Report Number : ICRR0020615

1. Project Data

Project ID	Project Name
P113415	TG:Emergency Infra.Rehab. & Energy Proj.

Country	Practice Area(Lead)	Additional Financing
Togo	Social, Urban, Rural and Resilience Global Practice	P125049,P126899

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-H4890,IDA-H7030,IDA-H8560,TF-94675	31-Dec-2013	33,928,182.00

Bank Approval Date	Closing Date (Actual)
02-Jun-2009	30-Jun-2016

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	25,000,000.00	0.00
Revised Commitment	53,780,264.48	0.00
Actual	52,703,532.58	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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Project ID	Project Name
P115066	Togo Efficient Lighting Program (P115066)

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
TF-94675	31-Dec-2013	7,108,182.00
Bank Approval Date	**Closing Date (Actual)**	
02-Jun-2009	30-Jun-2016	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	1,818,182.00
Revised Commitment	0.00	1,769,485.36
Actual	0.00	1,769,485.36

2. Project Objectives and Components

a. Objectives

According to the Project Emergency Paper of May 13, 2009 (p. 7) the project's objective was "to increase access to infrastructure and urban services in Lomé." The objective stated in the Financing Agreement of June 29, 2009 was the same.

The project included a sub-project financed by the Global Environment Facility (GEF) which was integrated into sub-component 4 of the project. The Results Framework for the GEF project states in the Emergency Paper (p. 86) that the objective of the project was "to reduce peak load and energy use by diffusing compact fluorescent light bulbs (CFL) to households in Togo and by introducing standards and labels for light bulbs."

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

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included two components:

Component A: Infrastructure Rehabilitation (appraisal estimate US$22.82 million, actual US$47 million): This component was to finance drainage cleaning and rehabilitation in selected poor neighborhoods in Lomé, rehabilitation of five kilometers of primary and secondary roads in Lomé to increase access to isolated areas of the city, and to increase access to and improve the quality of water supply services for residents in poor peri-urban neighborhoods in Lomé which were not serviced by Togo's Water Utility. This component was also to finance the rehabilitation of the electric distribution network. The GEF financed the improvement of the efficiency of the electric distribution system. Under the Additional

Financings activities in regards to drainage cleaning and rehabilitation and urban roads rehabilitation were scaled-up to mitigate the negative effects of another flooding emergency in Lomé.
Component B: Institutional Strengthening (appraisal estimate US$4.0 million, actual US$7.47 million): This component was to finance institutional strengthening to build capacity in terms of equipment and logistics for all entities involved in the project implementation, to strengthen the supervision, monitoring and evaluation (M&E), and communication functions of the Technical Secretariat for project implementation. Furthermore, this component was to finance building capacity in the entities involved in the areas of financial management, procurement, M&E, and environmental and social safeguards. The Additional Financings provided financing to scale up the institutional strengthening activities.

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

Project Cost: The project was estimated to cost US$26.82 million. Actual cost was US$54.47 million, 203.1% of the appraisal estimate.
Financing: The project was financed through an original grant of US$25.0 million and two additional grants in the amounts of US$15 million and US$14 million by the International Development Agency (IDA), and a US$1.82 million grant by the Global Environmental Facility (GEF).
Borrower Contribution: There were no contributions by the counterpart.
Dates: The project was restructured four times:

- On May 4, 2010, the project was restructured to modify component A to allow for the construction of a center for natural disaster victims.
- On May 31, 2011 the project was restructured to: i) provide the project with Additional Financing in the amount of US$15 million to support the rehabilitation of roads and drainage infrastructures in Lomé damaged by the 2010 floods; ii) extend the closing date from December 31, 2013 to December 31, 2015 to allow for the implementation of activities as stated under i); iii) adapt the Results Framework to reflect the activities financed by the Additional Financing.
- On June 6, 2013, the project was restructured to: i) provide the project with Additional Financing in the amount of US$14 million to expand the rehabilitation and construction works of the drainage and urban roads; and ii) revise the targets in the Results Framework to reflect the additional activities being financed.
- On December 11, 2015, the project was restructured to extend the closing date by six months to June 30, 2016 to give the project additional time to complete the implementation of the remaining activities such as works related to the construction of the water tank, the paving of two major roads in poor neighborhoods, and the operationalization of the National Laboratory for testing energy efficient light bulbs.

3. Relevance of Objectives & Design

a. Relevance of Objectives

High: The project's objective was highly relevant given the capital's severely limited infrastructure maintenance and extension of services as consequences of years of political conflict and social upheaval. During the 2008 rainy season, approximately 18 bridges collapsed, causing an infrastructural emergency, restricting major economic activity. Furthermore, continuously strong urbanization put a substantive pressure on the already weak infrastructure of Lomé.
The project was in line with the government's Strategy for Boosting Growth and Promoting Employment (2013-2017) (SCAPE) which aimed to consolidate and foster inclusive growth through the rehabilitation and expansion of urban roads along with water and electricity services. The strategy identifies urban development as key for achieving economic growth. Also, the government's National Policy for Housing and Urban Development (PNHDU), the National Policy for Water (PNE), the National Energy Policy (POLEN), and the National Action Plan for Energy Efficiency all aim to improve access to infrastructure and services and foster energy efficiency to improve living conditions in the cities. The objective of the project was also in line with the Bank's Interim Strategy Note (FY08-FY10) at the time of appraisal which aimed to improve governance and transparency, promote economic recovery and sustainable development, and address urgent social needs. The objective was also in line with the Bank's latest Interim Strategy Note (FY12-13) which aimed to improve access to infrastructure as a key priority for promoting economic recovery and sustainable development.

Rating
High

b. Relevance of Design

Substantial: The planned activities of the project and the GEF-financed activities were logical and plausible linked to the achievement of the project's objective. These activities included cleaning and rehabilitation of drainages, rehabilitation of primary and secondary roads, increase in access to water and improvement of the quality of water. Furthermore, the project financed the rehabilitation of the electric distribution network and improvement of the efficiency of the electric distribution system. Also, the project design included several activities to strengthen institutional capacity in areas such as of financial management, procurement, M&E, and environmental and social safeguards. Even though the GEF-financed activities were well integrated into the project, their scope was too ambitious, such as the development of a regulatory framework and the setting up of a testing laboratory, given Togo's sectoral context and the grant amount of US$3.0 million.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To increase access to infrastructure and urban services in Lomé

Rationale

Only one indicator (number of people protected against periodic flooding) had a baseline, all others did not.

Outputs:

- 120.9 kilometers of drain were cleaned, surpassing the original target of 42 kilometers and the revised targets (due to the scale-up of activities under the first and second additional financing) of 92 and 98.2 kilometers.
- 31.3 kilometers of drainage network were rehabilitated, surpassing the original target of 8 kilometers and the revised targets (due to the scale-up of activities under the first and second additional financing) of 17kilometers and 22.2 kilometers.
- 18.5 kilometers were rehabilitated, surpassing the original target of 5 kilometers and the revised targets (due to the scale-up of activities under the first and second additional financing) of 7.5 kilometers and 12.5 kilometers.
- 5 major retention ponds were constructed or rehabilitated, totaling a capacity of 190,000 cubic meters. One pond was also equipped with a pumping station.
- 64 community water points were constructed or rehabilitated under the project, surpassing the target of 60 community water points.
- 15 mini water systems were constructed, achieving the target of 15.
- 6 decentralized water production and supply systems (each with a storage capacity of over 200 cubic meters, totaling 1,359 cubic meters) were constructed.
- 15 transformer stations were rehabilitated, 5 were constructed and 5 pre-built stations were set up, surpassing the target of 20 transformer stations being rehabilitated. In addition, 36 kilometers of electricity distribution network were constructed and 200 default detectors installed.
- 500,000 energy efficient light bulbs were installed, surpassing the target of 400,000 light bulbs.
- 164 people were trained in institutions involved in project management and implementation, surpassing the original target of 40 people and the revised target (due to the scale-up of activities under the first additional financing) of 60 people.
- A center for disaster victims was constructed which can offer temporary shelter for up to 1,000 people.
- 25 strategically targeted transformer stations in areas with the most voltage drops, overloads or other safety issues were rehabilitated/constructed.
- A low voltage electricity distribution network was extended by 36 kilometers.
- 200 fault detectors were installed.

Outcomes:

- 1,020,983 people benefited directly from the project, surpassing the target of 885,500 people.
- The number of people protected against periodic flooding increased from 2,000 people in 2009 to 858,062 people in 2016, surpassing the original target of 202,000 people and the revised targets (due to

the scale-up of activities under the first and second additional financing) of 502,000 and 768,000 people.
- The number of people in urban areas provided with access to all-season roads within a 500 meter range under the project was 350,000 people in 2016, surpassing the original target of 105,000 people, the revised targets (due to the scale-up of activities under the first and second additional financing) of 153,00 and 262,500 people.
- The number of people in urban areas provided with access to improved water sources under the project was 64,444 people in 2016, surpassing the original target of 55,000 people. Overall, 167,792 people, who live in the catchment areas of the decentralized water supply system could access water from the standpipes by covering a longer distance or requesting a private household connection.
- 98,477 people in urban areas were provided with access to electricity under the project by household connections, almost achieving the target of 100,000 people.
- Due to the installation of 500,000 Compact Fluorescent Lights the project reduced peak load by 12.5 megawatt, surpassing the original target of 10.8 megawatts.
- The energy consumption reduction per year from the installation of Compact Fluorescent Lights reached 26,500 megawatts, surpassing the target of 20,000 megawatts.

Rating
Substantial

5. Efficiency

Substantial: Given the emergency nature of the project, the Emergency Project Paper did not include an Economic analysis. The ICR conducted several cost benefit analyses.
The ICR defined the benefits of the drainage and roads sub-components as avoided flood damages and health expenses. The activities implemented under these sub-components had an estimated cost of US$15.2 million instead of the planned US$31 million due to competition among contractors. The cost-benefit analyses estimated an Economic Rate of Return of 21.4%, significantly above the recommended 6% threshold.
The ICR defined the benefits of roads rehabilitation as improved mobility and comfort, vehicle operating costs savings and travel time costs savings. The analyses estimated for vehicle operating costs savings an Economic Rate of Return of 16% and a Net Present Value of US$393.4 million.
The benefits of the water supply sub-component were identified as reduction of water related diseases and time saving. However, the ICR could not quantify these benefits due to the lack of data and/or challenge to estimate these effects. The ICR states (p. 15) that the component disbursed US$63 per beneficiary, comparing adequately with the per capita cost of standpipes in Africa which are estimated at US$62.
An ex-post economic analysis was conducted for the energy sub-component, which implemented activities in the amount of US$2.3 million. Benefits were identified as costs savings resulting from purchasing less electricity from neighboring countries due to a reduction in technical losses of the distribution network. The analyses assumed that the reduction in technical losses to be attributed to the project was 0.7 percentage

points of energy sales. The ICR estimated an Economic Rate of 21% and a Net Present Value of US$1,116,993 indication economic efficiency.
An economic analysis of the energy efficiency activities, which had an estimated cost of US$1.7 million, resulted in an Economic Rate of Return of 109% and a Net Present Value of US$2,491,707.
Project implementation costs were only 4% of the total project costs. However, the project's closing date was extended by six months in December 2015 due to delays in the construction of water tanks and the paving of two roads, indicating minor inefficiencies in the use of project funds. Taking everything together, Efficiency is rated Substantial.

Efficiency Rating
Substantial

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 ☐Not Applicable
ICR Estimate		0	0 ☐Not Applicable

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

6. Outcome

Relevance of objective is High given Lomé's weak infrastructure. Relevance of Design is Substantial since the planned activities of the project and the GEF-financed activities were logical and plausible linked to the achievement of the project's objective. Achievement of the Objective and Efficiency are rated Substantial. Taking everything together, the outcome rating is Satisfactory.

a. Outcome Rating
Satisfactory

7. Rationale for Risk to Development Outcome Rating

During project implementation, efforts were made to ensure the sustainability of activities implemented under the project. Togo's Electric Energy Utility was responsible for the operation and maintenance of the rehabilitated electricity distribution network and the Ministry of Social Affairs for the management of the center for disaster victims. However, at project closing most water kiosks and the testing laboratory for light bulbs were not

operational yet. Even though the government showed its commitment to sustaining the project's investments by allocating a budget to the National Agency for Sanitation and Public Health (ANSAP) for maintaining the infrastructure and improving solid waste management, it is not clear how roads and drainages will be maintained over the medium and long-term. In order for ANSAP to take on this responsibility, its budget will need external support given the government's tight fiscal situation. Taking everything together, the risk to development outcome rating is Substantial.

a. Risk to Development Outcome Rating

Substantial

8. Assessment of Bank Performance

a. Quality-at-Entry

Given the emergency, project preparation took less than months. The project was built on lessons learned from previous Bank operations in the country and was based on existing plans and studies. Also, selected project activities complemented ongoing and planned activities by other donors. The Bank team consisted of staff from the urban and energy units, allowing for a full integration of energy activities.
The overall risk was rated High. The Bank team identified relevant risks during project preparation. These risks were related to weak capacity of the government and municipality of Lomé to manage the rehabilitated investments properly, unstable political environment, political interference in the selection of project activities, corruption and fraud in procurement and financial management. The Bank mitigation efforts included outsourcing procurement to an independent procurement agent (AGETUR), establishing an Interministerial Steering Committee consisting of representatives from beneficiary committees, providing procurement training, implementing a computerized accounting system, defining adequate prior review procurement thresholds, ensuring close supervision and requesting the government to implement immediate sanctions in case of misuse of resources. Most mitigation efforts were adequate. However, the mitigation efforts for safeguards and operation and maintenance of roads and drainage were insufficient

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

The Bank team conducted 16 supervision missions throughout project implementation. The project was successfully restructured four times and received additional financing to scale-up project activities. Also, the Bank team was able to mobilize a GEF co-financing grant to complement the IDA-funded rehabilitation of the electricity distribution network. The Bank provided support and training in procurement and financial management. However, initially the Bank did not provide sufficient support for the implementation of safeguards resulting in challenges (see section 11a for more details).

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance
The government was committed to the achievement of the development objectives. The president of Togo demonstrated ownership of the project and facilitated inter-sectoral collaboration. A project coordinator, M&E specialist, communications specialist, and an internal auditor for the Technical Secretariat within the Ministry of Urban Development and Housing were hired. However, the internal auditor was hired with a significant delay resulting in Moderately Satisfactory rating of the project's Financial Management function.

The ICR (p. 20) states that the Technical Secretariat supervised AGETUR's work and coordinated with Togo's Electricity Energy Utility, Togo's Water Utility, and the Municipality of Lomé. At the beginning of the project there were challenges and disagreements regarding safeguards compliance and procurement processes. However, these were solved and the Technical Secretariat started to organize meetings on a monthly basis in April 2010. The Technical Secretariat submitted regular progress reports to the Bank and the Ministry of Urban Development and Housing conducted regular meetings with the Interministerial Steering Committee to track implementation progress and provide strategic recommendations.
Even though the project did not include counterpart financing, the government financed water supply, electricity, and drainage works in addition to equipment for the center for disaster victims. Also, since 2011 the government allocated yearly operating budgets for the center for disaster victims. Furthermore, since 2014 the government also provided ANSAP with funds to improve the maintenance of urban infrastructure.

Government Performance Rating
Satisfactory

b. Implementing Agency Performance
AGETUR was responsible for the overall implementation of the project while Togo's Electric Energy Utility, Togo's Water Utility, the Municipality of Lomé and the Technical Secretariat/Ministry of Urban Development and Housing provided technical assistance for the implementation of specific sub-components. All entities were committed to achieving the development objectives. While the project experienced some safeguards challenges at the beginning of the project, collaboration between these entities improved once the challenges were addressed.
All implementing agencies conducted outreach and communication activities to ensure the involvement of other stakeholders and beneficiaries. Communication between the implementing agencies and the Bank was taking place on an ongoing basis and projects reports were submitted to the Bank in a timely manner.

Implementing Agency Performance Rating
Satisfactory

Overall Borrower Performance Rating
Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design
The objective of the project was clearly specified and well reflected in the selected indicators in the Results Framework. The original Results Framework included four PDO indicators and seven intermediate outcome indicators which were measurable. The GEF required the Bank team to also prepare a Results Framework for the GEF financed activities which included two GEO indicators and 17 intermediate outcome indicators.

b. M&E Implementation
A staff was hired for the Technical Secretariat to be responsible for the M&E of the agencies involved in project implementation. During the project restructuring in 2010 the Results Framework was modified to align the PDO indicators with core sector indicators. However, the ICR (p. 8) states that the target for the indicator which tracked access to electricity was not adjusted even though the unit of measurement changed from households to people. During the 2011 project restructuring an additional PDO indicator was added to measure direct beneficiaries. AGETUR was responsible for the data collection for sub-components A1, A2, and A3 while Togo's Electricity Energy Utility collected data for sub-component A4. The ICR (p. 8) states that the GEO indicator was tracked inconsistently due to a lack of clear definition.

c. M&E Utilization
Surveys to measure the progress towards achieving the project's objective were conducted in 2013, 2014, 2015, and 2016. According to the Bank team the M&E results were used to inform decision making.

M&E Quality Rating
Modest

11. Other Issues

a. Safeguards

The project was classified as Category B and triggered the Bank's safeguard policies OP/BP 4.01 (Environmental Assessment) and OP/BP 4.12 (Involuntary Resettlement). An Environmental and Social Management Framework and a Resettlement Policy Framework were prepared and disclosed. The ICR (p. 8) states that safeguard audits were triggered in April 2012 when project activities regarding drainage and urban road works were implemented and complaints regarding compensation to people affected by the project and a fatal accident were raised. The audits identified several shortcomings such as non-compliance with the Resettlement Action Plans and Environmental Management Plans due to a lack of clarity regarding the distribution of responsibilities and lack of training in the Bank's safeguard policies. An action plan was developed and successfully implemented. Subsequent project activities complied with the Bank's safeguards. The Resettlement Action Plans and Environmental Management Plans were approved and mitigation measures were implemented satisfactorily. No further complaints were received during the remaining project implementation.

b. Fiduciary Compliance

Financial Management

The Agency for the Execution of Urban Works (AGETUR) was responsible for the financial management and procurement of the project. AGETUR had experience in implementing externally-funded projects. Due to a high fiduciary risk the Bank required the recruitment of an internal auditor to strengthen the internal control environment. Initially financial management was rated Moderately Satisfactory due to delays in hiring the auditor. However, the rating was increased to Satisfactory once the auditor was hired in May 2011. Interim financial reports and financial statements were submitted on a quarterly basis. The opinions of annual external audit reports were unqualified. The project's financial management and disbursement systems were adequate throughout the project's duration.

Procurement

Procurement was rated Moderately Satisfactory during the initial years of project implementation due to AGETUR staff's unfamiliarity with new Bank procedures that became effective. The Bank provided support and training which led to an improvement and the procurement rating was increased to Satisfactory from July 2013 onwards. Furthermore, post-procurement reviews showed that the project complied with the Bank's procedures and recommendations were implemented in a timely manner. However, the reviews also identified delays in completing procurement for civil works.

c. Unintended impacts (Positive or Negative)

N/A

d. Other

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12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Substantial	Substantial	---
Bank Performance	Satisfactory	Moderately Satisfactory	Initially the Bank did not provide sufficient support for the implementation of safeguards resulting in challenges.
Borrower Performance	Satisfactory	Satisfactory	---
Quality of ICR		Substantial	---

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

13. Lessons

The ICR (p. 21-23) provides several useful lessons learned:

1. If there is weak capacity to ensure the project's compliance with safeguards, fiduciary policies and project management, it is critical that training to strengthen capacity is being provided at the beginning of the project implementation. This project faced safeguard issues until April 2012 due to the lack of training of the responsible staff, resulting in non-compliance with the Bank's Resettlement Action Plans and Environmental Management Plans.
2. In order to ensure the sustainability of a project, strengthening operation and maintenance arrangements, coordinating with other development partners and including beneficiaries in the process is critical.
3. Integrating GEF-funded activities into an IDA project brings higher visibility to the energy efficiency agenda. However, it is important that the scope of activities is feasible. In this project, a test laboratory was developed, however, the decree to start the operation of the laboratory has not been signed yet.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR provides a good overview of project preparation and implementation. The ICR is candid, concise and consistent and includes a cost-benefit analysis. It also provides useful lessons learned drawn from project implementation. However, the ICR does not provide any information on how M&E data was used to inform decision making.

a. Quality of ICR Rating
Substantial