grants for investment aimed at the adoption of these technologies by small- and medium-size farmers for further commercialization.





## Outputs:

- Project supported demonstration and adoption of 91 technologies against a planned 100. These technologies were tested and demonstrated by local research and extension organizations.
- It was expected to increase the number of CADAs developing and implementing business plans by 59 percent and number of CADAs keeping farm records by 80 percent. However, due to some issues of weak capacities of CADAs, and possible elite capture, the Project worked with beneficiaries either directly or through CIGs. The original targets for business skills development were set for the number of CADAs elaborating and implementing business plans financed by the matching grants. However, since CADAs were not fully engaged in the Project, the outcomes were estimated in number of beneficiaries, who participated in the training and adopted technologies. At the closing, some 18,873 farmers received training maintaining farm records, and 16,215 farmers on management processes.
- The Project provided 1,828 matching grants (against 1,500 expected at the appraisal), which contributed to technology uptake by project beneficiaries. The baseline target was to empower 16,000 farmers to adopt improved technologies and at the Project's closing Project reported reaching about 21,952 project beneficiaries with technologies uptake.
- The Project supported linkages of beneficiaries with various service providers. A total of 23,912 project beneficiaries (against a target of 25,000) participated in these linkages.
- Originally the Project intended to connect 700 farms to the electrical grid. As a result of the implementation of business plans, about 4,430 commercial farmers were connected to the electrical grid, but the connection proved to be in some locations not fully reliable.

## Outcomes:

Increase in production. The Project reached and significantly exceeded targets. That especially is well demonstrated in the ICR by an increase in production in all eight value chains. The increase expected at appraisal was 25 percent; the target was raised at the restructuring in 2014 to 43 percent. Thus, rice production was increased by 69.15 percent against expected 65 percent, maize by 82.88 percent against 80 percent expected, and increase in production of poultry (eggs) reached 70 percent (expected increase was 55 percent). The ICR reported that at the Project's closing, total production increased in all value chains by 65 percent on average.

However, the baseline data established in 2012 was revised (decreased) in 2014 due to errors in original assumptions, which were unrealistically high. For instance, the CADP aimed to increase production of aquaculture by 25 percent. The baseline used at the appraisal was 21,222 metric tons (MT). That baseline was revised at the restructuring in 2014 to 3,506.12 MT, i.e. a six-fold decrease. That revision was made to reflect a smaller than expected number of the beneficiaries participating in the Project at the time of restructuring in 2014. Similarly, in dairy, the baseline estimate was 2.9 million dairy cows, in the restructuring of 2014 this data was changed to 835 cows based on number of participating beneficiaries.

Increase in terms of yields of rice, maize and poultry also exceeded target indicators (25 percent at appraisal, and 42 percent at the 2014 restructuring) and averaged about 63 percent at the Project's closing (ICR, para 27). Again, the baseline data was revised to reflect actual number of beneficiaries reached in 2014.



Increase in adoption of technologies. The targets (30-70 percent) for the adoption of supported by the Project technologies for the eight value chains were met and exceeded in some instances.

Beneficiaries. Despite these impressive results, the overall efficacy is not high, due to a smaller number of beneficiaries reached and failure to strengthen farmers' organizations (CADAs). The Project intended to target farmers through these organizations, but was not able to do so and worked with farmers directly. The CADAs were supposed to coordinate the implementation of all subprojects, and be responsible for market development and facilitation. However, the Borrower's Implementation Completion Report (ICR) notes that the CADAs did not play a coordinating role due to vested interests and the Project worked directly with the CIGs (ICR, p. 55) instead. Similar institutional challenges were faced in the course of implementation due to a lack of vision and aggregation of ownership arrangements.

The Project intended to engage 50,000 beneficiaries, including 40,000 medium scale and 10,000 small scale enterprises (10,000 in each state). It aimed to achieve an increase in production and processing of these beneficiaries in all eight value chains. However, at the time of the restructuring in July 2014, i.e. six months before the closing date, the Project had reached 32,859 beneficiaries, or 65 percent of the target (Restructuring Paper, 2014). During that restructuring, the target was revised and reduced to 45,000 beneficiaries, even though new activities were added focusing on two commodity associations, and a new Women and Youth Empowerment Program. By the Project's closing, there were 38,232 direct beneficiaries from the 3,453 CIGs associated with the project (ICR, p.16). This translates to 74 percent of the number of intended direct beneficiaries at the appraisal, or 84 percent of beneficiaries estimated at the restructuring in 2014. The ICR reports an additional 6,830 beneficiaries from added activities focused on women and youth, bringing the total number of direct beneficiaries to 45,062. At the end of the Project, there were a total of 21,952 technology adopters, spread among producers (19,159), processors (1,816), and marketing entities (977) (ICR, p.42). The ICR explains the difference between number of beneficiaries and technology adopters by the fact that the Project was not able to monitor and capture farmers who adopted Project-supported technologies using their own funds.

Although the Project reached less than originally expected number of 50,000 beneficiaries, it succeeded to benefit the number of beneficiaries as revised at the restructuring of 2014. The lack of clarity with number of beneficiaries was largely caused by the inadequate monitoring and evaluation system, which failed to capture direct beneficiaries, who adopted technologies without use of matching grant financing. The Project was successful in achieving and exceeding two key targets in terms of increased production and yields. Based on evidences provided in the ICR, the IEG assesses the efficacy of the Objective 1 as Substantial.

**Rating**  
Substantial

## **Objective 2**

### **Objective**





Objective 2: to facilitate access to market for small and medium scale commercial farmers engaged in targeted agricultural value chains

### **Rationale**

For higher volumes of agricultural product sales, farmers and processors needed information on markets and improved infrastructure to access markets. Investments in infrastructure included constructing new roads and rehabilitating feeder roads, establishing farm service centers for input distribution and facilities

### **Outputs:**

- To improve access to markets, the CADP intended at appraisal to construct and rehabilitate 500 kilometers of rural roads. However, a portion of the targeted roads was rehabilitated by the state and other programs (about 175 km). Therefore, the target was reduced to 308 km during the 2014 restructuring. All the roads at revised target and even more (319.54 km) were rehabilitated by the end of the Project.
- The Project established eight out of an intended 15 post-harvest or aggregation centers. The Project was not able to establish more centers as intended was due to a lack of institutional arrangements required for ownership and management of these centers. Originally it was expected that CADAs would take over the management of these centers, but after building five centers it was clear that it was not a feasible arrangement.
- The Project built six market information kiosks out of the 52 markets targeted. The lower number was due to the difficulty of securing locations at the markets and the fact that farmers seemed to prefer electronic sources of information.

**Outcomes:** The CADP intended at appraisal to increase net sales by 40 percent on average. This target was increased during the 2014 restructuring to 49 percent on average. At the Project closing, the average net sales increase was reported to be 64 percent. The access to markets was improved through construction and rehabilitation of roads.

Access to market information. The Project intended to increase by 60 percent the number of farmers with access to market information. Few results were generated in terms of to information, with a limited number of kiosks established and no arrangements made to collect market price information on various commodities.

Decrease of travel/transportation time and cost. To improve access to markets the Project intended to decrease travel time from farm to market of an average distance of 5 km, or by 25 percent, and to reduce transportation cost by 25 percent. The ICR reports that there was a 50 percent reduction in average travel time from farm to market for an average distance of 5 km, meeting the revised project target after the restructuring (the restructuring raised the target from 25 percent at appraisal to 50 percent).

The efficacy of the Objective 2 is evaluated as Modest since the Project had not managed to improve market information dissemination as planned, fewer aggregation facilities have been established than intended, and a smaller number of beneficiaries have been reached.



**Rating**  
Modest

**Rationale**

The Project has substantially generated intended outcomes in terms of strengthened agricultural production systems, and reached and exceeded targets on increase in production volumes and yields of targeted crops. There were moderate shortcoming in reaching fewer beneficiaries than expected and that about 2.7 percent of IDA funding was undisbursed at the Project's closing date. Activities implemented towards facilitating access to market were modest, with several outcomes achieved only partially. Considering that Project's key targets were met, the overall efficiency of the Project is evaluated as Substantial.

**Overall Efficacy Rating**

Substantial

**5. Efficiency**

**At Appraisal**

Financial and economic analysis at the appraisal stage were conducted for 16 model or prototype enterprises operating in eight value chains (aquaculture, cocoa, dairy, fruit trees, maize, palm oil, poultry, and rice). The assumption was pretty simplistic that the Project would benefit directly 50,000 beneficiaries or about 3,125 participants within each of the value chain in 16 types of enterprises: 1) Milk Production, 2) Layers Production, 3) Paddy Rice Production, 4) Pineapple Production, 5) Cocoa Production, 6) Palm and Kernel Oil Extraction, 7) Citrus Production, 8) Earthen Pond Aquaculture, 9) Palm fruit Processing, 10) Rice Milling, 11) Pineapple Processing, 12) Citrus Processing, 13) Broiler Production, 14) Fingerlings Production, 15) Maize Production and 16) Day-Old-Chicks Production. The analysis were conducted based on the assumption that 50,000 people would benefit from the Project's outcomes, and considered the costs and benefits over a 15 year period for all the value chains, and a 12 percent opportunity cost.

The analysis was conducted for "with and without project" scenarios, and benefits, benefit-cost ratio and Net Present Value (NPV) were estimated for each enterprise. For sensitivity analysis there were four scenarios modeled with 10% and 20% reduction in output prices as well as costs overruns.

The results of these analyses indicated that the estimated financial rates of return (FRR) for the modelled enterprises ranged between 14% for citrus processing to 25% for pineapple production. The financial NPV was estimated at appraisal to achieve US\$1,369.13 million. The financial and economic rates of return of the Project were estimated to be 20% and 17%, respectively.

With the sensitivity analysis with the worst case scenarios based on ten percent in reduction in prices of outputs, the FRR and ERR dropped to 18% and 15% respectively. With the assumption of a 20 percent



reduction in output prices the FRR and ERR came down to 16% and 13%, respectively. In a scenario with a 10 percent increase in all costs resulted in a decline of FRR to 19% and ERR to 16%. And in a scenario with 20 percent cost increase the FRR declined to 18% and ERR to 15%.

### **At Project Closing**

Economic and financial analysis in the ICR were conducted also using "with-and-without" project scenarios. In this case, the cost and benefit were calculated for the actual number of beneficiaries who participated in various value chains interventions. Thus, the total number of beneficiaries was 21,952 based on number of farmers who adopted Project supported technologies. The share of beneficiaries in different value chains was not proportional as assumed in the analysis at the appraisal: 34.9 percent in the maize value chain, 21.8 percent in the rice, 12.8 percent in poultry (layers and broilers), 10.1 percent in aquaculture, 8 percent in dairy, 7.13 percent in cocoa, 4.6 percent in oil palm, and only 0.7 percent in pineapple (ICR, p.42).

The ICR economic and financial analysis were based on a 15 year period and a 12 percent opportunity cost of capital as assumed in the PAD. The Internal Rate of Return (IRR) at closing was estimated by the ICR at 30.1 percent and the Economic Rate of Return (ER) at 21.1 percent, which is significantly higher than at appraisal. This difference is explained by a concentration of beneficiaries in more profitable value chains and significantly higher production, yield and sales rate than projected at the appraisal.

### **Administrative and Operational Efficiency**

Some aspects of efficiency are not captured by the economic and financial analysis discussed above. The Project was efficient in terms of operating and administrative expenses, which comprised around 5 percent of total project cost.

However, the sensitivity analysis conducted at the ICR stage, similar to that undertaken at the appraisal, had less optimistic results and showed that the Project returns were very sensitive to an increase in the prices of the inputs. This analysis demonstrated that none of the enterprises supported by the Project would be viable if the cost were increased more than 15 percent or if the benefits were reduced by more than 15 percent.

Taking this consideration into account as well as the fact that the Project was implemented for eight years instead of five, with reduced activities and outputs (reduced length of rehabilitated and constructed roads, significantly fewer information kiosks and post-harvest centers established), that US\$5 million was cancelled at the closing and that the Project reached significantly fewer beneficiaries with adoption of promoted technologies, its efficiency is assessed as Modest.

### **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	✓	17.00	0 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	21.00	0 <input type="checkbox"/> Not Applicable

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

## 6. Outcome

Although the relevance of the objectives was high, the design had some shortcomings, including inadequate monitoring and evaluation system, which affected a quality of the evidence data and overall assessment of the results. The Project efficacy was assessed as Substantial, since it produced most although not all of its intended outputs and generated significant outcomes along the all key targets. However, delays in the implementation for about three years, cancelation of some activities and funds, and failure to produce several expected outputs, as well as a risk of the sustaining Project's benefits led to the evaluation of the Project's Efficiency as Modest. Following the guidelines for reviewing the ICR, the overall Project outcome is rated as Moderately Satisfactory.

### a. Outcome Rating

Moderately Satisfactory

## 7. Risk to Development Outcome

There is some risk that beneficiaries might discontinue applying adopted technologies due to various reasons and that would affect sustaining achieved production and productivity. However, the technologies transferred were not complex, were affordable, and were locally researched and tested, all of which should contribute to their sustainability. There is a concern of sustainability of the established and funded by the Project post-harvest centers, which were transferred to the CADAs at the late stage of the Project's implementation. The ICR informs that the governance of CADAs management had raised concerns in regards to fair access to their services and possibility of the elite capture. The ICR does not provide sufficient information on arrangements and Safeguards made to ensure sustainable and equitable functioning of these centers.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

Project objectives and design were relevant to the country's needs and in line with general and sectoral strategies. That alignment with the country's priorities ensured commitment and ownership by the federal and state governments and Project, albeit with delays but was supported with the counterpart funding. The



key lessons considered in the design were to link Project activities to the country's strategic plans to ensure relevance and to strengthen ownership; and to strengthen the participation of beneficiaries in the selection of technologies and value chains. Most of these lessons were incorporated in the design, which was further streamlined during the restructuring to adjust to the country's new agricultural strategy.

The design considered lessons learned in previous and ongoing Bank operations. Synergies were accounted for and reflected in the implementation modalities to avoid duplication. The Project also considered ways to efficiently target beneficiaries through existing local institutions. Intention to use the OPRC approach to contract companies to construct and rehabilitate rural roads was ambitious and did not have to be prescribed in the design to allow flexibility in implementation. The results framework had some minor issues with the quality and reliability of baseline data but that was addressed during implementation.

The effort to support NEEDS and SEEDS, and later the Agriculture Transformation Agenda (ATA) and their implementation probably led to the decision to support a very wide range of value chains, resulting in a complexity of approaches, schemes, and directions. The Project targeted various subsectors, from cropping and aquaculture to poultry and dairy production and processing. In response to the Government of Nigeria, about one-third of IDA credit resources were allocated for emergency-type activities to mitigate the consequences of soaring global food prices. That sub component was a project within a project, designed as stipulated in the PAD following the Global Food Crisis Response Program Framework and aimed at supporting production of basic staple crops such as maize and rice (PAD, p.6). That stand-alone operation led to confusion and complexity in implementation. Later, those issues were addressed during the full restructuring, with some activities dropped, and others streamlined within Component 1.

The Project could have been more focused without complex activities which were not fully in line with the Theory of Change, such as energy connectivity issues, which required more solid analysis and addressing energy sector issues. The Project design did not put in place sufficient governance safeguards to ensure inclusion. Thus, the design engaged multiple beneficiaries, targeting small- and medium-size farmers -- members of existing or to be established Commodity Interest Groups (CIGs), which had to be members of the existing Commercial Agriculture Development Associations (CADAs). The CADAs were supposed to coordinate the implementation of all subprojects, and be responsible for market development and facilitation. However, the Borrower's Implementation Completion Report (ICR) notes that the CADAs did not play a coordinating role due to vested interests and the Project worked directly with the CIGs (ICR, p. 55) instead. Similar institutional challenges were faced in the course of implementation due to a lack of vision and aggregation center ownership arrangements.

The connection of commercial farms to electrical grids also was not implemented as designed due to the limitations of the existing system. The provision was revised during the restructuring of 2014 to allow use of alternative sources of energy. The CADP applied complex principles for selecting beneficiaries, investments, and varied schemes of matching financing. That complexity delayed implementation and had to be addressed at a later stage to simplify mechanisms and criteria.

Another element, which was not well-thought-out at the design, was linked to the Outputs and Performance-Based Road Contracts (OPRC) method for contracting private companies to construct and rehabilitate farm roads. After generating no interest from companies to participate in the tender, it was realized that this



method was not fully appropriate for small projects. Therefore, the requirement was canceled during the restructuring in 2010.

The baseline data used for the Monitoring and Evaluation system was not verified or reliable, and created challenges in assessing the overall Project outcomes. The potential risks assessed at the appraisal were valid, but measures adopted were not sufficient to mitigate them. Counterpart funding posed a serious impediment for the implementation and caused delays. The possibility of collusion and/lack of transparency and accountability in the management of funds at the beneficiary level led to diversion of the activities focused on CADAs in the course of the implementation directly to the beneficiaries.

The Project design had significant shortcomings, such as a broad scope and weak theory of change with not all activities contributing to the expected outcomes, inadequate M&E system lacking baseline data and clear methods of its collection and capturing, as well as setting unrealistic targets. Insufficient institutional assessments of CADAs and subsequent lack of arrangements strengthening their governance issues caused Moderately Unsatisfactory evaluation of the Project's Quality-at-Entry.

### **Quality-at-Entry Rating** Moderately Unsatisfactory

#### **b. Quality of supervision**

The Bank team was proactive in supporting Project implementation with at least twice a year missions visiting beneficiaries and maintaining dialogue with the federal and state authorities. Because the team was country based, Project implementation issues were addressed and arrangements adjusted in a timely manner. The Bank team provided continuous technical support to the implementing agencies.

It is not clear for what reasons Project restructuring was delayed by two years. During restructuring in 2014 some activities were streamlined, but new activities were added when Project had only 15 months left for implementation. At the time of the restructuring in 2014, the Project had disbursed less than 50 percent of IDA financing and was rated as Moderately Unsatisfactory. The additional activities contributed to further delays and to another extension of the closing date at a later stage.

Considering continuous support to the implementation provided by the Bank team during the supervision mission and in between in addressing numerous issues, and efforts in maintaining a dialogue with the state and federal governments on provision of counterpart funding, the overall evaluation of the quality of supervision is rated as Moderately Satisfactory.

### **Quality of Supervision Rating** Moderately Satisfactory

### **Overall Bank Performance Rating** Moderately Satisfactory





## 9. M&E Design, Implementation, & Utilization

### a. M&E Design

The Project financed the establishment of the Management Information System for the monitoring and evaluation of the results. The National Coordination Office was responsible for overall Monitoring and Evaluation, and the State Commercial Agriculture Development Office for the state level M&E.

The M&E framework as presented in the PAD was not fully adequate to monitor and measure Project progress, performance, and results. Some indicators were difficult to collect and attribute and baseline data was not captured for all indicators or was unrealistic. Thus, monitoring was not adequate until 2014, when baseline data was corrected, and when the Results Framework and indicators were revised. The poor quality of baseline data prevented a fully reliable picture of the Project's outcomes. The term for adoption of the technologies was not clearly explained, which led to challenges with measuring final outcomes in terms of the number of beneficiaries.

### b. M&E Implementation

The Project monitoring and evaluation was improved after restructuring and with the corrections of the baseline data. The M&E system produced regular reports. However, the M&E system failed to monitor properly some key data, such as the number of farmers who adopted Project supported technologies without taking matching grants provided by the Project.

### c. M&E Utilization

The ICR states that the M&E system and affiliated studies helped implementing agencies to understand and address issues. A finding of the beneficiaries' assessment study led to a revision of the matching grant program with more appropriate arrangements for different value chain producers.

### M&E Quality Rating

Modest

## 10. Other Issues

### a. Safeguards

**Environmental.** The Project was classified as Category B, since no adverse impacts were expected from the Project's interventions. Potential environmental and social issues were analyzed and addressed in the Project's Environmental and Social Management Framework (ESMF), Pest Management Plan (PMP), and a



Resettlement Policy Framework (RPF). All proposed sub projects were screened and potential environmental and social impacts were reviewed and verified against the checklists. There were no activities implemented which would trigger resettlement. The ICR reports on the Project's satisfactory compliance with environmental and social safeguards (ICR, p. 26).

## **b. Fiduciary Compliance**

### **Financial management**

The Project established sufficient mechanisms and procedures for an effective financial management and accountability by the Financial Management Unit operating within the National Coordination Office (NCO). Various measures on control and the risk management were taken to mitigate the possibilities of funds mismanagement and outlined in the Project Financial Manual. There was reportedly one case of alleged fraud in the procurement of civil works which was raised by the external audit. That case affected the Moderately Satisfactory rating of the financial management system.

### **Procurement**

Procurement was undertaken by the NCO at the Federal level and State Commercial Agriculture Development Office (SCADOs) at the level of the states. There was a case of abuse of procurement rules observed in tendering road construction work and US\$140,000 was refunded to the designated account. That case led to a Moderately Satisfactory assessment of procurement management in June 2015.

## **c. Unintended impacts (Positive or Negative)**

With the Project restructuring in July 2014, a focus on women and youth economic empowerment was added. As a result of these activities, more than 3,500 economic opportunities were created for women and young people.

## **d. Other**

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## **11. Ratings**

<b>Ratings</b>	<b>ICR</b>	<b>IEG</b>	<b>Reason for Disagreements/Comment</b>
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---



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

## 12. Lessons

The ICR presents six lessons, which mostly relate to general project preparation requirements, such as a need to undertake a broad institutional assessment of participating institutions to tailor a capacity-building program to identified needs and gaps; and to design a flexible and adequately funded M&E system with proper baseline data to enable a meaningful evaluation of the outcomes and impacts. Other lessons are generic to value chain development, such as effective stakeholder collaboration, the role of productive member organizations, and alliances in agribusiness development.

One specific lesson, which could be useful for other similar interventions, concerned the OPRC method for contracting companies for road construction and rehabilitation. The lesson on the OPRC method suggests that for such an approach to be attractive to construction companies, the works should be bundled into lots, contractors should be trained on the method if it is new to the country, and guarantees need to be provided to ensure payments for maintenance beyond the Project's life.

Another lesson learned concerned procurement arrangements in a decentralized project, when resources are targeting activities in different administrative units. In such cases, allocating resources through competitive processes is more effective and efficient than earmarking funds for each unit. Under such a competitive allocation principle, there is an additional incentive for administrative units (states in cases of the CADP) to perform and implement activities without unnecessary delays.

## 13. Assessment Recommended?

No

## 14. Comments on Quality of ICR

The ICR is well written with sufficient information on the Project implementation, challenges faced, how the challenges were addressed, and results achieved. The ICR contains a Theory of Change and explains what assumptions were made at Appraisal. It provides a candid explanation of outcomes and reasons for delays in implementation. It has sufficient information on safeguards and compliance, and on the monitoring and evaluation system and its implementation. There were minor inconsistencies on IDA financing disbursement figures, the amount of state contributions, and on achieved outputs. The ICR did not follow the OPCS guidelines on the overall outcome rating. The ICR could have been improved with a clearer story on beneficiary benefits, and more explanation of the participation of CADAs (Commercial Agriculture Development Associations).



**a. Quality of ICR Rating**  
Substantial