



Report Number : ICRR0020754

## 1. Project Data

|  |   |   |                                |
|--|---|---|--------------------------------|
| <b>Project ID</b><br>P072644             | <b>Project Name</b><br>NG-Rural Access & Mobility - Ph. 1 |   |                                |
| <b>Country</b><br>Nigeria                | <b>Practice Area(Lead)</b><br>Transport & ICT             | <b>Additional Financing</b><br>P159089                    |                                |
| <b>L/C/TF Number(s)</b><br>IDA-44080     | <b>Closing Date (Original)</b><br>31-Dec-2014             | <b>Total Project Cost (USD)</b><br>72,000,000.00          |                                |
| <b>Bank Approval Date</b><br>01-Apr-2008 | <b>Closing Date (Actual)</b><br>30-Jun-2016               |   |                                |
|  | <b>IBRD/IDA (USD)</b>                                     | <b>Grants (USD)</b>                                       |                                |
| Original Commitment                      | 60,000,000.00   | 0.00  |                                |
| Revised Commitment                       | 59,478,437.42   | 0.00  |                                |
| Actual                                   | 56,524,534.95   | 0.00  |                                |
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## 2. Project Objectives and Components

### a. Objectives

The objective of the project was to improve road access for rural communities in Kaduna State and to improve management of Kaduna State's road network in a sustainable manner (page 5, Financial Agreement, 2008).

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

No



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

No

**d. Components**

Component A: Upgrading, Rehabilitation, and Maintenance of Transport Infrastructure (appraisal total US\$63.81 million, of which IDA US\$51.91 million and Borrower US\$12 million; actual total US\$60.77 million, of which IDA US\$48.62 million and Borrower US\$12.15 million)

(a) improvement and maintenance of about 427 kilometers (km) of rural roads within six intervention areas of the state using an output- and performance-based road contract (OPRC) and (b) construction and rehabilitation of about 132 river crossings spread across the Kaduna state.

Component B: Institutional Strengthening, Reforms, and Capacity Building (IDA financing only, appraisal total US\$8.09 million; actual total US\$2.67 million)

(a) project implementation support by providing goods, materials and equipment and by ensuring the availability of project management capacity and skills at the federal and state levels; (b) strengthening of capacity to manage the road network, and rationalizing the establishment and enhancement of skills in strategic planning, program and project scheduling, designing, implementation and maintenance of rural road infrastructure; (c) development and implementation of institutional reforms to enhance efficiency in resource allocation, procurement, and quality control responsibilities at the state government level; (d) other cross cutting issues such as awareness creation and related work on road safety, gender and human immuno-deficiency virus (HIV) and acquired immune-deficiency syndrome (AIDS); and (e) preparation of state-funded follow-on this Rural Access and Mobility Project (RAMP).

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

Project cost

The total project cost at appraisal was US\$72 million. The actual project cost was US\$63.44 million, lower than the appraisal, partly due to the exchange rate fluctuations of US\$ and SDR.

Financing

The IDA credit at appraisal was US\$60 million equivalent of SDR. Almost all (99 percent) of the original IDA credit in SDR terms was disbursed. The actual US dollar disbursement was US\$51.29 due to losses in the exchange rate fluctuations.

Borrower Contribution

At appraisal, the Borrower contribution was estimated at US\$12 million. The actual contribution was slightly higher at US\$12.15 million.

Dates

The World Bank board approval of the project was on April 1, 2008. After eight months, the project became effective on December 16, 2008. The delay in project effectiveness was due to the processing



time of the Credit Agreement and the on-lending agreement. The project had two level-two restructurings on December 2, 2014 and December 29, 2015 only to extend the project closing date to complete activities. The total of the two extensions was one and half year. The original project closing date was January 1, 2015. The project actually closed 18 months later on June 30, 2016. IDA disbursement rates were high at both restructurings, at 82 percent and 93 percent, respectively.

### **3. Relevance of Objectives & Design**

#### **a. Relevance of Objectives**

At appraisal, the PDO was relevant to Nigeria and the World Bank. The medium-term (2003–2007) National Economic Empowerment and Development Strategy included developing the transport infrastructure, in particular, the state-level transport sector. About 70 million of the 130 million population were living on less than a dollar a day. To reduce the rural mobility gap and poverty, the federal government adopted the National Policy on Rural Travel and Transport (NPRTT). The World Bank-managed Sub-Saharan Africa Transport Policy Program supported the preparation of the NPRTT. This project was directly linked to the NPRTT. The government initiated a systematic investment in rural connectivity under the Rural Accessibility and Mobility Program (RAMP). Kaduna state was identified to launch the program as it was the third most populous state with a good agricultural economy. The state had only few rural roads, which were poorly maintained. The road classification was inadequate. The state responsibilities for the road asset management and maintenance were unclear.

The World Bank Country Partnership Strategy (CPS) for 2005 -2009 supported transport infrastructures and included Kaduna state. The World Bank's 2005 Africa Action Plan included three of the outputs: road network rehabilitations, implementation of reforms, and establishment of sustainable financing and management mechanisms. This project would contribute to all three outputs. The World Bank Nigeria Competitiveness and Growth report in 2008 noted that the costs of poor roads to the economy at about 3 percent of GDP, causing 15 to 20 percent of the agricultural produce not to reach markets. The report recognized that Nigeria's major problem in the transport sector was not so much the lack of financing but rather the inefficient resource utilization. Hence, the report recommended reforming the road sector to ensure efficient utilization of local resources and unlock economic growth especially in the rural areas with a high development potential.

At the project's completion, the PDO remained relevant to Nigeria and the World Bank. The CPS for 2014-2017 was built on Nigeria's national vision 20:2020 and the transformation agenda. The CPS identified the road infrastructure among others as one of the constraints to Nigeria's economic development. The CPS recognized that the poor infrastructure increased transport costs for farmers and affected human capital, as poor households lack access to schools and social and health services. The CPS supported improving efficiency of the federal and state governments.

#### **Rating**



Substantial

## **b. Relevance of Design**

The project's design was relevant to the PDO due to the following reasons. Upgrading, rehabilitation, and maintenance of rural roads and river crossings (component A) would contribute to the first PDO to improve road access for rural communities. Institutional strengthening, reform, and capacity buildings of the road sub-sector at the state government level (component B) would contribute to the second PDO to improve management of Kaduna state's road network in a sustainable manner. The results framework (page 33, PAD) was straightforward and presented clear linkages between the PDO, the final and intermediate outcomes, and the project's activities and inputs. It was also quantitatively specific in its annual, cumulative outcome targets during the 5-year implementation period, and in the frequency as well as instruments for data collection. The PAD (page 12) also assessed the implementation and data collection capacity of the State Project Implementation Unit (SPIU) as adequate.

### **Rating**

Substantial

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

### **Objective 1**

#### **Objective**

To improve road access for rural communities in Kaduna State

#### **Rationale**

##### Outputs

- Under OPRC, the total length of roads rehabilitated and maintained was 475 km. This achievement was 48 km (11.2 percent) more than 427 km of roads targeted due in part to lower unit costs than originally estimated.
- The 146 rehabilitated river crossings that was achieved exceeded the target of 132 crossings by 10.6 percent.

##### Outcomes

- Road usage by the rural population exceeded the target by 52 percent. Based on the indicator of number of road trips per day, 76 trips were achieved, which was significantly higher than the target of 50 trips and the baseline of 37 trips. Data was based on average daily vehicle counts and reconfirmed through household interviews.
- The targeted addition of 1.5 million of the rural population with improved access to an all-weather road



within 2 km was achieved 100 percent, compared to the baseline of 1 million. Data was established by first converting the baseline population to a percentage of the people with access to an all-weather road and estimating changes in the percentage with local interviews. The data collection method used at the project completion differed from that at the appraisal, which used absolute numbers. Sampling based estimates could risk biased results if the sample did not represent the entire population. However, the sample of local interviews added qualitative value rather than just measuring or estimating the absolute number of people.

- The amount of agricultural produce transported across improved river crossings increased to 4.6 million tons. This achievement exceeded the target of 3.8 million tons by 25 percent. The baseline was 3.5 million tons. The monitoring report presented the proportion of respondents indicating increased transportation of agricultural produce across the new river crossings. As in the case of the improved access above, the project completion's data collection method differed from that at the appraisal, which used absolute numbers. Despite the potential sampling bias, sample interviews provided more insights of the attribution issues as discussed below.

- Other factors such as weather, agricultural productivity, market demand, inputs supply and demand, etc., could also contribute to this achievement of agricultural products transported. Hence, whether this achievement could be fully attributable to this project needed to be ascertained. The Bank team informed IEG that the project's contribution to this achievement was checked through stakeholder interviews. Stakeholders along the project corridors informed the Bank's team that farmers used to lose up to 30 percent of their agricultural product due to lack of access to markets. This loss was because their agricultural products could not be sold, hence they became spoiled and were discarded. However, the team was informed that sales of agriculture products have increased due to the improved road and river crossings. Farmers could get to the markets and traders came to villages to buy the products. Accordingly, with increased market sales, the local formers could also increase production.

- The local construction industry developed skills through their participation in the OPRC. With the introduction of the OPRC a culture of long-term road asset management approach was to be institutionalized. However, there was no evidence of the OPRC's direct contribution to the efficacy in achieving the outcome. As the OPRC was the first of its kind in Nigeria, it delayed the implementation due to the OPRC's need to learn and make adjustments to the reality of local industry, such as removal of prequalification requirement for bidding procedures.

## Rating

Substantial

## Objective 2

### Objective

To improve management of Kaduna State's road network in a sustainable manner



## **Rationale**

### Outputs

The following were achieved:

- Training needs assessment and detailed capacity building framework was prepared for the Civil Engineering Department of the State Ministry of Works and Transport (SMOWT) in June 2015. Its recommendations were yet to be implemented.
- The three-year rolling plan, a new road reclassification, and digitization of the state's road network were completed, but only partially used.
- Studies were completed on (i) road information management system, (ii) road management institutional development and capacity-building reforms, and (iii) "Evaluation of Community Involvement and Gender Issues in the Rural Access and Mobility Project (RAMP-I) in Kaduna State".
- Road management operational equipment was provided (e.g., operational vehicles, computers, printers, copiers, etc.).
- Road sector reform studies and a policy document were completed.
- Road safety features were incorporated in road design. Road safety awareness building campaigns and HIV/AIDS sensitization workshops were conducted.

However, the following were not achieved:

- The next phase of RAMP in Kaduna state was not prepared.
- A simplified road management and road inventory database was not prepared, even though the database is a basic entry point towards professional road planning and is relatively easy to implement.

### Outcomes

- The allocation of funds to Kaduna State Public Works Agency improved following the adoption of the three-year rolling plan.
- The development and use of road management systems were only partially achieved, because some of the above output activities and studies to develop the system were completed but not fully used.
- Implementation of the Kaduna state road sector institutional reform implementation was not initiated by the project's completion. However, the Bank team informed IEG on June 5, 2017 that the Kaduna state legislative house (House of Assembly) approved the draft bill intended to become a law setting up an independent agency for road management in the state (Kaduna State Road Authority, KADRA). The bill was prepared under the project. This development indicates continuation of what the project left behind. The new authority would separate the implementation function from the policy function that has been the responsibility of the State Ministry of Works.

**Rating**  
Modest



## 5. Efficiency

### Ex-ante economic analysis

An ex-ante economic analysis estimated the options to provide communities with the rural transport infrastructure. Two approaches have been employed: a cost effectiveness analysis method (CEA) and a cost benefit analysis (CBA).

The CEA of very low-volume roads was carried out by estimating the investment cost per beneficiary. The CEA covered nine local government areas where about 239,948 additional people would have improved accessibility. An investment of US\$189 per person over five years was determined as favorable cost-effectiveness. However, the CEA's coverage of the total project cost at appraisal was inconsistent in the PAD: page 91 indicates about 57 percent while table 9-B on page 92 showed 63 percent.

The CBA for the roads with traffic between 50 and 200 annual average daily traffic (AADT) were assessed. AADT is the annualized average 24-hour volume of vehicles at a given point or section of road, called a traffic count. It is normally calculated by determining the volume of vehicles during a given period and dividing that number by the number of days in that period. The benefits were road user costs savings. The analysis for 10 years was done only for the Fadan Kamantan-Yangal-Walijo Road. This road segment was chosen because it was assumed to yield the lowest benefits so that the results of the analysis would be conservative. The gravel option was estimated to be the best option with a net present value (NPV) of US\$1.32 million at 12 percent discount rate with an economic internal rate of return (EIRR) of 26 percent. The paved option with single surface dressing was also economically justified with an NPV of US\$0.47 million at 12 percent discount rate and an EIRR of 15 percent. The paving option was justified because of the expected traffic diversion from an alternative road with a distance savings of 11 km.

Economic benefits of the specific river crossing were not assessed.

### Ex-post economic analysis

An ex-post analysis used the same methodologies used at the ex-ante analysis. The CEA covered 80 percent of the actual total project cost and 309,641 people, more than those at the appraisal. The investment cost per beneficiary was estimated to be US\$165 per beneficiary, lower by 13 percent than the ex-ante analysis of US\$189. It was lower by 18 percent than the minimum threshold of US\$200 per beneficiary for inclusion of a road as part of the RAMP intervention network (paragraph 5, page 91, PAD, 2008). The CBA results showed that the best alternative was the upgrading of the road to single surface dressing, with an NPV of US\$3.34 million at 12 percent discount rate and an EIRR of 30 percent. However, an alternative of upgrading to double surface dressing was also economically justified with an NPV of US\$3.14 million and an EIRR of 27 percent.

However, the ICR noted inadequate evidence that the roads and river crossing would be sustainably





maintained (page 17, ICR). The unsustainable road management could deteriorate the quality of roads, which could decrease the normal traffic volume, the traffic growth rate, and the generated traffic. As a result, the benefits would be reduced. A sensitivity analysis of the CBA addressed these parameters' changes to the NPV and EIRR by increasing or decreasing these parameters by 25 percent. The results of the sensitivity analysis produced NPV of between US\$2.73 million and US\$4.85 million and EIRR values of between 20 percent and 34 percent. The analysis showed that the option would still be economically justified even when the normal traffic reduces by 46 percent or the annual maintenance cost per kilometer (km) at US\$35,100, which means a total cost of US\$765,180 for the 21.8km road link over Fadan Kamantan - Yangal -Walijo. This indicated the robustness of economic impacts of the road upgrades even when the unsustainable road maintenance reduced the traffic. Nevertheless, the project covered 457 km and CBA covered only 5 percent (21.8km) of the total project road links. Therefore, this robust economic impact could not be fully assumed for the rest of the road links. The rest of the road link was covered by CEA and had lower road traffic volumes (less than 50 AADT) than the Fadan Kamantan - Yangal -Walijo road link (between 50 AADT and 200 AADT).

The economic benefits from the largest river crossing constructed under this project was evaluated. The largest river crossing was a two-span reinforced concrete bridge, with each span measuring 12.5 m, located in Kajuru Local Government Authority of Kaduna State. Benefits could be the impact of transport investments on local agricultural productivity, increases in agricultural output, improved market prices for agricultural produce, and reduced costs of agricultural inputs. Non-quantifiable benefits could include better access to schools, health facilities, and markets. Data were not available to permit an objective evaluation of the benefits derived from the investment made. However, information from a recent study on monitoring and evaluation (M&E) indicators noted that 76.4 percent of farmers, who before the provision of improved river crossings experienced problems in transporting agricultural produce during the wet season, were able to do so without problems. The study estimates that the volume of agricultural produce transported across new bridges, culverts, and drifts has increased by an average of 30.7 percent.

No financial analysis was available in the PAD or the ICR.

An analysis of the estimated costs and contract prices indicated that the prices of the road upgrading contracts were, on an average, about 8 percent lower than the estimated costs. The significant depreciation of the Nigerian naira (NGN) against the U.S. dollar happened during the project (from NGN 117.8 per U.S. dollar at the time of the Credit approval to about NGN 279.7 per U.S. dollar at the project completion). Therefore, the project is reported to have saved some costs as the project cost was mostly in local currency. An actual expenditure of sub-component A1 (rehabilitation and maintenance of roads) indicated a savings of 10 percent of the original estimates.

There was no evidence that the OPRC contributed to the cost efficiency. While the actual unit cost of the road rehabilitation and maintenance was lower than the estimate at appraisal, there was no evidence this was the result of the OPRC.

#### Administrative and Implementation Efficiency

The administrative efficiency was modest as the original project implementation period of 6 years and four months was extended by 1.5 years. The key sources of delay included: civil works documents still being





drafted when the project was approved; slow administrative processes; poor response and quality of bidders; intermittent provision of counterpart funding; poor staff commitment due to inadequate civil service remuneration levels; and precarious security situation in the project sites.

Due to the new concept of OPRC in Nigeria, the implementation efficiency deteriorated as it took time to learn and make adjustments. The World Bank underestimated the heavy burden placed on the Borrower regarding the preparations needed for successful implementation of the OPRC, especially in view of the Borrower's inadequate internal capacity. Requirements for the OPRC delayed the procurement of civil works. It took 18 months before the contracts could finally be awarded. This long process was due to the poor response and quality of bidders at the prequalification stage.

## 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    | ✓               | 26.00           | 0<br><input checked="" type="checkbox"/> Not Applicable |
| ICR Estimate | ✓               | 30.00           | 0<br><input checked="" type="checkbox"/> Not Applicable |

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

## 6. Outcome

The relevance of the PDO is substantial. The relevance of design is substantial. The efficacy of the first PDO is substantial but the second PDO is modest. The efficiency is substantial. Overall project outcome is moderately satisfactory.

### a. Outcome Rating

Moderately Satisfactory

## 7. Rationale for Risk to Development Outcome Rating

The roads and river crossings financed by the project have a risk in terms of sustainable maintenance. This risk mainly is stemmed from the uncertainties of (i) budget allocation and (ii) actual utilization of the technical and institutional capacity (e.g., modern road management tool), which were strengthened by the project.



Unsustainable road maintenance could lead to deterioration of quality of the road, resulting in the reduced road traffic thereby reducing the benefits of the project. Sustainable maintenance is still a concern.

Despite the government intentions to finance the road maintenance and the project's provision of capacity building, the uncertainties remain. The contracts of the newly completed river crossings were terminated without clear long term maintenance plans. The institutional foundations, backed by the reforms, were needed to support the realization of the state government budget allocation for the project roads and the rest of the road network and the utilization of the strengthened capacity. At the time the ICR mission, the state had decided to extend some of the OPRCs. This decision was a good sign because with the introduction of the OPRC a culture of long-term road asset management approach was to be institutionalized.

As noted in the section 4 above, the state has approved a law to set up an independent agency for road management in the state. As the planned reforms at the project appraisal did not materialize, the political risk to reverse this development remains. However, once approved, it will be a positive sign that the risk to sustainable maintenance would be mitigated.

While the state is still considering an appropriate approach toward road sector reforms, the Department of Roads could already start addressing two main challenges: adoption of a more robust road network management approach and ensuring that road maintenance was well institutionalized and funded.

**a. Risk to Development Outcome Rating**  
Substantial

## **8. Assessment of Bank Performance**

### **a. Quality-at-Entry**

The project was well prepared to address the need of Nigeria to improve the rural mobility. The project incorporated lessons learned from the previous IDA-supported Second Multi-State Roads Project (Credit 2485-UNI), which closed on December 31, 1999. This previous project was rated unsatisfactory on sustainability, and medium on institutional development impact. One of the lessons learned from the operation was more focus on institutional capacity building.

The Bank team appropriately identified key risks. These risks included the use of the long-term OPRCs as it was a new concept to Nigeria and the adoption of the proposed reforms by the state government. Nevertheless, the mitigation measures appeared insufficient. It was premature to include the adoption of a state road sector reform policy in an environment that lacked a comprehensive federal model. The World Bank underestimated the heavy burden placed on the Borrower regarding the preparations needed for successful implementation of the OPRC, especially given the Borrower's inadequate internal capacity. The Bank paid inadequate attention to the need for (i) designing a model suited for the capacity of the construction industry and the government, (ii) raising high level of awareness and promoting private sector



buy-in and (iii) all-inclusive training ahead of the starting the OPRC. The requirement of the Kaduna state's counterpart funding was too arduous as the state was largely dependent on federal allocations. This risk to the counterpart funding was not identified at the appraisal.

### **Quality-at-Entry Rating**

Moderately Unsatisfactory

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

The World Bank supervision included approximately two missions per year. The team made special arrangements to avoid the risky circumstances occasioned by insecurity, especially in the last three years of the project. The absence of monitoring data prevented the midterm review in November 2012 from adequately assessing the project performance (page 19, ICR, 2017).

The Bank team actively supported to resolve implementation problems. For example, the Bank team advised the State Project Implementation Unit (SPIU) to recruit support personnel on monitoring and evaluation (M&E). This advice was taken and it resulted in remarkable improvement (page 19, ICR, 2017). When the counterpart funding had stopped during the first half of the project implementation, the Bank team explained the state administration the effects of the lack of counterpart funding. The State Government thereafter reintroduced the counterpart funding in its state budget. Eventually, the counterpart funding was adequately provided despite the initial delays.

### **Quality of Supervision Rating**

Moderately Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. Assessment of Borrower Performance**

### **a. Government Performance**

The Federal Government demonstrated its commitment to the PDO as following examples. The government had set up the policy and strategy during the project preparation. The government took initial steps to coordinate its implementation. The government used the Rural Travel and Transport Program (RTTP) to guide selection of participating states, define overall project outputs, and allocate internal resources toward a national program. The government established a Federal Project Monitoring Unit (FPMU).

Kaduna state eventually provided the counterpart funding after the initial delays. However, its commitment toward reforms and the RAMP was lost due to the following reasons. Despite their agreement at appraisal, Kaduna State did not prepare a follow-on state-funded RAMP due to their lack of funding for the project implementation. The state did not complete the final critical steps of the road sector reform process to institutionalize road maintenance by the project completion. However, as noted in the section 4 above, after



the project's completion, the Kaduna state legislative house approved a law to set up an independent agency for road management (KADRA). This signaled the state's sustained commitment to the PDO.

The Bank team informed IEG that all covenants were complied with.

### **Government Performance Rating**

Moderately Unsatisfactory

#### **b. Implementing Agency Performance**

The project implementing entity was the Kaduna state (page 15, Financial Agreement, 2008). The implementing agency was the Kaduna State Ministry of Works and Transport (SMOWT) (page i, ICR). The State Project Implementation Unit (SPIU) in the SMOWT was responsible for managing and coordinating project activities (page 3, Project Agreement, 2008). The SPIU contributed to achieving higher than estimated outputs on the infrastructure aspect of the project. The Bank team informed the IEG that all covenants were complied with.

Originally, the project staff was to be competitively and openly recruited within and outside the government. However, the government decided to second the existing government staff directly. The government only recruited outside the government for positions (e.g., with OPRC experience) that they could not find the suitable candidates within the government.

The SPIU needed to report to the State Project Management Committee (SPMC). The SPMC included representatives of various policy officials from stakeholder ministries and departments to enable participatory decision making. However, the SPMC did not meet for a long period. Only the Permanent Secretary was making decisions. In this regard, the project lost the opportunity of all-inclusive oversight. This situation was reversed when a new government took over governance in the state in 2015. The SPMC was reactivated. The SPMC was meeting regularly until end 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 PDO and intermediate indicators were generally adequate. Attributions of some of the indicators were unclear as shown in the following examples. A PDO indicator of the reduction of transportation cost per trip could be influenced by other factors such as cost of fuel, efficiency and size of the vehicle, logistics, etc. The attribution of the PDO indicator of amount of agricultural produce transported across the



new river crossings could be influenced by other factors than the project alone. However, the Bank team informed IEG that they had checked with local people to verify the attribution. The ICR noted the crucial and challenging role of the state road sector reform. Yet, the project had no indicator to monitor the progress toward road sector reforms.

The SPIU was responsible for data collection. Most of data sources were from formal studies, one from a report, and only two from the state statistical office. These arrangements were adequate as most of the indicators were project specific. However, since the project documents did not provide guidance on how the data was to be collected, the method used during the implementation diverged from the one used during appraisal. Baselines were established at project appraisal. The Development Economics unit (DEC) of the World Bank identified the project as a potential candidate to receive support for an impact evaluation. The project's M&E would partner with the Living Standards Measurement Study (LSMS) to commence in April 2008 under the auspices of Nigeria Bureau of Statistics. The Bank team informed IEG that DEC and/or LSMS did not actually support the project.

## **b. M&E Implementation**

The inadequate capacity of SPIU delayed data collection. The quality of the data collection process was not sufficiently checked. The midterm review (MTR) in November 2011 lacked sufficient M&E data to assess the performance of the project. An M&E consultant contract was signed only on November 2013. Afterwards, the SPIU arranged a regular data monitoring process in 2014 and produced quarterly reports. The reports were general and used different methodologies from those at the appraisal. However, these different methodologies did not significantly affect the evaluation at the project completion.

## **c. M&E Utilization**

M&E was not utilized during the midterm review (MTR) in November 2011 when the M&E data could help determine if any changes in directions or making other critical decisions. This was because of lack of M&E data to assess performance at the MTR. The Bank project ICR team informed IEG that there was no explicit reference to the utilization of the M&E in the material used to compile the ICR. However, the economic benefits of river crossings were assessed using the information from a recent study on M&E indicators (page 32, ICR), which indicated the utilization of the M&E.

The PAD of Nigeria Second Rural Access and Mobility Project (2012, P095003) noted that the OPRC experience of this project in Kaduna state would be closely monitored to address the road maintenance risk (page 19). Also, the same PAD noted close monitoring and stock taking of OPRC pilot launched in Kaduna state as part of as part of the implementation support plan (page 71). However, the same PAD did not specifically indicate the use of the intermediate outcome indicator of number of kilometers of roads rehabilitated under OPRC contracts of this project's M&E. The Bank project ICR team informed IEG that the team also could not find the evidence of the specific use of the intermediate indicator.



## **M&E Quality Rating**

Modest

## **11. Other Issues**

### **a. Safeguards**

#### Environmental safeguards

This project triggered the Environmental Assessment (OP/BP 4.01) policy and was assigned an Environmental Screening Category of B. The safeguards instruments were prepared and disclosed in Nigeria and the Bank's InfoShop prior to project appraisal. The date of disclosure at the InfoShop was November 7, 2007 (page 94, PAD 2008). No major significant negative impacts during the project implementation were anticipated. It was expected that the rehabilitation of the roads would result in positive environmental and social impacts (page 22, PAD, 2008). The Bank team informed IEG that the environmental safeguards were complied with. An independent audit did not reveal issues or concerns on compliance with safeguard policies.

#### Social safeguards

The project triggered Involuntary Resettlement (OP/BP 4.12). The safeguards instruments were prepared and disclosed in Nigeria and the Bank's InfoShop prior to the project appraisal. The date of disclosure at the InfoShop was November 7, 2007 (page 94, PAD). The Bank team informed the IEG that the social safeguards were complied with. The project's Abbreviated Resettlement Action Plan (ARAP) was disclosed in Nigeria between November 9 and 12, 2011 and at the InfoShop on November 14, 2011. The supervision missions of November 2012 and January 2013 observed that the ARAP document omitted some Project Affected Persons (PAPs) on one of the roads. The ARAP document was revised after several months of delay. The revised document was disclosed as an addendum to the ARAP. The process did not affect the progress of the works. The PAPs were compensated. Following this incidence, the SPIU set up a Resettlement Implementation Committee and Grievances Redress Committee to implement social safeguard recommendations.

### **b. Fiduciary Compliance**

#### Financial Management

The ICR reported no financial management (FM) concerns. The Bank team informed IEG that all audits were unqualified. The Federal Project Financial Management Division located in the office of the Accountant General of the Federation was responsible for FM for all World Bank-funded projects. Consequently, the project maintained sound and robust internal control system. The project complied with the FM manual and



the project implementation manual.

The accounting process was affected by the introduction of a new state government FM policy in May 2015. The new procedures hindered the smooth operation of the project and delayed payments to service providers. By November 2015, with the World Bank support, the state government resolved this situation.

#### Procurement

Requirements for the OPRC delayed the procurement of civil works. It took 18 months before the contracts could finally be awarded. This long process was due to the poor response and quality of bidders at the prequalification stage. Potential bidders lacked OPRC experiences and had a perceived risk of the OPRC because Nigerian contractors were not used to pre-financing a project. Under many other government contracts, contractors were well paid in advance of up to 50 percent. Furthermore, potential bidders feared a perceived high risk of the long term payment period in long-term contracts. One of prequalification requirements was the engineering capacity within the bidder's establishment. Typically, medium- and small-size contractors would not have significant engineering competencies. As a result, the contracts were re-advertised. The pre-qualification was eliminated. Eventually, this revised approach was successful in contracting. The works were completed on time. To fill the gaps of engineering capacity of the contractors, the supervision consultants designed the roads.

Procurement of river crossing contracts did not have to follow a pre-qualification procedure. The procurement took four months to complete. The procurement and construction of the Bailey bridge was difficult because IDA financed only part of the works. A substantial part of the Bailey bridge had to be salvaged from another existing bridge and was assembled by the Nigerian Army. The quality control of the work was inadequate. In May 2014, the substructure failed. The Kaduna state government financed the completion of the bridge. The contract was not completed by the project closing date.

The World Bank procurement team guided and trained the SPIU and the FPMU. The SPIU referred procurement cases to the State Tender Committee for ratification before approaching the World Bank for clearance. After the SPIU was disbanded at the end of the project, the procurement personnel were reintegrated into the state procurement offices. Therefore, their skills continued to be utilized.

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

Not applicable.

#### **d. Other**

Not applicable.





## 12. Ratings

| Ratings                     | ICR                       | IEG                     | Reason for Disagreements/Comment  |
|-----------------------------|---------------------------|-------------------------|---|
| Outcome                     | Moderately Satisfactory   | Moderately Satisfactory | ---   |
| Risk to Development Outcome | Substantial               | Substantial             | ---   |
| Bank Performance            | Moderately Unsatisfactory | Moderately Satisfactory | The ICR did not follow the harmonized OPCS/IEG guidelines. When two sub-ratings are in the opposite direction of satisfactory versus unsatisfactory (i.e., MU for Quality at Entry and MS for Supervision in this case), the overall rating (for Bank Performance) follows the direction of the overall outcome rating (MS in this case).                               |
| Borrower Performance        | Moderately Unsatisfactory | Moderately Satisfactory | The ICR did not follow the harmonized OPCS/IEG guidelines. When two sub-ratings are in the opposite direction of satisfactory versus unsatisfactory (i.e., MU for Government Performance and MS for Implementing Agency Performance in this case), the overall rating (for Borrower Performance) follows the direction of the overall outcome rating (MS in this case). |
| 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

Followings are lessons learned largely drawn from the ICR's lessons learned.



**1. For the OPRC to be successful, sufficient preparatory work is required.** The project experienced challenges as the OPRC was new to Nigeria. Prequalification requirements did not match the engineering capability of small and medium sized contractors. An OPRC bid process could be carefully designed to reflect the local reality and remove any responsibilities beyond the existing capacities. Supplementary measures can fill the gap resulting from the removed responsibilities. If lump-sum prices are used, careful reviews are required about the risks of lump-sum prices for works in the OPRC bid documents. The minimum costs for all activities could be established as benchmarks for lump-sum priced items. In choosing the road links in an OPRC package, it is important to minimize logistical challenges at implementation (e.g., each road segment located far apart each other).

**2. Investment in providing basic access could leverage government resources.** The improvement of river crossings had the advantage that it encouraged the state government to provide its own resources to improve the 'missing' road links.

**3. Absence of continuous M&E increases the risk of missed opportunities.** At the midterm review, insufficient data were available to assess the project's progress toward achieving its objectives. As a result, the project focused more on the rather obvious deliverables of the road infrastructure and less on the transformational and institutional aspects. By the time the related activities were implemented, the project did not have time for internalization of the outcomes and meaningful dialogue with stakeholders by the project closing date.

**4. Development and implementation of reforms in a single Investment Project Financing (IPF) operation is a known challenge and could be complemented by Development Policy Financing (DPF).** During the total 8-year project implementation period, this project failed to deliver reforms although the steps leading to the reforms were taken. Under the Nigeria Federal Roads Development Project (P090135), the federal-level road sector reforms had also not progressed as planned. The proposed reforms would have included funding of road maintenance using some form of road user-charging or taxation system. In the absence of a federal-level model, the planned reforms in Kaduna state faced uncertainty. DPF could have complemented IPF to support reforms. However, if the target is ambitious, such as tariff, user-charging system or taxation system, even the combination of DPF and IPF may not always achieve the target (e.g., Côte d'Ivoire Urgent Electricity Rehabilitation Project, P112573).

#### 14. Assessment Recommended?

No

#### 15. Comments on Quality of ICR

The ICR was candid and sufficiently analytical, and focused on identifying and presenting relevant evidence. Safeguard policies triggered were not listed. The beneficial impacts of the project noted in the section of Poverty Impacts, Gender Aspects, and Social Development (page 16, ICR) could have included sufficient



justifications of attributions. The ICR did not follow some of the ICR guidelines (updated version on July 22, 2014) and following are examples. Monitoring and Evaluation (M&E) Design, Implementation, and Utilization section needed to include separate assessments of (a) M&E design, (b) M&E implementation and (c) M&E utilization. When the rating for one dimension is in the satisfactory range while the rating for the other dimension is in the unsatisfactory range, the rating for overall Bank or Borrower Performance normally would depend on the Outcome rating.

**a. Quality of ICR Rating**  
Substantial