AFRICAN DEVELOPMENT BANK
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AFRICAN DEVELOPMENT FUND
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28 November 2019
Prepared by: PERN/RDGW/PGCL
Original: French

BOARD APPROVAL
Lapse-of-time Procedure

28 November 2019

FOR INFORMATION

MEMORANDUM

TO : THE BOARDS OF DIRECTORS

FROM : Vincent O. NMEHIELLE
Secretary General

SUBJECT : TOGO – PROJECT TO SUPPORT THE SOCIAL COMPONENT OF RURAL ELECTRIFICATION PROGRAMME CIZO (PRAVOST)*

ADF LOAN OF UA 360,000
ADF GRANT OF UA 320,000
EU-AITF GRANT OF EUR 9,990,000

The attached **Loan and grant Proposals** and the **Draft Resolutions** were submitted for your consideration **on a Lapse-of-time basis** on 14 November 2019.

Since no objection was recorded by 5.00 pm, on 28 November 2019, **the proposals are approved and the Resolutions adopted.**

Attach:

Cc : The President

*Questions on this document should be referred to:			
Ms. M.L. AKIN-OLUGBADE	**Regional Director**	**RDGW**	**Extension 4018**
Mr. G. PENN	**General Counsel**	**PGCL**	**Extension 3220**
M. S. N'GUESSAN	**Deputy Regional Director**	**RDGW**	**Extension 4042**
M. D. SCHROTH	**Ag. Director**	**PERN**	**Extension 1564**
M. G. BOHOUSSOU	**Oficer-In-Charge**	**COTG**	**Extension 7134**
M. J.D. CUNHA	**Officer-In-Charge**	**PERN.1**	**Extension 3819**
Ms. F. BEN ABDA	**Team Leader**	**PERN.1**	**Extension 3525**

SCCD:C.H.

AFRICAN DEVELOPMENT BANK GROUP

PROJECT : PROJECT TO SUPPORT THE SOCIAL COMPONENT RURAL ELECTRIFICATION PROGRAMME CIZO (PRAVOST)

COUNTRY : REPUBLIC OF TOGO

PROJECT APPRAISAL REPORT

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AFRICAN DEVELOPMENT BANK GROUP

PROJECT : PROJECT TO SUPPORT THE SOCIAL COMPONENT RURAL ELECTRIFICATION PROGRAMME CIZO (PRAVOST)

COUNTRY : REPUBLIC OF TOGO

PROJECT APPRAISAL REPORT

PERN/RDGW

November 2019

Translated Document

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Currency Equivalents

31 July 2019

UA 1	=	809.09016	XOF
UA 1	=	1.23345	EUR
UA 1	=	1.37542	USD
EUR 1	=	655.95700	XOF

Fiscal Year

1 January au 31 December

Weights and Measures

1 tonne	=	1 000 kg
1 kilo joule (kJ)	=	1 000 Joules (J)
1 kilovolt (kV)	=	1 000 Volt (V)
1 kilovolt ampere (kVA)	=	1 000 Volt – Ampere (VA)
1 kilowatt (kW)	=	1 000 Watt (W)
1 Megawatt (MW)	=	1 000 kW = 1 000 000 W
1 Gigawatt (GW)	=	1 000 MW = 1 000 000 kW
1 kilowatt-hour (kWh)	=	1 000 Watt-hour = 3 600 000 Joule (J)
1 Megawatt-hour (MWh)	=	1 000 kWh = 1 000 000 Wh
1 Gigawatt-hour (GWh)	=	1 000 MWh = 1 000 000 kWh
1 Terawatt-hour (TWh)	=	1 000 GWh = 1 000 000 MWh
1 tonne of oil equivalent (toe)	=	41 868 kJ = 11 630 kWh
1 million tonnes of oil equivalent (Mtoe)	=	1 000 000 toe
1 tonne CO_2 equivalent per year (tCO_2eq)	=	1 000 $kgCO_2eq$

ACRONYMS AND ABBREVIATIONS

ACTC	African Climate Technology Centre
AC	Advanced Contracting
ADF	African Development Fund
AFD	French Development Agency
AfDB	African Development Bank
AIF	African Investment Facility
ANGE	National Environmental Management Agency
AT2ER	Togolese Rural Electrification and Renewable Energy Agency
AWBP	Annual Work Plan and Budget
BD	Bidding Documents
BOAD	West African Development Bank
BOO	Build Own Operate
CEB	Communauté Electrique du Bénin
CEET	Compagnie Energie Electrique du Togo (Togo power utility)
CSP	Country Strategy Paper
DER	Renewable Energy Directorate
DWS	Drinking Water Supply
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
EU-AITF	EU Africa Infrastructure Trust Fund
GoT	Government of Togo
HV	High Voltage
IFC	International Finance Corporation
INDC	Intended Nationally Determined Contributions
IsDB	Islamic Development Bank
LV	Low Voltage
MIFA	Agriculture Financing Incentive Facility based on risk sharing
PAP	Project Affected Persons
PCN	Programme Concept Note
PND	National Development Plan
PERN	AfDB Renewable Energy Department
PESR	AfDB Energy Financial Solutions, Policy and Regulation Department
PMU	Project Management Unit
PPP	Public-Private Partnership
PV	Photovoltaic
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SCAPE	Strategy for Accelerated Growth and Employment Promotion
SE4ALL	Sustainable Energy for All
SEFA	Sustainable Energy Fund for Africa
SESA	Strategic Environmental and Social Assessment
SMEs	Small- and Medium-sized Enterprises
TFP	Technical and Financial Partners
UA	AfDB Unit of Account
USD	United States Dollar
WB	World Bank

PROJECT INFORMATION

Client Information

BORROWER: Togolese Republic

EXECUTING AGENCY: Togolese Rural Electrification and Renewable Energies Agency (AT2ER)

Financing Plan

SOURCE DE FINANCEMENT	XOF Million Total	UC Thousand Total	EUR Thousand	Contribution (%)
ADF Loan	291.27	360.00		4%
ADF Grant	258.91	320.00		3%
EU-AITF	6,552.98	8,099.19	9,990.00	82%
Government of Togo	651.55	805.28		8%
Private sector partners	221.64	273.94		3%
Total	**7,976.35**	**9,858.42**		**100%**

Key Financial Information on the Loans

Maturity (years)	40
Grace period (years)	10
First period (years)	10
Amortisation rate (%)	2%
Second period (years)	20
Principal amortisation rate (%)	4,0
Service charge (%)	0,75
Commitment charge (%)	0,50
Interest rate (%)	0
Concessionnality (%)	51

Timeframe – Key Milestones (expected):

Concept Note approval	13.05.2019
Project approval	27.11.2019
Effectiveness	31.03.2020
First disbursement	30.06.2020
Last disbursement	31.09.2023
Completion	31.12.2023
Last reimbursement	April 2060

Executive Summary

Project Summary

Overview: The project to support the social component of Togo's rural electrification programme (PRAVOST) is a solar electrification project aimed at rural areas as part of the national program, "CIZO". The project's overarching objective is to strengthen the resilience of approximately 500 rural communities in Togo by improving access to energy for households, community infrastructure and small-scale farms. The project has four components: (a) a social component that includes the electrification of 314 health centers and equipping 122 health centres with solar water heaters, the solar electrification of 400 drinking water supply stations and the deployment of 600 solar irrigation pumps; (b) The electrification of approximately 2000 households by smart mini-grids; (c) the implementation of a PayGo platform for the integration of payments and data collection; and (d) coordination, management and monitoring and evaluation.

The project is part of the Togo Electrification Strategy launched by the country in June 2018. It also corresponds to the five main operational priorities of the Bank, in particular "Light up and power Africa"; "Feed Africa" and "Improve the quality of life of the people in Africa". In order to achieve its objectives, the project will utilise sustainable off-grid solar solutions such as photovoltaic technology, as well as smart technologies (smart meters and solar systems). Regional inclusion forms the development basis of the project reflecting the needs of the different localities and considering population density as well as synergies between the different components, such as equipping a drinking water supply station near a health center. The main expected results of the project are: (i) increasing the electrification rate of households and community infrastructure in rural off-grid areas; (ii) and increasing the number of small farms using sustainable renewable energy systems. The total project costs considering private investment are estimated to XOF 7,976 million (UA 9.858 million) excluding taxes.

Main beneficiaries: The main beneficiaries of the project are: (i) rural communities, it is estimated that the project covers approximately 500 localities; (ii) small farmers vulnerable to climate change in off-grid areas. The majority of farmers continue to use ancestral and manual irrigation systems that often expose them to a high risk of unpredictable rainfall and climate change; and finally (iii) households that will benefit from mini-grids. The number of beneficiaries is estimated to be 600,000 people in the five regions of the country, representing about 100,000 people in each of the Kara, Maritime, Central and Savannah regions and about 200,000 beneficiaries in the Plateau region.

Needs Assessment: The project is designed to respond to socio-economic developments in Togo, which are characterised by growth and the country's willingness to modernize the agricultural sector through agro-industrial transformation and related services as well as the improvement of the quality of life of people who need electricity to achieve the desired modernization of the country. The electricity sector in Togo is facing a low acess rate, coupled with growing demand, so that the gap between supply and demand is constantly increasing. In addition, a large disparity in access is noted between urban areas (88.8%) and rural areas (19.5%), with an average coverage of 48% at the national level (in 2017). Thus, PRAVOST is expected to improve the rural access rate by using off-grid solar solutions that are faster and cheaper to deploy than network extension in order to achieve the objectives of the electrification strategy. The strategy targets electricity access of 50% in 2020 and 75% in 2025, to reach 100% by 2030. Furthermore, PRAVOST complements a particular component of CIZO, household energy access, by electrifying community facilities, hence achieving "whole village electrification" through standalone solar systems.

Bank's added value: The Bank mobilized a grant of EUR 9.990 million, representing 82% of the project cost, from the EU-AITF fund which was approved in September 2019 by the European Commission. The Bank financed the feasibility studies that led to this project. In addition, the project draws on the Bank's experience in rural electrification projects under the "Desert to Power" initiative,

the SEFA fund and its green mini-grid program in Africa, as well as the agricultural transformation project in Togo.

Institutional Development and Knowledge Management: The project strengthens the Bank's presence in the electricity sector and is part of its efforts to diversify sources of energy production and increase electricity access rates in rural areas. The Bank's support for this government initiative positions it as the country's leading partner in the distributed renewable energy and rural electrification sector. Lessons learned from similar operations, as well as good practice in Africa, have been valued in the formulation of this project. Through its capacity building component, a system adapted to the monitoring and evaluation of project performance will be implemented to generate the essential data that will be used in the context of knowledge management. This will allow to effectively develop the institutions in charge of the sector.

Results-based Logical Framework (RBLF) for PRAVOST-Togo

Country and Project Name: Togo – Project to Support the Social Component of the ICZO Rural Electrification Programme (PRAVOST)
Project Objective: Increase access to clean electricity in rural communities with off-grid solutions and smart technologies

RESULTS CHAIN		PERFORMANCE INDICATORS	Means of Verification			RISKS/MITIGATION MEASURE/ASSUMPTIONS
		Indicators	**2019 Baseline Situation**	**2022 Targets**	**Report**	
IMPACT	Improved quality of life for residents and economic competitiveness	**1.** Additional number of people with access to clean energy (gender disaggregated data) **2.** Number of people benefiting from improved health services and access to water (gender disaggregated data) **3.** Number of people benefiting from better agricultural revenue thanks to better irrigation means (gender disaggregated data) **4.** Number of direct jobs created (gender disaggregated data)	1. N/A 2. N/A 3. N/A 4. N/A	1. 10,000 (2000 mini-grid connections, 5 people per household); prioritize female-headed households 2. 640 000 disaggregate the number of households held by women and by men 3. 3000 (600 smallholders and their families) 50% of whom are women 4. 220 permanent jobs including 50% women and 300 temporary jobs of which 50% women (Considering an average of 2 direct jobs created per mini-network plus 1 technician per 3 localities for the social component)	AT2ER reports Reports from different ministries National statistics	Risk 1: Low revenues of mini-grids / Low purchasing power of households benefiting from mini-grids Mitigation 1: The 10 mini-networks will be operated by a single developer to create an economy of scale. The GoT will participate in the subsidy of the tariff to make electricity access affordable.. Risk 2: Low purchasing power of households benefiting from mini-grids and irrigation pumps: Mitigation 2: Consumers (households, farmers,) will be supported by flexible payment systems (pay-as-you-go) Risk 3: Lack of private sector interest could limit planned investments in mini-grids Mitigation 3: Forum, Workshops inviting private investors, clarification of regulation and tendering procedures Risk 4: Lack of local technical capacity to maintain

OUTCOMES	Improve access to clean energy in rural communities	1. Number of localities benefiting from one or more components of the project 2. Access rate to household electricity (gender disaggregated data) 3. Number of small farms with solar irrigation (gender disaggregated data) 4. Number of connections created (gender disaggregated data) 5. MW value of renewable energy generated 6. CO2 value avoided	1. N/A 2. 48% 3. N/A 4. N/A 5. 3 MW 6. 3113.77 kg CO2eq	1. 500 (Estimate considering localities that will benefit from several components) 2. + 2000 connections 3. 600 (+0.6%) 4. 3436 5. 4.5 MW 6. 3113.77 kg CO2eq (Calcul : voir rensmart)	AT2ER reports National statistics Reports from different ministries	Mitigation 4: Developers will be required in to plan training and knowledge transfer activities for the operation and maintenance of solar installations Risk 5: Climate Change and Extreme Weather Mitigation 5: The AT2ER must ensure that the long-term impact of climate change is also assessed and taken into account in the design and design of structures Risk 6: Maintenance of the works Mitigation 6: Maintenance and service level agreements (SLAs) with service providers, training of local technicians on the technologies of the installed systems Risk 7: Delays in project implementation due to the executing agency insufficient knowkedge of Bank procedures and poor quality of documents (financial model of mini-grids) Mitigation 7: Substantial institutional support is planned

OUTPUTS	1.1. 314 USPs are electrified and 122 have access to hot water 1.2. 400 electrified drinking water supply systems (DWS) pumps with solar 1.3. 600 small farms have access to solar irrigation pumps 2.1. 2000 households have access to electricity through mini-grids and smart meters 3.1. The AT2ER has a dashboard on off-grid and mini-grid electrification and mobile payment access for pay-as-you-go solution developers 4.1 Coordination, management, project monitoring and application of the ESMP	1.1.1 Number of off-grid USPs electrified; 1.1.2 Number of centers with access to hot water 1.2. Number DWS 1.3. Number of small farms (disaggregated by gender) 2.1. Number of households with access to electricity (disaggregated by gender); 3.1. 1. Number of off-grid connections transmitting data 3.1.2. Number of off-network promoters using PayGo platform services 4.1. % of MP plans submitted and timely and validated% of validated PM plans completed on time; Number of annual audit reports submitted on time; Number of half-yearly reports of activities submitted on time; % of ESMP actions implemented; Reference and end of project surveys carried out		1.1.1 314 1.1.2 122 1.2. 400 1.3. 600 2.1. 2000 3.1. 1. 2800 3.1.2. 5 4.1. - 1 Project Plan and Calendar updated each semester - 1 dashboard of the project updated each semester - 1 Procurement Plan (PPM) - 1 Disbursement Plan - 1 audit report per year - 1 activity report / evaluation follow-up by semester 1 PGES report per semester	AT2ER reports National statistics Reports from different ministries	

ACTIVITIES	**RESOURCES**			**SOURCES**		
1. **Social component:** 1.1 Equipment and maintenance of 314 off-grid peripheral healthcare units (USP) by photovoltaic solar roof systems with storage and smart meters; Equipment and maintenance of 122 health centers with solar water heaters; 1.2 Equipment and maintenance of 400 solar systems for drinking water supply (DWS) in 500 localities with manicured water drainage systems; 1.3 Deployment of 600 irrigation pumps in the five regions of Togo in pay-as-you-go 2. **Smart solar mini-grid concessions:** 2.1 Electrify about 2000 households in 10 localities under a licensing agreement with a private developer. , Partial financing, construction, operation and maintenance of 10 mini solar networks with storage and smart metering system. 3**. PayGo platform**: 3.1 Setting up a Pay-as-you-go platform 4. **Management, follow-up and studies:** 4.1 Project management execution, monitoring and supervision and implementation of the ESMP and gender plan, hydraulic studies	1. Social component	UA	6,637,050	68%	**<u>Sources of Financing UA</u>** ADF grants 320,000 ADF loan 360,000 EU-AITF 8,099,193 State 805,283 Estimated private contribution to 273,940	
	2. Mini-grids	UA	1,369,710	14%		
	3. Platform	UA	1,046,052	10%		
	4. Management and studies	UA	557,174	6%		
	5. Implementation of the ESMP	UA	187,710	2%		
	Reserve	UA	60,720			
	Total	**UA**	**9,858,418**	**100%**	**Total**	**UC 9,858,418**

Provisional Project Implementation Schedule

Year	2019				2020				2021				2022				2023			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Preparatory Activities																				
Project Appraisal																				
Negotiation of Loans, Grants and Approval																				
Signing of Loan/Grant Agreements and fulfilment of conditions precedent to first disbursement																				
Publication of the General Procurement Notice																				
Completion of the recruitment of key staff and project launching																				
A/ Social Components																				
Procurement, installation and maintenance of PV systems for the electrification of health centres																				
Procurement, installation and maintenance of solar water heaters for health centres																				
Studies on the hydrodynamic properties of boreholes																				
Procurement, installation and maintenance of solar pumps for DWS																				
Procurement and installation of solar irrigation pumping systems																				
Maintenance - social components																				
B/Mini-networks																				
Installation, operation and maintenance of 10 mini-solar power plants																				
C/ Platform																				
Procurement of a PayGo platform																				
Integration/maintenance platform																				
D/ Technical Assistance																				
Recruitment of individual consultants																				
Recruitment of firms																				
E/ Project Coordination and Management																				
Establishment of the financial, administrative and accounting management system																				
Establishment of the baseline situation and implementation of the monitoring/evaluation system																				
Coordination and management, monitoring, evaluation and communication																				
Annual Audit Reports																				
Mid-Term Review																				
Completion Report																				

REPORT AND RECOMMENDATIONS OF BANK GROUP MANAGEMENT TO THE BOARD OF DIRECTORS CONCERNING GRANTS AND LOANS TO THE REPUBLIC OF TOGO TO FINANCE THE PROJECT

SUPPORT THE SOCIAL COMPONENT OF THE CIZO RURAL ELECTRIFICATION PROGRAMME IN TOGO (PRAVOST)

Management hereby submits this report and its recommendation concerning a proposal to award a UA 320,000 grant and extend a UA 360,000 loan from the ADF country allocation, as well as a EUR 9.990 million (UA 8.099 million) grant as co-financing from the European Union AITF to the Government of the Togolese Republic to finance activities under PRAVOST.

1 STRATEGIC THRUST AND RATIONALE

1.1. Project Linkages with Country Strategy and Objectives

1.1.1. Launched in August 2018 by the Togolese Government, the 2018-2022 National Development Plan (PND) has three strategic thrusts: (i) establish a logistics hub of excellence and a first-class business centre in the sub-region; (ii) develop poles of agricultural, manufacturing and extractive industries transformation; (iii) consolidate social development and strengthen inclusion mechanisms.

TOGO'S CIZO RURAL ELECTRIFICATION PROGRAMME

Launched by the GoT in 2018, the CIZO Rural Electrification Programme focuses on off-grid renewable energies, such as small standalone solar systems and mini grids. These solutions often reach rural communities faster and at a lower cost than a central network and are safer and cleaner than such local alternatives as kerosene, candles or torches with disposable batteries. CIZO's objective is to deploy 300,000 standalone solar systems in 5 years starting 2018. In pursuit of this objective, the Bank is committed to supporting the GoT in preparing and structuring the programme and ensuring the successful completion of the crucial pilot phase to attract private companies for large-scale deployment. CIZO is divided into two phases: Phase 1 from 2018 to 2020, which started with a pilot programme in 2018 to confirm the viability of the concept before a first large-scale deployment, followed by the roll-out by 2020, including: (i) 76,000 solar systems for households by several private operators; and (ii) the CIZO social component corresponding to this project (PRAVOST); Phase 2 from 2021 to 2022, which will be the national expansion for the installation of 200,000 solar systems by 2022. Furthermore, the programme is complemented by a solar cheque launched by GoT in March 2019 to help households to access good quality solar products and encourage people to purchase the systems and adopt a new power model.

Box 1: The CIZO rural electrification program

1.1.2. The PRAVOST project, which forms the social component of the CIZO Programme (see the box opposite), contributes to the third thrust of the PND by providing access to sustainable energy services especially for the poorest communities. Furthermore, the project is in line with the objective of the plan under SDG 7: ensure access for all to reliable, sustainable and modern energy services at an affordable cost. To achieve this objective, Togo plans to rely on the private sector and a technological combination including standalone solar kits, mini-solar power plants but also the extension and densification of the conventional grid. Moreover, the Government has set its Nationally Determined Contribution (INDC) to limit the impact of climate change. Therefore, the project will contribute to achieving the INDC's objectives for climate change mitigation and adaptation as well as strengthen the resilience of rural communities, particularly smallholders. Finally, the project creates synergies with the Togo agri-food processing project approved by the Bank in 2018, by allowing small farmers to access bank loans to finance irrigation pumps.

1.1.3. Furthermore, the country prepared and adopted the Togo Electrification Strategy that was launched in June 2018 and designed to provide a model for village electrification with off-grid solutions and intelligent technologies. These solutions will facilitate real-time data collection and

deployment of the pay-as-you-go model. The CIZO Programme ("*cizo*" means "light up" in Mina, a Togolese language), which is one of the pillars of the country's rural electrification strategy, consists of a part that will be implemented by the private sector covering household electrification and a part comprising the social components that will be financed mainly by grants, concessional loans and a contribution from the private sector. PRAVOST represents the public and social component of the CIZO Programme (see the box on the CIZO Programme).

1.1.4. Lastly, PRAVOST is in line with the main objective of the **Bank's Country Strategy Paper 2016-2022**, which is to support the country in improving the living conditions of the people through the development of agropoles and access to energy. In particular, the project aligns with the priorities of CSP Pillar I "Develop inclusive growth poles and agro-industrial competitiveness", including the creation of essential socio-economic infrastructure such as the provision of electricity and drinking water, the construction of main and feeder roads as well as irrigation development. In particular, the solar irrigation pump component and the social components fall under this pillar.

1.2. Rationale for Bank Involvement

1.2.1. **Socio-economically.** Recent developments are marked by the rise in the investment rate, dominated by public capital spending from 12% to 26% of GDP, from 2012 to 2015, to support important energy and road infrastructure. This, with an average growth rate of 5% in the agricultural sector, increased real GDP by 5.5% on average. However, the financing of these investments by nonconcessional debt in the form of pre-financing guaranteed by the State had three major macroeconomic consequences, in particular: (i) first, the debt ratio was raised to more than 80% GDP in 2016, increasing the risk of debt unsustainability; (ii) secondly, on the one hand, the authorities have put in place a macroeconomic program aimed at making a budgetary adjustment (a 40% decrease in capital expenditure in 2017). On the other hand, this program aims to accelerate reforms to widen fiscal space (Togolese revenue office-OTR, implementation of WAEMU directives, investment code, etc.), and lower the rate of indebtedness below 70% of GDP in 2020; and (iii) thirdly, the decline in state capital spending, combined with the negative impact of the mid-2017 political crisis, has slowed real GDP growth to 4.4% in 2017, before it recovered to 4.9% in 2018. In this respect, it has benefited from the slackening of political tensions and the fall-out from the acceleration of economic reforms focused on increasing fiscal space to raise spending on energy, social inclusion and promote energy, agroindustrial, logistic and digital policies and sectors.

1.2.2. Despite well-established reforms, the scope for transforming the economy remains significant. The poverty rate is above 50%, with significant inequalities (Gini index above 0.30). The mismatch between training and available jobs leads to a rate of underemployment and an unemployment rate of graduates above 20%. The low value-added contribution of the manufacturing sector (16% of GDP on average in 2015-2018) reflects the narrowness of the industrial fabric. The public investment process is inefficient, leading to a loss of two-thirds of the potential impact of the investment (PIMA study, IMF 2016). In this context, the possible resurgence of political tensions aside, the two major challenges to transforming the economy concern the increase in fiscal space and the facilitation of bank financing of growth-enhancing sectors. Indeed, the tax burden is capped at 20% of GDP, while it must absolutely increase rapidly to increase the budgets allocated to investments, bridge the infrastructure gap (energy, transport, telecom) and to finance reforms of growth sectors (e.g. strong potentials such as agro-industry), the development of human capital (including capacity building) and social inclusion measures. The rise of the private sector in the financing of the PND, with regard to institutional inertia and delays in structuring projects, will require more time. A strong tax burden should increase spending related to the sustainable improvement of human capital. Additionally, the bank financing of growth sectors must also increase when, in general, it does not exceed 0.5% of loans to the economy in the agro-industrial sector for example.

1.2.3. Despite the political and economic progress noted, Togo remains a fragile state as its average score following the AfDB and World Bank's Country Policy and Institutional Assessment (CPIA) is 3.2 on a scale of 6. Despite the structural reforms that the Government implemented between 2006 and 2015, there has been political tension and demonstrations in the country since August 2017, notwithstanding the intensification of dialogue between the Government and the opposition. Another source of fragility is related to the economy's very high dependence on the phosphates subsector (+40% of export earnings) and revenue from port and airport traffic, as well as regional disparities in terms of socio-economic development.

1.2.4. The power sector in Togo has a low access rate. The sector analysis immediately shows large disparities between access in urban (88.8%) and rural areas (19.5%), with a national average of 48% in 2017. The priority of the Government of Togo (GoT) is to rapidly increase the rural electrification rate, which is still very low despite efforts made. The SCAPE National Development Plan 2013-2017 envisaged an ambitious electrification programme based on extending the interconnected grid. Clearly, the pursuit of these objectives is now unlikely because it is so expensive to extend the interconnected network to most rural areas. Furthermore, Togo has a modest installed domestic power capacity compared to demand. The country produces about 275 MW, supplied by the national power utility (CEET), the bi-national company owned by Togo and Benin (CEB) and the first independent energy producer Contour Global (CG). Thus, as in most West African countries, Togo's production capacity is insufficient to sustainably meet the growing demand estimated at 8% per year. Togo will have to increase its domestic installed capacity by about 149 MW in 2025[1] to meet demand. Despite this growing need, little investment in power generation has been undertaken. As a result, Togo is heavily dependent on power imports from Nigeria, Ghana and Côte d'Ivoire. Imports accounted for about 46% of the energy injected into the CEET network in 2016[2].

1.2.5. Togo has considerable renewable energy potential that is not sufficiently developed. High potential exists for the development of solar (solar radiation is about 4.5 kWh/m2) and wind energy (for example, some of the coastal areas have recorded average wind speeds between 5 and m/s and as high as 6 m/s)[3]. PRAVOST will develop this solar potential and improve access to clean energy for rural public infrastructure, farms and households through mini-grids, and facilitate mobile payment for standalone solar systems.

1.2.6. Moreover, the Bank's intervention is consistently articulated around the New Deal on Energy for Africa aimed at universal access to energy by 2025, including the "connection of 75 million people with off-grid solutions." The project is also in line with the High 5s on "Feed Africa" and "Improve the quality of life for the people of Africa", by targeting energy for farmers who remain the poorest socio-economic group. The social components will contribute to improving the quality of life of rural dwellers and reducing the manual water pumping burden on women and children, and to better healthcare service in the health and maternity centres. It is also in tune with the Bank's Energy Policy and its role as the driving force of the United Nations Sustainable Energy for All (SE4All) initiative in Africa, which focuses on concretising the potential of renewable energy and supports the efforts of Regional Member States to provide modern, reliable and affordable energy services to all their citizens and productive sectors.

1.2.7. The INDC identifies energy and agriculture as priority sectors. More specifically, where reduction of greenhouse gas emissions is concerned, Togo confirms its commitment to contribute

1 http://documents.worldbank.org/curated/en/944651513998136523/pdf/TOGO-PAD-ENERGY-NEW-12012017.pdf

2 Scaling up Small and Medium Hydro in Togo, IFC report 2018, Castalia and Multiconsult

3 https://wedocs.unep.org/bitstream/handle/20.500.11822/20593/Energy_profile_Togo.pdf?sequence=1&isAllowed=y

to the objective of limiting the rise in temperature to 2°C by 2030. The country has already implemented activities to reduce greenhouse gas emissions, particularly in the areas of energy, agriculture and LULUCF (Land Use, Land Use Change and Forestry).

1.3. Aid Coordination

1.3.1 Aid coordination between the government and its partners is based on eleven sector committees as well as ad hoc joint review and co-financing activities. In December 2010, the Government created a mechanism for coordinating, monitoring and evaluating development policies, comprising two coordination bodies: the State-Donor Committee at the central level and the sector committees at the sector level. The creation and operationalisation of the Directorate General for External Aid Mobilisation and Partnership (DGMAP) in 2016 and 2017 was a positive factor for better aid coordination. No specific coordination has yet been established for the energy sector, but with the growing importance of activities and exchanges, projects in the energy sector and renewable energy and climate finance issues, ad hoc dialogue circles are being set up specifically with the Government and some partners such as UNDP, the World Bank and GIZ. Furthermore, the Bank is involved in the dialogue on tax reforms and inclusive finance, as well as economic infrastructure. AfDB is co-leader with Germany in the agricultural sector, given its strong involvement in the implementation of agricultural processing policies (including agropoles). It plays a significant strategic and operational role in the dialogue on important cross-cutting themes such as resource mobilisation (capacity building of the Togolese Revenue Office - OTR) and gender. Coordination of partner/government dialogue at the political, institutional and inter-sector levels should be deepened and strengthened, including coordination of capacity-building operations.

1.3.2 Togo's main TFPs in 2019 include: the West African Development Bank (BOAD) with 11.43% of total ODA; Compassion International (10.54%); the World Bank (9.69%); the European Union (8.75%); the Global Agriculture and Food Security Programme-GAFSP (7.05%); the United Nations System (6.73%); International Fund for Agricultural Development (6.60%); China (5.48%); Arab Funds (5.44%); and Global Fund (4.56%). The AfDB disbursed USD 17.40 million in 2016, or 3.94% of ODA. The ODA breakdown by sector was as follows: infrastructure (29%); social protection and employment (25%); governance (13%); agriculture (13%); health (10%); water, sanitation and environment (6%); and education (3%).

2 PROJECT DESCRIPTION

2.1 Objectives and project components

2.1.1 PRAVOST is a solar electrification project through off-grid solutions. The project's overall objective is to strengthen the community resilience of about 500 rural localities in Togo through access to solar energy. It aims to provide power to remote villages at a lower cost and by using off-grid solar solutions. The specific objectives are as follows: (i) increase the acess rate of community infrastructure in rural off-grid areas to clean energy; (ii) contribute to farmers' resilience by deploying solar irrigation pumps; and (iii) improve energy access for households through innovative smart technologies for standalone solar systems and mini grids.

2.1.2 **Project Components:** PRAVOST aims to achieve its electrification objectives through the use of intelligent technologies in mini-grids and solar pumps. This, combined with the PayGo platform, facilitates real-time monitoring of implementation progress and promotion of digital payment in unserved areas. Compared to similar projects using intelligent technologies for rural electrification, this project integrates with any connection operator (standalone solar system, solar irrigation pumps or mini-grid). Through these intelligent technologies, all data can be aggregated and evaluated on the PayGo platform, enabling a better understanding of the people's energy profile and planning for future grid extensions. The project will enable the Bank to test an electrification model for off-grid solutions that can be extended to other African countries.

SMART TECHNOLOGIES IN MINI-GRIDS

The project pilots access to energy with innovative smart technologies for mini-grids in West Africa. The cloud-based remote payment and measurement system that monitors energy consumption enables users to pay for power through their mobile phones and quickly resolve technical issues through remote monitoring. The smart meter acts as a powerful remote switch and data logger, ensuring payment for energy consumption and blocking energy supply in the event of non-payment. The technology reduces the risk of non-payment, thus improving the commercial viability of the project. Furthermore, the collection of real-time data on new and active connections via the PayGo platform will help the Government to monitor the deployment of mini-network connections and support a results-based funding model for future projects.

Box 2: Smart technologies in mini-grids

In terms of electrification, the anticipated components will cover three aspects of the project:

A/ The Social Component: This component covers both the electrification of public infrastructure and distribution of irrigation pumps through standalone solar systems, including in particular:

A.1 Health centre equipment: The component involves installing solar systems for off-grid outlying healthcare units (USPs). There are currently 314 health centres that are not connected to the conventional power grid. Of these, 223 are non-electrified, 87 are electrified with obsolete photovoltaic systems and four (4) are powered by generators. Two types of systems were designed depending on the USP type: (i) 305 PVS with a solar field power of about 1500 Wp for USP Type 1; (ii) 9 PVS with a solar field power of about 2000 Wp for USP Type 2. The systems consist of solar panels, a battery, converters, a refrigerator, lamps and an intelligent controller to monitor the performance of the installation remotely. Besides off-grid health centres, 122 solar water heaters with a storage capacity of 300 litres will be installed in centres that are already electrified and have access to water.

RESULTS OF THE FEASIBILITY STUDIES

The preparation of the project was facilitated by: (a) the feasibility study about the CIZO program, financed by the African Climate Technology Center (ACTC) during 2017/18, and (b) the 2018 EU feasibility study about mini-grids, and (c) the analysis of Togo's electrification strategy launched in 2018. According to the study, the main sources of electrical energy used in households are rechargeable flashlight (73%) and the domestic solar system (11%). The use of other energy sources is very low. Most of these sources of electricity are used for domestic activities (97.7% of households), economic activities (28.11% of households) and leisure activities (32.06% of households). The average monthly expenditure for electricity granted by households is ≤ 2000 FCFA / month according to 58.6% of households and> 2000 FCFA / month for 41.4% of households surveyed. Outside the Central Region (44.2% of households), more than 50% of households in other regions currently pay ≤ 2,000 FCFA / month for electricity. Indeed, 74.7% of households in Maritime, 60.5% of households in the plateaux, 53.9% of households in Kara and 59.7% of households in Savannah pay a sum greater than or equal to 2 000 FCFA. / Month for electricity.

Box 3: Results of feasibility studies

A.2 The installation of approximately 400 solar photovoltaic systems for rural drinking water supply systems (DWS) to replace existing hand pumps. The water point will be lit, equipped with standpipes, a water purification mechanism to make it drinkable and a device that secures the solar installation against theft. The solar pumping system will be "along the sun's path"; the pumps will be submersible and equipped with a storage tank. The total daily consumption was calculated based on a specific per capita consumption of 20 l and a total population of 250 inhabitants/borehole.

A.3 Lastly, the future deployment of 3000 solar pumping systems for irrigation by developing a reliable distribution model for solar pumps with the support of the private sector and the Ministry of Agriculture. Solar pumps can be surface or submersible units. It should be noted that the financing currently available for this component is UA 680,000 and will procure approximately 600 pumps in the first year[4], given the limit of the ADF-14 allocation for the project. However, if possible, this envelope will be supplemented by other grants from the next ADF replenishment (ADF-15) with a view to reaching a minimum of UA 1 million. The objective of this component is to contribute to poverty reduction in rural areas through ownership of sustainable irrigation resources (technology, financing, management and maintenance) to build the capacity of smallholder vegetable farms in Togo. AfDB financing will enable GoT to set up a revolving financing facility that funds each pump sold by the service provider to a farmer who meets the programme's criteria. The farmer buys the pump using a lease-purchase model. The farmer's payments in pay-as-you-go are credited to an account of the facility and will be used to finance new pumps.

To ensure that farmers reimburse their solar pump loans, the distribution of irrigation pumps will be based on the **Mechanism for Agricultural Finance Incentive based on risk sharing (MIFA) model run by the Ministry of Agriculture**. MIFA is a public limited company dedicated to increasing the banking sector's commitment to the agricultural sector. Launched by GoT in 2018, MIFA draws inspiration from a similar model in Nigeria[5]. It enables farmers to access credit from local banks and microfinancing facilities with lower-than-market interest rates to finance equipment, fertiliser or seed. The structure safeguards the payment of credit to small farmers through contracts between bulk buyers and small farmers. MIFA requires the farmer to register as a vulnerable agricultural producer from mobile phone services. The key advantage of this mechanism is that it provides access to a database of vulnerable farmers targeted by PRAVOST. MIFA will also facilitate the reimbursement of farmers' solar pump loans, thus providing a revolving facility.

B/ Concessions of smart mini-grids: This component aims to electrify approximately 2000 households. It is in line with the country's objective of installing 317 mini-grids by 2030. Togo's mini-grid programme is based on a technical, economic, environmental and social and strategic feasibility study funded by the EU in 2018 as part of the Togolese electrification strategy. The 10 intended mini-grids are solar-powered with battery storage and will be equipped with remote monitoring systems connected to the PayGo platform. The ten localities of the mini-networks will be in the Plateau and Central regions, selected according to the following criteria: (i) population desity above 500 inhabitants; (ii) located more than 5 km from the projected medium voltage (MV) grid and 10 km from the existing MV grid. These beneficiary localities are relatively small (231 households on average per locality and 1357 inhabitants on average per locality) with the average household size estimated at 6.05 individuals per household according to projections in 2018, on the basis of growth rate. The average monthly household income is highly seasonal and depends in particular on agriculture (63.71% of households) and livestock activities (13.59% of households). Monthly household income is estimated at 54,153 FCFA. The highest average monthly income is in the Plateaux (59,024 FCFA) and Kara (59,923 FCFA) regions, but these incomes are lower in the Maritime regions. (FCFA 49,024), Centrale (FCFA 51,165) and Savannas (FCFA 51,628).

[4] The technical characteristics of the pumping systems may vary according to the needs of farmers

[5] Nigeria Incentive – Based Risk Sharing System for Agricultural Lending (NIRSAL)

Development of public-private partnership through the involvement of project developers in mini-grids: The organization scheme used in the application of mini-grid electrification is the one based on regional concessions or local micro-concessions as framework of development of a public / private partnership. One of the main features of this component is the construction, operation and management of mini-grids by private companies selected through a competitive bid. The bidders submit proposals for the construction and management of a mini-power plant and a distribution network. Once the AT2ER approves the proposal, the private operator will seek funding to develop a business plan as part of a public-private partnership. Thus, private companies will obtain a license for a period of 15 years for developing, constructing and operating isolated mini-grids in certain localities in Togo.

The state provides a uniform tariff for mini-grids throughout the country. This tariff is currently 120 F CFA / kWh. According to the first economic analyzes, this tariff is not reached even with 100% of initial investment subsidies. To achieve a profitable investment for operators, the scheme also provides for operating subsidy. Discussions are ongoing to determine the applicable rate.

C/ PayGo platform: The PayGo platform will: (i) promote pay-as-you-go as a means of financing rural communities; (ii) collect data and monitor deployment and operation of solar kits; and (iii) facilitate the management of pay-as-you-go reimbursements made by private operators in Togo.

2.1.3 **At the institutional level**, several measures are planned to ensure sound project management and an adequate regulatory framework, including: (i) building the capacity of the project executing agency (the Togo Rural Electrification and Renewable Energy Agency - AT2ER), established by Decree 2016-064-PR on 11 May 2016 for the successful implementation of the project. The agency will be supported by consultants in project management, procurement, communications, technical studies and audits; (ii) the project will draw on the preparation of the mini-networks programme supported by GIZ and BOAD, the drafting of the Licence Agreement, the preparation of BDs, specifications and the economic simulation of the private sector's contribution; (iii) furthermore, to ensure the deployment of irrigation pumps, the agriculture component will rely on the Mechanism for Agricultural Finance Incentive (MIFA) piloted by that was launched in June 2018 with the main objective of facilitating access to finance for smallholder farmers (see Annex).

The table below summarises the **various** components of PRAVOST, including the indicative costs (net of taxes and customs duty).

Table 1: Project Components

PROJECT COMPONENTS	#	(XOF Millions)	(UA '000)
		Total Costs	Total
A. SOCIAL COMPONENTS		**5,369.98**	**6,637.05**
A.1 HEALTH CENTRE		**2,032.34**	**2,511.89**
Installation of PVS Type 1 - 1650 Wp	305	1,706.20	2,108.78
Installation of PVS Type 2 - 2280 Wp	9	68.89	85.15
Solar PV maintenance	2%	35.50	43.88
Installation of solar water heaters in priority health centres 1000 Wp	122	217.40	268.70
Maintenance of water heating systems	2%	4.35	5.37
A.2 DWS		**2,795.12**	**3,454.65**
Installation of the DWS 1 System - for a daily consumption of 7 m3 and an HMV of 30 - 250 Wp	175	1,091.77	1,349.38
Installation of the DWS 2 System - for a daily consumption of 7 m3 and an HMV of 60 - 500 Wp	175	1,244.46	1,538.10
Installation of the DWS 3 System - for a daily consumption of 7 m3 and an HMV of 90 -- 750 Wp	50	366.90	453.47
DWS Maintenance		40.00	49.44
Studies on the hydrodynamic properties of boreholes		52.00	64.27
A.3 IRRIGATION PUMPS		**542.51**	**670.52**

	Installation of irrigation systems 1,120 Wp	450	284.84	352.05
	Installation of irrigation systems 2,500 Wp	150	257.67	318.47
A.4 Social Component Reserve		**0%**	0.00	0.00
B. MINI-NETWORK			**1,108.217**	**1,369.71**
	Special study, installation and maintenance of mini-grids with smart meters, social promotion, special studies, subscriber connection, 50% subsidy	10	1,108.22	1,369.71
C. PLATFORM			**846.35**	**1,046.052**
	Implementation, integration, installation, training		521.19	644.17
	Maintenance (preferably from the same service provider)		284.86	352.07
	Reserve	5%	40.30	49.81
D. TECHNICAL ASSISTANCE			**450.80**	**557.174**
	Studies, works monitoring and supervision		90.00	111.24
	Institutional support		37.50	46.35
	Capacity building		20.00	24.72
	Missions, meetings		77.42	95.69
	Project management		129.88	160.53
	Technical and financial audit		56.00	69.21
	Contingencies		40.00	49.44
E. ESMP			**151.88**	**187.71**
	Implementation of the ESMP		151.88	187.71
TOTAL BASE COST			**7,927.22**	**9,797.70**
RESERVE			49.13	60.72
TOTAL PROJECT COST (*)			**7,976.35**	**9,858.418**

(*) Project budget including private investment in mini-networks

2.2 Technical Solutions Adopted and Alternatives Explored

2.2.1 The project will develop access to energy for public infrastructure and smallholdings through standalone solar systems and mini-grids. The choice of off-grid solar technologies with storage would offer cheaper and faster electrification compared to grid-connected electrification. Moreover, renewable energy solutions have a positive impact on climate change through reduced CO_2 emissions, increased use of solar energy and limited reliance on kerosene lamps and disposable batteries. Smart technologies will facilitate the collection of real-time data on new and active connections via the PayGo platform. Excluding the mini-grid component, which will be financed by a public-private arrangement, public infrastructure components will be financed from public funds (State grants and contribution).

2.2.2 Furthermore, the Project includes technical assistance for capacity building of the executing agency and detailed technical studies, including those on the hydrodynamic properties of boreholes as part of the "Drinking water supply" component. Moreover, the project will rely on other projects under CIZO and MIFA for its implementation. More specifically, solar academies which have been set up in the CIZO program to train technicians in off-grid solar installations and build the capacity of beneficiary farmers through the MIFA mechanism and prepare mini-grids.

Table 2: Alternatives Explored and Reasons for Rejection

Alternative Explored	Brief Description	Reason for Rejection
On-grid electrification	Construction of medium voltage power lines (33 kV) to connect villages	High costs and operating expenses due to the distance of the localities from the electricity grid
Fully private or fully public financing of mini-grids	The mini-networks are fully financed by private investment or public funds	• In general, fully private financing of mini-grids is not cost-effective. Moreover, subsidies are necessary due to the limited purchasing power of the population. • In contrast, fully public financing would not be feasible since the State does not have the resources to invest sustainably in mini-grids. Therefore, the best model is that of public-private financing.
Fund other social infrastructure such as schools and street lighting	Add other sub-components under the social component	• -The project budget (European Union and ADF) is limited to the amounts mobilised. Health centres and water points are components that have a very significant social impact in rural areas. They are at the centre of village life and their electrification has a demonstration effect on off-grid renewable energies as an alternative grid-connected electrification solution. • - The project could be extended in a second phase to schools and public lighting.
Fund social infrastructure through a public-private model	Consider a model that includes private co-financing	• Public infrastructure (particularly health centres) does not generate regular revenue from beneficiaries, and the population of the targeted areas is made up of people with seasonal agricultural income. Therefore, the revenue is relatively low and fluctuating to attract private investment.

2.3 Project Type

2.3.1 PRAVOST is a public investment project (community infrastructure) that includes public-private investment in both the mini-grid and agriculture components. The public-private investment of the mini-grids is in the form of a BOOT (build, own, operate and transfer) concession over 15 years, with the State participating by providing subsidies and land, and covering the costs of environmental and social measures. Under the agriculture component, the State, through its MIFA mechanism, supports the deployment of irrigation pumps with concessional credit. The project will also build the capacity of AT2ER to ensure its effective implementation.

2.4 Project Cost and Financing Arrangement

2.4.1 The overall project cost, net of taxes and customs duty, is estimated at UA 9. 858 million (XOF 7. 976 billion), of which UA 6.764 million (XOF 5.472 billion) in foreign exchange and UA 3.094 million (XOF 2.504 billion) in local currency. The cost includes provisions for physical contingencies estimated at 2% (calculated for each component), above a total project reserve. A summary of project cost estimates by component and expenditure is presented in the tables below.

Table 3: Summary of Estimated costs by Component

PROJECT COMPONENTS	(XOF million)			(UA '000)			% BC
	Local Currency	Foreign Exchange	Total Cost	Local Currency	Foreign Exchange	Total	
A. SOCIAL COMPONENT			**5,369.98**			**6,637.05**	**67%**
A.1 HEALTH CENTRE	637.60	1,394.74	2,032.34	788.04	1,723.84	2,511.89	25%
A.2 DWS	887.34	1,907.79	2,795.12	1,096.71	2,357.94	3,454.65	35%
A.3 IRRIGATION PUMPS	162.75	379.76	542.51	201.16	469.36	670.52	7%
A.4 Social Component Reserve	0.00	0.00	0.00	0.00	0.00	0.00	0%
B. MINI-NETWORK	**332.46**	**775.75**	**1,108.217**	**410.91**	**958.80**	**1,369.71**	**14%**
C. PLATFORM	**56.97**	**789.38**	**846.35**	**70.41**	**975.64**	**1,046.052**	**11%**
D. TECHNICAL ASSISTANCE	**225.40**	**225.40**	**450.80**	**278.59**	**278.59**	**557.174**	**6%**
E. ESMP			**151.88**			**187.71**	**2%**
TOTAL BASE COST	2,454.40	5,472.82	7,927.22	3,033.53	6,764.17	9,797.70	99%
RESERVE			49.13			60.72	0.62%
TOTAL PROJECT COST	2,454.40	5,472.82	7,976.35	3,033.53	6,764.17	9,858.42	100%

Table 4: Summary of Estimated Costs by Expenditure Category

CATEGORIES DES DEPENSES	(XOF millions)			UA ('000)						
	Local currency	Hard currency	Total	Local currency	Hard currency	Total	FAD loan	FAD grant	EU-AITF	GoT
I. Coûts d'Investissement										
1. WORKS										
Development, installation, operation and maintenance of 10 solar mini-grids	332	776	1,108	411	959	1,370			685	411
Total Concessions	**332**	**776**	**1,108**	**411**	**959**	**1,370**	**0**	**0**	**685**	**411**
2. GOODS										
2.1 Procurement, installation and maintenance of PV systems for the electrification of health centres	543	1,267	1,811	671	1,566	2,238			2,194	44
2.2 Procurement, installation and maintenance of solar water heaters for health centres	67	155	222	82	192	274			269	5
2.3 Procurement, installation and maintenance of solar pumps for DWS	823	1,920	2,743	1,017	2,373	3,390			3,341	49
2.4 Procurement, installation and maintenance of solar pump systems for irrigation	163	380	543	201	469	671	360	311	0	
2.5 Procurement of a PayGo platform	0	806	806	0	996	996			996	0
2.6 Procurement of a 4x4 vehicle	30	0	30	37	0	37			37	0
Total goods	**1,625**	**4,529**	**6,154**	**2,009**	**5,597**	**7,606**	**360**	**311**	**6,837**	**99**
3. SERVICES	**242**	**44**	**437**	**298**	**54**	**540**	**0**	**0**	**339**	**201**
3.1 CONSULTING FIRMS										
3.1. Hydrodynamic properties Studies	52	0	52	64	0	64			64	0
3.2. Recruitment of a firm in charge of TORs, studies, control and supervision of works	90	0	90	111	0	111			93	19
3.3. Recruitment of a firm in charge of accounting and financial and procurement audit of the project	56	0	56	69	0	69			62	7
3.4. Implementation of the ESMP			152	0	0	188			12	175
Total consulting firms	**198**	**0**	**350**	**245**	**0**	**432**			**231**	**201**
3.2. INDIVIDUAL CONSULTANTS										
3.2.1. Recruitment of an individual consultant specialized in procurement			36	0	0	44			44	0
3.2.2. Recruitment of an individual consultant responsible for monitoring and evaluation			36	0	0	44			44	0
3.2.5. Recruitment of an individual consultant in charge of project management training			5	0	0	6			6	0
3.2.6. Recruitment of an individual consultant in charge of training on environmental and social aspects			5	0	0	6			6	0
3.2.7. Recrutement d'un consultant individuel charge de l'elaboration de manuel de procedures			5	0	0	6			6	0
Total individual consultants	**44**	**44**	**87**	**54**	**54**	**108**			**108**	0
4. OPERATING COSTS										
4.1 Operating costs of the PMU including recruitment of a driver, field missions, reception of works, knowledge trips, study tours, TOMPRO configuration etc.	148	0	148	183	0	183			86	96
Total operating costs	**148**	**0**	**148**	**183**	**0**	**183**			**86**	**96**
6. RESERVE	**65**	**65**	**129**	**80**	**80**	**160**		**9**	**153**	10
TOTAL COSTS	**2,264.07**	**5,412.60**	**7,976.35**	**2,798.29**	**6,689.73**	**9,858.42**	**360.00**	**320.00**	**8,099.19**	**817.64**

Table 5: Expenditure Schedule by Component in UA

PROJECT COMPONENT	COST (UA)	PROJECT YEAR					Total (UA)
		2019	2020	2021	2022	2023	
A.1 HEALTH CENTRE		1,758.32	251.19	251.19	251.19	2,511.89	
A.2 DWS		2,418.25	345.46	345.46	345.46	3,454.65	
A.3 IRRIGATION PUMPS		335.26	335.26	0.00	0.00	670.52	
B. MINI-NETWORK		958.80	410.91	0.00	0.00	1,369.71	
C. PLATFORM		578.56	155.83	155.83	155.83	1,046.05	
D. TECHNICAL ASSISTANCE	111.43	111.43	111.43	111.43	111.43	557.17	111.43
ESMP		93.86	93.86			187.71	
RESERVE		60.72	0.00	0.00	0.00	60.72	
TOTAL	**111.43**	**6,315.20**	**1,703.95**	**863.92**	**863.92**	**9,858.42**	**111.43**

2.4.2 Financing Arrangement: The project is jointly financed by the Bank (ADF) and the EU-AITF Fund of the European Union. It will be financed by an ADF loan and grant, and a grant from the European Union's African Investment Trust Fund (EU-AITF) for UA 360,000, UA 320,000 and EUR 9,990 million respectively (UA 8.099 million) and GoT for UA 805,280.. The grant from the European Union fund will cover the health centers, the WDS, 50% of the mini-network costs, the platform, the technical assistance and part of the ESMP. The ADF contribution (grant and loan) will cover only the agricultural component. GoT will participate in: (i) the capacity building of the PMU, (ii) the maintenance of the structures, the operationalization and hosting of the platform, (iii) the securing of the ten mini-networks and the filling of the subsidy gap required to improve the profitability of mini-grids (minimum 30% of costs); (iv) and finally, the implementation of the Environmental and Social Management Plan (ESMP). The private sector will invest in the construction and operation of mini-grids as part of a public-private partnership (concessions).

2.4.3 The AITF approved the co-financing of the project in September 2019. EU grants are governed by the guidelines on the administration and use of grants from the EU-AITF[6]. In this co-financing, the Bank will be the executing entity of the project. Procurement will be in line with the Bank's procurement rules for projects. The Bank's policies and procedures (environmental and social safeguards, monitoring and evaluation, financial management, audit, etc.) apply to the project. The EU grant will be transferred to the Bank in different tranches according to the disbursement plan of the project.

2.4.4 The GoT will mobilize the resources of the project on an annual basis by reserving a budget line according to the project needs presented by the Ministry of Mines and Energies. These needs will be assessed and forwarded to the Ministry of Mines and Energies by AT2ER based on planned activities for each subsequent year.

[6] See "Guidelines for the administration and use of the EU-africa infrastructure trust fund"

Table 6: Project Financing Plan

SOURCE OF FINANCING	Components	(XOF million)			(UA '000)			FE %.	BC %
		Local Currency	Foreign Exchange	Total	Local Currency	Foreign Exchange	Total		
ADF loan	Irrigation pumps	291.27	-	291.27	360.00		360.00		4%
ADF grant	Irrigation pumps	258.91	-	258.91	320.00		320.00		3%
EU-AITF	Health centres; DWS Mini-networks (50%) Technical Assistance PayGo Platform	1,292.42	5,260.56	6,552.98	1,597.38	6,501.82	8,099.193	9,990.00	82%
Government of Togo	Mini-networks (at least 30%) ESMPs Technical Assistance Maintenance	651.55	-	651.55	805.28		805.283		8%
Private investors				221.64			273.941		3%
Total		**2,494.15**	**5,260.56**	**7,976.35**	**3,082.66**	**6,501.82**	**9,858.417**		100%

2.5 Project Area and Beneficiaries

2.5.1 The project will essentially cover all five regions of Togo (Maritime, Plateau, Central, Kara and Savannah). The choice of localities was based on various criteria: regional inclusion, population density, solar system needs, replacement of diesel production and synergies between components such as proximity of the water point to the health centre, for it to have an electrified water station. For specific components such as health centres, the project will cover all unconnected centres. Apart from off-grid health centres, 122 solar water heaters will be installed in centres that are already electrified and have access to water. For water stations, the project will deploy 400 solar systems for drinking water supply in the five regions, which corresponds to part of the estimated 10,000 needs. These solar systems will replace human-powered water pumping systems. The table below shows an estimate of the beneficiary population of the project.

Table 7: Beneficiaries

BENEFICIARY POPULATION OF THE PRAVOST PROJECT				
	Health center	**Mini grid**	**WDS**	**Total**
Maritime region	98,819		20,000	**118,819**
Plateaux region	203,290	9,492	20,000	**232,782**
Centrale region	76,021	940	20,000	**96,961**
Kara region	71,760		20,000	**91,760**
Savanes region	81,601		20,000	**101,601**
Total	**531,491**	**10,432**	**100,000**	**641,923**

For health centers, the number of beneficiaries is equal to the number of people living in the localities. Approximately 250 people were estimated to use each WDS station. This number corresponds to the number of people that the Ministry of Water estimates for the current manual water pumps. For mini-grids, the number corresponds to the number of people living in the locality. It is estimated that the farmers will be part of the localities of the other components (their location is not yet defined) so they have not been added into the table. The same for solar water heaters, the beneficiaries have not been added because they are considered to be beneficiaries of the health centers.

2.5.2 Solar irrigation pumps will also be deployed in the five regions according to the eligibility criteria set out in collaboration with the MIFA. However, the mini-network component will focus on the Plateaux region with the installation of nine (9) mini-networks, and one (1) mini-network in the Central Region. Proximity to localities is a key criterion to reduce the provider's installation and maintenance costs.

2.6 Participatory Approach in Project Identification, Design and Implementation

2.6.1 An inter-ministerial technical steering committee involving stakeholders from the various components was set up to facilitate project design. The different ministries involved in the committee as well as AT2ER and the consultants for feasibility, environmental and social impact studies held consultations with different stakeholders, including regional and local institutions in charge of health, agriculture, mining and energy, water, traditional chieftaincy, and grassroots communities. They helped to ensure that stakeholders participated in preparing the project. These consultations were held throughout the country, particularly in the regional headquarters of Maritimes (Tsévié), Plateaux (Atakpamé), Central (Sokodé), Kara (Kara) and Savanes (Dapaong) regions that might host project operations. In addition, several meetings were held with the TFPs, including the European Union, GIZ, BOAD and AFD. The project also provides for awareness and information campaigns for the various social groups (men, women and youths) throughout its implementation.

2.6.2 The consultation dynamics generated at project preparation will be maintained during its implementation through: (i) the PRAVOST Steering Committee, which brings together representatives of major ministerial stakeholders; (ii) the technical assistance planned to strengthen AT2ER; (iii) the monitoring and evaluation system focusing on project outcomes and impacts; and (iv) joint supervision missions. A special effort will be made during project implementation for the participation of women in all forms of consultations undertaken by the project.

2.7. Consideration of Bank Group Experience and Lessons in Project Design

2.7.1. The Bank's active portfolio in Togo as of September 2019 comprises fifteen (15) projects with a total net commitment of UA 304.8 million. It includes ten (10) national public projects, one (1) national private project and four (4) regional projects. The eleven national projects account for 48.5% of total commitments and the regional projects for 51.5%. This is 84% and 16% of net commitments for public and private sector projects, respectively. The portfolio is young with an average age of approximately four (4) years; and does not contain any problematic or potentially problematic projects.

2.7.2. Lessons learned from the CSP mid-term review (2019) revealed a number of difficulties with the overall portfolio. Difficulties mainly relate to: (i) the mobilisation of counterpart funding; and (ii) the cumbersome administrative processes for disbursement and procurement. Projects approved are closely monitored to accelerate their start-up.

2.7.3. To address these challenges, the following **measures** were considered during the project design: (i) mobilisation of ACTC resources to finance feasibility studies; (ii) mobilisation of European Union resources to finance a large portion of the project (social components, mini-networks, national platform); (iii) establishment of a technical committee since July 2019, comprising focal points from the various ministries; the committee meets regularly with the executing agency to plan and monitor the project; (iv) inclusion of the amount reserved for maintenance, subsidies and environmental and social implementation in the 2020 State budget; (v) a capacity building plan for the executing agency on procurement, financial management, evaluation and monitoring; (vi) support for existing or ongoing mechanisms, analyses and studies to inform project design (MIFA, mini-networks programme, databases and water studies); and (vii) inclusion of the poor (including women) by agreeing on inclusive eligibility criteria with the parties involved.

2.8. Key Performance Indicators

2.8.1. The following are the main performance indicators: Impact indicators: (i) the number of people with access to clean electricity; (ii) the number of people with better health and water services; and (iii) the number of people with better agricultural incomes through better irrigation; Outcome Indicators: (i) Number of localities benefiting from one or more components of the project; (ii) Electricity access rate for households and small farms; (iii) Value of MW of renewable energy generated; Output indicators: (i) number of off-grid electrified health centres; (ii) number of centres with access to hot water; (iii) number of off-grid electrified water supply systems; (iv) number of small electrified farms; (v) number of households with access to power; and (vi) number of households using mobile payment.

3. PROJECT FEASIBILITY

3.1. Economic and Financial Performance

3.1.1. The project aims to provide the following economic benefits: (i) reduce the recurrent cost of electricity, for example the cost related to lighting using a diesel generator in health centres. In general, an investment in renewable energy has few operational costs compared to a diesel generator or other sources (e.g. kerosene); (ii) at the household level, the time spent on studying and income-generating work increases and in financial terms, there is a rise in agricultural activity that leads to a higher income; (iii) improved agricultural production through power-driven pumps; (iv) enhanced community well-being by improving air quality through clean energy, food security, reducing the drudgery of work and access to water for families, particularly women and vulnerable groups, and improving health services; and (v) improving community financial inclusion through the expansion of mobile payment solutions in rural areas.

3.1.2. **Financial analysis:** Financial analysis is not applicable in this context since most components are not subject to a commercial transaction. However, for mini-grids and irrigation pumps, it is useful to study the commercial value of the investment in relation to developers and farmers, respectively. For mini-grids, the minimum amount of subsidy is analysed to obtain commercially viable investment, taking into account the maximum tariff targeted by the State. For irrigation pumps, the analysis is based on the cash flow available after investment, in view of the improvement in income following the use of irrigation pumps.

3.1.3. Therefore, the sensitivity analysis gave the following results: Mini-grids: considering a 15-year operation, a minimum subsidy of 80% on investment costs, a maximum tariff of XOF 120/kWh and an operating subsidy, the investment represents an internal rate of return (IRR) of 11%, which is higher than the opportunity cost of capital (cost of immobilising financial resources for investments under the project) and a payback period of about 3 years. In addition to the estimated monetary benefits, solar mini-grids will also contribute to environmental quality by reducing greenhouse gas emissions;

3.1.4. Solar irrigation pumps: cash flows from two models were analysed: (i) sesame plantation on 1 hectare for 3 years; and (ii) solo papaya plantation on 1 hectare for 24 months. Both models show a positive cash flow in the first year after investment due to increased production and income thanks to better irrigation, which covers the loan costs of the pump (3-year reimbursement period). Based on these outcomes, it can be concluded that Togo's PRAVOST has a profitability profile that financially justifies private investment participation.

3.2. Environmental and Social Impact

3.2.1. In accordance with the requirements of the African Development Bank's (AfDB) Integrated Safeguards System (ISS), **PRAVOST is classified under Category 2**. The project essentially consists of photovoltaic energy electricity. The major impacts noted in the use of this type of energy are the management of batteries and panels at the end of lifecycle. However, the solutions for the management of this waste are known and accessible to the country. Also, according to the country's legislation, environmental measures include the recovery of these batteries by suppliers and the recycling of panels. Therefore, there is no serious risk of irreversible damage to humans and the environment.

3.2.2. The PRAVOST project will take place in all 5 regions of Togo in approximately 500 localities. The beneficiaries are the WDS, the farmers, the health centers and households. Although the localities are known, the specific sites for the implementation of the infrastructures (mini-grids, solar system of the DWS, etc.) are not yet identified and retained by the developer. Consultations are underway at the level of the administration, and later with the developer, to present a list of the sites formally selected for the implementation of the project. Also, in accordance with the national legislation of Togo, an Environmental and Social Management Framework (ESMF); and a Resettlement Policy Framework (RPF) were developed and validated by the National Agency for Environmental Management (national structure in charge of environmental assessments) in July 2019 (The certificate of conformity is being signed) . The ESMF provides that specific ESIA / ESMP will be required for the implementation of project components such as the installation of mini-grids. This requirement should be included in the bidding documents of the companies. Similarly, the RPF provides specific RAPs on the concerned sites.

3.2.3. In accordance with the Bank's environmental and social safeguards policies and procedures, these reports and their summaries were published on the Bank's website on 09 August 2019.

3.2.4. ***Negative impacts***: The main potential negative impacts expected from the programme during the construction and operation phases are mostly: (i) risks of degradation of biological diversity and disruption of immediate receptors due to the release of spaces required for installing solar kits; and (ii) disposal of used batteries associated with solar kits in the wild. To prevent, eliminate and mitigate potential negative impacts or improve potential positive impacts, an Environmental and Social Management Framework (ESMF) with an ESMP has been developed to provide provides for generic environmental and social management measures and guidance on institutional, legal and technical measures, training, awareness raising and social mobilisation, the environmental and social monitoring plan that will allow reforestation or planting of compensatory trees to maintain biodiversity, and ecologically sound management of batteries at end-of-life, among others. Specific ESMPs elaborated under the specific ESIAs of the components will also define very rigorous measures to manage the negative impacts.

3.2.5. **The cost of implementing the environmental and social measures under PRAVOST, including the provision for potential compensation to those affected by the project, is estimated to UA 187,710 (FCFA 151,875,000)** and is fully supported by the contribution of GoT, the bank through the EU-AITF grant contributes only with UA 12,360.

3.2.6. **Environmental and Social Management Framework (ESMF) Plan**

3.2.6.1. To minimise the impact, the following generic environmental and social management measures are recommended: **At the environmental level**: (i) ecologically sound waste management (batteries and solar panels at the end of their useful life) to avoid air, water and soil pollution, compliance with traffic regulations and speed limits in urban areas; (ii) in the specifications of companies, impose battery technologies with a sufficiently long service life, without Li-ion-type acid. For community and mini-grid installations, maintenance-free OPzV gel batteries should be required. Furthermore, it should be proposed that the companies collect these batteries and transport them to recycling centres. PV modules have a lifetime in excess of 20 years and the majority of brands are labelled "PV RECYCLABLE". This implies that the manufacturer is responsible for recycling them. Regulators and inverters made of high-quality electronic components can also find local buyers. **At the social level**: (i) the provision of personnel with appropriate personal protective equipment and raising of awareness on their effective use; (ii) fair compensation for properties affected by sub-projects; (iii) during recruitment, priority to local workers with equal competence, impartiality in service provision; and (iv) compensatory reforestation. The AfDB's contribution to the implementation of the ESMF plan amounts to UA 12,360.

3.2.6.2. **Involuntary resettlement**: The project activities that could lead to the resettlement of populations are mainly the installation work of the solar panels (installation of the 10 mini-solar networks, solar equipment DWS). Its impacts will be the disruption of socio-economic activities in rural areas such as small businesses, fruit trees and plantations, which are currently placed in the sites. The precise estimate of the number of people who will be affected can not be known at this stage of the project especially since the sites were not finalised during the evaluation mission. However, although the scale and potential nature of displacement of people is not yet known in detail, the ESMF estimates potential impacted assets taking into account the nature and scope of the proposed work; individual needs and potential real needs of families. In addition, it is planned that the facilities will be mainly carried out on the public domain of the country or on the lands acquired by the government, in order to reduce or avoid the relocations.

3.2.6.3. The estimate of the actual total costs of resettlement and compensation will be determined in the development of RAPs. An initial estimate has been made to provide provisions for the financing of possible relocations. The overall costs of resettlement include: (i) RAP implementation costs; (ii) the costs of compensation for any agricultural, forestry, habitat loss, etc; (iii) public awareness and consultation costs; and (iv) monitoring / evaluation costs. **In total, the overall cost of resettlement has been estimated to sixty-five million FCFA (FCFA 65,000,000)**. It should be noted that the GoT will fully support the financing of the compensation costs (economic losses, access restrictions, etc.), the costs related to the preparation and implementation of the RAPs, as well as the awareness and monitoring / evaluation.

3.3. Climate Change

3.3.1. Climate change is a major concern in Togo. The erosion affecting unprotected coastal areas as well as their vulnerability to climatic hazards are two factors to be mentioned. The late arrival and irregularity of rains, particularly affects the agricultural sector whose contribution to economic growth fell sharply between 2014 and 2015. The environment is also affected by the scarcity of wood resources and biomass. The reduction in the supply of forest ecological services and forest resources not only leads to land degradation, loss of biodiversity, wood scarcity, but also to the drying up of water points and water courses, the loss of wetlands, etc. Therefore, Togo faces major adaptation challenges in the face of current climate realities and the expected impacts

in the relatively distant future. The project will contribute to the following measures identified in Togo's INDC (September 2015): (i) strengthen energy efficiency and low-carbon technologies; (ii) promote integrated and sustainable water resources management; and (iii) strengthen the resilience of agricultural production systems.

3.3.2. The project provides solutions to the two climate change windows: **Mitigation**: project activities will have an impact on climate change through the reduction of CO_2 emissions, the increased use of solar energy, and less use of kerosene and diesel generators. The specific activities planned under this intervention include building the capacity of communities in clean technologies as a means of contributing to the fight against climate change. For instance, village technicians will be trained in solar energy and, overall, rural areas will have access to clean energy and become familiar with clean technologies and their uses. **Adaptation**: the project will contribute to sustainable agricultural practices and production through the deployment of solar-powered irrigation. It will mitigate the impact of unpredictable rains on agriculture and improve the resilience of farmers to the impacts of climate change.

3.3.3. **The climate change risks** that could directly impact the project are limited: floods, droughts and temperature fluctuations will not affect equipment and the use of solar energy. However, the project presents an indirect financial risk: droughts induced by climate change or other extreme weather conditions affect agricultural production and productivity, which affects household income and their ability to repay the credit on irrigation pumps, or the electricity bill (mini-grids). These risks are mitigated by the provision of solar irrigation pumps to improve the resilience of targeted communities to extreme weather conditions.

3.4. Gender

3.4.1. **The project is classified under Category 2** of the AfDB's Gender Marker System (GMS) since one or more of the project outcomes will help to reduce gender gaps and promote women's economic empowerment. Togolese women are poor in the majority and live in ther rural area. These women have limited opportunities to receive education and access land, hence to fewer bank financing and entrepreneurial opportunities compared to men. Therefore, with an average of 6% electrification in rural areas, women are the most affected by energy precarity.

3.4.2. By specifically focusing on improving the living conditions of rural households, especially women, this project has a great potential to express gender sensitivity. Togo's CIZO Rural Electrification Programme will reduce the double burden suffered by women (domestic and agriculture work) by giving priority to female-headed households during the provision of free solar irrigation kits. Moreover, the project will promote access to water via the use of electricity-powered pumps, thus reducing the water chore most often borne by women. This will give women more time to devote to economic activities and to support their children's schooling, both girls and boys.

3.4.3. PRAVOST will contribute to improving women's health by enhancing access to water, thus reducing diseases through the consumption of clean water. It will also raise the quality of health services for women and children by providing reliable access to electricity in health centres and maternities. Furthermore, the project will promote the financial inclusion of women by expanding mobile money in rural areas and allocating about 100 permanent jobs to women.

3.4.4. With regard to gender mainstreaming, it should be noted that the theme was included at the strategic level when the CSP was designed. The Bank has also embraced the challenges of inclusion by choosing projects that can help reduce gender disparities. In the energy sector, the Bank will subsidise the distribution of improved stoves and multifunctional platforms to alleviate

women's domestic tasks and generate jobs and income for them. In addition, the Bank will set up a specific framework for girls aged 10 to 19 years to delay child marriage and teenage pregnancy. Furthermore, family planning awareness will be systematically integrated into all projects. Contraceptive methods in health centres will also be financed, in partnership with government and civil society organisations working in the gender field (See Annexes).

3.4.5. As regards private sector promotion, the Bank will increase financial flows and non-financial instruments for women via technical support from financial institutions through its Affirmative Finance Action for Women in Africa (AFAWA). In particular, the Bank will help to establish a fund to support women's entrepreneurial, technical and vocational training at the Innov'Up Incubation Centre.

3.5. Fragility-Resilience and Inclusion

3.5.1. The application of the fragility prism to the project is based on the promotion of resilient and inclusive communities, which was the project design entry point, including all activities selected to address the factors of fragility. These activities contribute to partially reduce the socio-economic, environmental and security challenges. Thus, the issue of promoting regional or spatial inclusion, access to public services and markets as well as inclusive and equitable models of growth are addressed by all project activities. Improving the quality of public services provided to the public, access to renewable energy for rural households, health centres and the procurement of solar water pumps will strengthen resilience in around beneficiary communities in each of the country's five regions. As much as possible, distribution in the five regions will aim to achieve equal and inclusive solar installation in the regions. All this will provide a source of community resilience for inclusive regional development and mitigate the risk of a prolonged rural exodus due to the lack of economic opportunity and adequate public services in remote parts of the regions.

4. IMPLEMENTATION

4.1. Implementation Arrangements

4.1.1. **The Togo Rural Electrification and Renewable Energy Agency (Agence Togolaise de l'Electrification Rurale et des Energies Renouvelables)** (AT2ER), which is under the dual supervision of the Ministry of Mines and Energy and the Ministry of Economy and Finance, is responsible for implementing this project. AT2ER was created in 2016 but began to operate effectively at the end of 2017. AT2ER has set up a Project Management Unit (PMU) with AT2ER staff. The PMU currently includes a project manager, a technical officer, an environmentalist, a lawyer, an administrative and financial manager and an accountant. The PMU will be complemented by consultants, recruited on a competitive basis to cover certain technical shortcomings, including procurement and monitoring and evaluation. The staff to be recruited are therefore: a procurement officer, and a monitoring and evaluation officer who will also serve as the co-project manager. The consultants to be recruited to strengthen the PMU will be financed from the project’s resources. The AT2ER director of rural electrification works will supervise the project and support the PMU in the execution of its tasks.

4.1.2. **Technical Committee:** The AT2ER has also set up a technical committee composed of the focal points of the various ministries involved in the project including the Ministry of Agriculture, Animal and Fisheries Production, MIFA, the Ministry of Posts, the Digital Economy and Technological Innovations, the Ministry of Water, Rural Infrastructure and Village Water Supply, the Ministry of Environment, Sustainable Development and Nature Protection, and the Ministry of public health and sanitation, and the Ministry of Economy and Finance. This committee will be consulted by AT2ER during the project, for instance in validating data and terms of reference, identifying the localities selected and supervising the project.

4.1.3. **Steering Committee:** the strategic management of the project will be under the supervision of the CIZO inter-ministerial steering committee, which has already been set up as part of the CIZO Programme. The steering committee is operational. It meets on a monthly basis as part of monitoring the projects: deployment of a granular distribution network and solar academies. It is composed of the AT2ER focal points under the supervision of the Ministry of Mines and Energies, the Ministry of the Post and Digital Economy, the ministry of Technical and Professional Education, the ministry of Economy and Finance. The committee will be extended to the ministries concerned under PRAVOST. Letters were sent to other ministries (agriculture, health and water) for the purpose of designating focal points. An official inter-ministerial decree will be published shortly with the composition of the global steering committee of CIZO.

4.1.4. **Procurement Arrangements**

4.1.4.1. All procurement of goods, works and consultancy services financed by the project will be conducted in compliance with the Procurement Policy for Bank Group Funded Operations ("AfDB Procurement Policy"), October 2015 edition, and with the provisions set out in the financing agreement. Pursuant to this policy and following various assessments conducted, it was agreed that: (a) the procurement of the following goods: (i) procurement, installation and maintenance of 122 solar water heaters for health centres; and (ii) one 4X4 vehicle shall be done in accordance with the provisions of Law No. 2009-013 of 30 June 2009 and Implementing Decree No. 2009-277/PR of 11 November 2009 on the Code of Public Procurement and Public Service Delegation (CMP) ("National System"); (b) all other procurement will be in accordance with the Bank's procurement system ("AfDB System").

4.1.4.2. The use of the National System for at least **3% of the non-operating project amount** will improve efficiency through the following actions, among others: (i) better ownership of the procurement system to be used by the executive agency; (ii) time saving with the absence of a second control (after control by national entities), which the Bank's ex-ante review represents. However, the Bank reserves the right to ask the Borrower to return to the use of the Bank's System: (a) were the legal framework for Togolese public procurement to change to a system not satisfactory to the Bank; (b) were the provisions in place not respected by the executing agency; or (c) were the appropriate risk mitigation measures included in the action plan on risk assessment not respected.

4.1.4.3. ***Procurement Capacity and Risk Assessment (PCRA):*** To reflect the specificities of the programme, the Bank assessed: (i) risks at the national, sector and project level; and (ii) the capacity of the executing agency. The outcomes of these assessments concluded that the procurement risk was "**substantial**" and helped to determine, subject to the application of mitigation measures proposed in paragraph 5.9 of Annex B.5, all procurements to be concluded using the Bank's system and those likely to be implemented, without major risk, using the National System.

4.1.4.4. ***Use of Advance Contracting (AC):*** In view of the procurement timeframes and to limit their impact on project implementation, the Government wished to submit a request to the Bank to use advance contracting (AC) to recruit the consultants that will strengthen the PMU and the study of the hydrodynamic properties of boreholes as part of the project's "Drinking Water Supply" component.

4.1.4.5. **Derogations from the origin rule**: Taking into account the nature of the Bank's resources (EU-AITF, ADF) to be used for financing the project and to facilitate its implementation, **two derogations will be requested** from the Board of Directors for reasons developed in the Technical Annex. These are the following derogations:

(i) The non-application of the Bank's window rule of origin (as provided for in Article 17.1.d Management Principles of the Agreement Establishing the African Development Bank, the so-called rule of origin), similar to that granted by the Board of Directors of the Bank ("the Board") in March 2017 (see Document ADB / BD / WP / 2016/184 / Rev.2 / Add.1), for all acquisitions financed by EU-AITF resources and concluded in accordance with the Togolese procurement system.

(ii) Non-application of the Bank's window rule of origin and opening to all countries (including non-Bank Group members) for all jointly financed ADF and EU-AITF financed procurements in connection with this transaction and to be concluded in accordance with Bank Acquisition Methods and Procedures (MPAB).

4.1.5. **Financial Management and Disbursement Arrangements**

4.1.5.1. The PMU will be responsible for monitoring and supervising project implementation, and shall have enough technical, human and material resources enabling it to set up an effective internal control system and an acceptable financial management system.

4.1.5.2. The assessment of AT2ER's financial management system was undertaken as part of PRAVOST appraisal. The mission noted the following weaknesses: (i) AT2ER's lack of experience in managing Bank-financed projects; (ii) the need to configure the TomPro software to manage PRAVOST; (iii) the poor knowledge of Bank disbursement procedures by project staff; (iv) the absence of the internal audit function; (v) inadequate human and material resources to manage the project; (vi) the need to update the current administrative, financial and accounting procedures manual to reflect the specificities of PRAVOST; (vii) the need to set up a steering committee (SC) charged with providing strategic guidance to the project, and to verify the consistency of project orientations with national strategies and objectives targeted by each project component, by approving the annual work plan and budget (AWPB); and (viii) the non-formalisation of the processes for preparing the AWPB in the administrative and financial procedures manual of the executing agency.

4.1.5.3. A set of mitigation measures will be put in place to reduce fiduciary risk, thus enabling AT2ER to have an effective and efficient financial management system that can guarantee, with reasonable assurance: (i) the use of PRAVOST resources for the intended purposes and in an effective and economical manner; (ii) timely project reporting; (iii) the periodic production of reliable project financial information; and (iv) the security of assets procured under the project. The financial management analysis will be documented in the project evaluation report and technical appendices.

4.1.5.4. These measures can be summarised as follows: (i) finalise the configuration of TomPro software to produce financial statements and financial reports in accordance with Bank recommended procedures; (ii) finalise the establishment of the PMU by recruiting additional staff (procurement specialist, M&E officer who will assume the role of deputy project manager); (iii) train staff on Bank disbursement procedures; (iv) finalise the update of the current administrative, financial and accounting procedures manual to take the specificities of PRAVOST into account, train staff on its use and ensure its wide dissemination; (v) finalise the establishment of the PRAVOST Steering Committee (SC); (vi) formalise the preparation of the annual work plan and budget (AWPB) in the administrative and financial procedures manual; (vii) open a special project account in a commercial bank acceptable to the Bank to facilitate the disbursement procedures.

4.1.5.5. As regards the internal audit function within PRAVOST, since AT2ER does not have an internal audit function, this function must be set up by AT2ER, which will ensure that the

procedures put in place within PRAVOST are properly applied from a financial, administrative and technical point of view. With regard to the internal audit function within PRAVOST, since AT2ER does not have an internal audit function, this function must be set up by AT2ER, which will ensure that the procedures put in place within PRAVOST are properly applied from a financial, administrative and technical point of view. Concerning the external audit, the annual financial statements prepared by the project will be subject to a financial and accounting audit undertaken by an independent accounting firm recruited competitively by AT2ER for a period not exceeding three (3) years, based on terms of reference previously agreed with the Bank. The auditor's fees will be paid from project resources. The audit reports shall be sent to the Bank within six (6) months following the closure of the financial year.

4.1.5.6. **Disbursements**: Bank financing will be mobilised in accordance with the rules and procedures set out in the Bank's Disbursement Manual using three disbursement methods: (i) direct payment (for the procurement of works, goods and services and other relatively high-cost expenditures); (ii) special account (mainly for operating expenses); and (iii) reimbursement, where applicable.

4.2. Project Monitoring/Evaluation

4.2.1. AT2ER will be responsible for all project activities, including procurement, execution of works and studies, financial management and monitoring/evaluation of project impacts. Thanks to the Platform and the smart solar installation meters, the AT2ER will have a dashboard with quantitative indicators on project progress (in terms of connections and electricity consumption) and linked to the execution of the sub-components. Such monitoring will provide the following information at half-yearly intervals for each activity: physical objective, achievement level, expected costs, actual costs, variances and explanations of possible variances. This information will be used to prepare the half-yearly project progress reports. Furthermore, in addition to the Steering Committee's review work, the Bank will field one supervision mission per year, as well as a mid-term review mission. Specifically, the AT2ER environmental and social specialist will monitor the implementation of the environmental and social measures.

4.2.2. **Impact assessment**. Project impact assessment will be carried out through studies conducted in a participatory manner. The first step in this assessment is to study the baseline situation. The objective of this study is to determine the level of the following indicators at Project Year Zero: (i) the number of people with access to clean electricity; (ii) the number of small farms connected; (iii) the number of infrastructure connected to clean energy; (iv) current yields of smallholdings; and (v) average household income. The same study will be conducted at completion on the same sample.

4.3. Governance

4.3.1. According to the 2018 Mo Ibrahim Index of African Governance, Togo ranks 30th out of 54 countries assessed (compared to 26th in 2017 and 33rd in 2016) with a score of 49.1 out of 100. Notwithstanding this relatively average ranking, Togo, with an average change of +5.2 points, is among the top 15 most reformist countries over the past decade, alongside Côte d'Ivoire (+12.7 points), Zimbabwe (+10.8), Morocco (7.3 points) and other countries such as Rwanda and Senegal. In 2016, it was the only country whose overall governance had consistently improved with progress in each of the 14 IIAG subcategories. In terms of perception of corruption, Transparency International's 2019 report ranks Togo 129th out of 180 with a Corruption Perception Index (CPI) of 30 compared to 32 in 2017 and 29 in 2014 on a scale from 0 (high corruption) to 100 (very low corruption).

4.3.2. To support the momentum of ongoing reforms in the country and promote the strengthening of good governance, the Bank has regularly maintained sustained political dialogue with the Togolese authorities, in close collaboration with the IMF and other partners, through reform support and institution building operations. In 2017, the Bank approved UA 9.53 million in budget support to back the Governance and Agribusiness Promotion Support Programme (PAGPA), which focuses on reforms aimed at creating a private and public investment environment conducive to the promotion of agribusiness and improving revenue mobilisation to support investment expenditures. Major strategic and structural reforms have been implemented by the government as part of this reform support operation. These include: (i) the revision and adoption of the Land Code; (ii) the preparation of the National Agropoles Development Strategy; and (iii) the preparation and adoption of the Private Sector Development Strategy. Other major reform measures planned for 2018 are being implemented, namely the development and adoption of the country's national industrialisation policy and strategy and the adoption of decrees on the organisation and operation of national structures in charge of quality, standards and metrology.

4.3.3. PRAVOST will contribute to the improvement of rural electrification governance by operationalising the project and the mini-grid programme, supporting the technical, methodological and material capacity building provided for under the project and the steering structure put in place. Lastly, the activities planned in the five regions of Togo will reinforce the inclusive nature of the project through the participation of local departments (Ministries of Health, Water and Power) and chiefdoms.

4.4. Sustainability

4.4.1. The project is part of a sustainable development approach. Its sustainability is attributable to the fact that most of the activities to be financed have been identified with the collaboration of stakeholders. In addition, the project provides for participatory awareness campaigns. It also provides for in-depth studies on borehole water reserves and various measures to ensure the sustainability of the investment. Specifically, as regards the public components, operators are impelled to ensure service quality and knowledge transfert to local technicians through a service level agreement based on fixed payments provided for in the maintenance agreement between AT2ER and the provider. As for mini-grids, the private sector's share of investment and revenue on the kWh consumed will encourage the developer to guarantee quality service levels.

4.5. Risk Management

4.5.1. The main risks related to PRAVOST's implementation have been identified, their potential impacts analysed, and the mitigation measures specified (see the table below).

Table 8: Risks and mitigations

Risks	**Risk Level**	**Mitigation Measures/Actions**
Risk 1: There is a risk that the amount of subsidy required may not be sufficient to improve the risk/return profiles of mini-grid operators. There is also a risk of low income due to low energy consumption	Moderate	Mitigation: A European Union study that analyses demand and demand management strategies, and the sensitivity analysis of the mini-grid model (BOAD) will help to better estimate the level of subsidy requested. Creation of economies of scale with the 317 mini-networks programme.
Risk 2: Low purchasing power of consumers and non-payment	High	Mitigation 2: Consumers (households and farmers) will be supported by flexible payment plans, especially for farmers, taking into account fluctuations in their income and the seasonal nature of their business.

Risk 3: Lack of private sector interest could limit planned investments in mini-grids	Moderate	Mitigation 3: (i) the EU organised a forum on mini-grids to explore interest and exchange with the private sectors (ii) GIZ and BOAD support GoT in its mini-grid programme with technical assistance (legal, technical, management, PPP, etc.)
Risk 4: Introduction of new technologies	Moderate	Mitigation 4: Providers must plan training and knowledge transfer activities for the operation and maintenance of this new infrastructure
Risk 5: Climate change and extreme weather	Moderate	Mitigation 5: AT2ER must ensure that the long-term impact of climate change is also assessed and factored into the design and sizing of structures.
Risk 6: Maintenance of works	Moderate	Mitigation 6: Maintenance contracts with service providers, training of local technicians on the technologies of works
Risk 7: Delays in project implementation due to inadequate understanding of Bank procedures and poor quality of documents (financial model of mini-networks)	High	Mitigation 7: Provision has been made for substantial institutional support

4.6. Knowledge Building

4.6.1. This project differs from those traditionally financed in Togo by the Bank, especially because of the following innovations: the development of a public-private partnership to finance mini-grids, and the choice of off-grid solutions including smart meters to electrify village infrastructure throughout the country. These innovations will be the subject of a documented monitoring/evaluation to help to tap from lessons drawn by the government, the private sector and the consultation frameworks. These lessons will not only be taken into account by PRAVOST but also valued by the Bank as regional member countries share experiences. At the end of the project, the lessons learned will be consolidated in the completion report.

5. LEGAL FRAMEWORK

LEGAL FRAMEWORK

5.1. Legal instrument

The project will be financed with an ADF loan and grant to be awarded to the Republic of Togo and a grant from EU-AITF resources to be awarded by the AfDB to the Republic of Togo as part of this project.

5.2. Conditions Governing the Bank's intervention

A) Conditions Precedent to Entry into Force

5.2.1. Entry into force of the ADF loan agreement is subject to the Borrower fulfilling the conditions set out in Article 12.01 of the *General Conditions Applicable to the African Development Fund Loan Agreements and Guarantee Agreements (Sovereign Entities)*.

5.2.2. Entry into force of the Memorandum of Understanding of the ADF Grant and the EU-AITF Grant Agreement is subject to the signature of these agreements by the Bank/Fund and the Donee.

B) Conditions Precedent to First Disbursement of the Bank's Resources

5.2.3. In addition to the entry into force of the Loan Agreement, the Grant MoU and the Grant Agreement, the first disbursement of resources, respectively, of the ADF Loan, ADF Grant and EU-AITF Grant is subject to the fulfilment by the Borrower/Donee and to the satisfaction of the Fund/Bank, of the following conditions:

- Provision of evidence of the establishment of the Project Management Unit (PMU) and the appointment of key staff, namely the project manager, an administrative and financial manager, an environmentalist, a procurement specialist and a monitoring and evaluation specialist.
- Provision of an on-lending agreement of the Grant/Loan between the Executing Agency and the Borrower/Donee, satisfactory in form and substance to the Fund/Bank;
- Provision of evidence of the mobilization of the national counterpart.

C) Conditions Precedent to Disbursements Related to Works involving Resettlement

Subject to the fulfilment of the conditions for entry into force and first disbursement, the Fund/Bank shall disburse Loan/Grant resources for works involving resettlement upon the fulfilment by the Borrower/Donee and to the satisfaction of the Fund/Bank, of the following additional conditions:

(a) Submit a work and compensation schedule prepared in accordance with the Relocation Plan and the Fund/Bank Safeguard Policies satisfactory in substance and form to the Fund/Bank. It should include the following: (i) each Project work area; and (ii) the time frame for compensation and/or resettlement of all persons affected by the Project ("PAP") for each area;

(b) Provide satisfactory evidence that all PAPs in the work area have been compensated and/or relocated in accordance with the Environmental and Social Management Plan ("ESMP"), Relocation Plan ("RP") and/or Work Schedule and Compensation, as agreed and the Fund/Bank Safeguard Policies, prior to the commencement of such work and in any event prior to relocating the PAPs and/or taking possession of their lands and/or related assets; or

(c) Instead of paragraph (b) above, provide satisfactory evidence that the resources allocated for the indemnification and/or resettlement of the PAPs have been deposited in a specific account in a bank acceptable to the Fund/Bank or deposited with a trusted third party acceptable to the Fund/Bank, where the Borrower can demonstrate to the satisfaction of the Fund/Bank that the indemnification and/or resettlement of the PAPs, pursuant to paragraph (b) above, could not be completed in whole or in part, for the following reasons:

(i) the identification of PAPs by the Borrower is not feasible or possible;
(ii) there are ongoing disputes involving PAPs and/or affecting the compensation and/or resettlement process; or
(iii) any other reason beyond the Borrower's control, as discussed and agreed with the Fund.

D) Other Conditions

The Donee/Borrower shall, in addition, satisfy the following conditions:

(i) Establish the Project Steering Committee within six (6) months of the entry into force of the Agreement/Memorandum of Understanding;
(ii) Finalize the configuration of TOMPRO, the integrated accounting and financial management software, adopt it and train staff in its use within six months of the entry into force of the Agreement/Memorandum of Understanding;

(iii) Update the AT2ER's Administrative, Accounting and Financial Procedures Manual, train staff in its use, disseminate it widely and implement it within six (6) months of the entry into force of the Agreement/Memorandum of Understanding;
(iv) Prepare a budget over five (5) years for the maintenance of solar systems in water supply systems and health centres
(v) Mobilize resources annually for the maintenance of solar systems in water supply systems and health centres

E) Environmental and Social Safeguards. The Borrower/Donee undertakes to and shall ensure that the Executing Agency, each of its contractors, subcontractors and agents:

(i) implement the Project in accordance with the ESMP, the Fund/Bank Safeguard Policies and applicable national legislation in a manner satisfactory to the Fund, in substance and form;
(ii) prepare and submit reports to the Fund/Bank on the implementation of the ESMP, including identified deficiencies and corrective actions taken;
(iii) refrain from any action that would prevent or hinder the implementation of the ESMP, including any modification, suspension, waiver and/or cancellation of any provision relating thereto, in whole or in part, without the prior written consent of the Fund/Bank; and
(iv) fully cooperate with the Fund/Bank in the event that the implementation of the Project or any change in its scope results in the unexpected displacement and/or resettlement of populations; and undertakes to start work in the area affected by the implementation of the Project solely provided that all PAPs are compensated and/or resettled in accordance with the prepared RP.

5.3. Compliance with Bank Policies

The Project contributes to three of the Bank's High 5s: (i) **"The New Deal on Energy for Africa"** for universal access to energy in 2025, including "Connecting 75 million people with off-grid solutions"; (ii) "Feed Africa" and (iii) "Improve the quality of life for the people of Africa". It is also in line with Bank environmental and social management policies, guidelines and procedures.

6. RECOMMENDATION

6.1.1. Bank management recommends that the Board of Directors:

(i) Approve the proposal to award a **UA 320,000 grant** and extend a **UA 360,000 loan from the ADF country allocation** and a grant from EU-AITF funds of 9.990 million EURO (UA 8.099 million) to the Republic of Togo for the purpose and under the conditions set out in this report.

(ii) that the procurement of goods, works and services that are financed from EU-AITF grant resources and concluded in accordance with the **Togolese procurement system** be open to all countries, including those that are not Bank Member States; and

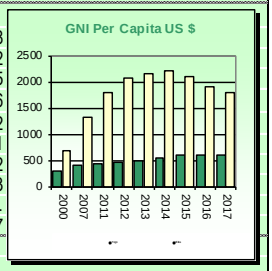
(iii) that acquisitions of goods, works and services that are jointly financed by ADF and EU-AITF resources and concluded under the **Bank's Procurement Methods and Procedures** be open to all countries, including those that are not Member States of the Bank

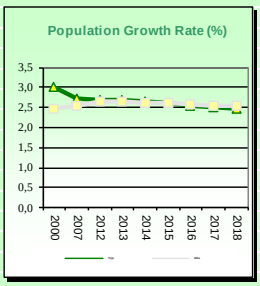
ANNEX 1: Togo: Socio-economic Indicators

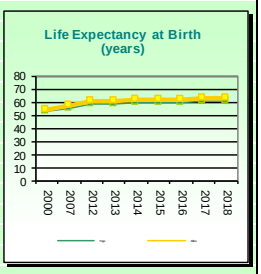
Togo

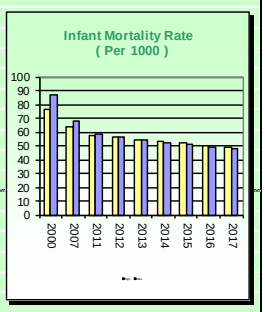
COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Togo	Africa	Develo-ping Countries	Develo-ped Countries
Basic Indicators					
Area ('000 Km²)	2018	57	30 067	92 017	40 008
Total Population (millions)	2018	8,0	1 286,2	6 432,7	1 197,2
Urban Population (% of Total)	2018	41,7	42,5	50,4	81,5
Population Density (per Km²)	2018	145,1	43,8	71,9	31,6
GNI per Capita (US $)	2017	610	1 767	4 456	40 142
Labor Force Participation *- Total (%)	2018	81,0	65,9	62,1	60,1
Labor Force Participation **- Female (%)	2018	80,9	55,5	47,6	52,2
Sex Ratio (per 100 female)	2018	99,4	99,8	102,3	99,3
Human Develop. Index (Rank among 189 countries)	2017	165	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2007-2017	49,2	...	11,9	0,7
Demographic Indicators					
Population Growth Rate - Total (%)	2018	2,5	2,5	1,2	0,5
Population Growth Rate - Urban (%)	2018	3,8	3,6	2,3	0,7
Population < 15 years (%)	2018	41,3	40,6	27,5	16,5
Population 15-24 years (%)	2018	19,3	19,2	16,3	11,7
Population >= 65 years (%)	2018	2,9	3,5	7,2	18,0
Dependency Ratio (%)	2018	79,9	79,2	53,2	52,8
Female Population 15-49 years (% of total population)	2018	24,4	24,1	25,4	22,2
Life Expectancy at Birth - Total (years)	2018	60,7	63,1	67,1	81,3
Life Expectancy at Birth - Female (years)	2018	61,6	64,9	69,2	83,8
Crude Birth Rate (per 1,000)	2018	33,1	33,4	26,4	10,9
Crude Death Rate (per 1,000)	2018	8,5	8,3	7,7	8,8
Infant Mortality Rate (per 1,000)	2017	49,2	47,7	32,0	4,6
Child Mortality Rate (per 1,000)	2017	72,9	68,6	42,8	5,4
Total Fertility Rate (per woman)	2018	4,3	4,4	3,5	1,7
Maternal Mortality Rate (per 100,000)	2015	368,0	444,1	237,0	10,0
Women Using Contraception (%)	2018	22,8	38,3	61,8	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2010-2016	5,3	33,6	117,8	300,8
Nurses and midwives (per 100,000 people)	2010-2016	27,4	123,3	232,6	868,4
Births attended by Trained Health Personnel (%)	2010-2017	44,6	61,7	78,3	99,0
Access to Safe Water (% of Population)	2015	63,1	71,6	89,4	99,5
Access to Sanitation (% of Population)	2015	11,6	39,4	61,5	99,4
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2017	2,1	3,4	1,1	...
Incidence of Tuberculosis (per 100,000)	2016	46,0	221,7	163,0	12,0
Child Immunization Against Tuberculosis (%)	2017	75,0	82,1	84,9	95,8
Child Immunization Against Measles (%)	2017	91,0	74,4	84,0	93,7
Underweight Children (% of children under 5 years)	2010-2016	16,2	17,5	15,0	0,9
Prevalence of stunding	2010-2016	27,5	34,0	24,6	2,5
Prevalence of undernourishment (% of pop.)	2016	16,2	18,5	12,4	2,7
Public Expenditure on Health (as % of GDP)	2014	2,0	2,6	3,0	7,7
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2017	123,0	99,5	102,8	102,6
Primary School - Female	2010-2017	120,1	97,4	102,0	102,5
Secondary School - Total	2010-2017	61,7	51,9	59,5	108,5
Secondary School - Female	2010-2017	51,9	49,5	57,9	108,3
Primary School Female Teaching Staff (% of Total)	2010-2017	16,2	48,7	53,0	81,5
Adult literacy Rate - Total (%)	2010-2017	63,7	65,5	73,1	...
Adult literacy Rate - Male (%)	2010-2017	77,3	77,0	79,1	...
Adult literacy Rate - Female (%)	2010-2017	51,2	62,6	67,2	...
Percentage of GDP Spent on Education	2010-2015	5,1	4,9	4,1	5,2
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2016	48,7	8,0	11,3	10,4
Agricultural Land (as % of land area)	2016	70,2	38,2	37,8	36,5
Forest (As % of Land Area)	2016	3,1	22,0	32,6	27,6
Per Capita CO2 Emissions (metric tons)	2014	0,4	1,1	3,5	11,0









Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports. *last update : Febuary 2019*

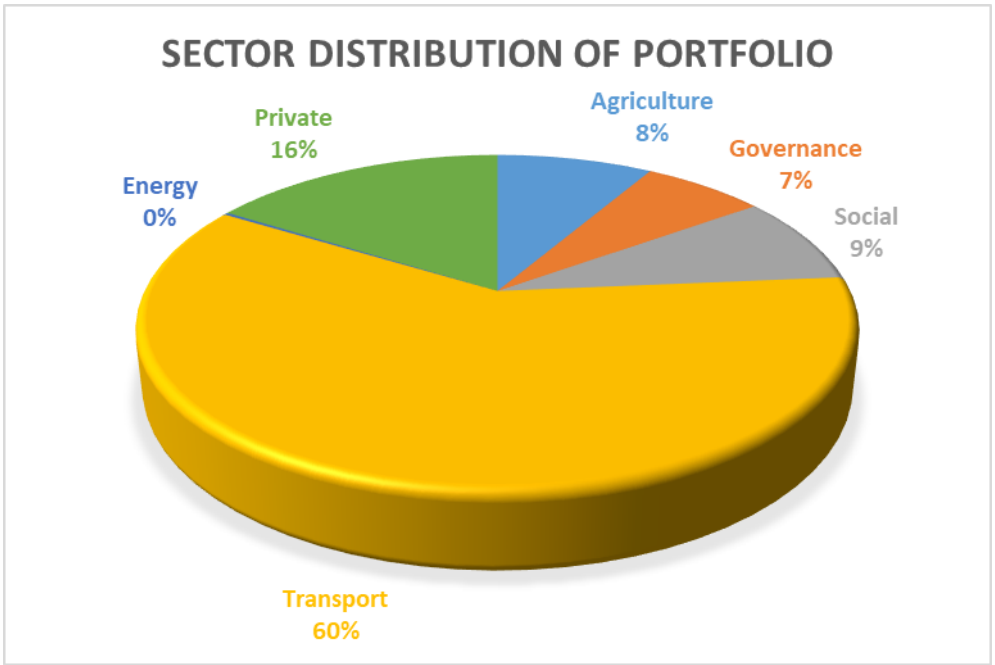
*Note : n.a. : Not Applicable ; ... : Data Not Available. * Labor force participation rate, total (% of total population ages 15+)*

*** Labor force participation rate, female (% of female population ages 15+)*

ANNEX 2: Active Bank Portfolio in Togo

Togo - Total Active Portfolio as at 09 September 2019

Project Title	Status of	Approval Date	Age (in years)	Closing Date	Amount approved in UA	Amount disbursed in UA	Disbursement rate
Agro-Food Processing Projec in Togo - PTA TOGO	OnGo	7/18/2018	**1.23**	12/31/2023	20,995,000	213,067.6	**1.0%**
Agro-Food Processing Projec in Togo - PTA TOGO Additionnal	OnGo	4/15/2019	**0.48**	12/31/2024	4,000,000	0.0	**0.0%**
Emergency aid to fight Spodoptera in Togo	OnGo	1/28/2019	**0.70**	12/31/2019	721,699	721,699	**100.0%**
Total Agriculture Sector					**25,716,699**	**934,766**	**3.6%**
Resource Mobilization and Institutional Capacity Building Support Project (PAMOCI)	OnGo	10/9/2014	**5.00**	12/31/2019	5,000,000	4,286,151	**85.7%**
Tax Governance Support Project (PAGFI)	OnGo	2/17/2016	**3.64**	12/31/2020	15,000,000	7,729,136	**51.5%**
Environmental Information System Improvement Project	OnGo	8/14/2017	**2.15**	12/31/2019	309,851	154,794	**50.0%**
Total Governance Sector					**20,309,851**	**12,170,081**	**59.9%**
Project to Support the Inclusion of Training in Road, Railway and Mining Trades in "Conseil de l'Entente" Member Countries (PAIF)	OnGo	7/20/2018	**1.22**	9/30/2023	6,740,000	134,449	**2.0%**
Kara and Lomé Markets Reconstruction and Traders Support Project (PARMCO)	OnGo	1/22/2014	**5.72**	11/30/2019	3,580,000	2,418,357	**67.6%**
Support Project for Youth Employability and Insertion in Growth Areas	OnGo	10/28/2015	**3.95**	12/31/2020	14,500,000	4,498,404	**31.0%**
Project to Support the Financial Inclusion of Vulnerable Women (PAIFFV)	OnGo	8/22/2016	**3.13**	3/31/2020	1,152,173	544,628	**47.3%**
Total Social Sector					**25,972,173**	**7,595,837**	**29.2%**
Benin/Togo: Project to Rehabilitate the Lome-Cotonou Road and Facilitate Transport on the Abidjan-Lagos Corridor - Phase 1	OnGo	10/5/2011	**8.02**	12/31/2019	77,950,000	65,605,885	**84.2%**
Benin/Togo: Lome-Cotonou Road Rehabilitation and Coastal Projection Project in Togo- Phase 2	OnGo	12/16/2016	**2.81**	12/31/2021	34,691,257	1,063,979	**3.1%**
Togo - Project for Rehabilitation and Transport Facilitation - CU9	OnGo	6/27/2012	**7.29**	12/31/2019	70,503,588	68,911,418	**97.7%**
Total Transport Sector					**183,144,845**	**135,581,283**	**74.0%**
Pilot Phase Rural Electrification Program CIZO	OnGo	8/8/2017	**2.17**	12/31/2020	684,629	99,404	**14.5%**
Total Energy Sector					684,629	99,404	**14.5%**
GENERAL TOTAL Public			**3.39**		**255,828,197**	**156,381,371**	**61.1%**
Container Terminal Private Sector)	OnGo	7/15/2011	**8.24**	12/15/2023	48,995,447	35,280,250	72.0%
GENERAL TOTAL			**4.04**		**304,823,644**	**191,661,621**	**62.9%**



ANNEX 3: Analysis of Togo's Fragility

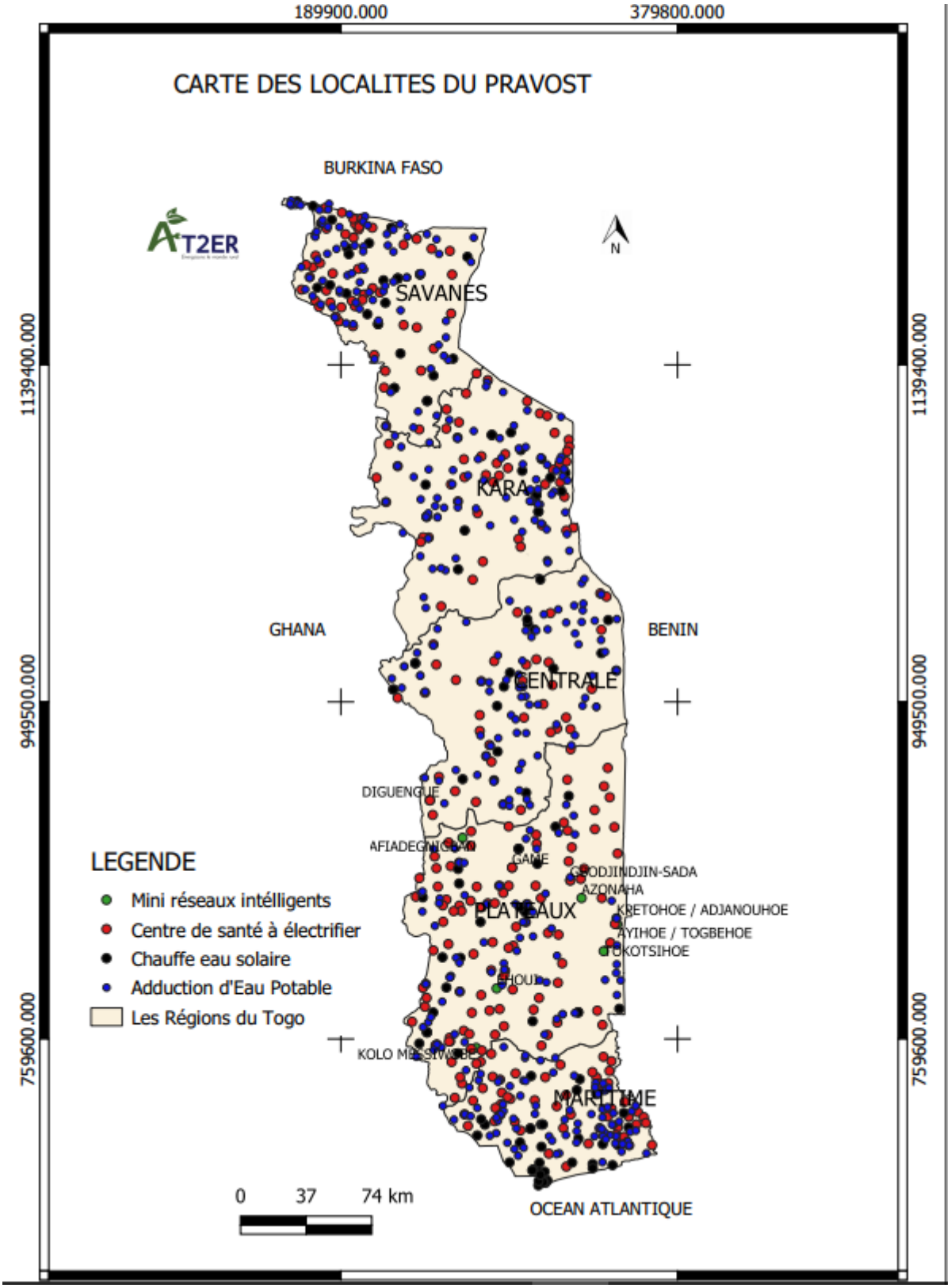
Matrix for Determining Fragility Factors

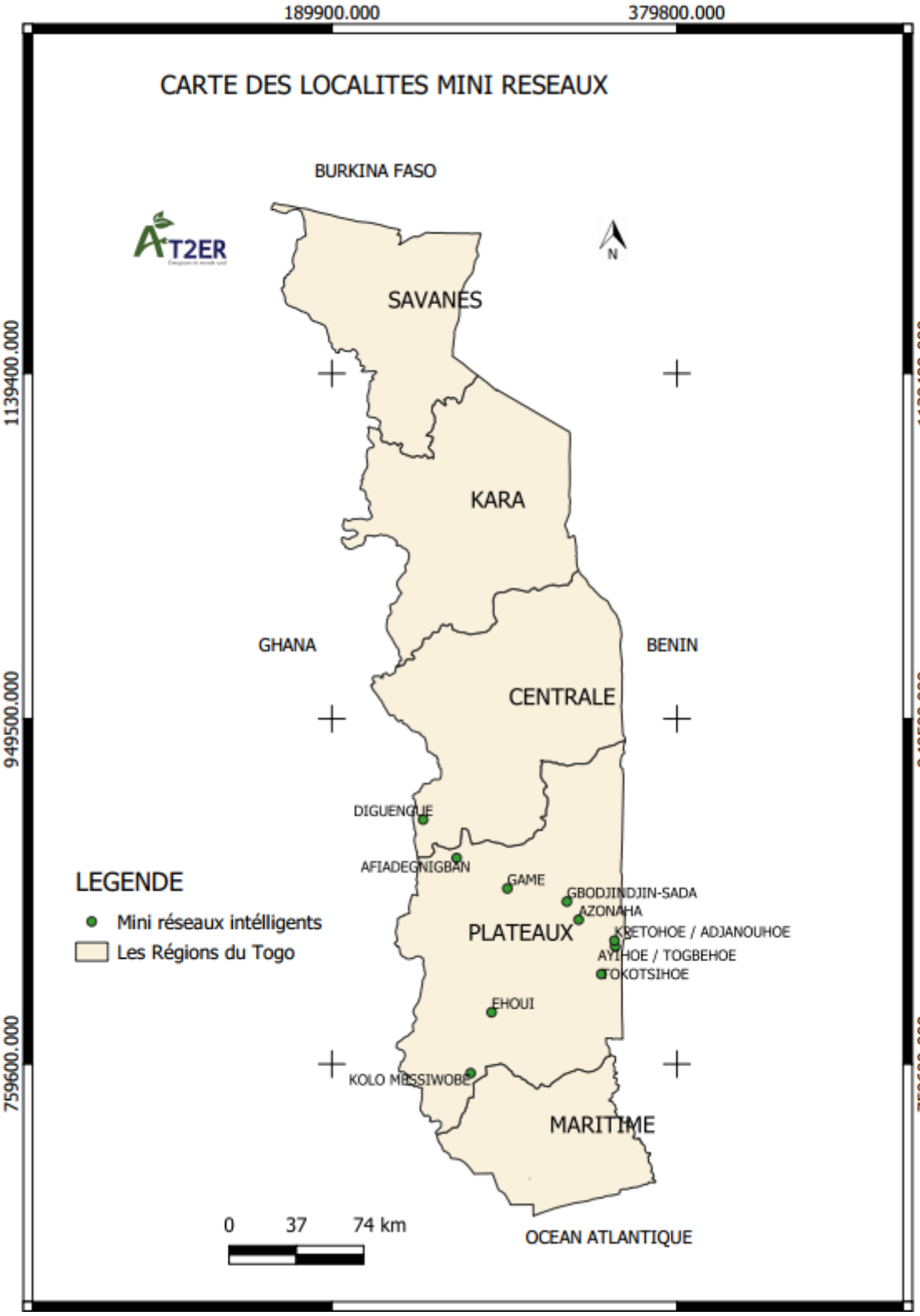
Fragility Factors	Situation, Challenges and Resilience Measures Supported by the General Government Policy with the Backing of Technical and Financial Partners (TFPs)	Measures Supported by the Joint EU and AfDB Intervention under PRAVOST-TOGO (2020-2023)
Inclusive Policy	Togo enjoyed political stability from 1967 until the beginning of the 1990s, before the democratic wind blown over Africa reached the country. This news in the country's landscape was marked by recurring socio-political crises between 1991 and 1993, which resulted in the adoption of a new pluralistic and inclusive constitution. Despite this great advance in the political stability, the alternation desired by the political parties, has faded with the non-limitation of presidential terms. Recent events, such as the campaign "back to the constitution of 1992 as well as the application of its corollaries", highlighted the country's poor capacity for representation and participation across the spectrum of political landscapes, including significant levels of pressure on perceived corruption. The capacity of young people and women to get involved is low, as is the participation of citizens in political discourse. However, since Togo has not been engaged in a decentralisation process for more than three decades, Togo completed its first local elections in June 2019 and is preparing to hold the presidential elections in 2020 to complete the electoral calendar. The organisation of this electoral process has somewhat calmed anti-government demonstrations, thus helping to preserve a generally stable political climate.	Through the implementation of the activities of the social component of PRAVOST, the resilience of communities that it creates will not have a direct impact on political inclusion but will bring a new perspective on the representation of the political system and political participation.
Security	Due to the low incidence of criminal violence and armed conflict, Togo has maintained a high capacity for law enforcement and defence institutions. With military spending acceptable compared to GDP, the strong capacity of security institutions contributes to ensuring stability within the political opposition. Although violence and conflict represent areas of moderate pressure, Togo has maintained a certain degree of public confidence in its security institutions and has always relied on them to ensure a moderately low threat to security, although the terrorist threat is to be reported in the north of the country.	PRAVOST does not contribute directly to the security factor but it provides solutions for food security while mitigating risks that could worsen the security situation.
Justice	Despite the establishment of the Truth, Justice and Reconciliation Commission to deal with allegations of political violence between 1958 and 2005, Togo has a moderate capacity for judicial institutions, partly because of the apparent lack of independence of the judiciary from the executive branch. This increases the significant pressure on impunity of senior officials and access to justice when people in rural communities are excluded from the judicial system due to the non-availability of legal advice and representation, procedural fairness and enforceability of court decisions.	PRAVOST does not contribute directly to the justice system but addresses the issue of social and spatial inclusion, a source of social injustice, taking into account vulnerable groups, particularly women and young people, in the activities to be carried out.
Economic and social inclusion	Togo has experienced periods of stable and moderate economic growth, fuelled by both political stability and policies aimed at effective economic management. With 40% of the population living in the urban districts of large cities such as Lomé, which provides 90% of national resources, income	Various sectors selected under PRAVOST such as rural electrification (households and health centres), irrigation of agriculture with solar

	inequalities are widening. Increased urbanisation is also having an impact on how rural populations access necessary public services. Thus, poverty remains an important area of pressure for Togo, partly because of the lack of economic opportunities and the gap between urban and rural areas, although the youth unemployment rate as a percentage of the total active population has reached a record level of 28.3% of young people without a decent job or regular income.	pumps and the establishment of a digital platform are far-reaching actions that are economically and socially inclusive.
Social cohesion	With a freedom of expression index of 64 out of 100, Togo has a moderately high capacity for the ease of creating associations, without government interference, but the infrastructure capacity needed to facilitate these movements is limited. Despite a low youth unemployment rate and a moderate gender inequality score, group exclusion remains an area of pressure as a result of regional marginalisation due to the centralisation of key activities in Lomé and other parts of the south of the country.	The geographic location of PRAVOST is a first response to the imbalance in the provision of services between urban and rural areas. Through the implementation of all project activities, a number of the planned components will contribute to the establishment of the public easements necessary to ensure the successful socio-economic integration of communities.
External effects / regional ripple effects	Togo's medium-low economic diversification makes it vulnerable to economic shocks. However, this low resilience to external economic shocks is linked to a strong regional integration capacity, which has been strengthened by President Faure Gnassingbe's recent term as ECOWAS President. Togo is also surrounded by stable West African neighbours such as Ghana, Burkina Faso and Benin, which explains the low pressure on cross-border insecurity while government measures are directly aimed at eliminating trafficking and other transnational crimes.	PRAVOST's support has no direct impact on external effects, but various interventions by the Bank and other TFPs are aimed at helping to create an environment conducive to the diversification of the Togolese economy, whose GDP is represented by the agricultural sector (nearly 40%). To mitigate the impact of exogenous shocks, the establishment of agropoles and the professionalization of the agricultural sector offer new opportunities for the private sector, an engine of economic growth.
Climatic / environmental impacts	Togo has a strong capacity for environmental conservation and emergency preparedness through government resources allocated to natural disaster prevention and prevention. Despite the presence of about 45% of arable land for the production of products such as cocoa and coffee, coastal lands are submerged by seawater and exert strong pressure on existing vulnerability, whereas an intermediate pressure zone does not allow access to food and nutrition, which may be due to food price volatility and seasonal water shortages. However, Togo's vulnerability to food insecurity and natural disasters is mitigated by an effective environmental policy aimed at the sustainable use of available resources.	By focusing on renewable energy, which forms the backbone of PRAVOST, the implementation and operationalization of all project activities will use clean energy and the greenhouse effects on the environment and climate change have been taken into account in the project formulation.

ANNEX 4: Maps of the Project Impact Areas

Source AT2ER

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CARTE DES LOCALITES MINI RESEAUX
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BENIN
CENTRALE
DIGUENGUE
AFIADEGNIGBAN
GAME
GBODJINDJIN-SADA
AZONAHA
PLATEAUX
KPETOHOE / ADJANOUHOE
AYIHOE / TOGBEHOE
TOKOTSIHOE
EHOUI
KOLO MESSIWOBE
MARITIME
LEGENDE
Mini réseaux intélligents
Les Régions du Togo
0
37
74 km
OCEAN ATLANTIQUE

ANNEX 5: Irrigation pump deployment model with MIFA support

Launched on June 25, 2018, the Risk-Based Agricultural Finance Incentive Mechanism (MIFA SA) aims to increase local banks' contributions to the agricultural sector by increasing the volume of loans and reducing interest rates. In view of the conclusive results recorded after the six months of the pilot phase, MIFA has changed since February 2019 into a public limited company, with a Board of Directors with a capital of ten billion (10,000,000,000) FCFA held at 49 % by the Togolese State and 51% by the private sector. The main objective of the mechanism is to promote the agricultural sector by structuring agricultural value chains in order to facilitate the access of producers and other actors to financing, with the objective to increase productivity, develop agribusiness and make this sector a real source of national wealth creation.

Some achievements of the MIFA during the pilot phase (June - December 2018):

- ✓ More than 1.1 billion FCFA financed,
- ✓ Decrease in agricultural interest rate from 15% to an average of 8.75%
- ✓ Nearly 200% of affected beneficiaries
- ✓ 83% of beneficiaries subscribed to insurance products
- ✓ 110% of agricultural cooperatives have been formalized
- ✓ 90% of direct and indirect jobs created or consolidated.

An innovative fund for a professional oriented business agriculture, the MIFA is headquartered in Lomé and currently has about thirty employees. Together with World Bank, AfDB, BOAD and IFAD as partners, MIFA also enjoys a pivotal position between farmers, suppliers of goods and services and financial institutions, which the State of Togo thus confers on it for each value chain and for each farmer to propose the appropriate mechanism.

As part of its collaboration with AT2ER, MIFA SA's mission is to:
- identify and communicate to the Agency, the beneficiary producers of the project, structure and organize them;
- facilitate producers' access to factors of production and negotiate financing with the Financial Institutions partners of the Mechanism;
- ensure compliance by the beneficiary producers with the reimbursement mechanisms put in place for the acquisition costs of the solar pumps;
- support the Agency in contracting with the producers and the latter with the various providers selected to maintain the equipment;
- provide any other support to the Agency that falls within the objectives of the Mechanism.

<u>Funding model - description of solar irrigation pump distribution with the support of MIFA</u>

- MIFA selects potential farmers to benefit from solar pumping systems; it supports eligible farmers in developing their business model. If these business models are bankable, MIFA assists potential beneficiary farmers in obtaining a bank loan to buy a solar pump.

- MIFA informs AT2ER about the needs of farmers for solar pumping.

- The AT2ER selects distributors of solar irrigation pumps for agriculture.

- Th solar pump will be fully financed by the project.

- The selected farmers will benefit from the solar irrigation pump.

- The bank's loan obtained by the farmers allows for the repayment of the pump over a certain number of years. Farmers' payments will be collected into a special AT2ER account.

- The collected funds will be used to finance new pumps for other farmers.

- MIFA helps farmers find buyers for their harvest.

- The buyer pays the crop money into the farmers' accounts. The farmer will be able to repay the bank's loan through instalments (payment in six instalments over 3 years in the harvest season).

- New farmer's solar pump applications will follow the same mechanism: MIFA ensures farmers' identification and accompanies the farmer in obtaining a bank loan after developing a bankable business plan. MIFA will also help farmers to secure the sale of their harvest to reduce the risk of loan repayment. Money from farmers' crop sales will be deposited in the AT2ER special account, which will allow to distribute other pumps and so on.

ANNEX 6: Cost estimates of the ESMP

ESMP- Environmental and social measures	Total Amount		Financing source (XOF '000)	
	XOF 000	UA 000	AfDB/AITF	GoT
Preparation and implementation of specific ESIA/ESMP	44,875	55.46	0.00	55.46
Preparation and implementation of (possible) RAPs: compensation, Mini-Grid land purchases, etc.	65,000	80.34	0.00	80.34
Capacity Building Training of all project actors (AT2ER, ANGE, project consultants, companies,) in : - Environmental and Social Assessment, - Development of TOR and content of ESIAs and RAPs, - Selection of Environmental and Social measures, - AfDB Safeguard Policies	5,000	6.18	0.00	6.18
Information and awareness-raising of the population, and local associations	5,000	6.18	0.00	6.18
Environmental and social monitoring	5,000	6.18	0.00	6.18
Environmental and social monitoring	10,000	12.36	12.36	0.00
Mid-term evaluation of environmental and social performance	5,000	6.18	0.00	6.18
Pre-closing audit of ES performance	6,000	7.42	0.00	7.42
contingency	6,000	7.42	0.00	7.42
Total	**151,875**	**187.71**	**12.36**	**175.35**

AFRICAN DEVELOPMENT FUND

BOARD OF DIRECTORS

Resolution N° F/TG/2019/109

Adopted by the Board of Directors on a lapse-of-time basis, on 28 November 2019

Loan to the Republic of Togo to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST)

THE BOARD OF DIRECTORS,

HAVING REGARD TO: (i) Articles 1, 2, 11, 12, 14, 15, 16, 26 and 30 of the Agreement Establishing the African Development Fund (the "Fund" or "ADF"); (ii) the Report on the Fourteenth General Replenishment of the Resources of the Fund ("ADF-14"); (iii) the applicable ADF-14 Country Resource Allocation; and (iv) the appraisal report contained in Document ADB/BD/WP/2019/269/Approval - ADF/BD/WP/2019/182/Approval (the "Appraisal Report");

NOTING the availability of sufficient resources to enable the Fund to commit the amount of the Loan;

DECIDES as follows:

1. To award to the Republic of Togo (the "Borrower"), from the resources of the Fund, a loan of an amount not exceeding the equivalent of Three Hundred and Sixty Thousand Units of Account (UA 360,000) (the "Loan") to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST);

2. To authorize the President to conclude a loan agreement between the Fund and the Borrower (the "Loan Agreement") on the terms and conditions specified in the General Conditions Applicable to the African Development Fund Loan Agreements and Guarantee Agreements (Sovereign Entities), the Appraisal Report and, in particular:

   (i) The ADF-14 Loan Financing Terms applicable to Regular Countries; and

   (ii) The Loan will be amortized in equal and consecutive semi-annual instalments payable on 15 March and 15 September of each year;

3. The President may cancel the Loan if the Loan Agreement is not signed within ninety (90) days from the date of approval of the Loan by this Board; and

4. This Resolution shall become effective on the date above-mentioned.

AFRICAN DEVELOPMENT FUND

BOARD OF DIRECTORS

Resolution N° F/TG/2019/110

Adopted by the Board of Directors on a lapse-of-time basis, on 28 November 2019

Grant to the Republic of Togo to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST)

THE BOARD OF DIRECTORS,

HAVING REGARD to: (i) Articles 1, 2, 11, 12, 14, 15, 16, 26 and 30 of the Agreement Establishing the African Development Fund (the "Fund" or "ADF"); (ii) the Report on the Fourteenth General Replenishment of the Resources of the Fund ("ADF-14"); (iii) the applicable ADF-14 Country Resource Allocation; and (iv) the appraisal report contained in Document ADB/BD/WP/2019/269/Approval - ADF/BD/WP/2019/182/Approval (the "Appraisal Report");

NOTING the availability of sufficient resources to enable the Fund to commit the amount of the Grant;

DECIDES as follows:

1. To award to the Republic of Togo (the "Recipient"), from the resources of the Fund, a grant of an amount not exceeding the equivalent of Three Hundred and Twenty Thousand Units of Account (UA 320,000) (the "Grant") to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST);

2. To authorize the President to conclude a protocol of agreement between the Fund and the Recipient (the "Protocol of Agreement") on the terms and conditions specified in the General Conditions Applicable to Protocols of Agreement for Grants of the African Development Fund and the Appraisal Report;

3. The President may cancel the Grant if the Protocol of Agreement is not signed within ninety (90) days from the date of approval of the Grant by this Board; and

This Resolution shall become effective on the date above-mentioned.

AFRICAN DEVELOPMENT BANK

BOARD OF DIRECTORS

Resolution N° B/TG/2019/98

Adopted by the Board of Directors, on a lapse-of-time basis, on 28 November 2019

Grant to the Republic of Togo to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST)

THE BOARD OF DIRECTORS,

HAVING REGARD to: (i) Articles 1, 2, 10, 12, 13, 17 and 32 of the Agreement Establishing the African Development Bank (the "Bank"); (ii) the Agreement Constituting the Implementation Rules of the EU-Africa Infrastructure Trust Fund (the "EU-AITF Implementation Rules"); (iii) the Memorandum of Understanding (the "MOU") dated 9 February 2006 between the European Commission and the European Investment Bank; and (iv) the appraisal report contained in Document ADB/BD/WP/2019/269/Approval - ADF/BD/WP/2019/182/Approval (the "Appraisal Report");

RECALLING:

(i) That the EU-AITF was established to: (a) contribute to overall development objectives of the fight against poverty, sustainable economic growth, social development, protection of the environment, interconnectivity and regional integration through the provision of financial support by way of grants to finance eligible infrastructure projects in Sub-Saharan Africa; and (b) target funding aimed at making up the regional and continental deficit in infrastructure in Sub-Saharan Africa;

(ii) That pursuant to the EU-AITF Implementation Rules, the Bank is one of the eligible financiers of the EU-AITF;

(iii) Document ADB/BD/WP/2010/113 entitled "The EU-Africa Infrastructure Trust Fund - Extending Procurement Eligibility to certain European Union Member States and Beneficiary Countries of European Union Resources" (the "Proposal"); and

(iv) Resolution N° B/BD/2010/15 adopted by this Board on 20 July 2010, approving the Proposal and deciding inter-alia, that the procurement of goods, works and services using the resources of the EU-AITF shall be open to the: (i) member States of the European Union that are not Member States of the Bank; and (ii) African, Caribbean and Pacific (ACP) States that are not Member States of the Bank but are signatories to the Partnership Agreement with the European Community and its Member States dated 23 June 2000, as amended; and

NOTING that the European Investment Bank, acting in its capacity of Manager of the EU-AITF in a letter dated 29 October 2019 confirmed the approval by the EU-AITF Executive Committee of the provision of a grant of an amount not exceeding Nine Million, Nine Hundred and Ninety Thousand Euros (EUR 9,990,000) out of the resources of the EU-AITF, to the Republic of Togo, to finance part of the costs of the Project to Support the Social Component of Togo's Rural Electrification Programme (PRAVOST) (the "Project");

DECIDES as follows:

1. To award to the Republic of Togo (the "Recipient"), from the approved resources of the EU-AITF, a grant of an amount not exceeding Nine Million, Nine Hundred and Ninety Thousand Euros (EUR 9,990,000) (the "Grant") to finance part of the costs of the Project;

2. That procurement of goods, works and services that are financed by the proceeds of the Grant shall be open to all countries including those that are not Member States of the Bank;

3. To authorize the President to conclude a protocol of agreement between the Bank and the Recipient (the "Protocol of Agreement") on the terms and conditions specified in the Standard Conditions Applicable to Grants made by the African Development Bank and the African Development Fund from the Resources of Various Funds and the Appraisal Report;

4. That the President may cancel the Grant if the Grant Agreement is not signed within one hundred and eighty (180) days from the date of this Resolution; and

5. That this Resolution shall become effective on the date above-mentioned.