BURKINA FASO YELEEN RURAL ELECTRIFICATION PROGRAMME

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

(CGES)

Updated report

September 2023

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Tableau 5: Quantités de batteries usagées provenant du système photovoltaïque devant être recyclées par an

Année	Quantité de batteries usagées (tonne)
2021	4715
2020	9933
2019	9207
2018	2843
Total	**26698**

Source : BGB-Méridien à l'aide des données de la Douane, juin 2019

LIST OF TABLES

GLOSSARY

BUT	Burkinabe Rural Electrification Agency
Aneve	National Environmental Assessment Agency
BAD	African Development Bank
BUNEE	National Environmental Assessment Office
CGES	Environmental and Social Management Framework
CPR	Resettlement Policy Framework
CVD	Village Development Council
THIS	Environmental and Social Impact Statement
DCS	Compliance and Safeguards Division
DSIR	Regional Integration Strategy Paper
DSJ	Department of Legal Services
DSP	Country Strategy Paper
E&S	Environment and Social
EES	Environmental and Social Assessment
EES	Environmental and Social Assessment
OWNE D	Environmental and Social Impact Assessment Social Impact Assessment
ICE HE	Renewable energy Environmental and Social Compliance Note
NCOES	African Sustainable Energy Fund
FAED	Electrification Development Fund
FDE	Heavy fuel oil
FL	Environmental and Social Monitoring Form
FSES	Environmental and Social Screening Form
FSES	Green Climate Fund
FVC	World Bank Group
GBM	Gender-Based Violence
GBV	Greenhouse Gases
GIVEN	Hygiene, Health, Safety and Environment
HSSE	Department in charge of evaluation
IDEV	Integrated Environmental and Social Impact Assessment
IESIA	

YEW	Financial Intermediary
DFI	Development Finance Institution
INDC	Intended Nationally Determined Contributions
IPRR	Implementation Progress and Results Report
IST	Sexually transmitted infections
SISS	Integrated Backup Tracking System
LSC	Broad Community Support
MCES	Environmental and Social Framework Memorandum
MDA	Ministries, Departments and Agencies
BMD	Multilateral Development Bank
ME	Ministry of Energy
MEEA	Ministry of Environment, Water and Sanitation
MEMC	Ministry of Energy, Mines and Quarries
MGC	Complaints Management Mechanism
MINEFP	Ministry of Economy, Finance and Foresight
MIR	Independent Reporting Mechanism
MRMS	Livelihood Restoration Mechanism
MVC	Category Validation Memorandum
ASC	Project Concept Note
NEP	Preliminary Assessment Note
NS	Performance Standards
OSPMF	Private Sector and Microfinance Operations
PANA	National Action Programme on Adaptation to Climate Change
PAP	Person Affected by the Project
PSR	Summary Resettlement Plan
OBP	Program-Based Operation
GCGEP	Environmental and Social Management Framework Plan
PCR	Complete Resettlement Plan
RAP	Project Completion Report
PDPA	Indigenous Peoples Development Plan
PEES	AfDB Environmental and Social Assessment Procedures
PEPP	Stakeholder Engagement Plan
PES	Environmental and Social Significance

EGP	Environmental Management Plan
ESMP	Environmental and Social Management Plan
PGESS	Specific Environmental and Social Management Plan
WOODP ECKER	Public Information Centre
MAGPIE	Independent Producers Electricity
PME	Small and Medium Enterprises
PMR	Regional Member Country
PNA	National Adaptation Plan
RAES	Environmental and Social Completion Report
RAFEES	Final Environmental and Social Assessment Report
RCM	Categorization Request Memorandum
RPC	Physical and Cultural Resources
SE4ALL	Sustainable Energy for All
IFC	International Finance Corporation
SGES	Environmental and Social Management System
SO	Operational backups
SSD	Solar Home System
IFF	Integrated Backup System
Tdr	Terms of Reference
HIV-	Human Immunodeficiency Virus
AIDS	Acquired immunodeficiency syndrome

DEFINITIONS OF TERMS

Environmental and Social Assessment Procedures (ESAP): the Bank's procedures for applying its Operational Safeguards to its operations, defining the steps to be followed by borrowers/clients and Bank staff at different stages of the project cycle.

Environmental and Social Impact Assessment (ESIA): A tool for identifying and assessing the likely environmental and social impacts of a proposed project, determining their magnitude and significance, and defining management or mitigation measures designed to avoid or minimize not to offset or offset negative impacts and risks.

Environmental and Social Management Framework (ESMF): an instrument to be applied in the framework of programmatic loans, which establishes a unified process to assess and manage all environmental and social safeguard issues of sub-projects, from their preparation to their implementation.

Environmental and Social Management Plan (ESMP): an instrument developed following an ESIA of a proposed project that defines the action plan of environmental and social management measures to be implemented by the borrower or client.

Environmental and Social Management System (ESMS): An instrument, developed in the context of an entity (in the context of this CGES, sub-project developers), to apply the requirements of the Bank's safeguard systems to AfDB-financed sub-projects in an appropriate manner taking into account the scale and nature of the entity's operations. It provides a framework for integrating environmental and social risk management into the entity's business processes.

Environmental and Social Screening: An instrument used by Bank staff in the early phases of the project cycle, in accordance with the provisions of the GCES, to determine the environmental and social assessment category of a specific operation.

Financial intermediary (FI): a financial institution, such as a bank, insurance or leasing company or microfinance provider, to which the Bank can provide financing to be lent or invested in sub-projects.

Grievance and Complaint Management (MRP) Mechanisms: A systematic process of receiving, evaluating, and facilitating the resolution of issues, complaints, and grievances related to projects from affected individuals regarding the borrower/client's social and environmental performance on a project.

Integrated Safeguards System (ISS): The Bank's integrated system of environmental and social safeguards , including a Statement of Principles on Integrated Safeguards; a set of

operational safeguards; and a revised set of environmental and social assessment procedures. It also includes an updated set of guidance notes and sector factsheets.

Integrated Backup Monitoring System (IMSIS): The Bank's database system that serves as a repository for key information on compliance with backups related to the progress of the project and makes compliance information publicly available.

Operational safeguards: a set of brief and focused policy statements that clearly define the operational environmental and social requirements with which Bank-financed operations must comply.

Vulnerable groups: Groups belonging to the area of influence of a project and particularly marginalized or disadvantaged, who are therefore more likely than others to suffer the negative effects of a project. Vulnerable status may stem from a group's gender, economic status, ethnicity, religion, cultural behaviour, sexual orientation, language, or physical and psychological conditions**.**

Abbreviated Resettlement Plan (RAP): an abbreviated planning document outlining the procedures for an involuntary resettlement process and the measures to be taken to compensate affected individuals and communities.

NON-TECHNICAL SUMMARY

1. Brief description of the project

Objective of the project

The Yeleen Rural Electrification project aims to develop and validate an innovative rural electrification model through mini-grids that do not require recurring public subsidies and that allow productive use of electricity.

Project Components

The project consists of three (3) components:

- ✓ 1) A review and restructuring of the legal, regulatory and institutional framework for a rural electrification model that promotes sustainable access to rural energy financed by private sector developers.
- ✓ 2) The installation of 100 mini-grids powered by an estimated overall solar photovoltaic capacity of 9.5 MWp to connect 50,000 households in 100 electrified rural localities, including 500 productive connections.
- ✓ 3) The provision of equipment for productive use to support economic activity in the targeted regions. Mini-grid developers, through selected microfinance institutions (FIs) that will provide loans of up to €2.8 million, will provide the equipment for productive use. Recipients of productive use loans will repay the loans through their electricity bills. The productive use component is an essential component to ensure the financial viability of the project. It should trigger a virtuous circle of improved productivity and value added in the rural context, which will help increase the capacity to pay for electricity while improving the socio-economic fundamentals of the target populations. This will ensure the sustainability of the project's positive impacts on the environment and climate change.

Main project activities

The project will include the construction of mini-grids with solar photovoltaic plants and the installation of solar home systems. The Yeleen off-grid project will lead to the installation of 100 mini-grids over a two-year period, powered by an estimated overall solar PV capacity of 9.5 MWp, to connect 50,000 households in 100 electrified rural localities, including 500 productive connections. The outcome will include a functioning legal and regulatory system and competent and empowered institutions to develop the rural electrification model developed in the other provinces of Burkina Faso.

1. Brief description of the major environmental and social issues of the project

The Yeleen project will undoubtedly bring benefits to the populations in terms of availability of the electricity resource essential for the development of socio-economic activities. However, other environmental and social issues will need to be strongly considered:

- the direct economic benefits for the populations of the 12 regions of intervention of the project (jobs, income, opening up, etc.);
- expropriation of portions of land and temporary loss of sources of income;
- partial destruction of vegetation cover and wildlife habitat;
- the risks of disease and nuisance for both workers and populations living near the work sites;
- the risks of soil and surface water pollution;
- the risks of accidents at work.

2. Policy, legal and institutional framework for environmental and social assessments

The policy, legal framework for environmental and social assessments takes into account that of Burkina Faso as well as the ISS requirements of the African Development Bank (AfDB) that are triggered by this project.

National policy framework covers:

- Action Plan for Stabilization and Development (PA-SD)
- the National Economic and Social Development Plan (PNDES II) 2020-2025;
- the Energy Sector Policy 2014 – 2025 adopted in 2013;
- the Energy Strategy 2019-2023;
- the National Action Plan for Renewable Energies (PANER) - Burkina Faso - Period [2015-2020/2030];
- the Energy Sector Policy Letter (EPSA) of September 2016;
- the National Sustainable Development Policy (PNDD);
- the National Environmental Policy (PNE) of 30 March 2007;
- the Sectoral Policy "Environment, Water and Sanitation" 2018-2027 (PS-EEA);
- the National Policy and Scheme for Regional Planning and Sustainable Development;
- Burkina Faso's National Gender Policy (PNG);
- the National Policy for Land Security in Rural Areas (PNSFMR).

Legal framework concerns:

- the Constitution of Burkina Faso of 2 June 1991;
- Law No. 006-2013/AN on the Environmental Code in Burkina Faso of 2 April 2013;
- Law No. 008-2014/AN on the framework law on sustainable development in Burkina Faso of 8 April 2014;
- Law No. 025-2017/AN on plant protection in Burkina Faso of 15 May 2017;
- Law No. 003/2011 /AN of 5 April 2011 on the Forest Code in Burkina Faso;
- Law No. 034-2012/AN on agrarian and land reorganization in Burkina Faso of 2 July 2012;
- Law No. 038-2018/AN on the Investment Code in Burkina Faso;
- Law No. 028-2008/AN of 13 May 2008 on the Labour Code in Burkina Faso;
- Law No. 024-2007/AN of 13 November 2007 on the protection of cultural heritage in Burkina Faso;
- Law No. 014-2017/AN on the general regulation of the energy sector of 20 April 2017;
- Law No. 009-2018/AN on expropriation in the public interest and compensation of persons affected by developments and projects of public utility and general interest in Burkina Faso adopted on 03 May 2018;
- Law No. 23/94/ADP on the Public Health Code;
- Law No. 022-2005/AN on the Public Health Code in Burkina Faso;
- Act No. 034-2002/an of 14 November 2002 on the framework law on pastoralism in Burkina Faso;
- Law No. 061-2015/CNT of 6 September 2015 on the prevention, punishment and reparation of violence against women and girls and the care of victims on violence against women and girls;
- Law No. 015-2014/AN of 13 May 2014 on the protection of children in conflict with the law or at risk.

On the basis of the environmental and social provisions in force at both national and AfDB levels, the project is classified in category 2 (Decree No. 2015-1187/PRES/TRANS/PM/MERH/MATD/MME/MS/MARHASA/MRA/MICA/MHU/MIDT/MCT , on the conditions and procedures for carrying out and validating the strategic environmental assessment (SEA), of the Environmental and Social Impact Statement (ESIA/NIES)). However, according to Decree No. 2015-1187 and SO2, Action and Resettlement Plans (RAP) will have to be developed for Persons Affected by the Project (PAP), object of involuntary physical and/or economic displacement.

AfDB Operational Safeguards (SO)

• **Operational Safeguard 1** : The objective of this overarching SO, and of all the SOs that support it, is to integrate environmental and social considerations – including those related to vulnerability to climate change – into the Bank's operations and thus contribute to sustainable development in the region. This operational safeguard is triggered by the Yeleen program because it is an investment project subject de facto to environmental and social assessment. The program is classified in category 2;

• **Operational Safeguard 2** – Involuntary Resettlement : This SO aims to facilitate the operationalization of the Bank's 2003 Policy on Involuntary Resettlement, as part of the SO 1 implementation conditions and in doing so, to integrate resettlement considerations into the Bank's operations. This operational backup is not triggered provided that the criteria for selecting and installing mini-grid sites indicate the exclusion of those leading to reinstallation;

• **Operational Safeguarding 3** – Biodiversity, renewable resources and ecosystem services: This SO defines the conditions required for borrowers or clients to (i) identify and apply opportunities to preserve, and sustainably use, biodiversity and natural habitats, and (ii) observe, implement, and comply with prescribed conditions for the preservation and sustainable management of priority ecosystem services. This operational safeguard This operational safeguard is not triggered because the project will have a minimal impact on the fauna and flora components and will not affect ecosystem services. Also, the selection criteria exclude sub-projects proposed at SO-3 sensitive sites.

• **Operational Safeguard 4** – Pollution Prevention and Control, Hazardous Materials and Resource Efficiency: This SO outlines the key pollution control and prevention requirements for borrowers or clients to achieve high-quality environmental performance throughout the life cycle of a project. This operational safeguard is triggered by the fact that the project could generate various nuisances and pollution during the works. Also in the operational phase the problem of used batteries will arise.

• **Operational safeguard 5** - Working conditions, health and safety: Work is one of a country's most important resources in the quest for poverty reduction and economic growth. Respect for workers' rights is one of the foundations for developing a strong and productive workforce. This operational safeguard sets out the main conditions that borrowers or customers must meet to protect workers' rights and meet their basic needs. This operational safeguard is triggered by the existence of risks to the health and safety of workers during the execution of work for this type of project.

Institutional framework: the National Agency for Environmental Assessments (ANEVE) (formerly the National Bureau for Environmental Assessments (BUNEE)) will ensure the examination and approval of the environmental classification of sub-projects as well as the approval

of environmental assessments and Environmental and Social Management Plans (ESMP) and will participate in environmental monitoring, particularly with regard to pollution and nuisances, and the improvement of housing and living environment. Indeed, the BUNEE was erected as a Public Establishment of the State (EPE) of an Administrative nature called "National Agency for Environmental Assessments (ANEVE)" by Decree No. 2020- 0632 / PRES / PM / MINEFID / MEEVCC of July 16, 2020.

At the central level, ANEVE will be responsible for the validation of EIES/NIES/PAR reports for environmental monitoring. It will ensure external monitoring at regional and local level of the implementation of the project's environmental measures by relying on the regional directorates in charge of the environment and the branches of ANEVE that will be created in the regions.

3. Generic impacts/risks of the project

The table below shows the impacts by type of project activity:

Activities	Sources of impact	Negative environmental impacts	Negative social impacts
Release and cleaning of right-of-way and diversion routes	Tree felling; Land acquisition; Marking of jobs; Mechanized land preparation work.	Destruction of vegetation cover; Air pollution; Surface and groundwater pollution; Soil pollution due to uncontrolled discharges of solid waste and excavated material	Loss of homes and displacement; Loss of land, crops and trees; Loss of business and revenue sources Allegations of GBV/EAS/HS Disruption of social cohesion (social conflicts related to non-respect of local habits and customs, marking of works, acquisition of land or loss of property, EAS/HS, non-recruitment of local populations especially for unskilled jobs, etc.) Noise Traffic disruption; Traffic accidents; Accidents and incidents at work; Incidents on construction sites for workers and neighbouring populations Disruption of concessionaires' networks (roads, water supply, telephone, etc.)
Installation and commissioning of life bases	Dumping of solid waste and waste oil from machinery Occupation of private or agricultural or pastoral land Poor protection of staff	Water and soil contamination	Disruption of social cohesion (Social conflicts related to the marking of works, the acquisition of land or loss of property, EAS/HS, non-recruitment of local populations especially for unskilled jobs, etc.);

Activities	Sources of impact	Negative environmental impacts	Negative social impacts
	Poor signage of the construction site Site withdrawal		Genes/nuisances due to noise, dust and gases; Traffic disruption Traffic accidents, Accidents and incidents at work Incidents on construction sites for workers and neighbouring populations; VBG/EAS/HS allegations.
Recruitment of site personnel	Presence of a foreign workforce	-	Conflicts with local populations; Acts of vandalism/theft; VBG/EAS/HS allegations; Spread of STI/HIV/AIDS and COVID-19.
Excavations for the construction and restructuring of lines	Machinery traffic; Excavation for material supply; Various excavations on the site; Spillage of fuel and waste oil; Poor signage of the construction site	Air pollution; Contamination of water and soil.	VBG/EAS/HS allegations; Potential destruction of previously undisclosed physical cultural property; Traffic disruption; Traffic accidents; Accidents and incidents at work; Incidents on construction sites for workers and neighbouring populations.

Activities	Sources of impact	Negative environmental impacts	Negative social impacts
Excavations and formatting of the platform, Construction of solar fields	Emission of dust particles; Machinery traffic; Excavation for material supply; Various excavations on the site; Spillage of fuel and used oil.	Air pollution; Contamination of water and soil.	VBG/EAS/HS allegations; Potential destruction of previously undisclosed physical cultural property; Traffic disruption; Traffic accidents; Accidents and incidents at work; Incidents on construction sites for workers and neighbouring populations.
Operation of power lines	Act of vandalism by the population; Poor protection of staff; Misuse of facilities.	-	VBG/EAS/HS allegations; Destruction of facilities and disruption of networks; Accidents, incidents, fire, explosion and electrocution.
Operation of solar power plants	Operation of solar power plants; Waste discharges from photovoltaic power plants; Poor security of the batteries of the photovoltaic system (for energy storage) at the end of their life; Act of vandalism by the population.	Soil and water pollution due to poor management of solid and liquid waste generated	Fire, incidents, explosion and electrocution; VBG/EAS/HS allegations; Destruction of facilities and disruption of energy-dependent activities.

The table below outlines the risks by type of project activity:

Activities	Sources of risk	Risks
Release and cleaning of right-of-way and diversion routes	Tree felling Land acquisition Job markup Mechanized land preparation work	Risks of land conflicts; Risks of exclusion of certain vulnerable groups; Risks to the health and safety of workers and local communities; Risk of deterioration of archaeological remains.
Installation and commissioning of life bases	Mechanized work	Risks of accidents and work incidents; Risk of spreading COVID-19.
Recruitment of site personnel	Presence of a foreign workforce	Risk of increased GBV; Risk of EAS/HS; Risk of social conflicts; Risk of spread of COVID-19 and STIs/AIDS.
Excavations for the construction and restructuring of lines	Emission of dust particles	Risk of air pollution
	Poor signage of the construction site Mechanized work Work at height Employee attendance	Risks of accidents and work incidents; Risk of falls on the same level and during work at height; Risk of deterioration of archaeological remains; Risk of spread of COVID-19 and AIDS STIs; Risk of increased GBV; Risk of EAS/HS.
Excavations and formatting of the platform, Construction of solar fields	Emission of dust particles	Risk of air pollution
	Poor signage of the construction site Mechanized work Work at height Employee attendance	Risks of accidents and work incidents; Risk of falls on the same level and during work at height; Risk of deterioration of archaeological remains; Risk of spread of COVID-19 and AIDS STIs; Risk of increased GBV; Risk of EAS/HS;
Operation of solar power plants and power lines	Operation of equipment; Waste from photovoltaic power plants.	Risk of deterioration of the health, safety and hygiene of workers and the local population; Risk of fire and electrocution; Risk of increased GBV; Risk of EAS/HS; Risk of spreading STIs/AIDS and COVID-19 Risk of deterioration of the situation of vulnerable people; Risk of vandalism of the park and theft of equipment.

Source: CGES SOLEER project, VF, May 2023

4. Environmental and Social Management Framework Plan (GCSP)

Generic environmental and social management measures

Several environmental and social management measures will be implemented. These measures include:

❖ **Regulatory and technical measures**

Regulatory and technical measures are the achievements of environmental and social assessments for YELEEN sub-projects and RAPs for IDPs.

❖ **Implementing measures**

The implementing measures are as follows:

- make judicious, participatory and motivated choices of sites;
- develop RAPs in cases of involuntary displacement;
- conduct a communication and awareness-raising campaign before the works;
- ensure respect for the habits and customs of the localities concerned (when they are not harmful to the communities);
- ensure compliance with hygiene and safety measures for construction site installations;
- Ensure the signing of a code of conduct, including the prohibition and sanctions related to EAS/HS, for all employees and contractors involved in the project;
- carry out adequate signage of the works;
- give priority to using local labour;
- ensure compliance with health and safety rules during the work;
- ensure the collection and disposal of waste from the works;
- include in the sub-projects accompanying measures for PAPs, especially for the most vulnerable;
- conducting awareness campaigns on prevention and response to SEA/HS, STI/HIV/AIDS and COVID-19;
- closely involve municipal services in monitoring the implementation of sub-projects;
- strengthen the capacity of municipalities and institutional actors in the management and maintenance of SOLEER project infrastructure.

❖ **Action items**

- environmental monitoring and monitoring of the Yeleen project by the teams of the work control missions, the local commissions of the communes, the DREEA, the ANEVE, the PMU of the Yeleen project, the SSES of ABER,
- evaluation of the ESMP (internal, mid-term and final) by the Yeleen project PMU, the SSES of the coordination unit and ANEVE, the SSES of ABER;
- monitoring of EAS/HS risk prevention and mitigation measures.

Environmental and social management procedures for sub-projects

The CGSP provides major guidelines for environmental and social management to mitigate and/or enhance the impacts of the Yeleen sub-projects. These guidelines include the screening system, the realization of ESIA/NIES, capacity building for the implementation of the CGES, the periodic

reporting of the implementation of the CGES and finally the periodic monitoring of the implementation of environmental and social measures.

Specific capacity-building

Capacity-building activities are of several kinds.

For behaviour change communication:

- Communication and awareness-raising campaigns for the population, Councillors and Municipal Agents, Agents of the Departmental Service in charge of the Environment, (SDE), Village Development Committee (CVD) before and during the works (EAS/HS, IST/HIV-AIDS, Covid-19, environmental and social issues of the project).

With regard to the implementing entities of the sub-projects, the following capacity-building actions will be undertaken:

- recruitment of two experts, one of whom is in social protection and one gender, for the benefit of ABER;
- updating knowledge on the AfDB's environmental and social safeguard systems for the benefit of 02 ABER environment officers;
- Training of the three (03) Environment, Social & Gender experts on the operational tools for the implementation and monitoring of ESPs and RAPs of the AfDB (provision of Documentation on the resettlement process, Procedure and tools for collecting and processing complaints / keeping of registers and complaint forms, Preparation and monitoring of the implementation of ESPs and Affected Persons);
- upgrading the knowledge of all key project stakeholders on AfDB approaches and procedures, including the application of environmental and social provisions;
- training of members of complaints management committees (village, communal, provincial) on the management mechanism related to the project;
- IEC action of the actors involved in the implementation of the project;
- provision of IT equipment for the proper functioning of the project management unit;
- logistical support (01 vehicle) for the conduct of periodic monitoring activities of the Yeleen project by ABER.

Environmental and social complaints and conflicts management mechanism

The modus operandi of the Complaints Management Mechanism consists of seven (7) steps which are: (i) receipt and registration of the complaint; (ii) acknowledgement, evaluation and assignment; (iii) proposing a response and developing a draft response; (iv) communicating the proposed response to the complainant and seeking agreement; (v) the implementation of the response to the complaint; (vi) review of the response in case of failure; (vii) referral of the claim to another jurisdiction.

Recourse to justice is possible in case of failure of the amicable way. But, it is often a path that is not recommended for the project because it can constitute a way of blocking and delaying the planned progress of activities. However, the complainant will freely choose the option that suits him best.

This complaint management mechanism will be adapted to deal with SEA/HS complaints, which should never be resolved amicably, and should be based on a survivor-centred approach.

Key indicators for the implementation of the CGES

The main indicators for the implementation of environmental and social management measures are:

- the number of NIES completed and implemented;

- the rate of implementation of the ESMP (based on environmental monitoring and monitoring indicators);
- the number of participants in awareness campaigns on STI/HIV-AIDS and the behaviours to adopt in the face of security challenges;
- the number of people trained on monitoring the implementation of ESMP sub-projects of the SOLEER project;
- the number of periodic monitoring reports produced.

Institutional arrangements for the implementation of the CGES

The implementation of the CGES will involve several actors including the Ministry of the Environment, Water and Sanitation (MEEA), the Regions, the Municipalities, the decentralized services of the State, companies, consultants, NGOs and the population.

All these actors are not always at the same level of impregnation and appreciation of the environmental and social issues, opportunities and challenges related to the environmental and social management of projects and do not always have the required capacities to comply with the different national and international regulations on environmental and social management.

- **The Ministry of Energy, Mines and Quarries**

  This ministry is responsible for the technical supervision of the SOLEER project. The structures of this ministry that will be involved in this project are:

  - Project Coordination Unit (PCU)

  This unit coordinates the project and reports on the environmental, social, health and safety management of the project to the MEEA and the AfDB. It has experts in charge of environmental, social and gender issues to ensure that environmental, social, health and safety and gender aspects are effectively taken into account in the project's components. It also provides environmental, social, gender, health and safety monitoring and advisory support for the conduct of environmental assessments. It is responsible for periodically reviewing and approving the reports on the implementation of environmental and social measures prepared by the implementing entity and transmitting to the attention of the bank.

However, it is important to note that the other experts on the team (Finance, Contracts, Monitoring and Evaluation, Technicians) do not necessarily have expertise in environmental and social assessment and health and safety. The acquisition of such knowledge could contribute to improved performance in the implementation of the project's CGES.

The implementing entity of the Yeleen project

ABER as executing agency, ensures the implementation of ESMP and RAPs through the Project Management Unit set up. It is responsible for periodically preparing reports on the implementation of environmental and social measures for the attention of the UCP.

- **Ministry of Environment, Water and Sanitation**

This ministry includes five main structures in charge of environmental issues and natural resource management on the one hand and the ESIA/NIES procedure on the other hand: the Directorate General for Environmental Preservation (DGPE), the Directorate General for Water and Forests (DGEF), the Directorate General for Economy and Climate Change (DGEVCC), the Directorate for Institutional Development and Legal Affairs (DDIAJ), ANEVE (formerly BUNEE), 13 regional

directorates and 45 provincial directorates. All these directorates have skills through the engineers and technicians who are in charge of issues of management of natural resources and the living environment of the districts to which they belong.

- ***ANEVE***

To ensure the supervision of environmental and social safeguards activities, ANEVE has drawn up a general guide for carrying out environmental and social impact studies and notices. This guide is supplemented by sectoral guides to promote the environmental procedure.

As part of the Yeleen project, ANEVE ensures the examination and approval of the environmental classification of sub-projects as well as the approval of environmental and social assessments and ESMPs and participates in external monitoring, particularly with regard to pollution and nuisances, and the improvement of housing and living environment.

At the central level, it will be responsible for the validation of ESIA/NIES reports and environmental monitoring.

Regional Directorates in charge of the environment

ANEVE does not yet have decentralized structures, which limits its effective operationality in terms of proximity in the conduct and especially the monitoring of the implementation of environmental and social assessments.

To this end, some of these activities are often entrusted to the regional environmental directorates, which have the same powers as ANEVE. These regional environmental directorates are involved in the environmental approval of projects, monitoring and monitoring of projects.

- **Local authorities and CVD**

The municipalities will have to be closely involved in monitoring the implementation of the sub-projects.

In addition, they will participate in the identification of PAPs and intervene in the complaints management mechanism.

While some of these municipalities and CVDs have had experience of these activities in the context of previous similar projects, others will be their first experience with the Yeleen project. It is also worth mentioning the context of team renewal at the community level over the past two years 2021. It is therefore necessary to train local authority actors and the CVDs concerned on environmental and social management, particularly in filling out the selection forms for microprojects. In addition, local authorities as well as VDCs will be involved in the identification of PAPs and the registration of complaints.

- **The execution companies and the consulting engineer**

At the contractual level, companies awarded works contracts are required to have an expert in charge of environmental and social issues within their staff. All mitigation measures as well as environmental and social clauses must be implemented under its responsibility with the periodic production of reports on the implementation of these measures.

A "consulting engineer" office is also recruited by the client to ensure the supervision on his own of the work carried out by the company. He must have an environmentalist within his team who

reports to the owner on the application of mitigation measures through the consolidation of reports prepared by the company

Budget for the implementation of CGES measures

The total budget for the implementation of the GCGP is estimated at one billion, forty-eight million nine hundred and fifty thousand (931,347,459) FCFA or 1,552,245,765 $US (US$ 1 = 600 FCFA) distributed as follows:

Estimated budget for environmental and social management

No.	Topics	Unit	Qty	Cost ($)
I.	**Security of works, equipment and infrastructure**			**80 000**
II.	**Capacity Building of Aber**			**420 000**
1.1	Updating ES&G specialists' knowledge of AfDB operational safeguard procedures	Trained person	03	15 000
1.2	Training of three (03) specialists on the monitoring of ESMs and environmental and social audits	Trained person	03	15 000
1.3	Upgrading the knowledge of all key project stakeholders (UCP Project Teams, Ministry of Energy and ABER) on the application of AfDB environmental and social provisions	Trained person	20	5 000
1.4	Training of the HSES of the PMU, MEMC, ABER and ANEVE on 1-Common ownership of the measures of the CGES and the provisions of the CPRP 2-Documentation of the resettlement process 3-Preparation and monitoring of the implementation of EMPs and RAPs			
1.5	Logistical support (01 vehicle) for the conduct of periodic monitoring activities of project activities by ABER	Vehicle	01	50 000
1.6	Mid-term evaluation of E&S performance	Package/locality		70 000
1.7	Pre-closing audit of E&S performance	Package/locality		35 000
1.8	Compensatory reforestation	Package/locality	100	230 000
II.	**Capacity building for ANEVE**			**100 000**
2.1	Upgrading of staff knowledge on the application of environmental and social provisions, in particular the requirements of the AfDB ISS	Trained person	20	40 000
2.2	Validation of operational instruments	Package/locality	100	60 000

No.	Topics	Unit	Qty	Cost ($)
	External monitoring and surveillance			
III.	**Training and support for mini-grid developers for the development and implementation of the ESMS**			**150 000**
3.1	Training of mini-grid developers on the preparation of ESMS	Trained person	10	25 000
3.2	Preparation of Environmental and Social Safeguards Instruments (NIES/RAP)	Package/locality	100	125 000
IV.	**Cost of implementation (NIES/RAP) and monitoring**			**230 000**
In.	**Community Engagement and Awareness Campaigns**			**200 000**
5.1	Regional and/or communal training/awareness-raising workshops for stakeholders on the implementation of the ESGP, RAP and environmental and social monitoring	Trained person	100	90 000
5.2	Training of CVDs on the procedure and tools for collecting and processing complaints / keeping registers and complaint forms and Support for the implementation of PRCs	Trained person	100	50 000
5.3	Training of women in income-generating activities (poultry farming, management of cereal mills, etc.)	Trained person	100	60 000
	Total			**1 190 000**
	Unforeseen (10%)			119 000
	TOTAL CGES			**1 309 000**

Source: CGES YELEEN, updated 2023

5. Public consultations and participation

The overall objective of the public consultations under this CGES is to involve the population in the final decision-making on the project. The specific objectives pursued by such an approach are to:

- provide interested parties with fair and relevant information on the project, including its objective, the description and its negative and positive impacts and the related mitigation measures;
- invite stakeholders to give their opinions and suggestions on proposed solutions and establish a dialogue;
- lay the foundations for a concerted and sustainable implementation of the sub-projects and actions provided for by the project.

The stakeholder groups that participated in the public consultations were: local authorities (High Commissioners, presidents of special delegations, secretaries general of municipalities, mayors), decentralized technical services (SONABEL, Agriculture, Livestock, Environment, Water and Sanitation, Economy and Planning, Health, Social Action, etc.), Civil Society Organizations (0SC), members of the CVD, the umbrella of the cooperative electricity companies of Burkina (FESCOOPEL-B), the customary authorities and the local populations.

For this year 2023, the consultations concerned one hundred and six (106) people, including eleven (11) women, in nine (09) regions out of the twelve covered by the project in addition to the stakeholders consulted in 2018.

During each of the meetings organized, the objectives and activities of the project, in terms of economic, social, cultural and environmental issues were presented and discussed with the actors concerned including the beneficiary populations and those affected by previous activities.

In order to ensure the success of the project activities, the following actions resulting from the stakeholder consultations were selected:

- the involvement of the State's decentralized technical services at all stages of the sub-projects;
- capacity building of technical services in logistics and environmental and social management;
- the involvement of beneficiaries at all stages of the project;
- the establishment of transparent project monitoring and management procedures;
- the recruitment of local labour and the promotion of local companies in the execution of the works;
- appropriate compensation for persons who will be displaced as a result of the implementation of the project in accordance with the CPRP.

This CGES is complemented by the CPRP, as well as subsequent specific studies (EIES, NIES, PAR) that will be developed to ensure the project's compliance with national regulations and AfDB operational safeguards.

CHAPTER I: INTRODUCTION

1.1 Background and Rationale

Burkina Faso is a landlocked Sahelian country, located in West Africa and characterized by a high proportion of the population living in rural areas (77.3%). More than 80% of this rural population depends on subsistence farming involving small farms. The agricultural sector accounts for 39% of the country's GDP. The poverty profile established in 2014 shows that 40.1% of the population lives below the poverty line, or less than one dollar a day. Insufficient electricity is one of the problems hampering the country's economy. Energy supply is lower than demand and moreover it is expensive (up to 25 euro cents per kWh). In 2016, peak demand was 280 MW (62.8% thermal, 30.7% interconnection with Côte d'Ivoire and 6.5% hydropower). According to the Energy Strategy (2019-2023), the level of access to electrification remains low by regional standards, at around 20%, with around 66% in urban areas and 3% in rural areas. To improve the situation, the Government has set itself the ambitious target of increasing the access rate to 45 per cent by 2022, reaching 75 and 19 per cent respectively in urban and rural areas.

Yet multiple challenges need to be addressed simultaneously to expand access to electricity services in a sustainable way:

- the high cost of the service, largely due to the particularly expensive cost of fuel in landlocked Burkina Faso;
- a rate lower than cost recovery but higher than the customer's ability to pay, particularly in rural areas;
- the sector's dependence on fiscal transfer that weighs on the tight fiscal space;
- lack of sector planning capacity to identify the least costly investments and ensure timely and cost-effective implementation;
- the operational and financial challenges of rural electrification;
- the lack of an enabling environment to attract private capital to rural electrification.

With a view to reducing the cost of electricity supply, Burkina Faso aims to increase access to electricity services in certain rural areas, as well as the availability of solar energy, and the mobilization of private financing.

To this end, the Government has requested financing from the AfDB for the YELEEN rural electrification program.

The YELEEN plan consists of 3 components:

1)a review and restructuring of the legal, regulatory and institutional framework for a rural electrification model that promotes sustainable access to rural energy financed by private sector promoters.

2) the installation of 100 mini-grids powered by an estimated global solar photovoltaic capacity of 9.5 MWp to connect 50,000 households in 100 electrified rural localities, including 500 productive connections.

and (3) the provision of equipment for productive use to support economic activity in the targeted regions. Mini-grid developers, through selected microfinance institutions (FIs) that

will provide loans of up to €2.8 million, will provide the equipment for productive use. Recipients of productive use loans will repay the loans through their electricity bills. The productive use component is an essential component to ensure the financial viability of the project. should trigger a virtuous circle of improved productivity and value added in the rural context, which will help increase electricity payability while improving the socio-economic fundamentals of target populations. This will ensure the sustainability of the project's positive impacts on the environment and climate change.

The use of solar PV technology and optimized battery storage through smart mini grid functions to adapt available solar energy to demand and limit night-time demand will enable 100% access to renewable energy for rural populations and reduce CO2 emissions.

The YELEEN Plan has three components, but the Bank's current financing is for the rural electrification component based on solar power generation, in particular mini-grids and individual kits (equipment for productive use). The component will be developed under the supervision of the Rural Electrification Agency of Burkina Faso (ABER). This program will be implemented. The project will include the construction of mini-grids with solar photovoltaic plants and the installation of solar home systems.

The YELEEN off-grid project will lead to the installation of 100 mini-grids over a two-year period, powered by an estimated overall solar PV capacity of 9.5 MWp, to connect 50,000 households in 100 electrified rural localities, including 500 productive connections. The outcome will include a functioning legal and regulatory system and competent and empowered institutions to develop the rural electrification model developed in the other provinces of Burkina Faso.

1.2 Objectives of the Environmental and Social Management Framework (ESMB)

As sub-projects, specific sites and beneficiary communities have not been defined, an SMGC will be appropriate to ensure that the environmental and social considerations that will be integrated during the implementation of the programme sub-projects that are identified. Once sub-projects, specific sites and beneficiary communities have been defined, all sub-projects and activities will be reviewed and appropriate mitigation tools such as ESIA/ESMP and Short Resettlement Plan (RAP) and other appropriate management tools will be developed with the provisions of local regulations and AfDB safeguards. The objectives of this CGES are to:

- establish clear procedures and methodologies for environmental and social planning, review, approval and implementation of sub-projects, to be financed under the AfDB-GCF program;
- define appropriate roles and responsibilities and define the reporting procedures necessary to manage and monitor environmental and social concerns related to sub-projects;
- Provide practical resources for the implementation of the CGES, including general guidance on the development of ESMP and their implementation.

Methodological approach

The methodological approach applied is based on the concept of a systemic approach, in permanent consultation with all the actors and partners concerned by the Project.

The implementation of the CGES of the YELEEN project was conducted in a participatory manner on the basis of the already existing documentation and the consultations of the various partners in order to promote a common understanding of the problem, rediscuss the advantages and disadvantages at the environmental and social level of the various investments to be made. The work plan was structured around five major areas of intervention:

- the framing meeting with the sponsor;
- literature reviews;
- public meetings/consultations and participation;
- visiting activity sites in beneficiary regions;
- data analysis and report development.

Scoping meeting between ABER and AfDB

It was held at the premises of the Burkinabe Agency for Rural Electrification (Aber), between a team from ABER and a team from the AfDB. This meeting made it possible to better understand all the components of the project, in particular the various developments and the process envisaged. On this occasion, the ins and outs of the project were known and the concerns of the sponsor were better discovered. Also, all questions of certain interest were addressed by both contracting parties. In addition, all stakeholders directly or indirectly concerned have been identified and exchange sessions will be organized with a view to integrating their concerns into the implementation of the CGES.

Literature review

A documentary review was carried out through the collection and exploitation of project documents, national policies and strategies, AfDB SOs and other documents from the documentation centers of the National Electricity Company of Burkina (SONABEL), the Burkinabe Rural Electrification Agency (ABER), the Ministry of Energy, the Ministry in charge of the Environment, (MEEA), AfDB. In addition, an inventory of the regulatory and institutional framework for the project was made. Socio-economic and environmental aspects were reviewed for the analysis of strategic variants/options of the project. Also, a cartographic and webographic research was carried out.

Public consultations and participation

Consultations were held with the key actors of the project, namely the state technical services at central and decentralized level, local authorities, village development committees (CVD), the electricity cooperatives (FESCOOPEL-B), local resource persons. The list of stakeholders consulted can be found in Annex 4.

They took place both online and during site visits in the Southwest, Haut-Bassins, Centre-West, East and Cascades regions (see list of people contacted in Appendix 4).

During these interviews, the following were called:

- explain to stakeholders the objective of the study in the context of the implementation of the project and solicit their support for the conduct of the study;
- collect data from the State's decentralized technical services;
- draft a work schedule with the various stakeholders;
- discuss the impacts of similar projects carried out in the regions;
- Gather proposals for the implementation of mitigation measures.

These discussions were used to discuss the mechanisms and institutional arrangements for the implementation of the CGES by clarifying the roles and responsibilities of the agencies and all stakeholders (at local, communal, provincial/regional and central level) involved in its implementation.

The stakeholder consultation was carried out with a view to developing a public consultation plan, involving all project stakeholders, including beneficiaries and persons affected by the project.

Visit to the project sites

Site visits were conducted from July 18 to August 10, 2023 in localities located in the Central Plateau, North Central, South Centre, East Central regions (see Appendix 4).

It is a preliminary summary analysis of the potential impacts on the biophysical, socio-economic and cultural environments that made it possible to identify the potential direct and indirect positive and negative impacts and the environmental and social risks in these areas of intervention of the project.

Data collection, analysis and report preparation

The data collected covered (i) relevant documents on the preparation of the project, (ii) the level of knowledge of the project by the stakeholders and their capacities for managing the measures that will be set out in the CGES, and (iii) the initial state of the biophysical and human environments of the sites where the project activities are carried out.

All the data collected was analysed, prioritized by sub-project and contextualized to identify the potential impacts/risks of the project.

The analysis of data collected during desk research, interviews and site visits to activities led to the development of this CGES.

CHAPTER II: DESCRIPTION OF THE YELEEN PROJECT

The development objective of the project is to increase the rate of access to electricity in Burkina Faso and especially in rural areas.

2.1 Components of the YELEEN project

The project consists of three (3) components:

1) a review and restructuring of the legal, regulatory and institutional framework for a rural electrification model that promotes sustainable access to rural energy financed by private sector promoters.

2) the installation of 100 mini-grids powered by an estimated global solar photovoltaic capacity of 9.5 MWp to connect 50,000 households in 100 electrified rural localities, including 500 productive connections.

and (3) the provision of equipment for productive use to support economic activity in the targeted regions.

2.2 YELEEN project activities potentially generating socio-environmental impacts

The YELEEN project aims to electrify approximately 100 localities by deploying solar photovoltaic (PV) systems to provide electricity to 150,000 households including: (i) 50,000 households through connection to solar PV mini-grids; (ii) 100,000 households through the installation of solar kits; and (iii) support for the development of economic activities in rural areas through the promotion of access to equipment for the productive use of energy. It will contribute to the development of the agricultural sector to promote inclusive growth and employability in rural areas.

The main project activities that may have an impact on the environmental and social components of the intervention areas are essentially those related to the construction of solar fields (Green Mini-grids), the construction of distribution networks (lines) for connecting households, and the installation of productive solar kits**.** Table 2 below identifies the instruments to which the sub-projects will be subject.

2.3 Mini-grids in Burkina Faso

The development of mini-grids: The concept of mini-grids is not new in Burkina Faso. The country has created the Rural Electrification Fund (FDE) replaced by ABER, mandated to undertake rural electrification activities in the country. As part of these arrangements, ABER promoted community mini-networks in collaboration with rural cooperatives (COOPEL) in the country. The mini-grids, designed to run on diesel generators, were developed mainly thanks to subsidies received by ABER (since late 2017, FDE has been transformed into a fully-fledged rural electrification agency – ABER) from various banking communities. However, this arrangement has faced sustainability issues, largely due to the use of unsustainable fuels to power mini-grids and relatively poor management. The Government of Burkina Faso is currently supported by the African Development Bank through the Sustainable Energy Fund for Africa (SEFA) Trust Fund to revise the country's mini-grid business models policies and regulations in the mini-grid space. Technical assistance also includes private sector investment

in mini-grids, one of the main reasons for the low rate of rural electrification being the high cost of grid extension infrastructure and insufficient capacity to serve the entire population.
The country receives abundant solar radiation all year round; the average annual solar radiation is 19.8 MJ/m2 per day and direct sunlight is more than 3,000 hours per year. Despite the high potential of solar energy, solar energy accounts for only 0.1% of total national energy consumption.
Burkina Faso has a large number of rural communities whose population density favours the installation of mini-grids. Based on current grid coverage, it is estimated that 37% of the population (or 6.6 million people) would be better served by off-grid solutions (mainly solar mini-grids).
As part of the YELEEN project, green energy mini-grid (MRV) infrastructures will be built in the various localities by integrating storage systems using lithium batteries. Technology with storage makes it possible to supply households with energy during the night. This intervention will cover twelve of the thirteen regions in the national territory (with the exception of the central region).
However, in view of the increasing quantities of batteries (see Annex 11 and Annex 12) used in energy production, an ongoing strategy for ecological management of these when they reach their end of life.
Localities were selected on the basis of a methodology that included population density, ability to pay and security.

Table 1: Instruments to be prepared for Sub-projects

Component	**Sub-project title**	**Categorical classification (national)**	**Classification catégorielle (SO BAD)**	**Number of instruments to be prepared**
	Installation and operation of 100 mini-solar power plants in one hundred rural communities	NED	Sub-project site-specific risks	100 to be confirmed with ANEVE
	Construction of medium and/or low voltage lines in 100 localities	NED	Sub-project site-specific risks	To be determined with ANEVE
	Construction of low-voltage lines in 100 localities	PES	No physical intervention on the environment, nor cause any negative environmental or social impact	To be determined with ANEVE

Component	Sub-project title	Categorical classification (national)	Classification catégorielle (SO BAD)	Number of instruments to be prepared
	Installation of solar kits for the productive use of energy for the benefit of SMEs / SMIs	PES	No physical intervention on the environment, nor cause any negative environmental or social impact	To be determined with ANEVE

Source: ABER, January 2023

2.4 Project Coordination

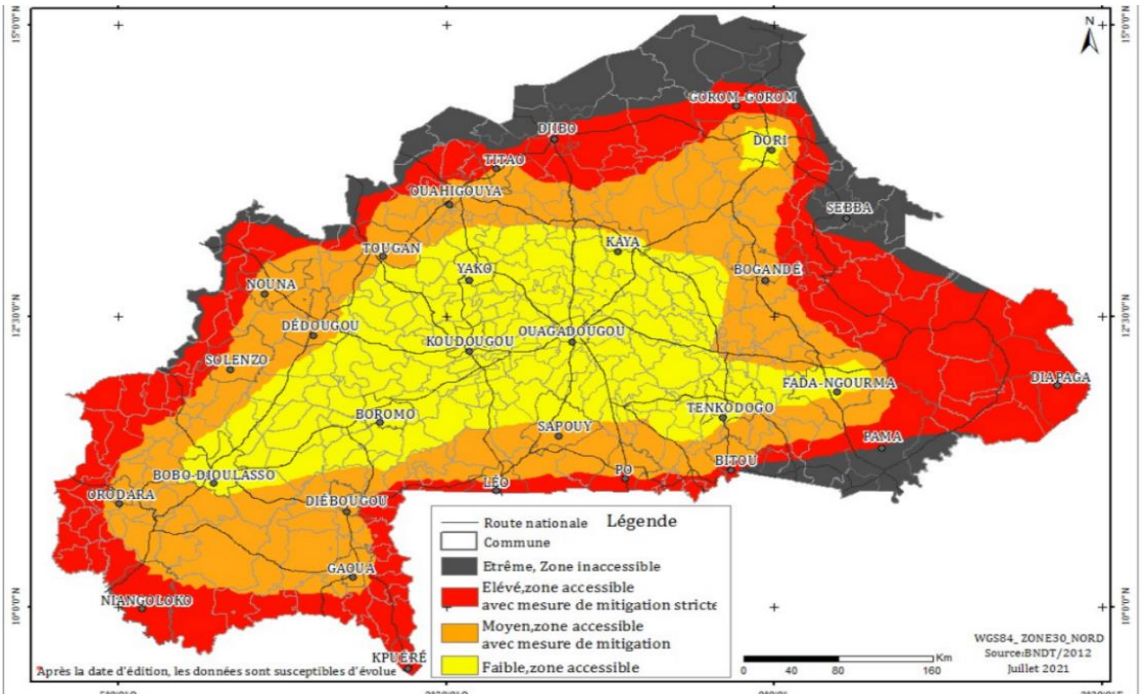
The Ministry of Energy will provide technical oversight of the implementation of the Project Within ABER, a Project Management Unit and implementation teams respectively will be responsible for the implementation of the CGES and all GECP development tasks and inter-institutional coordination and will be responsible for the day-to-day activities related to the CGES/CGGES. The project coordinator will be assisted by an environmental specialist, a social development specialist and individual consultants as required. The implementation team will hire a consulting firm and a gender-based violence (GBV) consultant when needed. It will also hire monitoring and evaluation (M&E) consultants to monitor the progress of the project and assess impacts, including environmental and social issues, once completed.

2.5 Brief overview of the current security context in Burkina Faso

Burkina Faso has been affected by a security and humanitarian crisis for several years. According to the National Council for Emergency Relief and Rehabilitation (CONASUR), as of 31 March 2023 the country had 2,062,534 internally displaced persons (IDPs). These statistics show an increase of about 3.17% compared to the updated publication of 28 February 2023 (1,999,127 IDPs) and demonstrate that the security situation in Burkina Faso remains very volatile with continuous displacement in some parts of the country.

Within the framework of the YELEEN project, the intervention areas are located in accessible regions (at least 50%) and accessible regions with mitigation measures. Regarding activities, the security risk concerns more the installation of the 100 mini-grids because this realization requires the use of equipment that does not go unnoticed. However, once the work is completed, securing the mini-grids is easier than securing conventional grid power lines because they are circumscribed in delimited spaces.

The map below presents a classification of the regions according to the security risk established in 2021, although today, the situation has improved and continues to improve in the regions benefiting from the project.



Source : *EAAP Global Security Study, 2021*

CHAPTER III: PRESENTATION OF BIOPHYSICAL AND HUMAN COMPONENTS AND DESCRIPTION OF THE ENVIRONMENTAL AND SOCIAL ISSUES OF THE PROJECT INTERVENTION AREA

This section presents a brief description of the main biophysical, socio-economic and climate change characteristics of the regions in which the sub-projects are proposed.

3.1 Presentation of the YELEEN project intervention area

The project area covers twelve (12) regions on the national territory of Burkina Faso. It is located in the heart of West Africa on an area of 274,000 km2 where hard-working and determined men and women live. It shares its borders with 6 countries, namely Mali to the north and west, Niger to the north and east, Benin to the southeast, Ghana and Togo to the south, Ivory Coast to the west and south. It lies between 9°20' and 15°5' north latitude, 2°20' east longitude and 5°3' west longitude.

3.1.1 Biophysical media

Burkina Faso is characterized by a tropical climate of Sudanese type that alternates two seasons: a long dry season from October to April and a short rainy season from May to September that decreases from south to north. The rhythm of the seasons is determined by the displacement of the soil trace of the Intertropical Front (ITF). The large spatio-temporal variability of precipitation is the main factor responsible for the variation in agricultural yields. It is this characteristic that is the basis for the subdivision of the country into the following three (3) climatic regions.

- ✓ the Sudanian zone, bounded to the north by the isohyet 900 mm of annual rainfall;
- ✓ the Sudano-Sahelian zone between 900 mm and 600 mm;
- ✓ the Sahelian zone bounded to the south by the isohyet 600 mm.

Whatever the time of year the temperatures are always positive. The average monthly temperatures varying between 30° - 34 ° C in March - April and between 23 ° - 25 ° C in December - January rarely exceed 35 ° C while the extremes encountered were respectively 50 ° C (in Banakélédaga 17 km from Bobo-Dioulasso in 1971 and Markoye in 1975) and 46 ° C in April 1980 still in Markoye. Sunshine lasts more than 10 hours per day and evaporation exceeds 2,600 mm per year (Data from the National Meteorological Agency).
The temperature usually varies between 24°C and 34°C in July.
Relative humidity is low, especially in the dry season while evaporative demand is high and can exceed 10 mm / day according to the National Agency of Meteorology.

Relief and hydrography

Burkina Faso has two main types of relief:

- The largest part of the country is covered by a peneplain. It forms a very slightly hilly relief with in places some isolated hills, the last vestiges of a Precambrian massif. It is a rather monotonous landscape, with a soil very often colored ochre by laterite;
- The southwestern part of the country forms a sandstone massif. There is the highest point of the country: the Ténakourou (749 m). The massif is limited by very steep cliffs up to 150 m high. Banfora cliff, Sindou peaks etc.

The average altitude is 400 m and the differential between the two extreme points does not exceed 600 m. Burkina Faso is therefore a rather flat country, with some localized field accidents.
The hydrographic network is marked by many rivers and ponds especially in the southern part. The watercourses are connected to three (3) main basins:

- ✓ Volta Basin which extends over 120,000 km2 in the center and west of the country. It consists of the Mouhoun, Nakambé, Nazinon and Pendjari rivers which meet in Ghana;
- ✓ Comoé basin, with an area of 18,000 km2, crosses the Ivory Coast before flowing into the Gulf of Guinea;
- ✓ Niger Basin, covering an area of 72,000 km2, drains eastern and northern Burkina. These streams are temporary and form a string of ponds.

Soil

Studies carried out by several authors show that nine (9) major soil groups can be considered according to rock weathering processes. These are: raw mineral soils or lithosols on various rocks and cuirasses (or lepthosols according to the FAO 1988 classification) (3%); soils with little evolution of erosion on gravel materials, and alluvial inputs (fluvisols and regosols) (26%); vertisols (6%); brownified soils on clay materials (11%); tropical ferruginous soils with little leaching and leached on sandy, sandy-clay or clay-sandy materials (luvisols, lixisols) (39%); moderately desaturated ferralitic soils on sandy-clay ferralsol materials) (2%); mineral hydromorphic soils with pseudogley on materials with varied texture (gleysols) (13%); sodic soils with degraded structure (Solnetz) (5%); isohumic soils (1%).

Each group of soils has specific characteristics and constraints, but it can generally be said that they have a low level of fertility, especially in phosphorus and nitrogen and a limited water reserve that varies with their topographical situation. They are greatly affected by runoff and water and/or wind erosion. (Country Report for the FAO International Technical Conference on Plant Genetic Resources, 1996)

Groundwater and surface water resources

The physical state of watersheds particularly determines (i) the phenomena of erosion at the base of the siltation of lakes and surface watercourses, and (ii) runoff and infiltration at the base of the recharge of surface water lakes and aquifers respectively. It results from the combination of the state of vegetation cover, soils, as well as adverse effects related to climate and anthropogenic actions that effectively govern the dynamics of its evolution.
The evolution of flows in the 4 river basins of Burkina Faso is highly dependent on rainfall, the storage capacities of surface water lakes and the physical state of the basin. There has been an upward trend since the late 1980s, marked by long episodes of drought.
According to the 4th report on the state of the environment in Burkina Faso, the country has 1536 surface water lakes of which only 363 are perennial and maintained and 592 (or 38%) in poor condition (strong degradation, spillway and / or dam failure). Among these lakes, there are 227 ponds and natural ponds, 55.5% of which are located in the two regions of the Sahel and the Boucle du Mouhoun.
The storage capacities of surface water lakes represent in relation to the average volumes of water returned to neighbouring countries (water leaving the national territory) rates ranging from 5.95% for Comoé to 188.25% for the Nakambé basin. Thus, the Nakambé basin, even

though it releases more than 2 billion m3 of water outside the national territory per year, has a storage capacity that far exceeds its volumes of water returned outside the national territory. This observation comes essentially from (i) the oversizing of the Kompienga hydroelectric dam, which at best had a maximum filling rate of about 60% of its storage capacity and (ii) the large number of small non-permanent structures that dry up early (from January-February for many). The creation of additional major works in this basin will therefore require pragmatic approaches and options for development and management and good negotiation, particularly with Ghana. On the other hand, the Mouhoun basin and that of the Comoé and most probably that of Niger, can quite well house large hydraulic surface water works provided that the necessary agreements of no objection are obtained with the neighbouring countries concerned (Ghana, Côte d'Ivoire, Republic of Niger and Mali in this case).

With regard to groundwater mobilization, it should be noted that from 2009 to 2014, the number of boreholes equipped with PMH[1] increased by 26.7%. As for AEPS and [2] PEAs, [3]their number has increased by 84.3% in 5 years, or an average of 16.9% per year; which reflects the increase in the size of villages and semi-urban centers and the transition to a more qualitative and less physically restrictive service offer (manual pumping). As a result, the rate of access to drinking water in rural areas increased from 54.9% in 2009 to 64.1% in 2014.

However, the waters of many boreholes in mining areas have abnormally high levels of arsenic (heavy metal); These waters, when delivered for consumption by the populations living in these areas, have serious health consequences.

However, access to sanitation remains a concern for Burkina Faso, although between 2009 and 2014, access rates increased from 0.8% to 9% for rural areas and from 19% to 32% for urban areas.

Vegetation

The total area of forest formations (open forest, gallery forest, shrub savannah, wooded savannah, steppes) in Burkina Faso increased from 14,410,288 ha in 1992, or 52.55% of the national territory, to 13,305,238 ha in 2002, a decrease of 7.67% in 10 years. It should be noted that since 2006, evolutionary trends have been oriented towards a reduction in the set-aside time of agricultural land (SP/CONEDD, 2010).

The average density of forest formations is 110 living plants and 3 dead animals per ha, the average basal area being 2.53 m²/ha: small subjects are predominant. The average volume of standing timber per hectare in 2014 is estimated at 17.51 m3 (including 17.18 m3 of green wood and 0.33 m3 of dead wood), compared to 17.60 m3/ha in 1983 (MEEVCC, 2016), an average decrease of 0.09 m3/ha in 33 years.

Thus, and compared to the hypothesis "absence of anthropogenic pressure", the total volume of standing timber in Burkina Faso's forests decreased **by 9,385,887 m3** per year during this period, or 1.3% per year. This volume is largely made up of wood energy (fuelwood and charcoal), whose consumption in 2012 was estimated at 6,880,000 tonnes of wood (FAO,

2012), equivalent to **8,494,000 m3 of** wood, the difference representing service wood and timber consumed annually (MEEVCC, 2016).

- ✓ In terms of specific diversity, the report of the second national forest inventory IFN2 (MEEVCC, 2016) indicates that at the national level, the value of the Shannon – Weaver (H)5 index is estimated at 1.09; those of its reciprocal (1/D) at 3.24 and the Simpson equitability index (E) at 0.73. As for the specific richness of forest formations, the second inventory reveals the presence of 233 species compared with 168 in 1983 (FAO, 1983) and 188 in 1995 (FONTES and GUINKO, 1995). Overall, there is a gradual increase in specific richness from north to south for most of the country: 201 species recorded in the south – Sudanian, 153 species in the north – Sudanian, 104 species in the south – Sahelian and 60 species in the strict Sahelian.
- ✓ For herbaceous plants, a total of 390 species were inventoried during the last National Forest Inventory (MEEVCC, 2016).
- ✓ The production of fresh foliar biomass of the pre-accounting plants (d1.30 m ≥ 5 cm) is estimated today at 313.06 kg/ha for the dry period, 963.54 kg/ha for the period of early leaf, 1 426.63 kg/ha for the period of maximum leaf and 803.66 kg/ha for the period of beginning of leaf. The average value for all periods of the year is estimated at 876.72 kg/ha. From November to mid-February, the available biomass is estimated at 502.62 kg DM/ha.
- ✓ IFN2 results indicate that the average carbon stock in woody biomass is estimated at 34.23 t C per ha nationally. As for the total carbon stock at the national level, it is estimated at 559.42 million t C for the classes "forests" and "other wooded land".
- ✓ Most of Burkina Faso's wildlife resources are now confined to national forest domains. Indeed, Burkina Faso is still full of a relatively abundant and varied wildlife, living in reserves, classified forests and areas still wooded. (The main species of large mammals commonly encountered include *Loxodonta africana* (elephant), *Hippotragus equinus (hippotrague*), Kobus *cob (buffon cob*), Alcephalus buselapus *(hartebeest)*, Phacochoerus aethiopicus *(* warthog)). With the updating of their status, there are now 76 protected areas, including several wildlife areas including 3 national parks (732,430 ha), a total wildlife reserve (12,7,000 ha); Eight (08) partial wildlife reserves (642,831 ha); One (1) game ranch (91300 ha); Twelve (12) classified wildlife forests (351,723 ha); Four hunting zones (154246 ha); A classified forest and Biosphere Reserve (19,200 ha); A silvo-pastoral and partial faunal reserve (1,600,000 ha). In addition to this network of classified areas, there are about sixty community conservation areas including village areas of hunting interest, local refuges and some animal parks.

  For fisheries resources, no new data are available since the last EBER in 2010. However, some statistical data (Burkina Faso, 2016) indicate an increase in fish production of 38% between 2011 and 2015, from 15,200 to 20,977 tonnes. In any case, Burkina Faso remains heavily dependent on imports of fishery products.

3.1.2 Human Environment

The national territory is divided into thirteen administrative regions. The regions are divided into: provinces (45), departments (330), 351 communes. The population of the country is estimated at 20,487,979 inhabitants according to the results of the latest General Population and Housing Census (RGPH 2019), with a general growth rate of 2.93% per year. This is a

population with a predominantly young component: 45.3% is under 15 years of age. Nearly 73.7 per cent of the population lives in rural areas and women account for 51.7 per cent. According to the country's population projections, the population would increase to 21,510,181 with 10,395,705 men and 11,114,476 women in 2020.

With regard **to ethnic groups and religions**, the country has more than 60 ethnic groups. The Mossi (48.6%), the Bissa, the Gourounsis and the Gourmantchés live in the central parts of the Sudano-Sahelian zone; the Fulani (7.8%) in the northern and northeastern parts of the Sahelian zone; the Dioulas in the west, in the Sudanian zone. Although traditional religions are practiced by 25.9% of the population, two other religious beliefs are represented in Burkina Faso: Islam accounts for 52% and Christianity for 17.6%. *(REEB IV, final version. May 2017).*

The country's economy is mainly based on agriculture and livestock. The agricultural sector in Burkina Faso contributes nearly 35% to the country's Gross Domestic Product (GDP) and employs 82% of the active population and accounts for 80% of total exports. Cotton is the main export crop. Primary products are the first export products with nearly 90% of agricultural origin. Livestock is the 2nd largest source of export earnings after cotton and contributes more than 18% to the formation of GDP. The herbivore herd is mainly composed of cattle, goats and pigs; equines (Livestock Sector Statistical Yearbook, 2017).

Agriculture is extensive, poorly mechanized, low input intensive and dominated by small family farms. Since the years of drought, the country has experienced significant cereal deficits so that it is difficult to achieve food self-sufficiency, even in a favourable year. Food crops represent 80% of the cultivated area (millet, sorghum, maize mainly). The main cash crop is cotton.

Livestock **farming** is based on extensive exploitation of natural resources (pastures) without much use of agricultural and industrial by-products.

As for **food poverty**, it affects 63.7% of rural populations against 36.1% of urban populations. The most affected regions are: the North, the Boucle du Mouhoun, the Centre-West, with respectively an incidence of poverty of 84.9%, 81.5% and 71.0%. Crop production consists mainly of food crops composed mainly of cereals (maize, sorghum, millet, rice, fonio), cash crops (cotton, sesame, groundnuts, soybeans), and vegetable crops (onion, tomato, eggplant, cabbage, etc.). Other food crops such as yams, sweet potatoes, cowpeas and voandzou are also grown. According to the results of the 2016-2017 crop year, the total current production of cereal crops is 4,567,066 tonnes, cash crops are 1,493,900 tonnes and 724,286 tonnes for other food crops.

The national average yields of the main pure cereal products are 809 kg/ha for millet, 1,775 kg/ha for maize, 1,547 kg/ha for rice, 992 kg/ha for white sorghum, 1,164 kg/ha for red sorghum and 747 kg/ha for fonio, respectively. National yields of pure cash crops are 1,208 kg/ha for cotton, 865 kg/ha for groundnuts, 543 kg/ha for sesame and 881 kg/ha for soybeans. Yields of other food crops are 6,386 kg/ha for yams, 11,238 kg/ha for sweet potatoes, 720 kg/ha for cowpeas and 740 kg/ha for voandzou. (DSS/DGESS/MAAH, 2017)

Burkina Faso is one of the countries with the highest energy costs. This situation weighs heavily on the development of our productive sector, particularly industry **(GRAAD, UNIDO Study,**

2015). It is important to find a solution to this problem quickly. In this sense, numerous studies and analyses show that a good energy saving policy is a very effective way. In some cases, the savings made through this type of policy reach the impressive rate of 70%. Today technologies exist and make it possible to considerably reduce energy bills.

3.2 Environmental and social issues of the project by region

This section provides a brief description of the main environmental, social and climate change issues of the regions (excluding the Central Region) in which the sub-projects are proposed.
In addition to these main issues, there are challenges related to the security situation in the country, which are confronted with terrorist attacks in several regions, causing at times destruction and/or acts of vandalism on electricity infrastructure. The completion of the project could be disrupted or halted due to attacks by armed terrorist groups.

3.2.1 Hauts-Bassins Region

Key Environmental and Social Issues

The region is characterized by the density of its natural vegetation composed mainly of savannah with all subtypes from wooded savannah to grassy savannah. It has 16 classified forests with a fairly rich biodiversity compared to the rest of the country.
The fauna is quite rich and varied due to the existence of many classified forests (16 in total). Indeed, this abundant vegetation cover has favored the convergence of animal species:
Elephants, Kobas, Hippos, Monkeys, Birds, Fish, etc.
Fishery resources are not negligible but fishing is artisanal.
This environment is a real potential for the activities of the primary sector and its geographical location is an asset for commercial activities.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction of the mini-grids and their operation will have an economic impact for the benefit of the populations of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.2 Boucle du Mouhoun Region

Key Environmental and Social Issues

Environmental issues in the region vary from one area to another. Indeed, in the north in the south-Sahelian sector, the vegetation evolves from the shrub steppe to the wooded steppe and in the south, to the savannah. In the center in the northern Sudanese sector, shrub and wooded savannahs, mixed formations of valleys associated with crops dominate. Finally, in the south

in the South Sudanian sector, extends the savannah from tree to wooded with gallery forests along the rivers. These plant formations serve as a shelter for a fairly rich and varied fauna. It consists largely of small game (hares, small antelopes, rats, squirrels, turtle doves ...). The big game encountered is mainly made up of a few herds of hippos, buffaloes, elephants (fully protected species), warthogs, hyenas, lions and panthers.

Hydrographically, the region has a fairly dense network woven around the watershed of the Mouhoun River which crosses the region for 280 km. Around the Mouhoun River are organized permanent secondary watercourses This physical group includes reserves and classified forests representing about 7% of the regional area and located mainly in the provinces of Balé, Mouhoun and Nayala.

The economy of the region is mainly based on agriculture and livestock which employ about 90% of the population. In addition to these two key sectors, there are sectors of opportunity such as mining, crafts, industry and services.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction of electricity links and their operation will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities in the region due to the existence of other sectors of activity besides agriculture and livestock.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.3 Central West Region

Key Environmental and Social Issues

The region is characterized by natural vegetation composed mainly of savannah and classified forests.

The region has enormous economic potential due to its geographical location. It occupies a geographical position favourable to trade. Its capital is a hub for agricultural trade with the rest of Burkina Faso on the one hand, and neighboring countries on the other. Countries bordering Burkina Faso such as Côte d'Ivoire, Ghana and Mali represent a huge potential for outlets for its agricultural products.

The region also contains industrial and craft activities. Indeed, some units of production of goods or market services are located on its territory. These include SOFITEX, FASOTEX. It is also worth mentioning the existence of some mining operations, the most important of which is the Perkoa zinc mine.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part

will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities in the region because of the existence of industrial units and mining companies that will be able to benefit from this extension of the network.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.4 South Central Region

Key Environmental and Social Issues

The south-central region is a region of wooded savannahs with mostly shrubs. These wooded and shrubby savannahs alone account for more than 66% of the region's land area. Similarly, in the region, gallery forests can be observed all along the various rivers.

In addition, the Centre-Sud region is home to a good part of the country's classified areas. There are: the Nazinga Game Ranch which covers 94,000 ha, the classified forest of Pic du Nahouri (836 ha), the Po National Park known as KABORE Tambi National Park (155,500 ha) and the southwestern zone of Zoundwéogo (29,000 ha). The diversity of flora therefore constitutes an unprecedented tourism potential for the region.

In this diverse vegetation, abounds an equally diverse fauna. The region therefore has significant potential in terms of wildlife. It has several ecological entities of various statuses that are home to many species of animals; These include:

- the Po National Park known as KABORE Tambi (PNKT);
- the local Woozi hippo refuge which, in addition to hippos, is home to a relatively large faunal relic;
- the Nazinga Game Ranch, which is a tourist hub in terms of resources Wildlife.

These parks and reserves face many difficulties, including poaching, illegal grazing and uncontrolled occupation by the local population.

The region is also home to many crocodile colonies (600 to 700 individuals) in almost all departments. There are also some mammals of small and large sizes and birds of various nature (warthogs, hippos, buffaloes, hippotragus, savannah elephants, leopards, spotted hyenas, francolins and spitting cobra).

Also, the Centre-Sud region is drained by a fairly dense hydrographic network and essentially constituted by the basins of the Nakambé, the Nazinon and the Sissili with many periodic tributaries over about 1,149 km in length.

The Centre-Sud benefits from pedoclimatic factors that favour agricultural activity. Its abundant vegetation, encourages livestock farming and its relief offers fascinating landscapes, objects of attraction of many tourists. The geographical location of the region is an asset for agricultural and commercial activities.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of commercial activities and tourism in the region.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.5 North Central Region

Key Environmental and Social Issues

Vegetation is characterized essentially by four types of plant formations. Going from north to south we distinguish respectively a steppe, a tabby bush, a shrub savannah and a wooded savannah. In addition to these four formations, there are some relics of gallery forests located mainly along rivers.

There are threats to the vegetation cover of the region. We can mainly retain the decrease or even the disappearance of certain woody and / or herbaceous species. All these aspects have cause-and-effect relationships that are essentially manifested by the degradation of the environment and the physical environment with the corollary, the gradual advance of the desert.

The region has little wildlife resources that have virtually disappeared. This situation seems to be explained by anthropogenic factors (population pressure, bush fires, cultivation and livestock farming methods) and natural factors (degradation of vegetation cover). Like wildlife, fisheries resources remain low in the region. These resources are mainly located on the Nakambé and its tributaries and on certain dams and reservoirs such as the Kanazoé dam, the Taonsgo dam, etc. The temporary nature of the rivers limits the development of fishery resources, which are composed mainly of tilapia, claria, schilbé, synodontus, auchenoglanis, etc.

Despite this bleak environmental situation, the availability of human resources has made it possible to transform certain constraints into assets. Thus, we can note the existence of credible agricultural organizations capable of carrying agricultural development and the existence of developable and irrigable potentialities at the level of the agricultural sector. Also the commercial activity is very developed.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of commercial activities in the region.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.6 Sahel Region

Key Environmental and Social Issues

The vegetation consists of shrub steppes dominated by expanding Acacia tortilis and Balanites aegyptiaca, and more or less degraded tiger bushes dominated by Pterocarpus lucens in high mortality in the northern part (Ganaba and Guinko, 1995). The shallows and beds of endorheic ponds are colonized by aquatic meadows consisting of bourgoutières (formation with Echinochloa ssp.) and Voscia cuspidata, Oryza longistaminata growing on hydromorphic soils. For several decades, the Sahelian region has been characterized by frequent rainfall deficits with serious ecological crises such as those of 1972/73 and 1984/85. These crises have been characterized by high selective mortality of woody plants with loss of biological diversity. However, livestock farming is highly developed.

The plant formation consists essentially: wooded and shrubby steppe; the tiger thicket or tabby bush; grassy steppe; shrubby savannah.

The relatively dense hydrographic network, consisting mainly of: Béli in Oudalan, Gorouol (Séno/Ouadalan), Feildégassé or Goudébo (Ouadalan), Sirba, Yali and Faga (Yagha). The network also includes a large number of natural ponds and shallows. This is the case of the pond of Oursi in Oudalan. There are also large dams that have been built like the Yakuta Dam in Seno.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities in the region.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.7 Southwest Region

Key Environmental and Social Issues

Due to its high rainfall and the diversity of its soils, the area offers ideal conditions for the formation of a very diverse vegetation cover. Indeed, the vegetation as a whole consists of wooded and grassy savannahs, there are open forests and gallery forests along the rivers. The region has three classified forests with an area of 55,000 ha and three wildlife reserves with an

area of 78,700 ha (profile of the regions of Burkina 2005).the fauna is very rich in mammals (porcupine, hare, elephant etc.) and birds (partridges, guinea fowl, francolin etc.).
The South West region is also covered by two watersheds: Mouhoun and Comoé. The Mouhoun remains the most influential river in the region. The river basin is the main fishing ground in the region. There are fish such as Silure (Glacias), Sardins (Alestes) etc. These tributaries are the Bougouriba and the Bambassou. However, other permanent rivers are scattered here and there in the region: the Poni, the Déko, the Kamba and the Pouéné.
This physical setting is a real potential for the activities of the primary sector. Its abundant vegetation, encourages livestock farming and its relief offers fascinating landscapes, objects of attraction of many tourists (the ruins of Loropeni). The geographical location of the region is an asset for commercial activities.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities and tourism in the region.

Loss of plant species in the project area

The vegetation cover of the region, characterized by vegetation composed of savannahs and classified forests, will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.8 Cascade Region

Key Environmental and Social Issues

Due to its high rainfall and the diversity of its soils, the area offers ideal conditions for the formation of a very diverse vegetation cover. Indeed, the vegetation as a whole consists of wooded savannahs and open forests 15 to 20 m high interspersed with forest galleries.
To these different species, are added the stands of roniers and the various orchards. There are several classified forests in the region, the largest in area of which are those of Dioufoula (85,000 ha) and Dida (75,000 ha). The groves of traditional healers and those of Kawara in the department of Sindou are also classified spaces.
In this diverse vegetation, abounds an equally diverse fauna. Indeed, the Cascades region is the second largest reservoir of fauna after that of eastern Burkina Faso but it is subject to devastating poaching.
The region is located in the Comoé watershed and has two rivers that flow permanently. These rivers, the Comoé and the Léraba, gave their names to the two provinces of the region.
The region enjoys good rainfall and is thus one of the best watered areas in Burkina Faso. The combination of this good rainfall and other natural factors is favorable to the intensification and diversification of agro-pastoral activities In addition, the region has lakes and many reservoirs. Indeed, on the rivers, more than twenty hydraulic structures with capacities ranging from 0.5 to 50,000 million m3 have been built. The presence of these structures is an asset for energy, the

development of irrigated cultivation (rice) and the practice of forestry. The abundance of water bodies also allows the population to practice off-season cultivation (vegetable crops).

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities and tourism in the region.

Loss of plant species in the project area

The vegetation cover of the region consisting of wooded savannahs and open forests 15 to 20 m high interspersed with forest galleries will be destroyed during the installation of solar fields, the construction of infrastructure and the construction of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.9 Central Plateau Region

Key Environmental and Social Issues

In the northern and central parts of the region, particularly in the provinces of Kourwéogo and Oubritenga, there is shrub-type vegetation and in the south (Ganzourgou) wooded vegetation, with the presence of open forests and gallery forests along permanent or temporary watercourses. Vegetation is rapidly deteriorating, mainly due to overgrazing, excessive logging, bush fires and climatic deterioration. However, several plant species are protected. These include shea (Butyrospermum parkii), nere (Parkia biglobosa), grape (Lannea microcarpa), tamarind (Tamarindus indica), baobab (Adansonia digitata), acacia senegal, anogéissus and the endangered ptorocarpus enrinacens.

In quantitative terms, the hydrographic network is relatively well supplied but in qualitative terms, it is classified as a dry regime network (very temporary) in almost its entirety. The main rivers are: Nakambé, Massili, Koulottoko, Nazinon, Bougoula-moudi, Bombore and Guibga.

This physical environment is not very favourable to activities in the primary sector. However, the presence of certain waterways is an asset for off-season activities, fishing and livestock.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities in the region.

Loss of plant species in the project area

The vegetation cover of the shrub-type region and to the south (Ganzourgou) a wooded vegetation, with the presence of open forests and gallery forests along permanent or temporary watercourses will be destroyed during the installation of solar fields, the construction of

infrastructures and the realization of the network (line corridor, excavations, land wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.10 Central East Region

Key Environmental and Social Issues

The Central East region is entirely included in the northern Sudanese phytogeographic sector. Shrub and wooded savannahs dominate natural formations; the dominant species are: Anogeisus leiocarpus, Butyrospermumparkii, combretum. The continuous and dense herbaceous carpet consists of andropogonées. The most important rivers are bordered by shallow gallery forests. The region has 2440 ha of classified forests and wildlife reserves. They accounted for 0.23% of all forests in the country in 2004. The woody potential of the region is estimated at 21,600,000m3.

As for aquatic fauna, the region has a significant potential in fishery resources due to the importance of water bodies, in particular the Bagré hydro-agricultural and hydroelectric dam, the largest body of water in the country with 25,646 ha.

The state of degradation of natural resources (soil and vegetation) is already advanced in the region. The main cause is the relative overpopulation of the region, the uncontrolled use of natural formations around Tenkodogo, repeated bush fires, the overload of livestock especially in the provinces of Boulgou and Koulpélogo, the use of mechanization and the very strong extension of cotton cultivation areas without any protection and restoration measures.

The region is drained by a dense river system. Five watersheds share the region; these are the basins of the Noaho, the Sirba, the Nakambé, the Oualé and the Nazinon. The rivers of the Sirba flow to the Niger, while the others flow to the south. On this hydrographic network there are 69 bodies of water (reservoirs and natural bodies of water). The total area covered by these bodies of water is 26,086 ha.

The hydrographic network offers the possibility of developing many water reservoirs for agro-pastoral purposes. If properly exploited, these opportunities could make the region a major producer of rice (rainfed or irrigated) and market gardening. Existing reservoirs are underutilized.

Also, the region enjoys good rainfall and is thus one of the best watered areas in Burkina Faso. The combination of this good rainfall and soils is favourable to the intensification and diversification of agro-pastoral activities.

Little is known about the mining situation in the region. However, according to the characterization study of the 13 regions of Burkina Faso, the Centre-Est region has 8 types of minerals.

Nowadays, two gold sites have been identified in Youga in the department of Zabré in Boulgou and Dassoui in the department of Dialgaye in Kourittenga. The exploitation of that of Dassoui is done in a traditional way, and that of Youga by the industrial system.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase.

Similarly, the availability of the resource will allow the development of socio-economic activities in the region, which is a hub for trade in agricultural products between the interior on the one hand and outside Burkina Faso on the other.

Loss of plant species in the project area

The vegetation cover of the region consisting of shrub and wooded savannahs will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, these activities will fragment and even destroy wildlife habitats.

3.2.11 Eastern Region

Key Environmental and Social Issues

The vegetation of the region is characterized by shrub savannah to the north and wooded savannah to the south. The East belongs to the Sudanian phytogeographical domain with very variable rainfall in number of rainy days as in quantity of water (between 900 and 1100mm / year), both spatially and over time. There are three types of vegetation: steppe, savannah and gallery forests (Pendjari). The region is home to numerous wildlife reserves and national parks covering the provinces of Gourma, Kompienga, Komondjoari and Tapoa.

The protected area in the Eastern region represents about 11.3% of the country's wildlife reserves with an abundant and varied fauna (DRED, 2003). These conservation areas were established to preserve both national and international heritage. In the Eastern Region, wildlife potential includes national parks, game reserves and hunting areas. This physical setting is a real potential for the activities of the primary sector. The region benefits from pedoclimatic factors that favor agricultural activity.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Likewise, the availability of the resource will allow the development of socio-economic activities in the region with abundant vegetation that encourages livestock activities and relief that offers fascinating landscapes, objects of attraction of many tourists. The geographical location of the region is an asset for commercial activities and the electrification of its localities will contribute enormously.

Loss of plant species in the project area

The vegetation cover of the region consisting of shrub savannah to the north and wooded savannah to the south will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, it is a region that is full of many wildlife reserves and national parks that will be impacted by the project's activities.

3.2.12 North Central

Key Environmental and Social Issues

Conditioned by the climate, there is Sudano-Sahelian vegetation in the region. It consists of wooded savannah in the south and tall grass savannah in the north tending to replace thorny steppes.

It is also rich in biological diversity, and more than sixty species provide non-timber forest products. These are fruits, seeds, leaves, flowers, stems, bark, roots, sap and exudates etc. We particularly retain Acacia Senegal (gum arabic in natural stand or plantation), Vitellaria paradoxa, (shea), Tamarindus Indica (tamarind), Bombax costatum (red kapokier), Adansonia digitata (baobab), Acacia microstatachya etc.

The hydrographic network of the region is organized around two (2) main watersheds: the Nakambé watershed in the West and South Center and the Niger sub-watershed, consisting of the Sirba to the East and the Faga to the North. The two (2) basins collect the main waters of the region and drain them to the main rivers. Nakambé is the most important and dries only part of the year.

This physical environment of the region seems unfavourable to the activities of the primary sector. However, the presence of certain waterways is an asset for off-season activities, fishing and breeding.

Environmental and social issues related to the sector of activity

Socio-economic benefits for populations

The construction, interconnection and operation of power lines will have an economic impact for the benefit of the people of the region. Many materials entering the civil engineering part will be acquired in the project area, the workforce of the region will be solicited among the populations of the localities to be electrified and their surroundings for the construction phase. Similarly, the availability of the resource will allow the development of socio-economic activities in the region.

Loss of plant species in the project area

The vegetation cover of the region consisting of wooded savannahs in the south and tall grass savannahs in the north tending to replace the thorny steppes will be destroyed during the installation of solar fields, the construction of infrastructure and the realization of the network (line corridor, excavations, earth wells etc.). Also, wildlife habitats will be impacted by project activities.

3.3 Climate Change Context

3.3.1 Key Risks and Sectors Involved

Burkina Faso is a Sahelian country hard hit by the effects of climate change. These effects include a steady decrease in the volume and quality of precipitation, rising temperatures, floods, droughts and high winds. The rural sector, consisting of the water, agriculture, forestry and land use sub-sectors, is the main driver of Burkina Faso's economy, which provides livelihoods to more than 80% of the population and is the most vulnerable to the effects of climate change.

According to the INDC, Burkina Faso's greenhouse gas emissions will increase significantly compared to the baseline of 21,916 GgCO2 eq in 2014 (based on the 2007 inventory). By 2030, the level of emissions will increase by a factor of almost 1.6.

INDC focuses on agriculture, forestry and land use (AFOLU), more sustainable livestock through manure and manure management, and the development of climate-resilient agriculture. The AFOLU sector, in particular, is a source of emissions, but also represents a major opportunity for sequestration and mitigation. Although INDC focuses on adaptation and combating desertification, the forward-looking intervention for scalable and sustainable

energy-based rural electrification through a private sector-driven model will significantly strengthen the adaptation strategy leading to much greater mitigation outcomes. than conventional mitigation projects given low emissions from residential and industrial sources.
The rural electrification project is not specifically mentioned in the INDC as part of mitigation measures. It is covered by the GHG results approach, which offers the greatest flexibility in how GHG reductions are achieved, without necessarily specifying all the actions that the emission reductions will entail.
This project to address energy access in rural areas is aligned with the priorities identified in the climate strategies and plans developed: The National Programme of Action on Adaptation to Climate Change and Variability (NAPA) was adopted in 2007 to take into account the most vulnerable populations, particularly rural populations. To initiate a comprehensive medium- and long-term approach (2025-2050) to climate change adaptation, Burkina Faso has begun the process of developing a national adaptation plan focused on sectors vulnerable to climate change, mainly related to the rural economy. The NAPA developed in 2008 focused on the National Rural Sector Programme (PNRR), which includes sectoral programmes from the departments of agriculture, livestock, water, environment and quality of life.
One of the main success factors of the INDC's climate change adaptation strategy is the improvement of the situation of rural populations in relation to poverty, food insecurity, low levels of education and lack of access to health services.
This project aims to address these conditions by increasing rural electrification in a financially and environmentally sustainable way. Therefore, the project will contribute to achieving the triple targets set under the SE4ALL initiative by 2030, namely: (1) ensuring universal access to modern energy services, (2) doubling the rate of improvement in energy efficiency, (3) doubling the share of renewable energy in the global energy mix, (4) contributing to the reduction of GHG emissions from the energy sector.

3.3.2 Climate vulnerability of the country and beneficiary groups (adaptation only)

As noted above, Burkina Faso is already facing the impacts of climate change that have exacerbated the vulnerability of this landlocked country, which is trying to emerge from a period of social and political instability.
The project will have impacts on 4 levels:

- At the national level, the project will support Burkina Faso's INDC adaptation strategy in the agriculture, forestry and land use (AFOLU) sectors by creating a sustainable model of rural electrification that is essential for rural populations in affected rural areas and struggle to adapt to climate change and desertification.
- The project will support the national economy by validating a model to stimulate the rural economy that employs 86% of the workforce and contributes 35% to GDP. In doing so, the model will demonstrate a way to solve the problem of rural poverty.

Finally, at the rural household level, where the current annual cost of energy is US$127 on average (level 0 access for kerosene and candles), the project will enable level 2-3 access at an annual cost of US$30-90 per household, representing direct cash savings associated with significant health and other benefits.

3.4 Land tenure in Burkina Faso

3.4.1 Background

After independence in 1960, land management in Burkina Faso was mainly left to customary institutions and governed by customary law. The government's role was limited to the management of classified or protected lands. The country's modern legislative system is based on the Agrarian and Land Reorganization, introduced in 1984 and amended in 1991 and 1996, which made it possible to develop a private regime of land ownership rights. The legislation conferred all land on the state, regardless of customary land status, all sales of prohibited land for the purpose of breaking with customary rights. Citizens will now be able to access land through government access rules, ending the power of traditional leaders.

The latest development of land laws in Burkina Faso was the adoption of the new law on rural land tenure (Law No. 034) in June 2009, following a lengthy transparent and inclusive process. The objectives of the new legislation include:

- ✓ ensuring equitable access to rural land;
- ✓ promoting investment in agriculture, forestry and pastoralism in Burkina Faso;
- ✓ reducing poverty in rural areas; and
- ✓ promoting sustainable management of natural resources; and
- ✓ Protect property rights, prevent and manage land conflicts and create a framework to ensure security of rural land tenure.

The law promotes decentralization in Burkina Faso and codifies the principles of customary rights by allowing communities to draft Rural Land Charters (rural land charters), which are local conventions based on customary land uses. These land charters contain rules relating to conservation or shared natural resources, the process of granting and receiving land loans, and the management of land disputes. The new law sets out the framework for land charters, which vary according to local needs and customs to reflect the diversity of Burkina Faso's people and ecosystems. Local land charters are created at the village level in a participatory manner and include a representative group of stakeholders (including women, forest users, pastoralists and youth), supported by the State. They are adopted at the village level, validated by the municipal court and registered in the register of local land charters.

The 2009 law also allows for the legal recognition of individual and collective land rights, the transfer of certificates of ownership of rural land by inheritance, oral and written land leases, and the establishment of local land management institutions.

The 2009 law sets out the framework for dealing with land disputes, stating that parties should first attempt to resolve the situation with local authorities, in accordance with the procedures of the local land charter. The law gives local authorities 45 days, which can be extended once, to reach conciliation between the parties. Going to court and taking legal action should only be used as a last resort.

Another legislation related to land management in Burkina Faso is the 2002 Pastoral Policy Law, which governs land related to pastoralism. Legislation that, among other provisions, guarantees pastoralists the right to pastoral land, equitable use of natural resources and movement of their herds, in addition to the 2009 Rural Land Tenure Law. There are also national orders governing the regulation of disputes between farmers and herders, decrees on national transhumance and the 1998 Economic Community of West African States (ECOWAS) agreement on cross-border transhumance.

3.4.2 Types of tenure

Under the framework law of Agrarian and Land Reorganization (RAF), the State owns all land without title. It may transfer full ownership of land rights to private operators upon application and payment. Once the land is titled and in private hands, it enters the market and can be freely bought, sold and rented. The law provides for a system of private property based on registration. However, much of the rural land still has no title and is therefore legally owned by the State, but in practice it is governed by customary rights. In rural Burkina Faso, most tenure patterns are normally governed by customary rules, which differ from community to community. In general, the types of land tenure are one of the following:

- Permanent use rights are granted to members of the community group (family clans);
- Permanent use rights are acquired by claiming unclaimed deforested land;
- Limited use rights are extended to group members who need to borrow land. Depending on the group, these can become permanent use rights if they are held for more than one generation;
- Limited use rights are granted to "foreigners" who borrow the land. These rights may become permanent after intergenerational transmissions, especially if the borrower has improved the land with the permission of the lender.

Not surprisingly, customary practices still trump statutory systems in many rural areas of Burkina Faso. Many communities do not recognize that anyone "owns" the land, but rather grant primary use rights to family groups who first settle on a plot of land.

In other communities, while a village chief is the official arbiter of village land, he does not have the power to control land other than that belonging to his family. Among the Mossi, an individual can only claim rights to land specifically granted by a land chief.

3.4.3 Other land administration institutions (national level)

- the Ministry of Agriculture and Animal Resources is responsible for the productivity of land, pasture and related resources.
- the Ministry of Environment (MEEA) is responsible for land conservation and land allocation planning.
- the Ministry of Territorial Administration and Decentralization is responsible for issues related to conflicts over access to and control over land and for steering the decentralization effort, which has established local self-government bodies.
- the Ministry of Economy, Finance and Foresight is responsible for land administration, land registration and property taxation.
- the Directorate of Topography and Land Works of the Ministry in charge of urban planning is responsible for surveying.
- Mediation of land disputes is the responsibility of the Ministry of Justice.

3.5. Role of rural areas in economic transformation

Due to its isolation and relative isolation from global supply chains, rural areas are expected to play a key role in Burkina Faso's economic transformation. The area of irrigable land is nearly 233,500 ha, of which only about 12 to 14% is currently cultivated. In addition, the country has 500,000 ha of lowlands that can be easily developed. Similarly, the potential for development of irrigation, fisheries and aquaculture is enormous. With about 1200 water bodies (dams, lakes,

ponds), the country can exploit up to five billion cubic meters of water per year. As for livestock, whose development depends on that of agriculture, it has the potential to become one of the vectors of Burkina Faso's exports to neighbouring countries. In 2014, Burkina Faso had a large and varied herd comprising 9,091,000 cattle, 23,200,000 small ruminants, etc. It also has a diversified regulatory framework (framework law on agro-sylvo-pastoral and wildlife activities, law on rural land, etc.) and offers many opportunities for the development of agricultural entrepreneurship.

Taking into account the current economic situation in which a large part of the rural population is locked in vicious circles of poverty, a model focused on expanding rural electrification for productive purposes is a crucial step in Burkina Faso's economic transition out of poverty. As such, this project is of major strategic importance for the country.

3.6 Vulnerability in Burkina Faso

According to the Human Development Index, Burkina Faso ranks 5th among the most disadvantaged countries in the world (UNDP, 2002) and 44.5% of Burkanibè live below the absolute poverty line (Ministry of Economy and Finance, 2000). Climate trends and its variability are often observed with great concern.

Key factors and trends that contribute to vulnerability and potentially reduce the sustainability of livelihoods in Burkina Faso include environmental vulnerability often defined by exposure to environmental and climate stresses (resulting from natural and human factors, e.g. climate variability, floods, droughts and epidemics), extreme weather, , environmental degradation) and social vulnerability (caused by the relatively social position of a specific group in the community that resulted in individual characteristics/assets and inadequate access to social resources and services).

Food insecurity is also linked to shocks and stresses, making households more vulnerable. The impact of shocks is very important and affects poor people the most. Burkinabe households are often hit by idiosyncratic and covariant shocks. Idiosyncratic shocks are those that affect a household (job loss, divorce, crime, separation, etc.) in particular. Covariant shocks affect a group of households (price changes, drought, floods, etc.), for example a village, a region or even the entire country. More than two-thirds of households reported experiencing at least one shock, most often of natural origin (43% of households), caused by price fluctuations (25%) or by the death or serious illness of a household family member (17%). Other shocks are less frequent and affect less than 5% of households. Shocks affect rural populations more than urban populations. Rural households suffer more from weather and plant diseases, leading to crop failures.

Sensitivity to constraints at finer scales - community, household or individual - depends on additional factors such as proximity and access to resources, individual characteristics and assets. Thus, some people are more vulnerable than others, depending on their status and their ability to cope with shock or stress. Health often links these different factors in Burkina Faso and strongly affects sensitivity to environmental stresses.

The groups identified in Table 2 are likely to be particularly vulnerable to the stresses discussed in this report.

Burkina Faso lags behind most other countries in terms of population health and health service delivery. Pregnancy is the leading cause of poor health among women (OXFAM, 2002); Pregnancy complications, such as anemia, bleeding, miscarriage and problematic abortions,

often become emergencies often leading to death. Rural health services, in particular, are often unable to cope with such emergencies. Diseases also remain a considerable factor in the lives of Burkinabés. Malaria is the second most common cause of death and accounts for 23% of the disease burden in Burkina Faso (CIA, 2002), with others including HIV/AIDS and other epidemics such as meningitis, diarrhoea; Cholera, etc.

When the prevalence of hunger is high, infant and under-five mortality rates are also high and life expectancy is low. In Burkina Faso, healthy life expectancy at birth is 33.9 years and 36.3 years for men and women, respectively (compared to more than 70 years of "complete health" in rich countries) (FAO, 2002). Infant mortality in Burkina Faso is at a staggering level, with an infant mortality rate of 105.3 deaths per 1000 live births and under-five mortality rates of 205/1000 and 216/1000 respectively for girls and boys (CIA, 2002).

Poor health in Burkina Faso is linked to the extremely limited provision of health services; For most people, even basic health care is minimal. Distance is a major barrier to providing health care. Patients travel an average of 10 km to the nearest health centre and much further into rural areas. Nomadic pastoralists, who are particularly vulnerable, have reduced access to health services due to their mobility and remoteness from settlements.

Although the identification of some groups as more vulnerable than others is a generalization, it can nevertheless be an important tool for targeting development assistance to key groups. However, it should be remembered that the vulnerability of individuals and households differs both in space and time and that local conditions must be taken into account.

Vulnerability varies across subgroups and areas in Burkina Faso depending on their exposure and adaptive capacity. Targeting vulnerability reduction to meet the specific needs of the most vulnerable can limit the most severe impacts of poverty and environmental stresses. Efforts to support the most vulnerable may focus on the following populations:

- ✓ Women and children: in general, they are the most vulnerable people in Burkina Faso because their access to and control over resources and capital is more limited than that of men and their sensitivity is more pronounced;
- ✓ Children who migrate and work in urban areas without their parents;
- ✓ The poor: poverty is always linked to vulnerability, the poorer the individuals, the more vulnerable the groups.

Table 2: Main vulnerable groups and individuals in Burkina Faso

Localization	Main vulnerable groups	Vulnerable people in all groups
Areas Rural	Low-income households Subsistence and small-scale farmers Landless peasants Fishermen Nomadic pastoralists Sedentary herders, small-scale livestock Indebted households Non-diversified farmers Cotton-producing households Migrant workers Victims of conflict Refugees Internally displaced persons People marginalized through community and family conflict	Women and children with additional workloads Women of childbearing potential, especially pregnant and lactating women Children under five, especially infants Orphans Elderly Disabled and sick Widows and widowers Divorced Households headed by women abandoned by migrant workers Landless returnees People who cannot receive remittances from migrants
Areas Urban	Marginal populations in urban areas Small-scale peri-urban agricultural producers waist People living alone on low fixed incomes or without support Sex workers Unemployed Beggars Migrant workers Recently arrived migrants Victims of conflict Refugees Internally displaced persons People marginalized due to conflict between communities and households	Women and children with additional workloads Women of childbearing age, especially Pregnant and lactating mothers Children under five, especially infants Orphans Elderly Disabled and sick Widows and widowers Divorced The homeless Street children Women and girls excluded from their families Parents who cannot receive migrant remittances

Source: CGES YELEEN, updated 2023

Women and children have been identified as the most vulnerable groups in Burkina Faso. There is also a disparity between the social and economic conditions of women in urban and rural areas. The division between men and women is deeply rooted in Burkina Faso and women are generally considered to have a lower status than men. In terms of poverty, women constitute the largest part of the population living in poverty in Burkina Faso. In this regard, the Government has sought to establish relevant institutional frameworks to address gender mainstreaming and social inclusion. The relevant institutions and policies established by the Government of Burkina Faso are as follows.

3.7 Institutions for social inclusion in Burkina Faso

The Ministry of Women's Advancement was established on June 10, 1997 and reorganized by Decree No. 2013/PRES/PM/MPFG of October 3, 2013 in order to address issues related to gender equality. Renamed the Ministry for the Advancement of Women and Gender Equality, it is responsible for implementing the Government's policy on the advancement of women and gender issues.

The institutional capacity of the Ministry has been strengthened through the creation of new structures, including the Directorate-General for the Advancement of Women (DGPG) and the Directorate-General for the Promotion of Women's Entrepreneurship (DGPEF).

In carrying out its tasks, the Ministry is supported by the National Council for the Advancement of Women (CONAPGENRE), with branches at the regional and communal levels (COREPGenre and COCOPGenre respectively). CONAPGenre is chaired by the Prime Minister and Vice-President by the Minister for the Promotion of Women and Gender Equality. Gender mainstreaming units are being established in ministries and institutions to mainstream the gender perspective into sectoral development policies.

The National Commission for the Follow-up of Burkina Faso's Commitments for the Advancement of Women (CNSEF), established by Decree No. 2008-482 / PRES / PM / MPF / MEF of 3 July 2008 to replace the National Commission to Combat Discrimination against Women Women (CONALDIS) is an advisory body composed of representatives of ministries and civil society organizations. It formulates opinions and recommendations concerning the implementation of the country's commitments in the field of the advancement of women.

The Ministry of Human Rights and Promotion of Civic Values aims to promote and protect human rights and good citizenship. Through the CIMDH and the National Human Rights Commission (CNDH), this ministry seeks to inform and sensitize the population on human rights and international humanitarian law.

The Ministry of Social Action and National Solidarity plays an important role in the protection and promotion of the family, children, adolescents and the elderly and disabled. It is actively involved in combating violence against women and girls through several specific structures, such as the National Council to Combat Female Circumcision (CNLPE) and the National Council for Children (CNE).

3.8 Policies, plans, programmes and projects to combat discrimination against women

Some of the documents on policies, plans, programmes and projects to combat discrimination against women are:

- Strategy for Accelerated Growth and Sustainable Development (SCADD), 2011-2015, National Reference Framework for Development, adopted by Decree No. 141 / PRES / PM / MEF of March 24, 2011. Goals 3, 4 and 6 focus on education for all, gender equality, women's empowerment and improved maternal care. Key objective 4 is to integrate cross-cutting priorities into development policies and programmes, one of whose activities is to strengthen gender reduction programmes;
- National Population Policy (PNP), 2010-2030. It aims for high-quality human resources; reproductive patterns that help couples, women, men and children develop; and greater availability of resources for productive investment in the country;

National Gender Policy (NGP), adopted by Decree No. 2009-672 PRES/PM/MEF/MPF of October 7, 2009, and a related action plan, 2011-2013. Their main objective is to promote inclusive and equitable development for men and women by ensuring equal and equitable access to and control over resources and decision-making in a manner that respects human rights. The policy therefore seeks to eliminate all forms of inequality and inequality between the sexes in order to ensure the social, cultural, economic and political development of every citizen. This determination was confirmed by the enshrinement of the promotion of gender equality in the Constitution in accordance with Law No. 33-2012/AN of 11 June 2012 on Constitutional Review;

- National Human Rights Policy and Promotion of Civic Responsibility (PNDHPC), 2013-2022. This policy and its first action plan 2013-2015 provide for the promotion and protection of the rights of specific groups.
- National Social Action Policy (PNAS), adopted on July 23, 2007 by Decree No. 2007-480 / PRES / PM / MASSN. It aims to promote social well-being, particularly for individuals, families and vulnerable groups, on a fully participatory basis aimed at reducing social inequalities;
- National Justice Policy (NPC), 2010-2019, adopted on May 1, 2010 by Decree No. 2010-216/PRES/PM/MJ, and a related action plan, 2010-2012. They protect the rights of women and children, including judicial proceedings, conditions of imprisonment for women and girls, social reintegration of women, divorce and child custody.

The above policies are implemented by the relevant ministries, which ensure relevant coordination with the support and monitoring of national actors as well as NGOs and TFPs.
Therefore, in addressing issues related to the inclusion of vulnerable groups in the program, the Ministry of Energy, through ABER as the lead executing entity, will work closely with relevant institutions to ensure that vulnerable groups are included in the program.

CHAPTER IV: ANALYSIS OF OVERALL PROJECT IMPLEMENTATION OPTIONS

The overall options for implementing the project are essentially:

- ✓ The electrification model
- ✓ The choice of beneficiary localities
- ✓ The choice of investors/private operators for the operationalization of the project

Assistance in the implementation of environmental and social safeguards by a consultant The locality electrification model is the major overall option for implementing the project. Indeed, the Yeleen project aims to develop an innovative rural electrification model through mini-grids that do not require recurring public subsidies and that allow productive use of electricity while minimizing environmental impacts. Eventually, 100 green mini-grids will be installed over a two-year period, powered by an estimated global solar photovoltaic capacity of 9.5 MWp, to connect 50,000 households in 100 electrified rural localities, including 500 productive connections.

The choice of beneficiary localities: a total of 100 villages spread throughout the territory will be identified to benefit from the Yeleen project. The 100 villages will be selected in a

participatory manner based on their compliance with the social and environmental screening checklist. The steps to follow are as follows:

Confirm the presence of ecologically sensitive areas from secondary sources or preliminary observations at the site;
Verify the extent of the applicability of the policies of the Government of Burkina Faso and the AfDB in the activities of the sub-projects;
Identify potential negative and positive impacts; clarify the issues that need to be further considered when preparing the environmental and social impact assessment to be carried out at the design stage.
The choice of private investors/operators. The project will be operationalized by private investors. They will be selected on the basis of their abilities and skills to carry out such a project. One of the criteria for their choice also concerns their commitment to environmental and social aspects in the conduct of projects. Investment business plans will incorporate environmental and social assessment. The implementation of the environmental and social safeguard is the responsibility of private investors with the assistance of an office recruited for this purpose and under the supervision and control of ABER and ANEVE.
Assistance in the implementation of environmental and social safeguards. Each private investor will have to implement the environmental and social safeguards of his project on the basis of the ESMP resulting from environmental and social studies and validated by ANEVE. However, to ensure that the ESPs are implemented in accordance with the provisions in force, a consultant will be hired to assist private investors. ABER will always ensure follow-up and surveillance with the collaboration of ANEVE.

CHAPTER V: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT

The political, legal and institutional framework of this CGES is based on the policies, strategies, regulations and institutions of Burkina Faso that intervene in the fields of the environment but also in those of the project concerned. This framework is also based on the World Bank's environmental and social instruments.

5. 1 Policy Framework

The policy framework addresses the national policy framework, the international policy framework, and the World Bank's environmental and social requirements and standards applicable to the SOLEER project.

5.1.1 National Policy Framework

The National Economic and Social Development Plan (PNDES) 2016-2020. Adopted by Decree No. 2016-931/PRES/PM/MINEFID of 3 October 2016, the PNDES is the national reference for interventions by the Burkinabe State and its partners over the period 2016-2020. In its strategic axis number 2, strategic objective 5 aims to "improve the living environment, access to water, sanitation and quality energy services". The second expected effect of this objective is that "access to quality energy services and energy efficiency are guaranteed".
This project is perfectly in line with the objectives of the PNDES. It will greatly contribute to its implementation.

The Energy Sector Policy 2014 – 2025 adopted in 2013. This policy is based on the following vision: "the Burkina energy sector, relying on endogenous resources and regional cooperation, ensures universal access to modern energy services and reinforces its role as a driving force for sustainable development."
The overall objective pursued through the implementation of this policy is to make energy accessible to all by promoting the sustainable use of our endogenous resources and taking advantage of the opportunities of sub-regional cooperation. This overall objective is divided into two specific objectives:

- Make energy available and accessible to all;
- Strengthen the institutional and operational capacities of the sector.

The Energy Strategy 2019-2023. This strategy is based both on the commitments made by Burkina Faso at the international, regional and subregional levels and on the reference documents at the national level.
The major challenges it aims to meet are:

- strengthening networks;
- strengthening the conventional energy production fleet;
- strengthening regional cooperation on energy exchanges;
- securing the supply and availability of petroleum products;
- the promotion of renewable energies;
- promoting energy efficiency;
- the operationalization of the solar equipment control system.

National Environmental Education Strategy

The aim of this national environmental education strategy is to provide all stakeholders in development in Burkina Faso, preferably an organized framework to enable them to make their actions on the ground more profitable in order to contribute to the promotion of sustainable development. It calls for the development of a national action plan for the implementation of environmental education. On the basis of this strategy, each sub-sector of the field of education will have to propose an environmental education action plan for the sub-sector.

National Strategy for the Management of Hazardous Chemicals and Substances

Burkina Faso's national strategy for the management of hazardous chemicals and substances is based on the International Conventions dealing with chemicals and wastes, which the country has signed and ratified, such as the Basel, Rotterdam and Stockholm Conventions, thus demonstrating its commitment alongside the international community to ensure better management of chemicals throughout the world.

Burkina Faso is not a major producer, let alone a major exporter of chemicals. However, it is just as vulnerable as other developing countries to the various dangers posed by the increasing consumption of these chemicals.

The National Action Plan for Renewable Energies (PANER) - Burkina Faso - Period [2015-2020/2030]. It is developed as part of the implementation of the ECOWAS Renewable Energy Policy (PERC). The plan contains baseline data on the status quo of national renewable energy development policies. It proposes achievable goals and targets, some indicators of which are disaggregated by gender, and based on national potentials and socio-economic assessments.

The Energy Sector Policy Letter (EPSA) of September 2016. It indicates the objectives of the Government of Burkina Faso for the energy sector over the period 2016-2020. It outlines the Government's main strategies and actions in terms of reform in the energy sector and energy transition to renewable energies and energy efficiency.

The National Policy for Sustainable Development (PNDD). Adopted by Decree No. 2013-1087/PRES/PM/MEEVCC/MEF of 20 November 2013. It aims to define the overall framework for the implementation of sustainable development in Burkina Faso. It provides general guidance for the formulation and guidance of sectoral policies, development strategies, plans and programmes, as well as planning and budgeting at both national and decentralized levels. The SOLEER project is part of a sustainable development framework. It is implemented in strict compliance with the principles set out in the PNDD.

The National Environmental Policy (PNE). It was adopted on 30 March 2007 by Decree No. 2007-160/PRES/PM/MECV/MFB. It aims, among other things, to promote shared environmental governance, decentralized participatory management of natural resources and the living environment. As part of the realization of this project, the promoter must ensure compliance with all environmental protection regulations. It should promote the participatory

management of the various impacts of the project on the environment and local populations. The realization of this CGES for the SOLEER project contributes to the consideration of the principles of the NCB.

The Sectoral Policy "Environment, Water and Sanitation" 2018-2027 (PS-EEA). It was adopted by Decree No. 2018-0456/PRES/PM/MEA/MEEVCC/MUH/MATD/MINEFID. The EEA Sector Policy is now the unifying framework for interventions in the sub-sectors of the environment, water, sanitation and improvement of the living environment over the next ten years (2018-2027).

This project will take into account the sustainable management of water resources, the environment while improving the living environment of local populations.

The National Policy and Scheme for Regional Planning and Sustainable Development. The National Plan for Regional Planning and Sustainable Development stems from the National Spatial Planning Policy, an official document adopted by Decree No. 2006-362/PRES/PM/MEDEV/MATD/MFB/MAHRH/MID/MECV of 20 July 2006. The policy confirms the need for spatial coherence for the efficient execution of development actions.
The National Plan for Regional Planning and Sustainable Development (SNADDT) operationalizes the policy, presents a relevant diagnosis that highlights and orders problems, analyzes handicaps and assets and assesses the possibilities for action. This diagram will serve as a compass for the SOLEER project in order to achieve a judicious occupation of the territory in its execution.

Burkina Faso's National Gender Policy (PNG)
PNG is an expression and commitment of the Burkinabe people. It is built on international, African and national benchmarks that justify its importance, relevance and structure. These benchmarks are the various commitments made at the international and regional levels to address the barriers to development related to gender inequalities and disparities, as well as the steps taken at the national level for gender equality and equity from which PNG draws its foundation.

The National Policy for Land Security in Rural Areas (PNSFMR)
The guidelines of the PNSFMR define the directions in which public action must be deployed to provide appropriate responses to the land tenure security of all rural actors. It is divided into six main orientations: 1) recognize and protect the legitimate rights of all rural actors on land and natural resources; 2°) promote and support the development of legitimate local institutions at the grassroots level; 3°) clarify the institutional framework for conflict management at the local level and improve the effectiveness of local conflict resolution bodies; 4°) improve the management of rural areas; 5°) establish a coherent institutional framework for rural land management; 6°) strengthen the capacities of State services, local authorities and civil society in land matters.

Cultural Policy in Burkina Faso

The National Culture Policy (PNC) was adopted in October 2009. It has four (04) strategic objectives:

- Strategic objective 1: Preserve cultural diversity with a view to promoting inculturation and consolidating social cohesion;
- Strategic objective 2: Strengthen the institutional capacities of the culture sector;
- Strategic objective 3: Structuring and developing the economy of culture;
- Strategic objective 4: Strengthen cultural cooperation and support the external dissemination of Burkinabe cultural products.

5.1.2 International Policy Framework

THE SUSTAINABLE DEVELOPMENT GOALS (SDGS). Adopted in 2015 by the heads of state and government of 193 United Nations countries, including Burkina Faso. This new sustainable development agenda calls for a fairer, more sustainable and more peaceful world by 2030. It sets out 17 Development Goals and 169 targets.
Goal 7 aims to "Ensure access for all to affordable, reliable, sustainable and modern energy services". The SOLEER project will contribute to this objective.

African Union Agenda 2063 Adopted by African Union Member States in 2015. It is intended to be "A shared Strategic Framework for Inclusive Growth and Sustainable Development and a Global Strategy to Optimize the Use of Africa's Resources for the Benefit of All Africans"
Africa's strategic vision set out in this Agenda "will involve the use of the continent's energy sources, including renewable energy, to promote economic growth and eradicate energy poverty. Renewable energy (wind, solar, hydro, bioenergy, tidal, geothermal and other renewables) will account for more than half of energy consumption for households, businesses and organizations. The SOLEER project therefore contributes perfectly to the implementation of the **African Union's Agenda 2063.**

The ECOWAS Environmental Policy, which aims to highlight regional integration and the strategic role of natural resources in the economic development of the sub-region. The vision of the ECOWAS Environmental Policy is that of "a peaceful, dignified and prosperous West Africa whose diverse, productive natural resources are conserved and sustainably managed for the development and balance of the sub-regional space. The achievement of this CGES contributes to the achievement of the objectives of this policy.

ECOWAS Renewable Energy Policy (PERC). Its aim is to ensure that more and more renewable energy sources such as solar, wind, small hydro and bioenergy feed power grids and ensure access to energy services in rural areas. This coincides perfectly with the objectives of the SOLEER project.

5.2 Legal framework

5.2.1 National legal framework

This legal framework includes all legislative and regulatory texts, from the specific field of the project or from the broader field of environmental and social safeguards. The promoters of the SOLEER project will have to pay particular attention to compliance with its texts.

The Burkinabe Constitution of 2 June 1991. Adopted by the Referendum of 2 June 1991, it has been revised several times, the latest of which is that of the transition by Law No. 072-2015/CNT revising the Constitution. From the preamble to the constitution, the environmental issue is mentioned. The sovereign people of Burkina Faso affirm in this preamble the absolute need to protect the environment.
Article 29 of the constitution recognizes the right of Burkinabe citizens to a healthy environment, while stating that "the protection, defense and promotion of the environment are a duty for all".

Law No. 006-2013/AN on the Environmental Code in Burkina Faso. It was adopted on 2 April 2013. It sets out the fundamental rules governing the environment in Burkina Faso and aims to protect living beings against harmful or uncomfortable damage and risks that hinder or endanger their existence as a result of the degradation of their environment and to improve their living conditions. According to Article 25 thereof, activities likely to have significant effects on the environment are to be submitted to the Minister responsible for the environment for the prior opinion. The opinion is drawn up on the basis of a Strategic Environmental Assessment (SEA), an Environmental Impact Assessment (EIA) or an Environmental Impact Statement (EIS). The SOLEER project will be carried out in accordance with the requirements of the Environmental Code.

Law No. 008-2014/AN on the framework law on sustainable development in Burkina Faso. It was adopted on 8 April 2014 and promulgated by Decree No. 2014-343/PRES of 12 May 2014. It sets the general rules for guiding the implementation of sustainable development in Burkina Faso and creates a unified national reference framework to ensure the coherence of actors' interventions through appropriate legal, political and institutional reforms to ensure economic efficiency, environmental sustainability and social equity in all development actions. The implementation of this CGES and the entire SOLEER project process take this law into account.

Law No. 025-2017/AN on plant protection in Burkina Faso. It was adopted on 15 May 2017. This Act regulates the health protection of plants, plant products and other regulated articles, including products derived from modern biotechnology. This Act applies to all activities and dimensions of the safety of plants, plant products and products of plant origin.

Law No. 003/2011/AN of 5 April 2011 on the Forest Code in Burkina Faso. It was promulgated by Decree No. 2011-346/PRES of 10 June 2011. In accordance with the National Forest Policy, it lays down all the fundamental principles of sustainable management and development of forest, wildlife and fisheries resources. In particular, it aims to establish a harmonious link between the necessary protection of these resources and the satisfaction of the economic, cultural and social needs of the population.

Law No. 034-2012/AN on agrarian and land reorganization in Burkina Faso. It was adopted on 02 July 2012 and promulgated by Decree No. 2012-716/PRES of 6 September 2012.

It applies to the national land domain and determines, on the other hand, the status of the lands in the national land domain, the general principles governing the planning and sustainable development of the territory, the management of land resources and other natural resources as well as the regulation of real property rights and, on the other hand, the orientations of an agrarian policy.

Law No. 038-2018/AN on the Investment Code in Burkina Faso. Its purpose is to promote productive investments contributing to the economic and social development of Burkina Faso. This law aims at the creation and development of activities aimed at: the promotion of employment and the training of a qualified national workforce; the valorization of local raw materials; export promotion; the production of goods and services for the domestic market; the use of appropriate technologies, modernization of local technologies and research and development; the mobilization of national savings and the inflow of external capital; investments in localities located at least fifty kilometers from Ouagadougou; the rehabilitation and extension of businesses; promotion of crafts; the promotion of renewable energies; environmental protection; the promotion of scientific, technological and innovation research; all activities deemed as such by the public authorities...

Law No. 028-2008/AN of 13 May 2008 on the Labour Code in Burkina Faso. This code applies to workers and employers working in Burkina Faso. It governs the labour regime. Thus, any discrimination in matters of employment and occupation is prohibited. Forced or compulsory labour is prohibited.
Section 36 of the Act provides, inter alia, that the employer:

- treat the worker with dignity;
- ensure the maintenance of good morals and the observance of public decency;
- prohibit any form of physical or emotional violence or any other abuse, including sexual harassment;

According to article 37, sexual harassment in the workplace is prohibited. Sexual harassment between colleagues, suppliers or customers encountered in the course of work is also prohibited. Sexual harassment consists of obtaining favours of a sexual nature from others by order, word, intimidation, act, gesture, threat or coercion.
The proponent of this project will take these obligations into account.

Law No. 024-2007/AN of 13 November 2007 on the protection of cultural heritage in Burkina Faso. This law sets out the rules for the protection of cultural heritage in Burkina Faso. Article 2 of the Act states that the protection of cultural heritage is aimed at safeguarding and promoting it.

Law No. 014-2017/year on the general regulation of the energy sector of 20 April 2017. Its objective is to ensure an effective, efficient, reliable, sustainable, sufficient and sustainable supply of energy, in order to promote sustainable socio-economic development in Burkina Faso. It covers the following areas: -the production, transmission, distribution, exploitation, import, export, purchase and sale of electrical energy; -the production, transport, import, export, exploitation, storage, marketing of all other forms of energy excluding hydrocarbons of fossil

origin; -the promotion of renewable energies and energy efficiency; -energy consumption; -control of the conformity and quality of infrastructure, equipment and energy products.

Law **No. 009-2018/AN on expropriation in the public interest and compensation of persons affected by developments and projects of public utility and general interest in Burkina Faso adopted on May 3, 2018.**
Its purpose is to determine the fundamental rules and principles governing expropriation in the public interest and compensation for persons affected by developments and projects of public utility and general interest in Burkina Faso.

Law No. 23/94/ADP on the Public Health Code. It deals with general sanitary measures and hygiene measures.

Law No. 022-2005/AN on the Public Health Code in Burkina Faso. It was adopted on 24 May 2005. It governs public hygiene in Burkina Faso, including hygiene on public roads and places, the hygiene of swimming pools and bathing, housing, foodstuffs, water, industrial and commercial facilities, schools, pre-schools and sanitary establishments, public buildings and the natural environment and noise control. Its main objective is to preserve and promote public health.

Law No. 034-2002/an on the framework law on pastoralism in Burkina Faso of 14 November 2002. It sets out the principles and modalities for a sustainable, peaceful and integrated development of pastoral, agropastoral and silvopastoral activities. Its field of action covers the breeding activities of bovine, ovine, caprine, camelina, asine and equine species.

Law No. 061-2015/CNT of 6 September 2015 on the prevention, punishment and reparation of violence against women and girls and the care of victims on violence against women and girls. Its purpose is to prevent, punish and redress violence against women and girls, and to protect and care for victims. It applies to all forms of violence against women and girls, including physical, moral, psychological, sexual, economic, patrimonial and cultural violence.

Law No. 015-2014/AN of 13 May 2014 on the protection of children in conflict with the law or at risk
This law, adopted on 13 May 2014, applies to every child, without distinction of any kind, regardless of any consideration of race, nationality, colour, sex, language, religion, political or other opinion of the child, his parents or legal guardians.
Under the provisions of the Act, every child has the right to protection of the law against arbitrary or unlawful interference with his or her privacy, family, home or correspondence and against unlawful attacks on his or her honour and reputation.
Thus, the promoters will specifically pay attention to the rights enshrined in the child. The primary consideration in all decisions concerning children in the implementation of this project should be the best interests of these children. Promoters must give priority consideration to the

child's emotional, moral and physical needs, age, state of health, family environment and all other aspects of his or her situation.

5.2.2 Regulatory Framework

Decree No. 2015-1187/PRES-TRANS/ PM/ MERH/ MATD/ MRS/ MS/ MARHASA/ MRA/ MICA/ MHU/ MIDT/ MCT of 22 October 2015 sets the conditions and procedures for carrying out and validating the strategic environmental assessment, the study and the environmental and social impact notice. Every promoter of a development project or programme is obliged to carry out, as part of the implementation of his project or programme, an environmental impact assessment which enables the authorities to have an overall assessment of the environmental effects of this project or programme. **According to Article 4 of the said decree,** works, developments and activities likely to have significant direct or indirect impacts on the environment are classified into three (03) categories as follows:
Category A: Activities subject to an environmental and social impact assessment (ESIA);
Category B: Activities subject to an Environmental and Social Impact Notice (NIES);
Category C: Activities subject to environmental and social requirements. The environmental and social prescription is a set of recommendations made by the structure in charge of environmental assessments to the promoters of category "C" activities with a view to better taking into account the environment.

Decree No. 2008-370/PRES/PM/MCE/MEF/MCPEA/MATD of 24 June 2008 on the conditions for granting licences and authorizations, concluding concession or leasing contracts and the obligation to declare installation in the electricity subsector in Burkina Faso.

Decree No. 2017-1011/PRES/PM/ME of 26 October 2017 setting power thresholds relating to production exploitation titles and coverage radius limits relating to distribution exploitation titles.

Decree No. 2017-1012/PRES/PM/ME/MCIA/MINEFID of 26 October 2017 on the conditions and procedures for granting licenses or authorizations for the production of electrical energy;

Decree No. 2017-1014/PRES/PM/ME/MCIA/MINEFID of 26 October 2017 setting energy efficiency standards and requirements for appliances and equipment and their implementation procedures;

Decree No. 2015-1205 / PRES / TRANS / PM / MERH /MEF /MAR HASA /MS /MRA /MICA /MRA /MIDT / MATD of 28 October 2015 on standards and conditions for wastewater discharges**.** This decree sets the standards and conditions for the discharge of wastewater into receiving environments in application of the provisions of the Environmental Code and aims to avoid or limit pollution related to the discharge of polluted or contaminated wastewater into receiving environments, and to protect public wastewater pre-treatment and management infrastructures as well as the environment and public health.

Decree No. 98-323/PRES/PM/MATS/MIHU/MS/MTT of 28 July 1998 regulating the collection, storage, transport, treatment and disposal of urban waste;

Decree No. 2015-1203/PRES-TRANS/PM/MERH/MJDHPC of 28 October 2015 on the modalities of organization and conduct of environmental inspection;

Decree No. 2004-581/PRES/PM/MAHRH/MFB of 15 December 2004 on definitions and procedure for delimiting the perimeters of protection of water intended for human consumption;

Decree No. 2001-185/PRESWMMEE setting standards for the discharge of pollutants into air, water and soil;

Order No. 2002-093/MCE/SG/DGE of 5 December 2002, setting the general conditions for obtaining a concession for the production, transmission and distribution of electrical energy for rural electrification systems of public service;

Order No. 097-066/MEM/SG/DGE of 30 October 1997 setting the conditions for obtaining technical approval for the profession of network and power plant contractor;

5.2.3 International legal framework

This framework concerns all the conventions to which Burkina Faso has subscribed and which apply to the project either from an environmental, social or energy point of view. Just like the national legal framework, the promoters of the SOLEER project will have to ensure that they are respected.

The 1992 United Nations Framework Convention on Climate Change. It aims to stabilize, in accordance with the relevant provisions of the Convention, greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system. This level should be reached in a sufficient time frame to enable ecosystems to adapt naturally to climate change, food production not to be threatened, and economic development to continue in a sustainable manner.

The African Convention for the Conservation of Nature and Natural Resources. It reiterates the will of the Member States to "put the natural and human resources of our continent at the service of the general progress of peoples in all fields of human activity. They desire through this Convention to undertake individual and collective action for the conservation, use and development of soils, waters, flora and fauna resources through the establishment and maintenance of their rational use for the present and future well-being of mankind;

International Plant Protection Convention. Through this Convention the Contracting Parties recognize the usefulness of international cooperation in the control of pests of plants and plant products and their spread and especially their introduction beyond national frontiers, desiring to ensure close coordination of measures to this end.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The overall objective of the Basel Convention is to protect human health and the environment from the adverse effects of hazardous wastes. Its scope covers a wide range of wastes considered as 'hazardous waste' by virtue of their origin and/or composition and characteristics, as well as two types of waste considered to constitute 'other waste', namely household waste and residues from incineration.

Rotterdam Convention on the Management of Hazardous Chemicals

The objective of the Convention is to encourage shared responsibility and cooperation among Parties in the international trade of certain hazardous chemicals, in order to protect human health and the environment from possible harm, and to contribute to the environmentally sound use of such chemicals by facilitating the exchange of information on their characteristics, establishing a national decision-making process applicable to their import and export and disclosing these decisions to the Parties

Convention concerning the Protection of the World Cultural and Natural Heritage

It was adopted at the seventeenth session of the General Conference of the United Nations Educational, Scientific and Cultural Organization, held in Paris from 17 October to 21 November 1972. Its purpose is to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 thereof and situated in its territory, and is primarily its responsibility. It shall endeavour to do so both by its own effort to the maximum of its available resources and, where appropriate, by means of such international assistance and cooperation as may be available to it, particularly financial, artistic, scientific and technical.

Ramsar Convention on Wetlands

Officially **Convention on Wetlands of International Importance especially as Waterfowl Habitat**, also commonly known **as the Convention on Wetlands**. It is an international treaty adopted on 2 February 1971 for the conservation and sustainable use of wetlands, which aims to halt their degradation or disappearance, today and tomorrow, by recognizing their ecological functions as well as their economic, cultural, scientific and recreational value under the designation of Ramsar site.

1992 United Nations Convention on Biological Diversity

The objectives of this Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising out of the utilization of genetic resources, including through adequate access to genetic resources and appropriate transfer of relevant technologies, taking into account all rights over such resources and technologies, and adequate funding.

The Paris Agreement on adaptation to climate change

It aims to contribute to the implementation of the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992, and to strengthen the global response to the threat of climate change, in the context of sustainable development and the fight against poverty.

The Convention on the Rights of the Child of 20 November 1989

It is an international treaty adopted by the General Assembly of the United Nations with the aim of recognising and protecting the specific rights of children.

The convention is built on four main principles that structure it:

1- non-discrimination;
2- priority given to the best interests of the child;
3- the right to live, survive and develop;
4- respect for the views of the child.

These principles set out the general guidelines detailed in its various articles:

- non-discrimination (Article 2);
- the best interests of the child (Article 3);
- the right to survival and development (Article 6);
- the views of the child (Article 12);
- the right to education and its purpose (Articles 28 and 29).

Convention **on the Elimination of All Forms of Discrimination against Women of 18 December 1979**

Adopted by the United Nations General Assembly, it entered into force as an international treaty on 3 September 1981 after being ratified by 20 countries. Ten years after its adoption, in 1989, almost a hundred countries have committed themselves to respecting its clauses.

In its preamble, the Convention explicitly recognizes that "widespread discrimination against women still exists" and stresses that such discrimination "violates the principles of equal rights and respect for human dignity". According to article I of the Convention, discrimination means "any distinction, exclusion or restriction based on sex in the political, economic, social, cultural, civil or any other field". The Convention reaffirms the principle of equality by requiring States parties to take "all appropriate measures, including legislative measures, to ensure the full development and advancement of women with a view to guaranteeing them the exercise and enjoyment of human rights and fundamental freedoms on an equal basis with men" (art. 3).

Additional Act A/SA.02/05/15 on Equal Rights between Women and Men for Sustainable Development in the ECOWAS Area.

The Supplementary Act on Equal Rights between Men and Women for Sustainable Development in the ECOWAS Region was adopted by the 47th Ordinary Session of the Assembly of Heads of State and Government held in Accra, Ghana, on 19 May 2015.

This act commits all ECOWAS Member States to the promotion of gender equality and equity in all sectors through the formulation and review of appropriate policies and legislation as well as strategic alignment. All stakeholders in the public, private and civil society sectors have specific roles to play in the implementation of this Additional Act.

The Multilateral Agreement on Regional Cooperation to Combat Trafficking in Persons, Especially Women and Children in West and Central Africa of 6 July 2006.

The Governments of the Member States of the Economic Community of West African States, and the Economic Community of Central African States, reaffirm through this agreement their concern for the growing scale of the phenomenon of trafficking in persons, especially women

and children for the purpose of exploitation in the regions. The objectives of the agreement are to:

- Develop a common front to prevent, suppress and punish trafficking in persons through international cooperation;
- Protect, rehabilitate, reintegrate and reintegrate victims of trafficking into their environment of origin when necessary;
- Assist each other in the investigation, arrest and prosecution of perpetrators through the competent central authority of each State Party;
- To promote friendly cooperation between the Parties with a view to achieving these objectives.

The Maputo Protocol

It is a Protocol to the African Charter on Human and Peoples' Rights (the African Charter on Human and Peoples' Rights was adopted on 27 June 1981 in Nairobi at the 18th Conference of the Organization of African Unity.) relating to the rights of women in Africa. It was adopted on 11 July 2003 by the 2nd Ordinary Session of the Assembly of the Organization of African Unity in Maputo (Mozambique).

The Protocol recognizes and guarantees women a wide range of civil and political rights, as well as economic, social and cultural rights, thus reaffirming the universality, indivisibility and interdependence of all internationally recognized human rights of women. These rights include the right to life, integrity and security of person, the prohibition of harmful traditional practices, the prohibition of discrimination and the protection of women in armed conflict. The Protocol also guarantees every woman the right to respect for herself and the free development of her personality, the prohibition of any exploitation or degrading treatment, access to justice and equal protection before the law, and participation in the political process and decision-making. It also protects women's right to health and reproductive rights, their right to food security and their right to adequate housing. Furthermore, the Committee urges States parties that have not yet done so to incorporate these fundamental principles into their constitutions and other legislative instruments and to ensure their effective implementation. Finally, it obliges them to integrate a gender perspective into their political decisions, laws, development plans and activities, and to ensure the general well-being of women.

Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime.

The Protocol was adopted in New York by resolution A/RES/55/25 of 15 November 2000 at the fifty-fifth session of the General Assembly of the United Nations.

The States Parties to the Protocol are convinced that the addition to the United Nations Convention against Transnational Organized Crime of an international instrument to prevent, suppress and punish trafficking in persons, especially women and children, will help to prevent and combat such crime. They set themselves the following objectives:

- prevent and combat trafficking in persons, paying particular attention to women and children;

- to protect and assist victims of such trafficking with full respect for their human rights; and
- to promote cooperation among States Parties with a view to achieving these objectives.

Regulation No. 007/2007/CM/UEMOA on plant, animal and food safety in the WAEMU.
Its purpose is to:

- ✓ the regulation of the health protection of plants and plant products and other regulated articles, including products derived from modern biotechnology as defined in this Regulation;
- ✓ the protection of animals, animal products, products of animal origin, animal nutrition and veterinary public health, including products of modern biotechnology;
- ✓ food health protection, including products derived from modern biotechnology.

Operational Safeguards (SO) of the African Development Bank (AfDB)
Five in number, the YELEEN project in the stake will trigger the following SOs:
SO 1: Environmental and Social Assessment;
SO 2: Involuntary Resettlement: Land acquisition, displacement and compensation of populations;
SO 4: Prevention and control of pollution, greenhouse gases, hazardous materials and efficient use of resources;
SO 5: Working conditions, health and safety.

Environmental Assessment Comparison Between National and African Development Bank Legislation

Table 3 below provides a comparative analysis of the AfDB's requirements and Burkina Faso's corresponding provisions:

Table 3: Comparative analysis of AfDB requirements and corresponding provisions of Burkina Faso

African Development Bank Requirements	Domains or content	Corresponding national provisions	Comments / Steps to be taken
SO 1"Environmental and Social Assessment"	Acts and regulations, policies, strategies, plans, projects and programs or any other initiative that have a significant impact on the environment	**Decree n°2015-1187:** Environmental Assessment Strategic (SEA) or Environmental and Social Management Framework (ESMA)	✓ Conduct an SEA always for plans and programs. ✓ Conduct an ESMC if investment sites are not known at the time of program evaluation ✓ Carry out an Environmental and Social Commitment Plan (ESEP) ✓ Conduct ESIAs, NIES, MOUs for sub-projects
	Works, structures, developments and activities likely to have significant direct or indirect impacts on the environment	**Decree n°2015-1187:** **Category A:** Activities subject to an Environmental and Social Impact Assessment (ESIA) **Category B:** Activities subject to an Environmental and Social Impact Notice (NIES) **Category C:** Activities subject to Environmental and Social Requirements (EP)	
SO 2 "Involuntary Resettlement: Land Acquisition, Displacement and Compensation"	Accessibility to land	**Article 34 of Law No. 034-2012/AN on agrarian and land reorganization:** In particular, agrarian policy must ensure: - equitable and secure access to rural land for all actors	➢ Perform a RAP ➢ Realize a Resettlement Policy Framework
	Involuntary physical and/or economic displacement	Decree n°2015-1187: ✓ Implementation of the Resettlement Action Plan (RAP) if the number of people is at least 200	

African Development Bank Requirements	Domains or content	Corresponding national provisions	Comments / Steps to be taken
		✓ Succinct Resettlement Plan (SRP) if the number of people is between 50 and 199 Resettlement measures and modalities to be included in the ESIA report if the number of persons is less than 50	
SO 3 "Biodiversity and ecosystem services"	Biodiversity conservation during project implementation	**Article 66 of the Environmental Code:** The Government shall take the necessary measures to limit or reduce pollution that affects the quality of life and biodiversity. **Law No. 025-2017/AN on plant protection** **Law No. 006/97/ADP of 31 January 1997 on the Forest Code**	➢ Conduct ESIAs, NIES, MOUs for sub-projects ➢ Carry out an Environmental and Social Commitment Plan (ESEP)
	Sustainable management of living natural resources	**Article 18 of the Environmental Code:** Natural resources that contribute to the satisfaction of human needs are exploited in such a way as to satisfy the needs of present generations without compromising the ability of future generations to meet their own needs**.** **Article 1 of Law No. 002-2001/AN** on the framework law on water management: Water is a precious resource. Its sustainable management is a national imperative.	
SO 4 "Prevention and Control of Pollution, Greenhouse Gases, Hazardous Materials	Preservation and rational management of natural resources during project implementation	**Article 18 of the Environmental Code:** Natural resources that contribute to the satisfaction of human needs are exploited in such a way as to satisfy the needs of present generations without	➢ Implement an Environmental and Social Management

African Development Bank Requirements	Domains or content	Corresponding national provisions	Comments / Steps to be taken
and Resource Efficiency"		compromising the ability of future generations to meet their own needs. **Article 1 of Law No. 002-2001/AN on the framework law on water management:** Water is a precious resource. Its sustainable management is a national imperative.	Framework (ESMF) ➢ Conduct ESIAs, NIES, MOUs for sub-projects
	Prevention and management of pollution during project implementation	**Article 70 of the Environmental Code:** Any person responsible for pollution is held liable for damage caused to third parties by his act. The costs of restoring polluted places are at his expense. In the event of an emergency, the competent authorities shall take the necessary measures to limit the effects of the said pollution, subject to them taking action against the person responsible for the pollution.	
SO 5 "Working Conditions, Health and Safety"		**Article 19 of the Constitution of 2 June 1991:** The right to work is recognized and equal for all. It is prohibited to discriminate in employment and remuneration on the grounds of, inter alia, sex, colour, social origin, ethnicity or political opinion.	➢ Produce a Project Workforce Management Procedures document ➢ Implement a health-health-safety-environment plan (PHSSE)
		Law No. 028 -2008/year on the Labour Code in Burkina Faso Title III : Industrial relations (Articles 36/37) ✓ Sexual harassment between colleagues, suppliers or customers encountered in the course of work is prohibited. ✓ Sexual harassment consists of obtaining favours of a sexual nature from others by order,	

African Development Bank Requirements	Domains or content	Corresponding national provisions	Comments / Steps to be taken
		word, intimidation, act, gesture, threat or coercion. ✓ The employer must refrain from any discrimination of any kind whatsoever with regard to access to employment, working conditions, vocational training, retention in employment or dismissal, in particular in relation to the actual or apparent HIV infection HIV status. Title V – Safety and health at work, company social services. To ensure prevention, the employer must: ✓ the technical measures applied to new installations or processes during their design or installation or by technical additions to existing installations or processes; ✓ measures to organise safety at work; ✓ measures to organise occupational health; ✓ work organisation measures; ✓ training and information measures for workers.	

5.3 Institutional framework

The institutional framework consists on the one hand of the institutions in the field of the project and on the other hand, of the institutions in the field of environmental and social protection and those of the transversal domains.

The Ministry in charge of Energy which, through the Directorate General of Energy, ensures the missions of design, development, coordination and application of energy policy. Since 2016, the department in charge of energy has created a number of operational directorates to enable it to carry out its missions. These are the Directorate-General for Renewable Energy (DGER), the Directorate-General for Energy Efficiency (DGEE) and the Directorate-General for Conventional Energy (DGEC) to focus on increasing renewable energies in the energy mix and promote energy efficiency.
The institutional organization for the implementation of energy policy is based on design structures (the Directorate General of Conventional Energy (DGEC), the Directorate General of Renewable Energies (DGER), and the Directorate General of Energy Efficiency (DGEE)) and operational structures (the National Electricity Company of Burkina (SONABEL), the Burkinabe Agency for Rural Electrification (ABER), and the National Agency for Renewable Energy and Energy Efficiency (ANEREE)).

In addition, other structures are involved in the energy sector. These are the Energy Sector Regulatory Authority (ARSE), which is responsible for regulating the energy sector, the Bureau of Mines and Geology of Burkina Faso (BUMIGEB), which is responsible for the control and installation of storage and distribution infrastructures for petroleum products, and the Burkinabe National Hydrocarbon Company (SONABHY), which is responsible for the import and storage of liquid and gaseous hydrocarbons.

Ministry of Environment, Green Economy and Climate Change (MEEVCC). It implements and monitors the Government's policy on the environment, the green economy and climate change.
According to Article 11 of Law No. 006-2013/AN of 2 April 2013 on the Environmental Code in Burkina Faso, "The Ministry of the Environment is the guarantor of the institutional coordination of environmental quality in Burkina Faso". It defines and implements State environmental policy, drafts legislation and monitors its implementation.

It monitors regulations on the environment, sanitation, protection of natural resources and promotes environmental research.

The Ministry of Economy, Finance and Development (MINEFID). It is in charge of the management of the State's heritage, including the national land domain, and is also involved in the management of the Mining Site Restoration Fund. Questions concerning the tax authorities fall within its competence, in particular with regard to duties and taxes relating to the domain.

Ministry of Women, National Solidarity and Family

The main **mission of the Ministry of Women, National Solidarity** and the Family is to ensure the implementation and monitoring of the Government's policy on the advancement of women and gender, more specifically the reduction of gender inequalities with a view to equitable and sustainable human development in Burkina Faso. The policy for the advancement of women and gender is cross-cutting and its implementation is also the responsibility of all ministries and institutions as well as local authorities, CSOs and the private sector. The creation of the Ministry for the Promotion of Women and Gender is a major achievement that reflects the Head of State's desire to set up a new framework for consultation on all interventions in favour of women and the reduction of gender inequalities.

The National Agency for Environmental Assessments (ANEVE) formerly the National Bureau for Environmental Assessments (BUNEE) whose statutes were approved by Decree No. 2020-0664/PRES/PM/MEEVCC/MINEFID approving the statutes of the National Agency for Environmental Assessments. Its mission is to promote environmental assessments and ensure compliance with environmental assessment rules. As such, it is the national structure responsible for environmental policing in environmental assessments. It also polices classified establishments through environmental inspections.

CHAPTER VI: ANALYSIS OF GENERIC ENVIRONMENTAL AND SOCIAL IMPACTS/RISKS ASSOCIATED WITH THE PROJECT

The environmental and social (E&S) risks and impacts associated with the development of the programme's sub-projects in an area of low environmental and social sensitivity are likely to be easily identified, assessed and mitigated through the adoption of good E&S practices. The environmental and social impact analysis of a project (or project options) involves comparing expected changes in the biophysical and socio-economic environment with and without the project.

The sub-projects to be reviewed under this AfDB-GCF program will be subject to project- and proponent-specific environmental and social due diligence, with the support of an independent consultant. The AfDB envisages that only Tier 2 and Tier 3 projects will be considered under this framework and, therefore, each sub-project will be individually reviewed and categorized and due diligence will be undertaken.

Given this anticipation of considering only Tier 2 and Tier 3 projects and in accordance with the Fund's "Comprehensive Disclosure Policy", it is understood that the Framework would include an overall categorization of Tier 2 based on the anticipated risk profile of each sub-project.

6.1 Project Environmental and Social Classification

Due to the potential direct and cumulative environmental and social impacts/risks, the project is classified as "Category 2" according to the AfDB's Integrated Safeguard System (ISS) and Environmental and Social Assessment Procedures (ESAP). A preliminary analysis of the proposed sub-project pipeline revealed some moderate environmental and social impacts. As sub-projects have not yet been defined and their actual locations identified, the impact analysis is based on a generic environmental baseline in the context in which the projects will be located and the prescribed nature of the proposed models, i.e., mini-grid PV connections and on-site solar systems. In general, the main E&S risks identified as cross-cutting for the project include land acquisition problems, land-use change, alteration of drainage channels, soil erosion, risks to the workforce including occupational health and safety (OSH) during construction: exposure to dust and noise, falling objects, hazardous materials, possible exposure to HIV and other STIs due to the influx of migrant workers), pollution risks during mini-grid work and during operation.

Where project sites would be located in agricultural areas, there are few opportunities for solar projects to share land with agricultural uses. This poses a problem because the land to be designated for solar panels is often used by local communities for agriculture, cultivation, etc., even if they do not have formal land ownership. Most of these impacts/risks are few, site-specific, largely reversible and easily mitigated through the application of appropriate management measures. The impacts are summarized below.

6.2 Negative environmental and social impacts

6.2.1 Impacts during the installation phase

Impacts on the biophysical environment

- The preparation of the site (clearing and levelling of the land) will generate dust and local nuisances (about 2 hectares of land will be required for each MW produced in mini-grid which makes a total of about 19 ha for the whole program).
- Local ground disturbance is expected at mini-grid sites. However, given the nature of the works and the materials to be used, it is not envisaged that soil and water pollution will occur outside the sites of the works, mainly groundwater.
- Soil pollution due to waste resulting from discharges of materials from installations.

Impacts on the human environment

- The use of moving machinery, e.g. vehicles and construction machinery, will cause nuisance in the form of dust, noise and vibration to which people will be exposed.
- Exposure to risks and hazards to workers and local residents (occupational health and safety risks)
- Failure to use resident labour during construction could create community frustrations/tensions and even local conflicts that could lead to vandalism, sabotage, looting or destruction/degradation of infrastructure and equipment.
- Social impacts due to population influx into project areas such as changes in social behaviour and potential risks of communicable diseases, including HIV/AIDS, associated with social interactions.

6.2.2 Impacts in the operational phase

Biophysical environment

- Due to the nature of project operations, no negative impacts on air quality, soil or water resources are expected during the operation phase
- Soil pollution can be due to poor waste management, especially improper handling of used/obsolete batteries (leakage of lead and acid that can pollute soil and water)
- Subproject components can also have a visual impact by altering the visual landscape of their location during construction and operation. However, the impact may be reversible during decommissioning. The significance of this impact will depend on the perceived importance of the affected sites and will also depend on the extent of the project's footprint.

- Solar systems can pose risks to wildlife, especially birds that can mistake solar panels for water bodies. This could lead to the loss and reduction of the local bird population.

Human environment

- Exposure to occupational health and safety risks and hazards, e.g. electrocution risks for persons and maintenance technicians;
- Risk of theft in the absence of adequate security measures;
- The existence of electric (solar) energy will allow villagers to engage in various economic activities;
- The project will significantly reduce fuel consumption (diesel) and greenhouse gases (GHG) in the atmosphere;

- The availability and use of mini-grids and individual solar kits will reduce the population using noisy generators, thereby reducing noise pollution for communities.
- Environmental, social and economic co-benefits, including gender-sensitive development impacts

Economic co-benefits

- Job creation resulting from the productive use of electricity in agriculture, agribusiness and light industry;
- Creation of green jobs in green economy sectors related to sustainable energy and climate change adaptation actions in Burkina Faso.
- Reducing poverty through a virtuous circle of more efficient value creation and reducing energy spending on lighting and mobile billing by about 40% for average residential households.
- Food security through climate-resilient agriculture, less dependent on rainfall through irrigated crops and refrigeration for better conservation of perishable goods

Social benefits:

- Focus on women entrepreneurs in the productive use component leading to strengthening the foundations of matriarchal society;
- Improved health and safety by removing smoke and soot from kerosene lamps and candles for lighting and fire hazards caused by open flames.
- Better access to education through homework lighting and better access to web-based materials at school;
- Water pumps for access to groundwater leading to a higher school enrolment rate raised for girls;
- Strengthening ties with the diaspora through donations of electrical appliances and remittances for the purchase of electrical equipment for productive use and entertainment.

Environmental benefits

- Increased indoor air quality through the use of LED lighting
- Reduction of soil and water pollution due to unsafe disposal or disposal of batteries
- reducing the use of traditional biomass (including wood), which accounts for 84% of all primary energy consumed in Burkina Faso;

6.2.3 Gender-sensitive development impact

The project improves living conditions, especially for women and girls, who are the main guardians of households and are responsible for the energy sources available for lighting and cooking. This mini-grid project aims to provide women and girls with equal opportunities with men and boys for access to energy, education, health care, decent work and representation in decision-making processes. The proposed measures must provide women with equal training and employment opportunities when technical assistance is provided to ABER.

Activities targeting women's participation and training under TA will ensure that the programme is gender-sensitive and that benefits are shared between men and women.

6.3 Mitigation Measures

The main E&S risks identified as cross-cutting for the project have been presented in the previous sections. Table 3 presents the key E&S challenges and proposed relevant mitigation measures.

Table 4: Key E&S challenges and mitigation measures

No.	Challenge	Approach to mitigation
1	**Security of employees and infrastructure and equipment related to terrorist attacks**	**Close collaboration of companies with the SDF and VDP** **Strict compliance with safety instructions**
2	Design of decentralized projects with a large number of small sub-projects prepared by private sector implementing entities	Environmental and Social Management System (ESMS) requirements for mini-grid designers and SHS companies; Differentiate ESIA and ESMP requirements based on E&S risk categorization Detailed step-by-step responsibilities for E&S for key players for each project component
3	Land acquisition, resettlement, livelihood restoration	Mini-grid developers will prepare RAPs No major land acquisition and resettlement are envisaged under the stand-alone solar system component. The content of the RAP is presented in appendices
4	Lack of awareness of E&S risks and impacts (communities, SHS clients, universities)	Awareness-raising and dialogue through different methods of stakeholder engagement
5	Lack of capacity of private sector implementing entities	Training for mini-grid developers, SHS companies
6	Disposal and recycling of solar panels and end-of-life batteries (lithium)	Development of a strategic approach to engage mini-grid developers, private companies in Burkina Faso in the implementation of consistent practices of battery storage, recycling and disposal

Source: CGES YELEEN, updated 2023

6.3.1 E&S Risk and Impact Mitigation Approach

The E&S risk and mitigation approach will include the use of the eligibility and exclusion list (as presented in Annex 2) during the project preparation stages, e.g. site selection and project selection.

Mitigation measures involve avoiding any impact, minimizing the impact, correcting the impact, and phasing out the impact over time. There are three mitigation measures: physical, socio-cultural and socio-economic.

Physical measures relate to problems of field baseing, revegetation and prevention such as land clearing, erosion, sedimentation and pollution control, good construction practices, waste management.

Socio-economic measures will include education and awareness-raising on safety instructions and behaviour in sensitive areas, hygiene and sanitation training, rules and regulations,

institutional support (including vocational training) and recruitment of qualified personnel where appropriate. Mitigation measures for public health issues include exploring options to accommodate the team off-site and avoid camps and, if not, educating the team on vegetation preservation, providing suitable temporary sanitation facilities such as washrooms. Use local and regional workforce as much as possible and provide HIV/AIDS awareness to workers and community if necessary, provide workers with guidelines on local culture, behaviour and social life and create walking paths and green where necessary.

Mitigation measures for the use of hazardous waste include: using off-site treatment methods and delivering only poles ready for fixing, incineration or disposal of any hazardous materials found on site; use protective equipment while working; remove or bury all abandoned building materials and debris; and fill and close all latrines and septic systems. Mitigation measures for the use of heavy facilities and equipment. For example, skips for the delivery of materials include: minimizing the use of heavy trucks; provision of drainage channels to guide runoff; the introduction of mulching to minimize the effects on soil erosion; Define protocols for vehicle maintenance on site and do not spill oil on site.

When identifying key risks, appropriate mitigation measures should be applied according to the specific situation of each project site.

Appendix 6 provides a list of generic E&S mitigation measures.

Environmental and social impact management will be supported by the applicable AfDB ISS, in accordance with the Accreditation Framework Agreement and/or other related arrangements. Each AfDB-GCF Yeleen project will be required to conduct a detailed environmental and social assessment in accordance with international standards, which will include mitigation measures drawn from the results of the assessment and international good practices in the sector.

Projects for funding under the AfDB-GCF will be subject to the evaluation process detailed in the following sections of this CGES and will be evaluated against ISS requirements and other international guidelines and practices such as performance standards, General Health and Safety (EHS) guidelines and relevant AfDB and World Bank guidelines and guidance notes. The application of these different guidelines and best practices will be based on site-specific project characteristics and will be in line with national regulations.

6.3.2 Environment, Health and Safety

Internationally accepted guidelines on environmental, social, health and safety mitigation measures for renewable energy projects can be found in the AfDB Guidelines and Guidance Notes, as well as the WB's EHS Guidelines.

In line with MDB best practices, the Bank's ISS, in particular guidance notes, require the borrower or client to refer to the World Bank Group's EHS guidelines. EHS guidelines contain performance levels and metrics that are generally considered feasible at a reasonable cost using commercially available technology. Effluent discharges, air emissions and other numerical guidelines and performance indicators, as well as other prevention and control approaches included in the EHS Guidelines, are considered default values for new projects.

The General EHS Directives include guidelines on a full range of topics relating to the environment, occupational health and safety, community health and safety, and construction and decommissioning. They should be used in conjunction with the EHS guidelines of the industrial sector. Below you will find the general EHS content in the guidelines.

Général Lignes directrices EHS: Table des matières

1. Environmental
1.1 Les émissions atmosphériques et la qualité de l'air ambiant.
1.2 Conservation de l'énergie.
1.3 Traitement des eaux usées et qualité de l'eau ambiante.
1.4 Conservation de l'eau.
1.5 Gestion des matières dangereuses.
1.6 Gestion des déchets.
1.7 Le bruit
1.8 terres contaminées.

2. Santé et sécurité au travail
2.1 Généralités La conception et le fonctionnement des installations.
2.2 La communication et la formation.
2.3 Dangers physiques.
2.4 Dangers chimiques.
2.5 Dangers biologiques.
2.6 dangers radiologiques.
2.7 Équipement de protection individuelle (EPI).
2.8 Environnements danger spécial.
2.9 La surveillance.

3. La santé et la sécurité des collectivités
3.1 La qualité de l'eau et la disponibilité.
3.2 Sécurité des structures de projet L'infrastructure.
3.3 La vie et la sécurité incendie (L&FS).
3.4 La sécurité de la circulation.
3.5 Transport des matières dangereuses.
3.6 Prévention des maladies.
3.7 Mesures et d'interventions d'urgence.

4. La construction et de la désaffectation de puits
4.1 Environnement.
4.2 Santé et sécurité au travail
4.3 Santé et sécurité communautaire

6.4 AfDB Integrated Backup System (ISS)

The African Development Bank's (AfDB) environmental and social safeguards are the cornerstone of the Bank's support for inclusive economic growth and environmental sustainability in Africa. AfDB will apply ISS for all projects reviewed under the AfDB-GCF framework

The Bank's ISS is designed to promote the sustainability of project results by protecting the environment and people from the potentially negative impacts of projects. This requires all projects to meet these ISS backup requirements when preparing and implementing the project. The safeguards aim to:

- avoid negative impacts of projects on the environment and affected people, while maximizing potential development benefits to the extent possible;
- minimize, mitigate and/or compensate for negative impacts on the environment and affected persons where avoidance is not possible; and
- Help borrowers/clients strengthen their backup systems and develop their capacity to manage environmental and social risks.
- The ISS consists of four interrelated components.

6.5 Enforcement of Integrated Backup Policies

It describes the common objectives of the Bank's safeguards and sets out the guiding principles. It is designed to be applied to current and future lending modalities and takes into account the diverse capacities and needs of regional member countries, in both the public and private sectors.

Integrated safeguards consist of a policy statement that sets out the basic principles that guide and underpin the Bank's approach to environmental protection. The Bank's Policy Statement on Integrated Safeguards sets out the Bank's commitments and responsibilities for ISS delivery:

- ✓ ensure systematic assessment of environmental and social impacts and risks;
- ✓ apply operating systems to the Bank's entire portfolio of operations;

- ✓ assist clients and countries by providing technical advice and practical support to meet requirements;
- ✓ implement an adaptive and proportionate approach to environmental and social management measures to be agreed with clients as a condition of project funding;
- ✓ ensure that clients engage in meaningful consultations with affected groups; and
- ✓ Respect and promote the protection of vulnerable groups, in a manner appropriate to the African context.

6.6 Operational Safeguards (SO)

It is a set of five safeguard requirements that the Bank's clients are expected to meet when dealing with social and environmental impacts and risks. Bank staff use due diligence, review and supervision to ensure that clients meet these requirements during project preparation and implementation. Over time, the Bank may adopt additional safeguards requirements or update existing requirements to improve efficiency, respond to changing needs, and reflect evolving best practices.

Under the Yeleen ADB-GCF program, the sub-project that will trigger all SOs will not be eligible.

6.7. Performance requirements, exclusion list and compliance with relevant laws and regulations General

The AfDB requires its projects to meet international best practices in environmental and social sustainability. To help clients and/or their projects achieve this goal, the AfDB has defined specific operational safeguards for key areas of environmental and social sustainability.

- ✓ **Operational backup 1** : The objective of this primordial SO, and of all

SO that support it, is to integrate environmental and social considerations – including those related to vulnerability to climate change – into the Bank's operations and thus contribute to sustainable development in the region;

- ✓ **Operational Safeguard 2** – Involuntary Resettlement : This SO aims to facilitate the operationalization of the Bank's 2003 Policy on Involuntary Resettlement, as part of the conditions for the implementation of SO 1 and in doing so, to integrate resettlement considerations into the Bank's operations;
- ✓ **Operational Safeguard 3** – Biodiversity, Renewable Resources and Ecosystem Services: This SO defines the conditions required for borrowers or clients to

  (i) identify and apply opportunities to conserve and sustainably use biodiversity and natural habitats, and (ii) observe, implement, and comply with prescribed conditions for the conservation and sustainable management of priority ecosystem services.

Operational Safeguard 4 – Pollution Prevention and Control, Hazardous Materials and Resource Efficiency: This SO outlines the key pollution control and prevention requirements for

borrowers or clients to achieve high-quality environmental performance throughout a project's lifecycle;

Operational safeguard 5 - Working conditions, health and safety: Work is one of a country's most important resources in the quest for poverty reduction and economic growth. Respect for workers' rights is one of the foundations for developing a strong and productive workforce.

Table 5: Summary of SO objectives and triggers

SO 1: Environmental and Social Assessment	
Objectives:	Identify and assess environmental and social impacts (including gender) and climate change vulnerability issues associated with Bank lending and grant operations in their area of influence; Avoid or reduce, mitigate and compensate for adverse impacts on the environment and on affected populations; Ensure that affected populations have access to timely and appropriate information about the Bank's operations and are adequately consulted on issues that may affect them;
Trigger factor:	This SO is triggered through the mandatory environmental and social sorting process by which a category is assigned to the project based on the environmental and social risks and impacts it may have in its area of influence. These risks and potential impacts include transboundary physical, biological, socio-economic, health, security, cultural property, and global impacts, including greenhouse gas emissions and vulnerability to the effects of climate change.
SO 2: Involuntary Resettlement: Land Acquisition, Displacement and Compensation	
Objectives:	Avoid involuntary resettlement as much as possible, or reduce the impacts of resettlement in cases where the Involuntary resettlement is inevitable, studying all the viable project designs; Ensure that displaced persons receive a significant resettlement assistance, preferably under the project, so that their standard of living, their production capacity income, production levels and their overall means of subsistence are improving from pre-project; Establish a mechanism to monitor the performance of Involuntary resettlement programs in Banking and for problem solving as you go they present themselves in such a way as to avoid Reinstallation poorly prepared and executed.

Trigger factor	This SO is triggered if projects require acquisition involuntary acquisition of land, the involuntary acquisition of other assets, and restrictions on land use or access to local natural resources, resulting in: •Relocation or loss of housing by people living in the area of influence of the project; •Loss of property or limitation of access to property, including national parks, protected areas or natural resources; or •Loss of sources of income or livelihood related to the project, whether or not affected persons are required to leave their lands.
SO 3: Biodiversity and ecosystem services	
Objectives	Conserve biological diversity by avoiding, and if this is impossible, by reducing impacts on biodiversity; In cases where certain impacts are unavoidable, look for restore biodiversity by implementing, where appropriate, compensatory measures not to realize a loss net, but rather a net gain in terms of biodiversity; Protect natural, modified and sensitive habitats; and Maintain service availability and productivity priority ecosystems to maintain benefits for affected populations and maintain project performance.
Trigger factor	This SO is triggered if the project is located in habitat that is likely to be impacted or takes place in areas that provide ecosystem services on which potentially affected populations depend for their survival, subsistence or income, or that are used to ensure the survival of the project. It is also triggered if the project consists mainly of exploiting natural resources (e.g. forest plantations, cash crops, agriculture, livestock, fisheries and aquaculture).
SO 4: Prevention and control of pollution, greenhouse gases, hazardous materials and resource efficiency	
Objective	Manage and reduce the pollutants that can be generated by a project so that they do not pose risks harmful to human health and the environment, including hazardous and non-hazardous waste and greenhouse gas emissions. Establish a framework for the efficient use of all raw materials and natural resources in a project, with a particular focus on energy and water
Trigger factor	This SO is triggered if the project is likely to have major adverse environmental and social impacts resulting from the emission of particulate pollutants, waste or hazardous materials covered by national laws, international conventions or internationally recognized standards or unsustainable use of resources. It is also triggered by potentially high levels of GHG emissions.
SO 5: Working Conditions, Health and Safety	

Objectives	Protect workers' rights and establish, preserve and improve relations between employees and employers; Promote compliance with national legal requirements and carry out due diligence in case national laws do not provide for or do not go in the same direction than SO; Promote broad compliance with relevant International Labour Organization (ILO) conventions, ILO core labour standards and the UNICEF Convention on the Rights of the Child in cases where national laws do not provide equivalent protection; Protecting workers from inequality, social exclusion, child labour and forced labour Requiring the protection of health and safety at work
Trigger factor	This SO is triggered if the project involves the establishment of temporary or permanent staff

In this program only SO-1, 2, 4 and 5 will be triggered. An abbreviated resettlement plan will be developed to address land acquisition or related issues in accordance with Operational Safeguard 2: Land Acquisition, Resettlement and Compensation of Involuntary Populations and those of the country's national laws and regulations.

Each operational backup defines the desired outcomes in its objectives, followed by specific requirements for projects to help customers achieve those outcomes. Compliance with relevant national legislation is an integral part of all operating systems.

Exclusion List of Goods and Activities Harmful to the Environment

The revised policy on eligible expenditure for Bank Group financing (May 2008) includes a "**negative list**" that prohibits public and private investment in goods "harmful to the environment" without explicitly defining what this means. Based on international best practices (in particular with regard to the IFC exclusion list), with particular reference to the criteria provided in the different SOs, the Bank defines the following elements as harmful to physical health as well as to the social environment, and therefore excludes them from its eligible operations for the public and private sectors:

- The production or trade of a good or activity considered illegal under the laws or regulations of the host country, or international conventions and agreements;
- The production of or trade in radioactive material, with the exception of medical equipment and quality control equipment where the radioactive source is insignificant and adequately protected;
- The production, trade or use of non-adherent asbestos fibres or other products containing asbestos bound to other substances as the dominant material;

- The production of or trade in pharmaceuticals, chemical compounds and other harmful substances subject to phase exit or international bans – including pesticides classified as category Ia (extremely hazardous), Ib (very hazardous) or II (moderately hazardous);
- Production of or trade in internationally banned ozone-depleting substances ;
- Trade in wildlife products regulated under the Convention on International Trade in Species of Wild Fauna and Flora (CITES);
- Purchase of logging equipment for use in unmanaged primary tropical forests; and

Production and activities involving harmful or exploitative forms of forced or child labour as defined by national regulations.

6.8 Environmental and Social Assessment Procedures (ESAP)

The ISP provides guidance on specific procedures that the Bank and its borrowers or clients should follow to ensure that the Bank's operations meet SO requirements at each stage of the Bank's project cycle.

6.9 Integrated Environmental and Social Assessment (ESIA)

Guidance notes provide technical advice to borrowers or clients of the Bank on standards relating to sectoral issues or on methodological approaches that clients or borrowers are expected to adopt to comply with SO standards. A summary of the ESIA guidance notes was presented in Annex 3.

The Integrated Environmental and Social Impact Assessment (ESIA) guidance notes provide a systematic process for addressing the environmental and social impacts of projects with a clear consideration of the specific characteristics of the sector.

IESIA guidance notes complement the guidance and formats provided in the ISP and provide guidance to RMCs when undertaking environmental and social assessments for Bank-financed projects/programs. They will also be used by the Bank's operational staff to review and validate these studies and supervise projects. The provision of high-quality technical advice is essential to ensure effective compliance, capacity and ownership of the ISS by Bank staff and borrowers.

The ESIA guidance notes are presented in the form of three stand-alone volumes providing guidance on the three essential components of the environmental and social assessment process, specific themes and operational safeguarding requirements, and technical advice on key sectors and sub-sectors that have been proposed by operational departments as areas requiring advice:

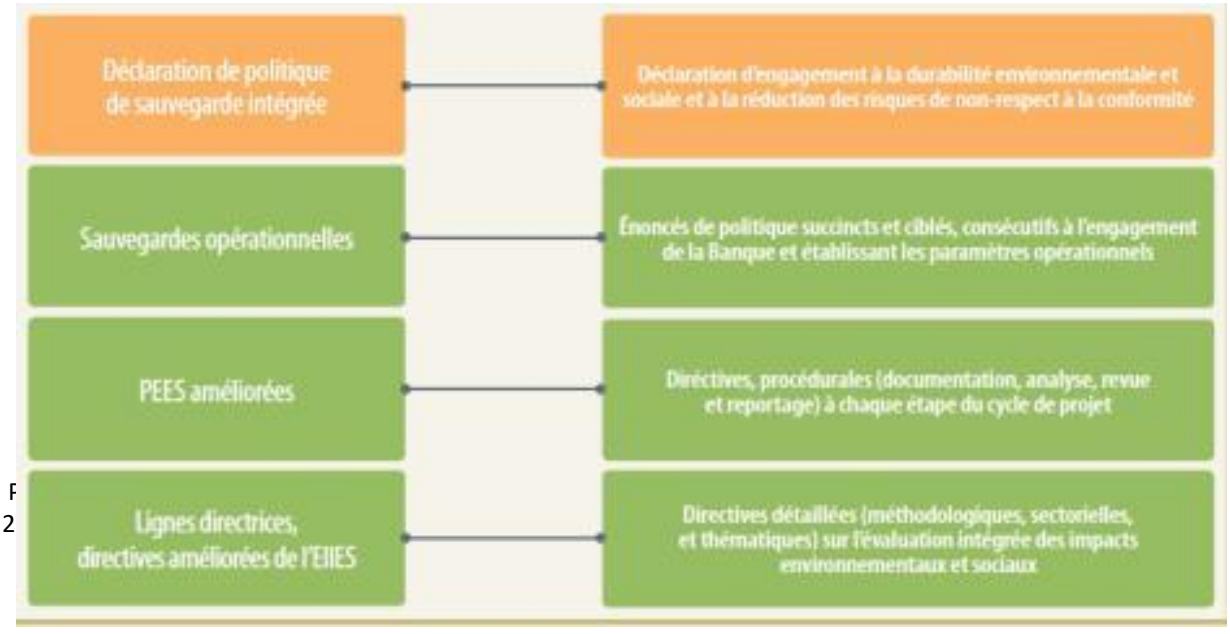


Figure 3: Structure of the ISS

CHAPTER VII: ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK PLAN OF THE PROGRAMME

7.1 Steps in the preparation and implementation of the CGSP

The CGGP provides the major guidelines for the environmental and social management of the project, based on national priorities and taking into account the requirements of the African Development Bank's operational safeguards. These requirements include the screening system, the realization of the NIES, the capacity building for the implementation of the CGES, the periodic reporting of the implementation of the CGES and finally the periodic monitoring of the implementation of environmental and social measures.

Sub-projects should be assessed on the basis of the due diligence process starting with the selection phase. The overall process is described in the flowchart below:

i) Site selection for sub-projects (Mini – networks)

ii) Social and Environmental Screening Checklist

iii) Key environmental and social characteristics (Significance based on likely impacts)

iv) Define the scope of environmental and social studies (ESA)

v) SEA-Identification of environmental and social impacts/issues for sub-projects

vi) Preparation of specific environmental and social management plans to a sub-project, p. E.g. leaflet/ESMP

vii) Environmental and social monitoring

Environmental and social management approach to the project

The following sections describe what needs to be done in terms of environmental and social management at each stage of the project's life: project identification, preparation, assessment, implementation and completion.

The proposed environmental approach consists of eight (8) steps:

- Step 1: Pre-selection of sub-project sites and activities to be carried out;
- 2nd step: Filling in the screening form,
- 3rd step: Approval of the screening sheet, i.e. the proposed categorization (A, B, C) and if necessary the preparation of a Resettlement Action Plan);
- 4th step: Elaboration of an environmental and social impact study or notice or an Environmental and Social Prescription (PES), and elaboration of PAR if necessary;
- Step 5: ESIA/NIES Approval
- Step 6: Public consultation and dissemination,
- 7th step: Integration of the results of environmental and social measures (the costed ESMP or PES) in the tender documents;
- Step 8: ESMP implementation and monitoring.

Step 1: Site pre-selection of sub-projects and activities to be carried out

This step is carried out during the preparation phase of the sub-projects by the municipality and the design office in charge of feasibility studies. It is carried out under the responsibility of the DRE in collaboration with the SSES of the ABER, and the municipal technical services.

Step 2: Filling in the screening form

The ERD, with the support of the consultant responsible for carrying out the NIES/PAR of the sub-projects and the municipal technical services, completes the screening form for sub-projects attached to Annex 2. In addition to potential environmental and social impacts, screening results will also indicate: (i) the need for land acquisition; and (ii) the type of public consultations that were conducted during the selection exercise and the suggestion of the type of environmental and social work to be carried out (ESIA/NIES/PAR/PES). The completed forms will be transmitted to the executing agency concerned through the SSES, which reviews and approves the screening results in collaboration with ANEVE.

In addition to the potential environmental and social impacts, the screening results will also indicate the application of the triggered operational safeguards.

Step 3: Approval of the screening sheet

Based on the results of the screening, the appropriate environmental category for the proposed sub-projects will be determined. After determining the environmental category, the ERD, with the support of the ESIA/ISIA/RAP consultant and municipal technical services, will determine the extent of environmental work required, namely:

- Category A: Project with certain major environmental and social risks;
- Category B: Project with moderate environmental and social risks;
- Category C: with negligible environmental and social risks.

The SMEC specifies the type and extent of environmental and social assessment to be conducted, using checklists, prior to the initiation of sub-projects. If the screening concludes that a sub-project is likely to have significant and/or irreversible adverse environmental or social impacts, the sub-project will be excluded from the project. If the sub-project is likely to have low to moderate negative impacts, an ESMP will be prepared prior to the start of the sub-project. For sub-projects that are likely to result in low levels of environmental or social impacts, the only assessment required will be screening using checklists.

Checklists and ESMPs prepared for various sub-projects will be reviewed by the project's Environmental and Social Development Specialist(s). ESMP and checklists for each sub-project type will be shared with the AfDB as required for review and approval. Once AfDB experts provide their advice/inputs, the ESPs and checklists can be reviewed by the Implementation Team's Environmental and Social Development Specialist(s) and validated by the implementing agencies. They should also be shared with the AfDB.

It should be noted that the YELEEN project has been classified in category 2 under the regulations of the African Development Bank.

The results of the categorization of the sub-projects must then be validated by ANEVE.

Step 4: Preparation of environmental and social impact studies or notices (ESIA/NIES) or simple measures (PEES)

- Category C sub-projects or current micro-projects - Simple analysis of mitigation measures (PES) through the realization of environmental and social requirements.

The checklist of general mitigation measures and those included in the CGES will serve as a basis for the Municipalities supported by the Consulting Engineers to determine the simple mitigation measures to be applied to the microproject in question. This determination will be made in consultation with those affected.

- Category B Sub-Projects - Simplified Environmental Assessment or Environmental Impact Notice

In parallel with the technical studies of the Sub-projects, a simplified environmental assessment will be carried out, which is a light environmental study that makes it possible to quickly identify and assess the potential impacts of a sub-project both during the work phase and the operating phase.

- Category A Sub-Projects - Environmental and Social Impact Assessment

An in-depth environmental assessment will be carried out to quickly identify and assess the potential impacts of a sub-project during both the work and operation phases.

Step 5: Approval of ESIA/NIS/RAP reports

The approval of the EIES/NIES/PAR reports of sub-projects is made under the responsibility of the Ministry in charge of the environment through ANEVE. The EIA/NIES/PAR reports prepared by the consultants are forwarded to ANEVE for instruction and opinion. During the training, ANEVE carries out technical field missions before the ESIA/NIES approval stage.

Step 6: Public consultation and dissemination

Public consultations are essential throughout the process of screening, impact assessment and environmental monitoring of sub-projects, and in particular in the preparation of proposals for those likely to have impacts on the environment and the population. The first step is to hold public consultations with local communities and all other potential interested/affected parties during the screening process and during the preparation of the IESA/NIES/PAR reports.

These consultations should identify key issues and determine how the concerns of all parties will be addressed.

Step 7: Integration of measures into OADs and enforcement files

The set of mitigation measures provided for by the ESIA/NIES is presented in the form of an Impact Management Plan applicable to the preparation and installation phases of the works and operation, which will include, where necessary, detailed measures for the management of incidental discoveries of physical cultural property; In addition, in the event of the displacement of people (physical displacement, allocation of material assets, impacts on sources of income,

etc.), a RAP is also prepared and executed entirely before the start of the work. General or standard mitigation measures are to be included in the specifications of companies, including clauses aimed at the management of physical cultural property discovered incidentally during any excavation (see Box below). Specific mitigation measures under the contractor's responsibility are incorporated into the CAD or contract documents as components of the sub-project. The cost of implementing mitigation measures is included in the costs of the microproject.

In case of discovery of archaeological remains, it will be necessary to contact the services of the Ministry in charge of cultural heritage.

Step 8: GGP Implementation and Monitoring

Environmental monitoring concerns both the construction phase and the operational phases of the project. The follow-up programme can make it possible, if necessary, to redirect the work and possibly improve the progress of the construction and implementation of the various elements of the project. Monitoring goes hand in hand with establishing impacts and proposing prevention, mitigation or compensation measures. Monitoring is essential to ensure that:

- impact predictions are accurate (effects monitoring);
- prevention, mitigation and compensation measures achieve the desired objectives (effects monitoring);
- regulations and standards are met (compliance monitoring);
- Environmental exploitation criteria are met (inspection and monitoring).

The monitoring system is based on a set of sheets to be prepared and introduced in order to ensure that all environmental and social recommendations, mitigation measures - mitigation and elimination or even reinforcement, are applied.

These can be check sheets or checklists:

A verification sheet: on the basis of the various impacts of the project and the measures enacted, a verification plan for their implementation is adopted;

A control sheet: it is used to detect non-compliance with environmental regulations, potential environmental risks not reported among the impacts. This leads to requests for compliance and preventive action.

At the municipal level, the monitoring of environmental measures is carried out under the responsibility of the DRE represented by the Departmental Service in charge of the Environment, (SDE), member of the Municipal Consultation Framework (CCC) in collaboration with the populations concerned. The municipalities will thus participate in the proximity monitoring of the implementation of project activities in their locality.

The permanent monitoring of the implementation of environmental measures in the field is done by the Environmental Specialist of the Management Unit. The inspection mission must record in writing (compliance or non-compliance sheets) the orders to make the environmental services, their progress and their execution according to the standards.

ANEVE is responsible for the external environmental monitoring of project activities on the basis of the annual reports produced by the Project Management Unit.

7.2 Institutional arrangements for the implementation of the CGES

The implementation of the CGES will involve several actors including the Ministry in charge of Energy and the Ministry in charge of the Environment, Municipalities and regions, decentralized services of the State, companies, consultants, NGOs and populations.

All these actors are not always at the same levels of impregnation and appreciation of the environmental and social issues, opportunities and challenges related to the environmental management of projects and do not always have the required capacities to comply with different national and international regulations on environmental and social management.

The Ministry of Energy, Mines and Quarries

This ministry provides technical supervision for the YELEEN project.

The Steering Committee of the YELEEN project

Within it, the Ministry of Energy includes the YELEEN Project Steering Committee which is responsible for the proper orientation of the Project. As such, it is responsible for:

- review the Project Implementation Plan;
- reviewing the annual programme of activities, budget and procurement plan;
- review periodic activity and financial reports;
- to make recommendations to the Project Coordinator and the various partners involved in the life of the Project;
- to ensure the implementation of the recommendations of the Steering Committee, the supervision and monitoring missions as well as the various audits;
- evaluate the performance of the Project Coordinator in accordance with his/her mission letter;
- approve the financial statements of the Project;
- examine the various evaluation reports of the Project;
- to examine any file submitted for its assessment.

THE UGP/YELEEN

This unit, housed within ABER, coordinates the YELEEN project and reports on the environmental and social management of the project to the MEEA and the AfDB. It has an expert in charge of environmental and social issues to ensure that environmental and social aspects are effectively taken into account in the components of the project. It will also ensure environmental and social monitoring and advisory support for the implementation of NIES.

However, it is important to note that the other experts on the team (Finance, Contracts, Monitoring and Evaluation, Technicians) do not necessarily have skills in environmental and social assessment. The acquisition of such knowledge could contribute to improved performance in the implementation of the YELEEN project CGES.

The implementing entity of the YELEEN project

ABER, as the executing agency of the project, ensures the implementation of the ESMP resulting from these sub-projects. It is responsible for periodically preparing, with the support of the PMU, reports on the implementation of environmental and social measures for the attention of the steering committee.

Ministry of Environment, Water and Sanitation

This ministry includes, among other main structures, in charge of environmental issues and natural resource management on the one hand and the EIA/NIE procedure on the other hand: the Directorate General for Environmental Preservation (DGPE), the Directorate General for Water and Forests (DGEF), the Directorate General for Economy and Climate Change (DGEVCC), the Directorate of Legal Affairs and Litigation (DAJC) and the National Agency for Evaluations. Environmental (ANEVE), 13 regional directorates, 45 provincial directorates, departmental services and forestry posts in the various municipalities.

All these directorates have skills through the engineers and technicians who are in charge of issues of management of natural resources and the living environment of the districts to which they belong.

ANEVE

To ensure the supervision of environmental and social safeguards activities, ANEVE has drawn up a general guide for carrying out environmental impact studies and notices. This guide is supplemented by sectoral guides to promote the environmental procedure.

As part of the YELEEN project, ANEVE ensures the examination and approval of the environmental classification of projects as well as the approval of impact studies and ESMPs and participates in external monitoring, particularly with regard to pollution and nuisances, and the improvement of housing and living environment.

At the central level, he will be responsible for the validation of NIES reports, environmental monitoring and external environmental monitoring.

It will ensure external monitoring at regional and local level of the implementation of the project's environmental measures with the support of the regional environment directorates.

ANEVE will transmit its report to the Management Unit for action to be taken, with amplification to the Steering Committee. The project will provide institutional support to ANEVE in this monitoring (logistics, capacity, etc.).

While the structure's experts have ESIA skills, their capacities will need to be further strengthened by a programme under the YELEEN project.

This capacity building program should include (i) on-site training on ESMP monitoring for agents, (iii) technical support (technical assistance) in the monitoring of EMP measures of the YELEEN project sub-projects. These reinforcement measures will enable ANEVE to meet the expectations and responsibilities assigned to it in the YELEEN project (evaluation, approval and monitoring).

Regional Directorates for the Environment

ANEVE does not yet have decentralized structures, which limits its effective operationality in terms of proximity in the conduct and especially the monitoring of the implementation of the PGES.

Its activities are often entrusted to the regional directorates of the environment. This is the case, for example, with environmental impact studies on the electrification of localities as part of the presidential programme.

These regional environmental directorates are involved in the environmental approval of projects, monitoring and monitoring of projects. These directorates are mainly specialized in forests and wildlife and nowadays have senior environmental engineers and technicians.

7.3 Generic mitigation measures for sub-projects

7.3.1 General mitigation measures for sub-project delivery

❖ **Regulatory and technical measures**

Regulatory and technical measures are the achievements of environmental and social assessments for YELEEN project sub-projects and the realization of Resettlement Action Plans for involuntary and/or economic resettlements.

❖ **Implementing measures**

The implementing measures are as follows:

- make judicious, participatory and motivated choice of sites;
- develop a RAP in the event of involuntary displacement;
- conduct a communication and awareness-raising campaign before the works;
- ensure respect for the habits and customs of the localities concerned;
- ensure compliance with hygiene and safety measures for construction site installations;
- carry out adequate signage of the works;
- give priority to using local labour;
- ensure compliance with safety rules during the work;
- ensure the collection and disposal of waste from the works;
- provide for accompanying measures in sub-projects;
- conduct awareness campaigns on EAS/HS, STI/HIV/AIDS and COVID-19;
- closely involve the municipal services in monitoring the implementation of the sub-projects;
- conduct training on EAS/HS;
- sign a code of conduct;
- Strengthen the capacity of municipalities and institutional actors in the management and maintenance of project infrastructure.

❖ **Action items**

- environmental monitoring and environmental monitoring of the YELEEN project by the teams of the works control missions, the local commissions of the communes and the DRE, ANEVE, the Directorate of the Environment, Social Development and Land Security (DEDSSF) of the ABER;
- ESMP evaluation (internal, mid-term and final) by the PMU, the DEDSSF of ABER and ANEVE.
- monitoring of EAS/HS risk prevention and mitigation measures.

7.3.2 Specific mitigation measures for sub-project delivery

Tables 8 and 9 present the activities and respectively the negative social and environmental impacts of the project, as well as their mitigation measures.

Table 6: Mitigation measures specific to adverse social impacts

Activities	Negative social impacts	Mitigation measures
Release and cleaning of right-of-way and diversion routes	Loss of homes and displacement of populations Loss of land, crops and trees Loss of business and revenue sources	Indemnification/compensation; Social support for resettlement Business site development Operationalization of the MGP
	Allegations of GBV/EAS/HS	Awareness of staff and the local population at the work sites Signature and compliance with the code of conduct; Referencing to local VBG/EAS/HS support structures; Identification of safe and accessible entry points for receiving and reporting GBV/EAS/HS complaints; Implement the complaint/conflict management mechanism.
	Disruption of social cohesion (social conflicts related to non-respect of local habits and customs, marking of works, acquisition of land or loss of property, EAS/HS, non-recruitment of local populations especially for unskilled jobs, etc.)	Choice of sites in consultation with the owners or the local authority; Information and awareness of site personnel on the respect of the habits and customs of local populations and EAS/HS; Information and awareness of local populations on the project; Priority recruitment of local labour for unskilled jobs; Prevention of child labour; Fulfilment of customary obligations.
	Noise	Regularly maintain construction machinery and vehicles; Avoid night work and stop work at sensitive hours; Requiring workers to wear PPE
	Traffic disruption Traffic accidents, Accidents and incidents at work Incidents on construction sites for workers and neighbouring populations	Organization of traffic by agents recruited for this purpose Recruitment of a Health and Safety Manager; Equipment and strict provisions for the effective wearing of PPE;

Activities	Negative social impacts	Mitigation measures
		First aid kit; Information and awareness of staff and local populations at the work sites. Installation of speed limit signs and speed bumps.
	Disruption of concessionaires' networks (roads, water supply, telephone, etc.)	Coordination with relevant services; Information of the population; Diligent rehabilitation of networks.
Installation and commissioning of life bases	Disruption of social cohesion (Social conflicts related to the marking of works, the acquisition of land or loss of property, EAS/HS, non-recruitment of local populations especially for unskilled jobs, etc.);	Ditto
	Genes/nuisances due to noise, dust and gases	See Air pollution and noise pollution
	Traffic disruption Traffic accidents, Accidents and incidents at work Incidents on construction sites for workers and neighbouring populations	Ditto
	Allegations of GBV/EAS/HS	Ditto
Recruitment of site personnel	Conflicts with local populations Vandalism/theft	Favor the labour-intensive approach; Inform and sensitize local populations on the sub-project; Prioritize recruiting local labour for unskilled jobs; Ensuring the prevention of child labour Establish a complaint/conflict management mechanism.
	Allegations of GBV/EAS/HS	Ditto
	Spread of STI/HIV/AIDS and COVID-19	Sensitization of staff and the public; Distribution of condoms (construction site). Application of barrier measures
	Allegations of GBV/EAS/HS	Ditto

Activities	Negative social impacts	Mitigation measures
Excavations and line construction	Potential destruction of previously undisclosed physical cultural property	Choice of sites in consultation with owners, customary authorities and local authorities; Information and communication; Immediate cessation of work and subsequent information to the services in charge of culture and local authorities, in case of discovery of cultural or archaeological remains; Support for the location and protection of the remains discovered on the site.
	Traffic disruption; Traffic accidents, Accidents and incidents at work Incidents on construction sites for workers and neighbouring populations	Ditto
Excavations and formatting of the platform, Construction of solar fields	Allegations of GBV/EAS/HS	Ditto
	Potential destruction of previously undisclosed physical cultural property	Ditto
	Traffic disruption; Traffic accidents, Accidents and incidents at work Incidents on construction sites for workers and neighbouring populations	Ditto
Operation of power lines	Allegations of GBV/EAS/HS	Ditto
	Destruction of facilities and disruption of networks	Accompaniment of political, administrative and customary authorities; Information, Awareness and Communication; Monitoring of facilities; For equal skills, recruit primarily the natives to ensure exploitation.
	Accidents, incidents, fire, explosion and electrocution	Recruitment of a Health and Safety Manager; Personal protective equipment First aid kit; Awareness of staff and residents of the facilities.

Activities	Negative social impacts	Mitigation measures
Exploitation of solar fields	Fire, incidents, explosion and electrocution	Recruitment of a Health and Safety Manager; Equipment of the multifunctional fire extinguishing platform; Personal Protective Equipment; First aid kit; Staff training and awareness.
	Allegations of GBV/EAS/HS	Ditto
	Destruction of facilities and disruption of energy-dependent activities	Accompaniment of political, administrative and customary authorities; Information, awareness-raising and communication; Monitoring of facilities; With equal skills, recruit as a priority the natives to ensure the exploitation of solar fields.

Source: CGES YELEEN, updated 2023

Table 7: Mitigation measures specific to adverse environmental impacts

Activities	Negative impacts	Mitigation measures
Release and cleaning of right-of-way and diversion routes	Destruction of vegetation cover	Respect for the route or boundaries of the site's right-of-way; Involvement of Forest Services; Compensatory reforestation;
	Air pollution	Protection of personnel (PPE); Regular maintenance of the machines; Regular watering of sites and access roads; Information and awareness of drivers on compliance with the speed limit (30 km/h); Prediction of speed bumps and traffic signs.
	Surface and groundwater pollution	Collection and recycling of waste oils Avoid water sources used by the population for the needs of the works; Develop compliant retention basins for the storage of hydrocarbons.
	Soil pollution due to uncontrolled discharges of	Collection and disposal of solid waste and excavated material to authorized sites.

Activities	Negative impacts	Mitigation measures
	solid waste and excavated material	
Installation and commissioning of life bases	Water and soil contamination	Collection and recycling of waste oils; Collection and disposal of solid waste at authorized sites; Appropriate sanitary facilities.
Excavations and construction and restructuring of lines	Air pollution	Ditto
	Water and soil contamination	Collection and recycling of waste oils; Collection and disposal of solid waste at authorized sites; Appropriate sanitary facilities
Excavations and formatting of the platform, Construction of solar fields	Air pollution	Ditto
	Water and soil contamination	Collection and recycling of waste oils; Collection and disposal of solid waste at authorized sites; Appropriate sanitary facilities
Exploitation of solar fields	Soil and water pollution due to poor management of solid and liquid waste generated	Collection and recycling of waste oils; Collection and disposal of solid waste at authorized sites; Appropriate sanitary facilities

Source: CGES YELEEN, updated 2023

7.4 Capacity Building Program

The capacity-building programme covers the various support measures, training for administrative structures and beneficiary populations within the framework of the project.

7.4.1 Technical support, training and awareness-raising measures

They are focused on raising awareness among local elected officials and municipal technical service agents, CVDs, SDEEVCC agents, local populations as well as the training of two (2) executives of the DEDSSF of the ABER. The training will cover ESIA procedures, ESMP monitoring and AfDB environmental audits.

Table 8: Technical support measures, training and awareness-raising

Awareness-raising themes	Targets	Targeted actors and partners
Communication and awareness campaigns before and during the works 100 localities (EAS/HS, IST/HIV-AIDS, COVID 19, risks of traffic accidents, handling of equipment and site work, support for filling in sub-project selection forms, etc.)	Members of Municipal Councils, Municipal Technical Services Officers, CVD, Agents SDE, local populations	VBG, STI/HIV-AIDS and COVID 19 consultants, DEDSSF/ABER environmental safeguards specialists
Communication and awareness campaigns before and during the	Members of Municipal Councils, Municipal	STI/HIV-AIDS and COVID 19 consultants,

work in 100 localities (risks of transformer explosions, cable breaks, falling pylons)	Technical Services Officers, CVD, Agents SDE, local populations	DEDSSF/ABER environmental safeguards specialists

Source: CGES YELEEN, updated 2023

7.4.2 Institutional support measures

Targets n°1: Signature of collaboration protocols with the relevant ERDs for the implementation and monitoring of ESMPs.

The organization of a workshop for the appropriation of the ESPs of the sub-projects of electrification of

100 localities will be needed. This workshop will also allow the Project Management and these structures to plan the activities to be carried out as part of the implementation of the ESMP. In addition, the effective accomplishment of the missions assigned to the DRE and their DPE within the framework of the project, requires the signature of separate collaboration protocols with each structure. Costs will have to be covered by the project and released on time.

Target 2: Recruitment of Consultants to carry out environmental and social assessments

Consultants will be engaged to carry out the planned environmental and social assessments of the sub-projects of the one hundred (100) localities. In addition to the budget for conducting the studies, the cost of implementing ESMP from the NIES will also need to be funded.

7.5 Cost of Capacity Building and Mitigation Measures

The costs of human, material and mitigation capacity-building measures are contained in table 10. It takes into account the cost of institutional measures, the cost of training, communication and awareness-raising actions and the implementation of environmental and social assessments of sub-projects.

7.6 Roles and responsibilities for managing social and environmental requirements

7.6.1 Client Role and Responsibilities

The Bank expects its clients to manage environmental and social issues associated with projects in order to comply with the Bank's SOs over a reasonable period of time. Projects involving new facilities or commercial activities will be designed to meet SO requirements from the outset. If a project involves existing facilities or activities that do not comply with the SOs at the time of project approval, the client shall adopt measures satisfactory to the AfDB, technically and financially feasible and cost-effective to ensure compliance of such facilities or activities with the SOs within a timeframe acceptable to the AfDB. In addition, the Bank will work with its clients to manage environmental and social risks that are compatible with the operating systems of their other operations associated with the project but not part of it.

It is also the client's responsibility to ensure that adequate information is provided so that the Bank can undertake an environmental and social assessment in accordance with the Bank's ESPs. The client may be required to commission appropriate environmental and social studies and to engage with stakeholders and cover the costs. The client should also provide AfDB representatives and independent consultants with access to project facilities and files.

7.6.2 Role and Responsibilities of the AfDB

The AfDB's responsibilities are consistent with its role as an international financial institution providing bank financing to projects through the use of AfDB resources approved by its management and Board of Directors or any other decision-making body. For any particular investment or technical cooperation project, the level of AfDB's commitment is determined by the nature and scope of the project, the availability of donor funding, and the specific circumstances of the collaboration and client relationships.

7.6.3 Institutional Arrangement for the Implementation of Project EEPs

The AfDB will be responsible for overall oversight of the implementation of the framework and will report to the GCF under the terms to be agreed under the Framework Accreditation Agreement (WADA) and the Funded Activities Agreement (AAF). For the management of GCF resources, a trust fund will be established within the AfDB as an autonomous mechanism and the Bank's role will be to administer the funds. Under this program, the AfDB will be a direct lender for projects as an accredited entity.

The project is the responsibility of the Ministry of Energy, which controls and regulates all entities responsible for energy. The Ministry of Energy will designate a public sector entity as the executing agency for the project (in this case, ABER).

Private sector developers will be selected through a request for proposals process for which the terms of reference will be prepared in coordination between the AfDB, the Ministry of Energy and ABER.

The same coordination will apply to the selection of all key contractors such as the independent consultancy for mini-grid connections. For the implementation of the CGES, institutional arrangements will be required.

7.6.4. Roles and responsibilities of the lead executing entity

ABER will provide overall project coordination and lead the implementation of program components, which will include overall responsibility for safeguards due diligence and compliance monitoring. In addition, ABER will be responsible for the overall coordination of project implementation and supervision. A Project Management Unit will be established at ABER and will include an Environmental and Social Safeguards Specialist (ESSS) and a Community Liaison Officer (CLO), who will be responsible for all issues related to stakeholder engagement. Specifically, in terms of E&S risk management across project components, the project PMU will be responsible for:

- ✓ General oversight of E&S risk assessment, management and monitoring processes, in accordance with this ESMC, for each project component;
- ✓ Set up and implement at ABER level a system for notifying private developers on the implementation of E&S requirements;
- ✓ Engage an independent I&S auditor to ensure that private developers consistently implement the I&S requirements defined in the CGES;
- ✓ Take responsibility for stakeholder participation, maintain an adequate mechanism for stakeholder engagement and grievance redress, and ensure that private developers maintain the same level of engagement
- ✓ ABER will establish a line of communication between ABER site offices and ensure the success of the project in this regard. It will also facilitate liaison with community-based organizations, NGOs and communities affected by the projects;

- ✓ Design, organize and implement capacity building programs for mini-grid developers and other key stakeholders;
- ✓ Define, jointly with States and local authorities, the priorities of the project according to the technical priorities and implementation of development policies;
- ✓ Address, in consultation with provincial and local governments, challenges requiring high-level intervention for the program; and
- ✓ Monitoring project implementation in consultation with states and local governments.

7.6.5 Responsibilities of the institutions and organizations concerned

Institutions at the national level

These are ministries, departments, agencies, civil societies, etc. directly or indirectly involved in the implementation of the programme. The implementation of the programme will involve multisectoral participation. They support the implementation of environmental and social measures on the ground in their respective fields and provide monitoring and reporting support. These institutions will assist in broader activities under the programme.

Institutions at the national level are responsible for setting the goals and objectives of national policy and for providing appropriate technical and financial assistance to local entities. For this particular CGES, the Ministry of Environment and its relevant agencies such as ANEVE will act as the lead environmental regulator, overseeing compliance requirements, granting consent, and monitoring or supervising ABER projects. It must also receive comments from stakeholders, a public hearing of project proposals and convene the interdepartmental committee as required for technical decision-making, as well as provide the necessary approval and authorization for ESIA/ESMP or other environmental approvals.

Other institutions will include the Ministries for the Advancement of Women, Human Rights and Promotion of Civic Values, Social Action and National Solidarity (coordination and supervision of all gender issues, children, youth, the elderly, persons with disabilities, management of natural resources).

Institutions at the local level

Local governance (GL) has made it possible to be closer to the people or the masses. For meaningful development to take place, this level of governance must be galvanized to implement people-oriented programs to reduce poverty levels. The GL governs affairs in the different communities. It is expected to serve as an interphase between community members and ABER coordination centres. GL can contribute to the implementation of stakeholder engagement mechanisms. Local authorities are mainly members of the community and can easily gain the trust of the population. Their staff can work with other MDAs.

Local boards should be fully informed of the process and actions to be taken under the GES/EA/PGES and the overall implementation of the project. The Council should in turn commit and be encouraged to support the awareness campaign on the proposed project that will be designed by the EDF/ABER, among the various grassroots interest groups concerned, for example: Village Development Committee (VDC): they support the implementation of sub-projects, especially in the areas of PAP identification, conflict prevention/resolution and loss compensation.

Community level

It includes relevant stakeholders/groups, direct and others. These may be complaints that need to be resolved in the selection and execution of the various sub-projects. It is obvious that

villages and youth leaders must be careful not to interfere with social values. Community-based organizations at the grassroots level in communities can act as an interface and to speak on behalf of the population.

Customary and religious authorities: support the implementation of mitigation measures as part of the public consultation and conflict and litigation management process related to PAPs.

Associations, NGOs and local populations: they support the implementation of the communication plan and conflict prevention.

CHAPTER VIII: STAKEHOLDER ENGAGEMENT AND COMPLAINT MANAGEMENT

8.1 Consultation and stakeholder engagement

The AfDB recognizes the importance of open and transparent engagement between clients, workers, local communities directly affected by projects and, where appropriate, other stakeholders as an essential element of international good practices and corporate citizenship. Such a commitment is also a way to improve the environmental and social sustainability of projects. In particular, effective community engagement, appropriate to the nature and scale of the project, promotes sound and sustainable environmental and social performance and can lead to better financial, social and environmental outcomes, as well as increased community benefits. Stakeholder engagement is essential to building strong, constructive and responsive relationships essential to effectively managing a project's environmental and social impacts and issues.

SO-1 states that the borrower or client is responsible for conducting and providing evidence of meaningful consultation (free, prior and informed consultation) with communities likely to be affected by environmental and social impacts and with other local stakeholders. Fairness and inclusiveness are the main objectives of effective consultation, namely, the approach taken must ensure that all groups (including those who are disadvantaged or vulnerable) are included in the consultation process on an equal footing and that all groups have the capacity to express their views on consideration.

SO-1 also states that the borrower or client is responsible for providing broad community support (CSL), particularly for Tier 1 projects (note that the program will not include Tier 1 projects) and for projects involving Indigenous peoples to promote appropriate solutions that do not harm livelihoods. Consultation should be conducted with the objectives of ensuring LSC for a project and ensuring that affected persons approve the proposed mitigation and management measures. Considered by the Bank as a key principle, the LSC is defined as a set of expressions by affected communities, through individuals or their recognized representatives, in support of the project.

In this AfDB-GCF program, consultation must be tailored to the language preferences of affected communities, their decision-making process and the needs of disadvantaged or vulnerable individuals or groups. With this scenario, the LSC will determine whether affected communities "support the project" and not whether opposition to the project is insufficient. To ensure the CSA, the consultation will provide affected communities with an opportunity to express their views on the risks, impacts, mitigation and management measures of the project, and will allow the borrower or client.

The Bank requires that consultation be seen as an ongoing process, not just a step in the process of obtaining project approval. It must begin at the project identification stage, or at least at an early stage of project preparation, and continue throughout the life of the project until construction, operation and decommissioning. As the Bank recognizes local E&S requirements, stakeholder consultation and engagement will also incorporate consultation requirements when conducting SESA studies mandated by Burkina Faso's environmental legislation, 2003).

The results of the consultation should be adequately reflected in the project design and project documentation. Affected communities have the opportunity to participate in key stages of project design and implementation. Therefore, stakeholders will be consulted to obtain their input into the preparation of the draft terms of reference for the environmental and social assessment and the associated environmental assessment studies (draft environmental impact statement or draft ESIA report and summary and draft ESMP). Consultations will be held to ensure that the project has broad community support and that affected people agree with the proposed mitigation and management measures. Where the borrower or client has identified vulnerable communities likely to be affected by the project, the borrower/client engages in meaningful informed consultation and participation with vulnerable communities, from the beginning of the project cycle prior to project submission for approval of the project to be financed.

The Client and the Bank will make ESIA/ESMP documents and RAPs available to the public as appropriate. The procedures require public disclosure of summaries in accordance with specified deadlines. All Class 2 transactions must be disclosed for 30 years before work begins. In addition, the Bank's guidance notes contain detailed information on the consultation mechanism setting out various aspects of the consultation, including the consultation objectives, requirements and method of consultation (consultation of persons, involvement process and stage concerned). Taking into account the specific aspect of stakeholder engagement, the Guidance Notes (ESIAs) also provide guidance on the identification of vulnerable groups according to SO 1 requirements for vulnerable groups and propose differentiated measures for the inclusion of vulnerable groups in development. The notes also provide guiding principles on the Aboriginal Community Development Plan (ADP) and the content of the plan.

8.2 Mechanisms for ensuring evidence of the LSC

SO-1 states that the borrower or client is responsible for conducting and providing evidence of meaningful consultation (free, prior and informed consultation) with communities likely to be affected by environmental and social impacts and with other local stakeholders. Fairness and inclusiveness are the main objectives of effective consultation, namely, the approach adopted must ensure that all groups (including those who are disadvantaged or vulnerable) are included in the consultation process on an equal footing, and that all groups have the capacity to express their views properly.

To ensure the LSC, the consultation will provide affected communities with the opportunity to express their views on risks, impacts, and mitigation and management measures, and will allow the borrower or client to consider them to facilitate the completion of the LSC.

The consultation must be documented; in particular, specific actions, measures or other examples of project decision-making that have been influenced or directly derived from the contributions of those who participated in the consultation. In addition, the specific consultation activities themselves should be documented, in the form of attendance logs, minutes of meetings, photographs and other forms of consultation logs (such as diagrams, drawings, etc.). If consultation has already taken place on a project, the borrower or client must be able to provide adequate documented evidence of this prior consultation.

The results of the consultation should also be communicated to affected communities and other stakeholders at regular intervals. Affected communities and other stakeholders will want to know how their views and recommendations have been taken into account by the borrower or

client, which have been adopted by the borrower or client, what risk or impact mitigation measures are of concern, and how, for example, project impacts are monitored.

8.3 Inclusion of vulnerable groups

The AfDB-ISS defines vulnerable individuals or groups as those who are in a project's area of influence and who are particularly marginalized or disadvantaged and who may therefore be more likely than others to suffer the negative effects of a project. Vulnerability can be determined by identifying the likelihood that an individual or group will face more difficult conditions as a result of project implementation.

Vulnerable status may stem from a group's gender, economic status, ethnicity, religion, cultural behaviour, sexual orientation, language, or physical and psychological conditions. Vulnerable groups may include, inter alia, female-headed households, those living below the poverty line, landless peasants, those without legal title, ethnic, religious and linguistic minorities, indigenous peoples, persons with disabilities, etc.

Vulnerable groups are more likely to be exposed to negative impacts in large-scale projects with a large area of influence, potential cumulative impacts and multiple affected communities, than in small-scale projects with site-specific problems.

8.4 AfDB ISS Requirements for Vulnerable Groups

The AfDB is committed to promoting human rights on the African continent and protecting vulnerable groups – particularly indigenous peoples – in the context of national systems and regulations.

SO-1 states that in assessing the potential impacts of Bank operations on affected communities, the borrower or client must use adequate and qualified expertise to identify individuals and groups who may be affected or marginalized directly, indirectly and/or disproportionately due to their recognized vulnerable status.

SO-1 also states that when groups are identified as vulnerable, the borrower or client must implement appropriate differentiated measures so that the inevitable negative impacts do not disproportionately weigh on these vulnerable groups (such as roads, schools, health facilities, etc.).

SO-1 also highlights the need to assess gender issues in the context of vulnerability. A gender assessment should be carried out for each project and form the basis for project design and compensation plans that lead to a better gender balance.

Finally, SO-1 states that groups that may be considered vulnerable may include social or cultural groups recognized as Indigenous peoples. The Bank seeks to promote the safeguarding of indigenous peoples' lands, natural assets and cultural heritage by its member countries and to provide special protection for projects that may involve their resettlement.

In addition, the ISS requires that the environmental and social assessment (SEA) process systematically identify vulnerable groups. The identification of vulnerable groups will be the result of a careful analysis of the social and economic context in which the project will operate. The presence of factors causing vulnerability should be analyzed, as well as the potential impacts of the project on vulnerable groups, the capacity of vulnerable groups to cope with or adapt to these impacts, and the mitigation potential of these impacts takes into account the specific vulnerabilities or marginalization status in question. Taking into account the particular situation of vulnerable groups should help borrowers or clients better define impacts relevant

to groups and improve the design and implementation of a specific community development plan or an Aboriginal community development plan.

8.4.1 Objective and Scope of Identification of Vulnerable Groups

The objective of identifying vulnerable groups is to allow a strategic focus on taking into account their specific views and needs during project planning and thus avoid harming them and allowing them to participate in the proposed project. After identifying vulnerable groups, the aim is to define differentiated measures to ensure their protection and to ensure that the appropriate benefits are properly planned and directed to them (see below).

8.4.2 Gender and vulnerable groups

Projects may have different impacts on women and men, due to their different socio-economic roles and varying degrees of access to and control over assets, productive resources and employment opportunities.

Gender discrimination often limits access to public resources, opportunities and services needed to improve living standards. In addition, there may be norms, societal practices or legal barriers that impede the full participation of persons of the same sex (usually women, but potentially men) in consultation, planning, benefit-sharing.

8.4.3 Other vulnerable groups

Those with low economic status, especially those below the poverty line, peasants without land or legal title, may also lack the resources and capacity to participate in decision-making or benefit-sharing.

In addition, people with health problems, people with disabilities, etc., are also groups that usually lack the abilities, means or voice to avoid the negative impacts of the project and derive benefits from the project.

8.4.4 Differentiated measures for the inclusion of vulnerable groups in development

Once groups have been identified as vulnerable, the borrower or client must propose and implement differentiated measures so that negative impacts do not disproportionately affect them and vulnerable groups are not disadvantaged. Differentiated measures are needed to meet the requirements of specific types of vulnerable groups. The AfDB-ISS provides guidance on requirements for differentiated measures to specific types of vulnerable groups, including measures targeting vulnerable groups, indigenous peoples, resettled vulnerable groups and other vulnerable groups, such as persons with disabilities, etc.

Meaningful consultation is vitally important to determine what differentiated measures are needed for the vulnerable groups in question, as well as to seek LSC from these vulnerable groups. There should be a targeted and meaningful consultation process, supported by adequate information and conducted with each vulnerable group.

Specific and targeted consultation sessions with each vulnerable group are important as consultations with non-vulnerable groups may not always reveal the particular conditions or concerns of vulnerable groups and how they can be addressed in a differentiated and targeted manner (see guidance note).

Consultation around differentiated measures for vulnerable groups requires a socially and culturally appropriate approach that ensures that:

- The vulnerable group in question is represented in the discussions and members of this group have the opportunity and means to express their views, concerns and aspirations in the language and manner of their choice, without external manipulation, interference or coercion and intimidation;
- Representative bodies and civil society organisations, as well as a sufficient number of members of the vulnerable group themselves, shall be included in the consultation process.
- Local leaders deemed to "represent" the views of vulnerable community members actually have the consent of the members and understand their views and perspectives.
- Spaces for discussion are created, perceived as "safe" from the perspective of the vulnerable group and easily accessible.
    - Consultations with each vulnerable group should focus on clarifying the particular conditions and concerns of the group in question and the form that the associated differentiated measures should take in order to ensure that the vulnerabilities of the group in question are not exacerbated by the project and that the group has the opportunity and ability to benefit from the project according to its views and needs.
    - For the Yeleen mini-grid programme, gender mainstreaming and vulnerability assessment were suggested among other evaluations to be undertaken to ensure that equality and social inclusion measures are integrated into the programme (see Annex 5).
    - Therefore, in addressing issues related to the inclusion of vulnerable groups in the program, the Ministry of Energy, through ABER as lead executing entity, will work closely with relevant institutions (in accordance with the legal and administrative framework to ensure that vulnerable groups are included in the program and emerge among its beneficiaries).

8.4.5 Gender and vulnerability assessment

The term "vulnerable groups" refers to individuals who, because of their gender identity, ethnicity, age, disability, economic disadvantage or social status, may be more affected than others and may limit or claim benefits from the project. Vulnerable individuals and/or groups may also include people living below the poverty line, landless people, the elderly, households headed by women and children, refugees, displaced persons, ethnic minorities, communities dependent on natural resources or others to be protected by national and/or international law. It is important to identify and address these groups in the early stages of project consultation to avoid placing additional constraints on these groups on the group.

The empowerment of vulnerable groups, especially women's and youth groups, is essential for the public good and for a number of them as well. The feasibility study revealed that, in both regions, women are widely involved in agricultural and related activities. Thus, adequate engagement of women is an essential aspect to ensure the sensitivity and sustainability of the overall management of the project. Therefore, demonstrated efforts must be made to encourage women's participation in the project. Annex 5 presents some information to be provided in an assessment of gender issues and opportunities.

The primary objective of measures to assess and assist vulnerable persons is to avoid the emergence of project-induced vulnerability and, where appropriate, to mitigate its effects through preventive and follow-up measures.
Criteria used to assess project-induced vulnerability include pre-project poverty, household composition, income, food supply, housing, social support and health.
The criteria are used to establish the vulnerability of households to local conditions. Vulnerability thus becomes locally defined as households recognized as being in a difficult situation in a context of general poverty in the region.
Vulnerability must be seen in two stages: pre-existing vulnerability and vulnerability to transient difficulties. The pre-existing vulnerability includes this step that would be present with or without project development. Vulnerability to transient difficulties occurs when those directly affected by the project, whether predisposed or not, cannot adapt to the new conditions due to the shock or stress of project activities.
Project measures to identify vulnerable households and individuals include:

- Participatory engagement techniques to confirm community perceptions of well-being and identify households at risk;
- Analysis of baseline data to identify households at risk;
- Implementation of household follow-up surveys to identify trends in social well-being (household composition, assets, sources of income, expenditure, etc.);
- Self-registration in the offices of households that identify as vulnerable or at risk; with all these records leading to an assessment of this household by the project/investor team in order to assess the vulnerability of households; and
- Regular visits to all economically displaced households identified as vulnerable during resettlement planning and implementation processes to reassess the vulnerability of these households. These visits will take place at least quarterly; and each visit will be recorded in the database, reporting changes to indicators that are problematic.

8.5 Involuntary Displacement Consultations

The main objective of the AfDB's involuntary displacement policy is to ensure that the Bank's interventions treat those who will be displaced equitably and to take advantage of the benefits of the project to improve their standard of living. ISS provides guidance to Bank staff and borrowers and establishes a mechanism to monitor the performance of resettlement programmes. Most importantly, ISS requires that an abbreviated resettlement plan (RAP) be prepared using a development approach that takes into account the livelihoods and living standards of IDPs, etc., at all stages of project design and implementation. As noted above, the project should have minimal displacement and, therefore, only RAP should be used to address involuntary displacement issues.
The policy foresees that IDPs and host communities are meaningfully consulted early in the planning process and encouraged to participate in the planning and implementation of the resettlement programme. IDPs must be informed of their resettlement options and rights. They should have real choices among technically and economically feasible resettlement solutions. In this regard, particular attention should be paid to the location and programming of activities. For consultation to be meaningful, information on the proposed project and resettlement plans must be made available to local populations and national civil society organisations in a timely

manner and in a form appropriate and understandable to those local populations. In addition, particular attention should be paid to the organization of meetings. The possibility of holding separate meetings for women and equitable representation of female heads of household, in addition to mixed meetings, should be considered. In addition, the way in which information is disseminated should be planned with caution, as literacy and communication levels may differ by gender.

Particular attention should be paid to the needs of disadvantaged groups among internally displaced persons, in particular those living below the poverty line, landless persons, the elderly, women and children and ethnic, religious and linguistic minorities; including those without legal title to assets, female-headed households. Appropriate assistance must be provided to help these disadvantaged groups cope with dislocation and improve their status. The provision of health services, especially for pregnant women and infants, can be important during and after resettlement to prevent increased morbidity and mortality due to malnutrition, psychological stress of uprooting, and increased risk of disease.

8.5.1 Stricter provisions for vulnerable groups

The AfDB's policy on involuntary displacement has a broader definition of vulnerable groups than the policies of similar institutions. For example, special attention should be paid to the needs of disadvantaged groups and safeguards should be provided for the quantity, quality and ownership of land. In addition, it requires a resettlement plan for any project that has negative impacts on disadvantaged groups or ethnic, religious and linguistic minorities, or affects the poorest and most marginalized communities that do not have the capacity to absorb these impacts.

Compensation unit: AfDB policy clearly defines the unit of remuneration by including the family or household; this may include the whole community if the project affects communal resources.

Cost of compensation: The AfDB's Investor Relations Policy highlights expropriation and compensation procedures at the full cost of replacement of land and property. It requires that compensation payments be independently monitored and accurate records of all transactions kept.

The Bank will support the borrower's efforts on projects involving involuntary resettlement through (i) assistance to executing agencies to adopt and implement the objectives and principles of this policy; (ii) assistance in the formulation and implementation of specific resettlement policies, laws, regulations, plans and strategies; and (iii) direct financing of the investment costs of resettlement.

The Bank will also support capacity building of implementing agencies to plan and implement involuntary resettlement in all projects and provide technical assistance to strengthen the organizational, management and implementation capacities of these agencies' technical expertise. The financing of the resettlement of the affected populations (economically displaced) will be provided by the Burkinabe State through the national counterpart.

8.6 Complaint Resolution Mechanism (PRM)

The AfDB defines MRP as a systematic process of receiving, evaluating and facilitating the resolution of project-related issues, complaints and grievances from affected individuals regarding the borrower/client's social and environmental performance on a project. The AfDB requires its clients to know and respond to stakeholders' concerns related to the project in a timely manner. To this end, the Client shall establish an effective grievance mechanism, process or procedure to receive and facilitate the resolution of stakeholder concerns and grievances, in particular with respect to the Client's environmental and social performance.

In SO-1, the Bank requires the borrower/client to establish a credible, independent and empowered local grievance and redress mechanism to receive, facilitate and monitor the resolution of complaints and concerns regarding the environmental and social performance of those affected by the project. The local grievance mechanism must be sufficiently independent, autonomous and accessible to stakeholders at all times during the project cycle and all responses to complaints must be recorded and included in project supervision formats and reports.

Some of the Bank's operations can inevitably have an impact on the well-being of the local population. The objective of an MRP is therefore to allow people who fear or suffer negative impacts to be heard and assisted. Those potentially or actually affected by a Bank-financed project need a reliable method of expressing and resolving issues related to the project, and the project needs an effective way to address the concerns of those affected. The MRP provides a structured and managed means of making the concerns of those involved heard and taken into account, including by the borrower/client's project management staff and, in certain circumstances, by Bank staff.

The main benefits of establishing and maintaining an appropriate MRP linked to a Bank-financed project are:

- Contribute to maintaining good development conditions on the ground, conducive to harmonious and sustainable development;
- minimize the risk of violent or destructive behaviour, as well as the associated economic and social costs;
- help protect the most vulnerable groups and individuals;
- mitigate the risk of escalation of disputes or conflicts, such as cases referred to the Bank's Independent Review Mechanism.

The MRP design process should be integrated into the overall approach to project preparation, as foreseen in the Bank's ISS. The Bank's ISS, through its Guidance Notes, provides guidance on the development and implementation of the MRP. It should also be included in the concrete actions required for Category 2 projects with specific potential social tension risks, in particular the risks of mismanagement of compensation/resettlement programmes or the presence of particularly vulnerable groups in the project's area of influence.

The AfDB has also established its own accountability mechanism, the Independent Review Mechanism (IRM). The IRM seeks to determine whether a Bank-approved project complies with relevant AfDB policy. The ISS is accessible to any group (at least 2 people living in the project's area of influence) that is actually or potentially affected by a Bank-financed project. The IRM reports to the Bank's Board of Directors and is therefore independent of the Bank's management. The IRM was established by the Bank to increase transparency. It is also an expensive mechanism to trigger. Setting up local MRPs can help reduce complainants' need for

ITN, while problem solving can be done more quickly and cost-effectively at the local level. The cultural context in which PRMs operate also helps to defuse complaints and find appropriate and appropriate solutions.

MRP at the project level

The AfDB-GCF MRP will be established in accordance with the guidance provided in the ISS through its Policy Notes. The first step is to determine the primary purpose of the MRP, which would typically be to resolve specific grievances in a way that meets both project management and community needs, but with significant local variation. The extent of complaints that may legitimately be raised by the communities and/or individuals concerned must be defined in advance. This scope will generally cover most, if not all, of the issues raised in a typical environmental and social assessment: natural resources, pollution, cultural property, land acquisition, income of resettled/displaced populations, well-being of vulnerable groups, etc.

The second step is to design the GRM by:

- Preparing a preliminary design;
- Choosing the means for receiving, recording, evaluating and responding to complaints;
- Choose complaint resolution approaches;
- Develop a means to monitor the handling of complaints;
- Develop the infrastructure of the grievance mechanism;
- Review and refine the design.

The design of the MRP can be carried out with the help of the team of specialized independent consultants (if resources are available). The MRP shall be designed on the basis of the following principles:

- ✓ Involvement of people of mixed levels and functions within the company (e.g. operations, environmental affairs, community relations, legal affairs, contractors). Staffing the design team with a single function, such as community relations or human resources, is not appropriate;
- ✓ The inclusion of a balanced group of community representatives, representing the range of constituencies and demographics that will use the grievance mechanism, while keeping the team small enough to meet the needs of the MRP;
- ✓ The MRP should be supported by clear terms of reference and a work plan outlining the team's objectives, roles and responsibilities, level of decision-making authority, reporting lines, tasks, timelines and outputs;

  Use multiple channels (e.g. face-to-face interview, telephone conversation, mail, text or email, message on a dedicated website), sensitive to cultural customs and traditional methods that may influence or hinder the expression of complaints;
- The existence of a central contact point that will receive complaints and register them in a central register;
- Existence and functioning of designated complaint resolution staff;
- The process for acknowledging receipt of a complaint and informing the complainant of the timeframe within which a response can be expected.

Appointment of Complaint Resolution Committee (PRC) Members

The AfDB-GCF program will involve the formulation of a project-level Claims Handling Committee (PRC), i.e. PRC staff, for claims processing. As a general rule, all project staff, senior staff of agencies involved in the project, and government administrators will assume responsibility for handling complaints. PRC members must be qualified, experienced and competent individuals who can earn the respect and trust of affected communities. It is also important to maintain gender balance within PRCs. The criteria for selecting PRC members could be as follows:

- ✓ Knowledge of the project, its objectives and results;
- ✓ technical knowledge and expertise to understand the project design and requirements;
- ✓ understanding of social, economic and cultural environments and community dynamics;
- ✓ Ability to absorb issues addressed and actively contribute to decision-making processes;
- ✓ social recognition and status; and
- ✓ equitable representation of men and women.

The CRP at project level will constitute, among other members, an officer of the local authority, e.g. District Environmental Officer, Project Coordinator, member of a recognized non-governmental organization and community representative. The PRC has the right to request technical staff of the project and officials of relevant state or non-state institutions to attend meetings and provide information. A complainant has the right to appear in person, to be accompanied by a member of the community, and/or to request representation by an elder from the community. PRCs should be established at the project level to ensure accessibility to access points.

Procedures, complaint channels and timelines for grievance mechanisms

Since there is no single ideal model or approach to grievance resolution, the best solutions to conflicts are usually achieved through local mechanisms that take into account specific problems, cultural context, local customs, and project conditions and scale. The process by which a complaint will be accepted or rejected must be carefully designed and to maximize interactivity and cultural sensitivity. The acceptance/rejection of a complaint will go through a discussion phase during which the complainant and the staff of the PRC will interact on the basis of the grounds and motivations of the complaint, after which the complainant should be informed in a clear and transparent manner of the handling of his complaint. The acceptance/rejection of the complaint is based on objective criteria posted by the PRC, including a written copy posted in the PRC public access area in an appropriate language.

Once accepted, the handling of a complaint must go through different phases:

- ✓ Filing the complaint and tagging with an identification code immediately communicated to the complainant;
- ✓ Assessment of the complaint (including the severity of the risk/impact);
- ✓ Formulation of the response.

The selection of the method of grievance resolution is crucial. There are four general approaches to choose from:

- ✓ The project management proposes a solution;
- ✓ The community and the project management decide together;
- ✓ The project management and the community turn to a third party to decide;

- ✓ The project management and the community use traditional or customary practices to find a solution.

The Bank's ISS recommends the application of a "Decide Together" approach, which is generally the most accessible, natural and riskless way for communities and project management to resolve disputes. With the possibility of resolving perhaps the majority of all grievances, "decide together" should be central to the resolution options of any grievance mechanism. In its simplest form, a grievance mechanism can be divided into the following main components:

- ➢ Receive and register a complaint;
- ➢ Verify and validate the complaint;
- ➢ Formulate a response;
- ➢ Select a resolution approach based on consultation with the person or group concerned;
- ➢ Implement the approach;
- ➢ Troubleshoot problems;
- ➢ Monitor and evaluate results;
- ➢ Learn from experience and communicate to all parties involved.

The time allotted to claims resolution committees must be agreed upon and documented, for example within a maximum of 3 weeks from receipt of the complaint.

A number of mechanisms will be available to injured parties to obtain redress. These should include institutions specific (internal) to a project and put in place at its inception or others that may have emerged over time in response to identified needs as the project evolved.

Other institutions that already exist in a country's judicial, administrative and/or political systems and that exist outside of a project should also be used if needed. These include councils at village, communal, provincial or regional level, etc. In addition, the Bank itself must sometimes provide a forum for the resolution of complaints. PRCs should include ways to resolve conflicts between affected parties or other stakeholders and can provide publicly sought information about the project.

Complaint channels could include submission of complaints by third parties (e.g. village elites/traditional leaders, community-based organizations, lawyers, non-governmental organizations (NGOs), etc.); face-to-face meetings; fax, telephone and e-mail communications; written complaints; etc.

The sub-projects to be implemented under the AfDB-GCF program are expected to be small in size with relatively simple problems. Therefore, simpler ways to deal with complaints, including community meetings, community liaison staff and suggestion boxes allowing anonymity, will also be used with other recommended channels.

If the complainant is not satisfied, the complainant should appeal to the national coordinator of the project and, if applicable, to the Director General and CEO of ANEVE and ABER respectively.

8.7 Suggested stakeholder engagement

A stakeholder engagement plan is needed to ensure that stakeholders are well informed about the project throughout its life cycle. Stakeholders should have the opportunity to express their views on the project and also to make complaints.

In order to ensure the proper implementation of such a stakeholder engagement plan, it is strongly recommended that the roles and responsibilities of the entity that will manage this program be defined. Therefore, ABER will be responsible for implementing stakeholder engagement activities in the established engagement plan. The entity must have a liaison officer who will be responsible for communication with the community and a social development officer who will be responsible for managing the grievance and redress mechanism. An example of a stakeholder engagement plan has been presented in Annex 7.

The following recommendations should be taken into account when deciding on the approach to stakeholder engagement:

Recommendation 1:

The PMU, through environmental and social protection officers, will have to carry out stakeholder engagement activities among its main tasks. It should designate a community liaison officer to communicate with the community. A social development officer should also be designated to manage the complaints and complaints mechanism.

Recommendation 2:

In full cooperation with the committee of community representatives that should be established with the various community groups, the community liaison officer should exchange information and respond to requests at a monthly meeting. This would result in:

- facilitate access to information about the project by holding regular informal meetings with community members;
- inform stakeholders of ongoing communications and meetings;
- inform stakeholders of the progress of the project, problems to be expected, construction deadlines, etc. ;
- Provide feedback from stakeholders on issues that have been raised through an active channel with ABER.

Recommendation 3:

In addition, separate focus group meetings should be held with women, youth and vulnerable groups to voice their concerns and concerns. Posters and leaflets about the project and an agreed contact person will have to be published in the main streets of the village, in the market square and near the plant. Women-focused NGOs should be involved in cooperating with them to convey information in plain dialect to marginalized poor women. Young people can be contacted through informal meetings at youth assembly centres.

Recommendation 4:

It is proposed to operators of all sub-projects/mini-grids to set up Project Management Units (PMUs) comprising a Community Liaison Officer for Environment and Social, responsible for:

- Raise workers' awareness of: on-site environmental management and health and safety requirements;
- Complaints mechanism for those affected by the project;
- Establish channels for sharing information;
- Provide information to the community on the construction program and schedule;
- inform the stakeholders directly concerned before the construction works.

Initiate disclosure of relevant EA studies, PPGTP and GGP reports on the ABER website and project funding partners. This aims to make the information available to the village community and all other interested stakeholders and groups. With regard to illiterate people, they should be informed of the main content of the reports through meetings with community leaders and ABER.

8.7.1 Public Consultations and Participation

This part of the study presents the process of public meeting/consultation and participation adopted under this CGES.

Background and purpose of the public consultation

The overall objective of the public consultations under this CGES is to involve the population in the final decision-making on the project. The specific objectives pursued by such an approach are to:

- first, provide interested parties with fair and relevant information on the project, including its objective, its description with both negative and positive impacts and the related mitigation measures;
- invite stakeholders to give their opinions and suggestions on proposed solutions and establish a dialogue;
- to lay the foundations for a concerted and sustainable implementation of the sub-projects and actions planned by the project.

The consultations were held with the administrative, technical and population leaders of the beneficiary regions.

For this year 2023, in view of the national situation related to insecurity, consultations could only be carried out in fifteen (15) localities. However, for other localities, they will be held during the elaboration of specific instruments (NIES, PGES, PAR, etc.).

Methodological approach to the consultation

The CGES was carried out on the basis of a participatory methodological approach which was based, on the one hand, on field visits, the exploitation of basic documents and previous studies, and on the other hand, on interviews with the various technical services at central level, in particular the Directorates-General for Renewable Energies, ABER, SONABEL, local NGOs, the various trade unions in the energy sector, donors, the populations concerned, the authorities and local authorities (Regional Councils, High Commission, Regional Administrations, Prefectures, Town Halls). During each of the meetings held during the project preparation mission and the field visits, the content of the project, in terms of economic, social, cultural and environmental issues were explained to the participants.

Also, during the implementation of the project, all these partners will be regularly informed of the project activities and consulted in a consultation framework.

Summary of the consultation

- **General opinion on the project**

The public consultation made it possible to assess the social acceptability of the YELEEN project. During the field missions, individual and group interviews (focus groups) with the actors concerned by the project were organised (attendance lists attached in Annexes 5 and 6). Minutes were drawn up (Appendix 4) at the end of the consultation and it appears that the people met fully support the project. Indeed, the implementation of the project must increase the rate of access to energy in the country.

As indicated in previous chapters, the implementation of the project will increase access to electricity services in selected rural areas and the availability of solar energy in Burkina Faso, as well as mobilize private financing.

The project from the point of view of its objectives is not a controversial activity for the people met in the regions and municipalities concerned.

On the contrary, it fills a missing link in the chain of interfaces aimed at promoting the economy in rural areas.

❖ **Summary of concerns, fears and questions**

For the most part, the actors and beneficiaries appreciate the project. There was general consensus on the need to address the concerns, expectations and suggestions expressed summarized in table 5.

Table 9: Summary of the stakeholder consultation

Actors	Information to be disclosed	Communication period	Communication tools	Documentation	Return of the actors
Start-up and construction phase					
Companies and subcontractors of the works Workers of each subproject	Make workers aware of the management plan, Introduce health and safety requirements, Workers' Complaint Resolution Mechanism, Information Sharing Channel Construction program and schedule Communication channels Grievance mechanism for workers	From the beginning to the end of the work (the entire duration of the project)	Internal newsletters/memos Regular intranet/internet and email updates	PEPP, ESMP and ESMP Implementation Report and Monitoring Report Health and Safety Instruction; Labour law	Workers can file complaints at any time during their employment at the project site. All feedback/response to grievances by workers should be documented
Beneficiary populations and local actors	Project implementation schedule provided to relevant stakeholders for notification prior to construction Disclosure of environmental assessment studies, implementation report of PEPPs, ESMPs, etc.	From the beginning to the end of the work	Regular meeting with communities as needed or monthly at start-up and quarterly in later phases Additional information is available on the ABER website	EES, PEPP, PGES studies Traffic Management Plan Monitoring Plans Security procedures, etc.	Requests from actors and responses provided (all this must be documented)

Actors	Information to be disclosed	Communication period	Communication tools	Documentation	Return of the actors
	on the ABER website and funding agencies				
	Job opportunities and qualifications required	Before the start of work	Posters to be distributed in the main arteries and public places, the entrance to the sub-project sites The range of job offers should be available	Job listings will be provided by the company including required qualifications	
	Complaints and redress mechanism	The entire duration of the project	Signage in public places and at construction sites	Complaints and redress mechanism described in the EESS	All complaints must be handled and documented
Other key players	Progress of the project E&S performance management and new activities	The entire duration of the project	Direct communication through one-on-one meetings, meetings, public consultations (as needed) Quarterly meeting)	Tracking sheets Tracking results Job Opportunity	Meetings and initiatives must be documented
Operational phase					
Population	Update on operational performance and specific issues	After the start of the operation	Regular meetings with communities as needed and quarterly	Follow-up plans and dispute resolution mechanism	
Workers in mini-grid installations	Environmental Management Plan and Grievance Mechanism		Information provided during induction of new workers	Plugs Follow-up results Rules of procedure, Labour Code	Workers can file complaints at any time during their employment on the

Actors	Information to be disclosed	Communication period	Communication tools	Documentation	Return of the actors
	Health and safety requirements Grievance mechanism for workers and channels for sharing information		Regular posters and flyers on the project website, Complaint Inbox, etc.		project site All complaints must be handled and documented
Project management and employees	Timing of operations, communications issues related to the workers' complaints mechanism	After the start of the operation	Internal letters, email, etc.	PEPP and ESMP, Monitoring Results	Workers can file complaints at any time during their employment at the project site. All complaints must be handled and documented
Local authorities and other stakeholders including industrial operators	Calendar of operations, project communications	During operation	Direct communication through one-on-one meetings, meetings, public consultations (as needed) Quarterly meeting	Plugs Monitoring results, GGP implementation report Job Opportunities	All meetings and comments must be documented

Source: CGES YELEEN 2018, updated

8.8 Proposed framework for disclosure of information

As noted in previous sections, the Bank requires that consultation be seen as an ongoing process, not just a step in the process of obtaining project approval. It must begin at the project identification stage, or at least at an early stage of project preparation, and continue throughout the life of the project until construction, operation and decommissioning. As the Bank recognizes local requirements for taking E&S considerations into account, stakeholder consultation and engagement will also incorporate national requirements as prescribed in Burkina Faso's environmental legislation.

The Client and ABER shall make the specific ESIA/ESMP documents publicly available. The procedures require public disclosure of summaries in accordance with specified deadlines.

In addition to the disclosure of information on environmental assessment studies. Other information that directly affects the concerns of different categories of stakeholders will also be disclosed. The mechanism for disseminating information should be simple and accessible to all. The program will use two mechanisms, including information materials and community consultation sessions. Information materials (all to be prepared in the local language) may take the form of (a) brochures (including information on the project, land needs and details of rights, including compensation and assistance to PAPs) which may be kept at the premises of local authorities and ABER; (b) posters to be posted in conspicuous places and (c) leaflets that can be distributed in the affected area of the sub-project.

ABER should also organise consultation meetings at regular intervals to inform PAPs and stakeholders about:

- ✓ Project schedule and progress;
- ✓ Information on set-off and rights;
- ✓ Information on land acquisition and valuations of property at market prices;
- ✓ Acquisition deadlines.

Disclosure will strengthen governance and accountability, including strengthening monitoring indicators to help the AfDB monitor compliance with agreements and assess impact on results. In accordance with the AfDB's ISS, project management should ensure the disclosure of relevant project information, including:

- the nature and scope of the project;
- the duration of the activities of the proposed project;
- any potential risks and impacts on the environment, worker health and safety, public health and safety and other social impacts on communities, and proposed mitigation plans;
- Envisaged consultation process and opportunities and means of public participation
- Time/location of all contemplated public meetings and process by which meetings are notified, summarized and reported.

Information must be disclosed in the local language(s) and in an accessible and culturally appropriate manner, taking into account any vulnerable persons (e.g. ethnic groups or displaced persons). The following describes the proposed arrangement.

During the preparation phase

The project should have good access to the media, all news regarding the work in the sub-project areas should be disseminated to the public through national and local media, including those owned by the State, etc.

In addition, social media should be used to publish information about the project in the regions concerned. To facilitate effective public information, a technical manager should be responsible for communicating with people and providing information on the site.

During the construction phase

During construction, ABER should provide ongoing information to people in and around the project areas. The information should relate to planned, unplanned and ongoing construction activities. This could include safety measures in the vicinity of construction sites, traffic management, employment opportunities, service delivery opportunities (e.g. catering, laundry, etc.) and any other information identified during the development of the ESMP. This information could be provided in a variety of ways, including:

- Monthly meetings with the community representation committee;
- Face-to-face meetings, which could involve the whole community or smaller focus groups;
- written updates mailed to the local school;
- via the Community Committee; and
- Annual progress reports on the project, including environmental and social impacts, health and safety performance and implementation of the external grievance mechanism.

During the exploitation phase of the project

During operation, ABER and individual sub-project promoters/mini-grid operators should continue to provide project information as necessary. This could focus on monitoring operational impacts such as emissions and any issues raised by stakeholders during previous phases of the project.

Suggested disclosure of the complaints and redress mechanism

Grievances may arise during the construction and operation phases of sub-projects, addressed to an individual project or to the programme as a whole. To ensure that stakeholders have a simple mechanism to voice their grievances and obtain redress, detailed grievance procedures need to be established. The aim is to respond to stakeholder complaints in a timely and transparent manner, without resorting as much as possible to complicated formal channels.

It is proposed that any person be entitled to grieve the project if they believe that a work practice or aspect of the project has a negative impact on the community, the environment or its quality of life.

CHAPTER IX: CAPACITY-BUILDING

The project will include an assessment of the capacity of AfDB clients to implement the CGES. Based on a preliminary assessment, the AfDB-GCF program framework will include a technical assistance component as a capacity building initiative to ensure the successful roll-out of the program and build the capacity of the government and other entities working in the field of renewable energy.

The technical assistance aims to support all key actors of the project, namely the Ministry of Energy, the Ministry of Environment, the Ministry of Finance, ABER, local government institutions, etc. The technical assistance component will address the main barriers to private

investment in the development of renewable energy projects and will also streamline the process of renewable energy deployment and capacity building of key players in the sector. The capacity building programme will seek to provide key actors with the necessary tools and skills for better deployment of mini-grids. This will include the development of guidelines on connection to the mini-grid, guidelines for investors and the organization of trainings and workshops on economic, financial, tariff evaluations, guidelines for recycling and sustainable disposal of used batteries, AfDB PEES (including aspects related to resettlements (grid integration, network management) aspects of mini-grids and individual solar kits (component of equipment for productive use).

ABER has an E&S and Renewable Energy section which is under its technical department. Effective implementation of the CGES will require technical E&S capabilities in the human resources of ABER as the lead implementing agency, as well as key private sector entities responsible for implementing the activities. Implementers need to identify and understand social and environmental issues. An appropriate understanding of the implementation mechanisms of the CGES will need to be provided to the different stakeholders implementing the sub-projects. It will also be important to ensure that ABER has sufficient capabilities and systems to effectively oversee relatively complex E&S risk management processes with multiple parties involved.

In general, to strengthen the respective roles and collaboration of relevant stakeholders, the following broad areas (not limited to) for capacity building were identified as meriting attention for effective implementation of the CGES:

- E&S management planning and monitoring systems impact assessment tools, monitoring tools and activities;
- preparation and verification of reports;
- public participation techniques and citizen engagement, including public awareness/education techniques (on environmental, social and health issues); and
- Address systemic E&S risks in the off-grid solar subsector in Burkina Faso by developing targeted strategic solutions.
- Capacity-building efforts are needed at different levels. It is necessary to ensure that all authorities, institutions and organizations involved integrate their activities within the framework of appropriate coordination mechanisms in order to give coherent signals for the management of sub-projects.

The four categories of E&S capacity building activities are:

- E&S capacity building for ABER;
- I&O training and support for mini-grid developers;
- Training that empowers stakeholder engagement;
- Capacity building that strengthens the development of strategic solutions for E&S risk management for the off-grid solar market.

9.1 E&S Capacity Building for ABER

This will develop ABER's capacity to implement a robust approach to E&S risk management in its activities, as well as enhance E&S benefits and opportunities, such as gender-related activities, green initiatives, etc.

ABER should be able to provide adequate training to its E&S staff, as well as to all other staff concerned with this aspect. This support will also include a budget to conduct regular monitoring activities, as well as independent E&S audits.

Examples of capacity building options for ABER to improve its management capacity by enabling the effective application of best practices such as:

- **E&S screening**: review of investments for potential environmental and social impacts, scoping assessments, planning of mitigation options, public consultation to assess feasibility and acceptability options; implement, step by step, the environmental and social selection process for projects;
- **Environment**: site selection to minimize environmental impacts and social disruption; restoration of drainage networks, including mitigation issues in contracts; management of impacts during construction; monitoring of the effectiveness of measures;
- **Follow-up and redress of grievances**: responsibilities for transparency and oversight.

9.2 Capacity building for ANEVE

There is a need to upgrade the knowledge of all its staff on the application of environmental and social provisions, in particular the requirements of the AfDB ISS. Institutional strengthening is also necessary for ANEVE to strengthen its capacity to ensure effective implementation and monitoring of compliance with E&S mitigation measures developed for sub-projects.

9.3 I&O training and support for mini-grid developers

This activity will strengthen the E&S capacity, as part of overall capacity building, of existing mini-grid developers and other private companies interested in entering the mini-grid market to identify viable sites for mini-grid development. They will receive training and support to develop or improve their ESMS so that they can comply with applicable E&S requirements, monitoring and reporting.

Mini-grid designers should be trained in different aspects of the implementation of the CGES and the proposed project, including the interpretation and implementation of environmental impact management guidelines. The three main areas for early training are:

- Awareness-raising to fully appreciate the importance or relevance of environmental issues, as well as the sensitivity of certain issues, such as land use;
- Detailed technical training on the analysis of potentially adverse environmental impacts, to prescribe mitigation approaches and measures, and to prepare and supervise the implementation of environmental and social management plans. This training will address issues such as environmental assessment; use the CGES; and project supervision and monitoring;
- Capacity building on how to interact with host communities, such as methods of community participation, both to carry out stakeholder engagement and resolve conflicts/grievances caused by the proposed project;
- Monitoring and reporting: how to meet ABER's monitoring and reporting requirements.
- Other trainings that will strengthen the capacity of mini-grid developers to improve the overall quality of the project, such as project management, occupational health and safety, monitoring and evaluation, waste management, etc.

9.4 Training that strengthens stakeholder engagement

This will support education and awareness-raising in the main areas of implementation of the project, namely households and small businesses. Different stakeholders affected by the implementation of the proposed projects have different training needs.

The target audience of these training activities includes, but is not limited to: local authorities (mayors and prefect), people living in and around the affected areas, people whose land and/or livelihoods could be affected by the projects, beneficiaries of the newly built solar mini-grids, potential buyers/buyers of the autonomous solar system, etc**.**

The proposed activities are:

- initial provision for the adoption of new technology for communities and households (for solar mini-grids);
- Strengthen the capacity of users for informed decision-making and to better understand the quality of products in the market;
- Knowledge of the importance and benefits of energy conservation;
- Raising awareness of solar technologies including recycling / proper disposal of batteries.
- E&S impacts and vulnerability aspects.

Capacity-building activities will also prioritize men and women as a preferred target audience. It is in the interest of the project to reach the women who will be the main users of the proposed solar solutions.

Capacity building of community facilitators and field staff will also be implemented, as it is the actors who will be in constant contact with the communities, and it becomes necessary that these actors and their representatives have adequate information on the project. They will be able to communicate effectively in local languages, understand community dynamics and processes, negotiation and conflict resolution, and empathize with communities and their needs. Building trust and maintaining good relationships with people in project areas by providing relevant information about the project and effectively addressing their needs and concerns will help resolve issues before they even become complaints. It is also important that community facilitators and field staff provide feedback to ABER.

9.5 Capacity building for a strategic development solution for E&S risk management for the off-grid solar subsector

This category of activities will support the development of programmatic approaches to address key strategic challenges faced by actors beyond the direct stakeholders of this project.

Beyond specific E&S due diligence at the level of mini-grid sites and developers, distributors of productive equipment and private sector subcontractors, some identified E&S risks require strategic solutions at the market level. Therefore, training targeting a target audience of policy makers, industry professionals, national and international financiers and other key players in the Burkinabe solar energy sector may be required.

There are also land tenure issues and concomitant land use challenges for mini-grids. Also, waste management, and more specifically battery storage and recycling; and the need for a consistent approach to battery storage, recycling and disposal in the country.

In summary, capacity-building should be seen as more than training. It is the development of human resources and the process of equipping individuals with the understanding, skills and

access to information, knowledge and training that enable them to carry out their tasks effectively.

It also involves organizational development, the development of management structures, processes and procedures, not only within organizations, but also in the management of relationships between different organizations and sectors (public, private and community).

To achieve the objective of the CGES, there is an urgent need to build capacity and relevant skills in environmental and social management at the level of the PMU, local authorities and communities, including contractors.

Given the nature of the environmental and social management requirements and arrangements described in this CGES, expertise and capacity building will be needed in the following areas:

- Environmental impact assessment process - Screening, scoping assessment, impact assessment, mitigation measures and monitoring, review of ESIA/EMP reports;
- Environmental due diligence - Types of due diligence, project selection, determination of due diligence, and review of due diligence reports;
- Monitoring and Evaluation - Understand the importance of E&S issues in project implementation, E&S requirements for project sustainability.
- The estimated budget financed by the national counterpart for the implementation of the CGES is shown in the table below.

Tableau 10: Budget pour la mise en œuvre du CGES

N°	Rubriques	Unité	Qté	Coût ($)
I.	**Sécurisations des travaux, équipements et infrastructures**			**80 000**
II.	**Renforcement des Capacités de l'Aber**			**420 000**
1.1	Mise à jour des connaissances des spécialistes ES&G sur les procédures des sauvegardes opérationnelles de la BAD	Personne formée	03	15 000
1.2	Formation de trois (03) spécialistes sur le suivi des PGES et les audits environnementaux et sociaux	Personne formée	03	15 000
1.3	Mise à niveau des connaissances de l'ensemble des acteurs clés du projet (Equipes de projet de l'UCP, Ministère de l'énergie et ABER) sur l'application des dispositions environnementales et sociales de la BAD	Personne formée	20	5 000
1.4	Formation des SSES de l'UGP, MEMC, ABER et ANEVE sur 1-Appropriation commune des mesures du CGES et des dispositions du CPRP 2-Documentation du processus de réinstallation 3-Préparation et suivi de la mise en œuvre des PGES et des PAR			
1.5	Appui logistique (01 véhicule) pour la conduite des activités périodiques de suivi des activités du projet par l'ABER	Véhicule	01	50 000
1.6	Evaluation à mi-parcours de la performance E&S	Forfait/localité		70 000
1.7	Audit avant clôture de la performance E&S	Forfait/localité		35 000
1.8	Reboisement compensatoire	Forfait/localité	100	230 000
II.	**Renforcement des capacités pour l'ANEVE**			**100 000**
2.1	Mise à niveau des connaissances du personnel sur l'application des dispositions environnementales et sociales, en particulier les exigences du SSI de la BAD	Personne formée	20	40 000
2.2	Validation des instruments opérationnels	Forfait/localité	100	60 000

N°	Rubriques	Unité	Qté	Coût ($)
	Suivi et surveillance externe			
III.	**Formation et soutien aux développeurs de mini-réseaux pour le développement et la mise en œuvre du SGES**			**150 000**
3.1	Formation des développeurs de mini-réseaux sur la préparation des SGES	Personne formée	10	25 000
3.2	Préparation des instruments des sauvegarde environnementale et sociale (NIES/PAR)	Forfait/localité	100	125 000
IV.	**Coût de mise en œuvre (NIES/PAR) et suivi**			**230 000**
V.	**Campagnes d'engagement et de sensibilisation de la communauté**			**200 000**
5.1	Ateliers régionaux et/ou communaux de formation/sensibilisation des acteurs sur la mise en œuvre du PGES, du PAR et du suivi environnemental et social	Personne formée	100	90 000
5.2	Formation des CVD sur la procédure et outils de recueil et de traitement des réclamations / tenue des registres et des fiches de réclamations et Appui à la mise en place des CRP	Personne formé	100	50 000
5.3	Formation des femmes à des activités génératrices de revenus (Aviculture, gestion des moulins à céréale…)	Personne formée	100	60 000
	Total			**1 190 000**
	Imprévus (10%)			119 000
	TOTAL CGES			**1 309 000**

Source : CGES YELEEN, actualisé 2023

CONCLUSION

La mise en œuvre du projet YELEEN apportera des avantages aux populations des localités concernées en termes d'amélioration de leur cadre de vie, de leurs revenus et par conséquent de leur niveau de vie. Les sauvegardes opérationnelles de la BAD déclenchées, et la règlementation nationale en matière environnementale et sociale ont permis d'appréhender plusieurs effets négatifs induits par le projet sur les composantes de l'environnement. Les effets sont entre autres : la destruction partielle du couvert végétal et de l'habitat de la faune ; l'expropriation de portions de terres et la perte temporaire de sources de revenus ; les risques de maladies et de nuisances aussi bien pour les travailleurs que les populations riveraines des sites des travaux ; les risques de pollution des sols et des eaux de surface et les risques d'accidents et d'incidents de travail.

En vue de maitriser ces effets, les actions d'atténuation suivantes ont été proposées :

- la réalisation d'évaluations environnementales (NIES ou PES) pour les sous-projets
- la mise en œuvre des PGES des sous-projets ;
- la mise en œuvre des actions de renforcement des capacités des acteurs à travers des sensibilisations, des formations et des moyens logistiques au profit des populations riveraines des zones touchées par les sous-projets, des représentants des services déconcentrés, des conseillers et agents municipaux des communes concernées.

Aussi, les consultations menées, ont donné lieu à des recommandations de la part des acteurs consultés. Ce sont :

- la formation des jeunes des villages à des métiers dans le domaine de l'énergie en collaboration avec les structures en charge de l'énergie (ABER) et les conseillers municipaux ;
- le respect des us et coutumes des différentes localités concernées à travers l'implication des autorités coutumières ;
- la prise en charge des personnes impactées par le projet en mettant en œuvre le CPRP ;
- l'implication des services en charge de l'action sociale pour la prévention et la réponse aux EAS/HS dans la mise en œuvre du projet.

Dans la mise en œuvre des actions d'atténuation, plusieurs structures seront impliquées. Il s'agit du Comité de revue du projet, de l'Unité de Gestion du Projet (UCP), des entités de mise en œuvre des composantes (Ministère de l'énergie, ABER), de l'ANEVE, des Collectivités territoriales (Mairies), des Services techniques déconcentrés (Agriculture, Environnement, etc.), des Organisations de la Société Civile, les populations locales, des Comités Villageois de Développement (CVD), les Prestataires et opérateurs privés, les autorités coutumières et religieuses.

Le budget de mise en œuvre du CGES est estimé à sept cent quatre-vingt millions quatre cent mille (785 400 000) FCFA.

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ANNEXES

Annexe 1 **:** Modèles d'instruments de gestion environnementale et sociale

Annexe 2 **:** Exigences de performance, exclusions, conformité aux lois et règlements pertinents, critères d'implantation des mini-réseaux

Annexe 3 **:** Résumé des notes d'orientation sur l'évaluation intégrée de l'impact environnemental et social (EIIES)

Annexe 4 **:** Liste des parties prenantes (structures) consultées

Annexe 5 **:** Intégration du genre et évaluation de la vulnérabilité

Annexe 6: Fiche d'enregistrement et de notification des EAS/HS (y compris VBG et VCE)

Annexe 7 **:** Mesures d'atténuation génériques contre l'E & S

Annexe 8 **:** Exemple de plan d'engagement des parties prenantes

Annexe 9 **:** Approche de gestion des déchets et des piles

Annexe 10 **:** Contenu d'un plan abrégé de réinstallation

ANNEXE 1: MODÈLES D'INSTRUMENTS DE GESTION ENVIRONNEMENTALE ET SOCIALE

Annexe 1a: Formulaire de sélection environnementale et sociale

SECTION A: INFORMATIONS GÉNÉRALES

Nom du projet	
Coût estimé ( )	
Site du projet	
Objectifs du projet	
Principales activités proposées du projet	
Nom de l'évaluateur	
Date de l'évaluation sur le terrain	

SECTION B: BREVE DESCRIPTION DES ACTIVITES PROPOSEES

Fournir des informations sur le type et l'échelle de l'activité de construction / réhabilitation (par exemple, la superficie, le terrain requis et la taille approximative des structures)

Fournir des informations sur les activités de construction, y compris les structures de soutien / auxiliaires et les activités nécessaires pour les construire, par exemple, besoin de carrière ou d'excavation de matériaux d'emprunt, de source d'eau, de routes d'accès, etc.

Décrivez comment les activités de construction / réhabilitation seront réalisées. Inclure une description du soutien / des activités et des ressources nécessaires pour la construction / réhabilitation.

SECTION C: FORMULAIRE DE TRI POUR L'IDENTIFICATION DE L'APDB OSS DÉCLENCHÉ ET IDENTIFICATION D'UN INSTRUMENT DE SAUVEGARDE APPROPRIÉ

SO de la BAD	**Déclenchés**		**Justification/détails**	**Instruments de sauvegarde requis**
	Oui	**Non**		
OS1,				
OS2				
OS3				
OS4				
OS5				

Orientations : Les directives pour la catégorisation des sous-projets et le déclenchement des systèmes d'exploitation sont disponibles dans le document PEES de la BAD (Annexe 2 avec un accent particulier sur la liste de contrôle de l'environnement et du social).

Conclusion sur les instruments de sauvegarde requis

Le sous-projet est classé en tant que projet de catégorie _____ conformément au PEES de la BAD, et les instruments de sauvegarde suivants seront préparés :

1. _____
2. _____
3. _____
4. _____
5. _____
6.

SECTION D: INFORMATIONS ENVIRONNEMENTALES ET SOCIALES

Nom de la zone	
Emplacement proposé du projet (Inclure un plan du site d'au moins 1:10 000 ou coordonnées du GPS)	
RESSOURCES TERRESTRES -Topographie et géologie de la région -Sols de la région -Principales utilisations du sol et activités économiques	
RESSOURCES EN EAU -quantité de ressources en eau de surface (rivières, lacs, etc.) et qualité	
CLIMAT -Température -Pluviométrie	
SOCIAL -Nombre potentielle de PAP -type et magnitude des impacts (impacts sur les terres, abtis, cultures, condition de vie, etc.) -Aperçu socio-économique des personnes touchées	

Annexe 1b: Rapport de suivi environnemental et social RSES
RAPPORT DE SUIVI ENVIRONNEMENTAL ET SOCIAL

Nom de projet :	**Catégories Env. & S :**
Manager du projet	Signature :
Evaluateur : expert env.&Social	Signature

Effets environnementaux et sociaux

Résumé des effets environnementaux du projet prévus lors de la planification du projet.
Effets environnementaux et sociaux observés lors de la visite sur le terrain.

Résumé des effets environnementaux observés lors de la visite sur le terrain:
- effets prévus et nature de l'observation; et
- Effets imprévisibles et nature de l'observation.
Les personnes participant à la visite sur le terrain:

Nom	Institution	Fonction	Signature

Conformité aux spécifications environnementales et sociales

Évaluation de la conformité du projet avec les spécifications de conception environnementale, y compris la protection et le contrôle de l'environnement, l'atténuation et les mesures de remboursement et de compensation, le cas échéant.

Résultats de la visite sur le terrain

Fournir les résultats de l'évaluation des effets biophysiques et socioéconomiques spécifiques, y compris les écarts par rapport aux valeurs de référence, le cas échéant.

Conclusions et recommandations pour le fonctionnement du projet

Les ajustements recommandés aux opérations du projet, le cas échéant, y compris la justification des recommandations.

Conclusions et recommandations pour le programme de surveillance

Les ajustements recommandés au programme de surveillance, le cas échéant, y compris la justification des recommandations.

Annexe 1c: Rapport final de suivi Environnement et Social RFSES

RAPPORT FINAL DE SUIVI ENVIRONNEMNTAL ET SOCIAL

Nom de projet : _____	**Catégories Env. & S : _____**
Manager du projet	Signature :
Evaluateur : expert env.&Social	Signature

Effets environnementaux et sociaux

Résumé des effets environnementaux du projet prévus lors de la planification du projet.
Effets environnementaux et sociaux observés lors de la visite sur le terrain.
Résumé des effets environnementaux observés lors de la visite sur le terrain:
- effets prévus et nature de l'observation; et
- Effets imprévisibles et nature de l'observation.
Les personnes participant à la visite sur le terrain:

Nom	Institution	Fonction	Signature

Conformité aux spécifications environnementales et sociales

Évaluation de la conformité du projet avec les spécifications de conception environnementale, y compris la protection et le contrôle de l'environnement, l'atténuation et les mesures de remboursement et de compensation, le cas échéant.

Résultats de la visite sur le terrain

Fournir les résultats de l'évaluation des effets biophysiques et socioéconomiques spécifiques, y compris les écarts par rapport aux valeurs de référence, le cas échéant.

Conclusions et recommandations pour le fonctionnement du projet

Les ajustements recommandés aux opérations du projet, le cas échéant, y compris la justification des recommandations.

Conclusions et recommandations pour le programme de surveillance

Les ajustements recommandés au programme de surveillance, le cas échéant, y compris la justification des recommandations.

Annexe 1c: Rapport final de suivi Environnement et Social RFSES

RAPPORT FINAL DE SUIVI ENVIRONNEMNTAL ET SOCIAL

Nom de projet : _____	**Catégories Env. & S : _____**
Manager du projet	Signature :
Evaluateur : expert env.&Social	Signature

1. Activités réalisées

Le (date) _____, l'évaluation finale des aspects environnementaux et sociaux correspondant à l'activité _____ a été menée pour vérifier le respect des mesures d'atténuation proposées pour le projet et pour vérifier si d'autres impacts négatifs sont apparus au cours de la période l'activité a eu lieu:

Nom	Institution	Fonction	Signature

2. Contexte

Capturer un enregistrement de dossier, y compris les dates, une brève description du problème et les recommandations des opportunités précédentes.

3. Résultats de la revue

Décrivez en détail les conditions dans lesquelles les mesures d'atténuation ont été développées, le degré de réalisation et l'état actuel, en expliquant les raisons pour lesquelles les mesures n'ont pas été complétées. Compléter le tableau ci-dessous aidera à visualiser ces informations.

No.	**Mesure d'atténuation**	**Réalisation**			**Délai requis pour Atteindre l'objectif de réalisation**	**Observations**
		Oui	Non	%		

4. Conclusions

Sur la base de la revue, préparer des conclusions concernant le respect des mesures d'atténuation et des recommandations.

ANNEXE 2: Exigences de performance, liste d'exclusions et respect des lois et réglementations pertinentes Général

La BAD exige que ses projets répondent aux bonnes pratiques internationales en matière de durabilité environnementale et sociale. Pour aider les clients et / ou leurs projets à atteindre cet objectif, la BAD a défini des sauvegardes opérationnelles spécifiques pour des domaines clés de la durabilité environnementale et sociale. La BAD a adopté les cinq (5) systèmes d'exploitation qui correspondent à la structure générale, à l'approche et à la couverture des autres exigences des institutions financières internationales multilatérales telles que les normes de performance 2012 de la SFI et le Groupe de la Banque mondiale. Ce principe est appliqué pour garantir que les bonnes pratiques internationales sont également prises en compte dans les programmes de la BAD.

Sauvegardes Opérationnelles Spécifiques

Les sauvegardes opérationnelles (OS) de la BAD adopté sont au nombre de cinq notamment:

Sauvegarde opérationnelle 1 : L'objectif de cette SO primordiale, et de l'ensemble des SO qui la soutiennent, est d'intégrer les considérations environnementales et sociales – y compris celles liées à la vulnérabilité au changement climatique – dans les opérations de la Banque et de contribuer ainsi au développement durable dans la région.;

Sauvegarde opérationnelle 2 – Réinstallation involontaire : Cette SO vise à faciliter l'opérationnalisation de la Politique de la Banque sur la réinstallation involontaire de 2003, dans le cadre des conditions de mise en œuvre des SO 1 et ce faisant, d'intégrer les facteurs de la réinstallation dans les opérations de la Banque.;

Sauvegarde opérationnelle 3 – Biodiversité, ressources renouvelables et services Écosystémiques : Cette SO définit les conditions requises pour les emprunteurs ou les clients afin

(ii) d'identifier et appliquer les occasions de préserver, et d'utiliser durablement la biodiversité et les habitats naturels, et (ii) d'observer, mettre en œuvre, et respecter les conditions prescrites pour la préservation et la gestion durable des services écosystémiques prioritaires.

Sauvegarde opérationnelle 4 – Prévention et contrôle de la pollution, matières dangereuses et utilisation efficiente des ressources : Cette SO expose les principales conditions de contrôle et de prévention de la pollution pour que les emprunteurs ou les clients puissent réaliser une performance environnementale de grande qualité tout au long du cycle de vie d'un projet ;

Sauvegarde opérationnelle 5 - Conditions de travail, santé et sécurité : Le travail est l'une des ressources les plus importantes d'un pays dans la recherche de la réduction de la pauvreté et de la croissance économique. Le respect des droits des travailleurs est l'un des fondements du développement d'une main-d'œuvre solide et productive.

Table AN1: Résumé des objectifs et des facteurs de déclenchement des SO

SGO 1 : Évaluation environnementale et sociale	
Objectifs :	Identifier et évaluer les impacts environnementaux et sociaux (y compris le genre) et les questions liées à la vulnérabilité aux changements climatiques associées aux opérations d'octroi de prêts et de dons par la Banque dans leur zone d'influence ; Éviter ou réduire, atténuer et compenser les impacts défavorables sur l'environnement et sur les populations touchées ; Faire en sorte que les populations touchées aient accès à l'information sous des formes convenables en temps voulu au sujet des opérations de la Banque et soient adéquatement consultées a sujet des questions qui peuvent les concerner ;
Facteur de déclenchement :	Cette SO est déclenchée à travers le processus de tri environnemental et social obligatoire par lequel une catégorie est attribuée au projet sur la base des risques et des impacts environnementaux et sociaux qu'il peut avoir dans sa zone d'influence. Ces risques et impacts potentiels englobent les impacts transfrontaliers physiques, biologiques, socioéconomiques, sur la santé, la sécurité, les biens culturels, et les impacts au plan mondial, notamment les émissions de gaz à effet de serre et la vulnérabilité aux effets des changements climatiques.
SO 2 : Réinstallation involontaire : Acquisition de terres, déplacement et indemnisation des populations	

Objectifs :	•Éviter autant que possible la réinstallation involontaire, ou réduire les impacts de la réinstallation dans les cas où la réinstallation involontaire est inévitable, en étudiant toutes les conceptions de projet viables ; •Faire en sorte que les personnes déplacées reçoivent une aide importante pour la réinstallation, de préférence au titre du projet, de sorte que leur niveau de vie, leur capacité de production de revenue, les niveaux de production et leurs moyens globaux de subsistance s'améliorent par rapport aux niveaux atteints avant le projet ; •Établir un mécanisme de suivi de la performance des programmes de réinstallation involontaire dans les opérations de la Banque et pour la résolution des problèmes au fur et à mesure qu'ils se présentent de façon à éviter des programmes de réinstallation mal préparés et mal exécutés.
Facteur de déclenchement	Cette SO est déclenchée si les projets nécessitent l'acquisition involontaire de terres, l'acquisition involontaire d'autres actifs et des restrictions sur l'utilisation des terres ou sur l'accès aux ressources naturelles locales, ce qui entraîne : •La relocalisation ou la perte de logement par les personnes vivant dans la zone d'influence du projet ; •La perte de biens ou la limitation d'accès aux biens, notamment les parcs nationaux, les zones protégées ou les ressources naturelles ; ou •La perte de sources de revenu ou de moyens de subsistance tenant au projet, que les personnes touchées soient ou non tenues de quitter leurs terres.
SO 3 : Biodiversité et services écosystémiques	

Objectifs	Préserver la diversité biologique en évitant, et si cela est impossible, en réduisant les impacts sur la biodiversité ; Dans les cas où certains impacts sont inévitables, chercher à restaurer la biodiversité en mettant en œuvre, au besoin, des mesures de compensation en vue de réaliser non pas une perte nette, mais plutôt un gain net au plan de la biodiversité ; Protéger les habitats naturels, modifiés et sensibles ; et Préserver la disponibilité et la productivité des services écosystémiques prioritaires en vue de conserver les bienfaits pour les populations touchées et maintenir la performance du projet.
Facteur de déclenchement	Cette SO est déclenchée si le projet est localisé dans un habitat susceptible de subir des impacts ou se déroule dans des zones qui fournissent des services écosystémiques auxquels dépendent les populations potentiellement touchées pour leur survie, leur subsistance ou leur revenu, ou qui sont utilisés pour assurer la survie du projet. Elle est également déclenchée si le projet consiste surtout à exploiter des ressources naturelles (par exemple les plantations forestières, cultures commerciales, agriculture, élevage, pêche et aquaculture).
SO 4 : Prévention et contrôle de la pollution, gaz à effet de serre, matières dangereuses et utilisation efficiente des ressources	
Objectif	Gérer et réduire les produits polluants que peut générer un projet de sorte qu'ils ne présentent pas de risques nuisibles à la santé humaine et à l'environnement, notamment les déchets dangereux et non dangereux ainsi que les émissions de gaz à effet de serre. Établir un cadre pour utiliser de façon efficiente toutes les matières premières et les ressources naturelles au titre d'un projet, avec un accent particulier sur l'énergie et l'eau
Facteur de déclenchement	Cette SO est déclenchée si le projet est susceptible d'avoir des impacts environnementaux et sociaux défavorables majeurs découlant de l'émission de particules polluantes, de déchets ou de matières dangereuses couverts par les lois nationales, les conventions internationales ou les normes reconnues au plan international ou l'utilisation non durable des ressources. Elle est également déclenchée par des niveaux potentiellement élevés d'émissions de GES.
SO 5 : Conditions de travail, santé et sécurité	

Objectifs	Protéger les droits des travailleurs et établir, préserver et améliorer les relations entre les employés et les employeurs ; Promouvoir la conformité avec les exigences légales nationales et effectuer une vérification préalable dans le cas où les lois nationales ne prévoient rien ou ne vont pas dans le même sens que la SO ; Favoriser une large conformité avec les conventions pertinentes de l'Organisation internationale du travail (OIT), les normes fondamentales du travail de l'OIT et la Convention de l'UNICEF sur les droits de l'enfant dans les cas où les lois nationales n'offrent pas une protection équivalente ; Protéger les travailleurs des inégalités, de l'exclusion sociale, du travail des enfants et du travail forcé Exiger la protection de la santé et de la sécurité au travail
Facteur de déclenchement	Cette SO est déclenchée si le projet comporte la mise en place d'un personnel temporaire ou permanent

Dans ce programme seulement les SO-1, 2, 4 et 5 seront déclenchées. Un plan de réinstallation abrégé sera élaboré pour traiter les problèmes d'acquisition de terres ou les problèmes connexes conformément à la sauvegarde opérationnelle 2: Acquisition de terres, réinstallation et indemnisation des populations involontaires et celles des lois et réglementations nationales du pays.

Chaque sauvegarde opérationnelle définit, dans ses objectifs, les résultats souhaités, suivis d'exigences spécifiques pour les projets visant à aider les clients à atteindre ces résultats. Le respect de la législation nationale pertinente fait partie intégrante de tous les systèmes d'exploitation.

Liste d'exclusion de Biens et activités nuisibles à l'environnement

La politique révisée sur les dépenses éligibles au financement du Groupe de la Banque (mai 2008) comprend une «**liste négative**» qui interdit l'investissement public et privé dans des biens «nocifs pour l'environnement» sans définir explicitement ce que cela signifie. Sur la base des meilleures pratiques internationales (en particulier en ce qui concerne la liste d'exclusion de la SFI), avec une référence particulière aux critères fournis dans les différents SO la Banque définit les éléments suivants comme nuisibles à la santé physique ainsi qu'à l'environnement social, et les exclut par conséquent de ses opérations éligibles pour les secteurs public et privé.:

- La production ou le commerce d'un produit ou d'une activité considérée illégale en vertu des lois ou des règlements du pays d'accueil, ou des conventions et accords internationaux ;
- La production ou le commerce des matières radioactives, à l'exception du matériel médical et de l'équipement du contrôle de la qualité où la source radioactive est insignifiante et adéquatement protégée ;
- La production, le commerce ou l'utilisation de fibres d'amiante non adhérentes ou d'autres produits contenant comme matériau dominant l'amiante liée à d'autres substances ;
- La production ou le commerce de produits pharmaceutiques, de composés chimiques et d'autres substances nocives soumises aux sorties de phase ou aux interdictions

internationales – y compris les pesticides classés dans les catégories Ia (extrêmement dangereux), Ib (très dangereux) ou II (modérément dangereux) ;

- La production ou le commerce de substances qui appauvrissent la couche d'ozone, bannies au niveau international ;
- Le commerce des produits de la faune sauvage ou des animaux sauvages réglementés en vertu de la Convention sur le commerce international des espèces de faune et de flore sauvages (CITES) ;
- L'achat de matériel d'exploitation forestière pour une utilisation dans les forêts tropicales primaires non aménagées ; et
- La production et les activités impliquant des formes nocives ou d'exploitation du travail forcé ou du travail des enfants telles que définies par la réglementation nationale.

Note: La «liste négative» comprend les articles suivants: boissons alcoolisées, tabac, matières radioactives, platine, perles, pierres précieuses, or et produits connexes, réacteurs nucléaires et produits connexes, armes, munitions et autres biens utilisés à des fins militaires et / ou fins paramilitaires, biens de consommation de luxe et produits nocifs pour l'environnement.

Le programme excluant les projets de catégorie 1, tous les projets identifiés comme projets de catégorie 1 dans l'annexe 2 (Dépistage environnemental et social) du PEES de la BAD seront inclus dans la liste d'exclusion du projet qui ne sera pas financée par le programme. L'encadré A ci-dessous présente les projets comme indiqué dans l'annexe particulière.

Box A

Affect environmentally sensitive components

- Natural and critical habitats (as per definitions in OS 3).
- Legally protected areas and internationally recognized areas (as per definition in OS3)
- Projects that intentionally intend to introduce invasive alien species and/or GMOs.
- Projects that may cause a significant impact to priority ecosystem services (as defined by OS 3)
- Projects that may affect populations of endangered and/or critically endangered species (as defined by OS 3)

Affect socially sensitive components

- Lead to the resettlement of a large population (more than 200 people) (as per OS 2)
- Affect rural areas whose population density is higher than the national average
- Affect physical cultural heritage (as defined in OS 1)
- Lead to a loss of intangible cultural heritage (as defined in OS 1)
- Affect areas presenting complex social settings or subject to significant social risks (post-conflict situations)
- Negatively affect vulnerable groups (as defined in OS1)
- Reduce the food supply for children and vulnerable groups, etc.
- Lead to a loss of productive assets (land, credit, etc.) for vulnerable groups
- Intensify discriminatory practices, particularly against women
- Reduce women's participation in decision-making processes

Considérations pour la sélection des sites de projet de mini-réseaux (Critère d'éligibilité)

En plus des critères d'exclusion ci-dessus, plusieurs facteurs devront être considérés pendant la sélection des sites pour les sous projets. Le site et les autres considérations techniques relatifs à la qualité des ressources est une considération a évidente à prendre en compte. Toutefois il y a d'autres considérations importantes à prendre en compte dans la recherche de site pour les sous projets :

- **Zones inondables** – La construction de centrale solaire dans des zones inondables ou submersibles pourrait endommager les PV et les infrastructures associées. La construction de telles zones sera évitée.
- **Pollution atmosphérique -** La pollution atmosphérique est un problème courant dans les grandes villes et les zones industrielles. Une forte concentration de poussières en suspension peut réduire l'ensoleillement net et accumuler la poussière sur les panneaux, nécessitant un nettoyage plus fréquent pour éviter une perte d'efficacité. Cela peut être un facteur important, en particulier dans les zones où les niveaux d'émission du pays ont été les plus élevés**.**
- **Sismicité, coulées de boue et glissements de terrain (risques géologiques)** - La construction de centrales solaires dans les zones à forte sismicité ou dans des zones sujettes aux coulées de boue et aux glissements de terrain pourrait endommager les PV et les infrastructures associées. En général, la construction dans ces zones à risque élevé sera évitée.
- **Considérations géotechniques** - Les considérations géotechniques doivent également être prises en compte, notamment en ce qui concerne la résistivité, les propriétés portantes du sol, le vent, la perte de végétation, le drainage et la gestion des eaux pluviales.

- **Utilisation du site** - Les sites photovoltaïques utilisent intensivement le terrain. Contrairement aux projets éoliens, qui ne nécessitent généralement que 1 acre de terre par mégawatt d'électricité produite et permettent au propriétaire de continuer à utiliser des terrains situés à proximité des zones de turbines pour des utilisations agricoles ou autres, les projets de PV doivent des acres de terre pour chaque mégawatt d'électricité produite, et exigent que le développeur ait l'usage exclusif du site pour s'assurer qu'il n'ya pas de perturbation de l'insolation solaire. En conséquence, les coûts de location sur un site photovoltaïque sont généralement plus élevés que ceux d'un parc éolien pour indemniser le propriétaire en cas de perte d'utilisation de la propriété pour d'autres activités génératrices de revenus. Ainsi, la recherche de sites ayant des utilisations agricoles, minérales ou autres utilisations productives limitées contribuera à garantir que l'acquisition du site sera rentable.
- **Taille**: En règle générale, plus le système est grand, plus le coût unitaire par watt généré est faible et plus la puissance produite est importante. Il convient donc de déterminer si un site est suffisamment grand pour être économiquement viable.

Contraintes environnementales et sociales

Une évaluation détaillée des contraintes environnementales et sociales liées à l'établissement des sous-projets solaires photovoltaïques doit être effectuée et des mesures d'atténuation adéquates doivent être prises en compte avant de prendre des décisions concernant l'implantation des sous-projets. Les facteurs environnementaux et sociaux pourraient avoir un impact significatif sur l'efficacité, la faisabilité économique et, par conséquent, l'implantation de ces installations dans les sous-projets. En outre, il existe des zones de grande sensibilité environnementale et / ou sociale dont la proximité doit également être fortement prise en

compte. Ces zones à haute sensibilité environnementale et / ou sociale sont brièvement présentées dans cette section.

- **Zones importantes pour la conservation des oiseaux / Oiseaux migrateurs** - Les oiseaux solaires pourraient être désorientés par les reflets des panneaux solaires photovoltaïques, entraînant des collisions avec des obstacles au sol. Par conséquent, l'emplacement des installations solaires dans les zones importantes pour la conservation des oiseaux (ZICO) ou à proximité de routes migratoires d'oiseaux connues devrait être évité dans toute la mesure du possible. Par conséquent, un tampon de protection supplémentaire devrait être placé autour des IBA. Lorsque les installations d'implantation dans une ZICO ou la zone tampon sont inévitables, une évaluation plus détaillée des effets environnementaux et des mesures supplémentaires d'atténuation des impacts seront nécessaires.
- **Zones forestières** - Les sites solaires potentiels dans les zones boisées seraient déconseillés, compte tenu des efforts déployés par les pays pour conserver les habitats forestiers et l'abondance des zones non forestières dans tout le pays en raison de la dégradation continue de l'environnement. Lorsque l'emplacement des installations dans une zone forestière est inévitable, une évaluation plus détaillée des effets environnementaux et des mesures supplémentaires d'atténuation des impacts seront nécessaires.
- **Qualité de l'eau de surface** - En raison du nettoyage, du nivellement, du creusement de tranchées et de la construction des fondations des composants de la centrale solaire, il existe un risque d'érosion du sol pendant la construction. En raison de ce potentiel, si les installations solaires sont situées à moins de 1 km d'un élément d'eau de surface (par exemple, cours d'eau intermittent ou pérenne, lacs ou étangs), une évaluation plus détaillée des effets environnementaux et des mesures supplémentaires d'atténuation des impacts seront nécessaires.
- **Patrimoine culturel** - Des précautions particulières devraient être prises pour éviter l'implantation d'installations solaires dans ou à proximité des sites connus ou provisoires du patrimoine mondial de l'UNESCO en raison de la spécificité mondiale de ces zones. Des précautions particulières devraient également être prises pour éviter de placer des installations solaires sur ou à proximité de sites du patrimoine culturel enregistrés localement.
- **Actifs matériels / sociaux** - Les pilotes d'avion ou d'hélicoptère peuvent être désorientés par la réflexion potentielle de la lumière au large des panneaux photovoltaïques près des aéroports. Par conséquent, des mesures spéciales devraient être prises pour éviter les installations à proximité des aéroports, et une zone tampon devrait être placée autour des aéroports. Lorsque l'emplacement des installations dans une zone tampon est inévitable, une évaluation plus détaillée des effets environnementaux et des mesures d'atténuation des impacts supplémentaires seront nécessaires. Les aéroports eux-mêmes seraient considérés comme une zone d'exclusion.
- **Zones sensibles sur le plan environnemental**: L'implantation des sous-projets ne doit pas inclure les zones sensibles sur le plan environnemental, telles que les zones humides, les plaines inondables, les habitats critiques, les zones protégées, par exemple. Parcs nationaux. Les zones protégées - parcs nationaux et réserves forestières / de gibier, zones de nature vierge, réserves fauniques et habitats critiques pour les espèces en voie de disparition - et les zones tampons autour de ces zones sont exclues. Les sites solaires potentiels dans ou à proximité

d'autres zones bénéficiant d'une protection juridique, y compris les parcs nationaux, et les terres préservées seraient découragés car ces zones revêtent une importance considérable pour le pays et sont protégées et gérées de manière importante par diverses législations.

Proximité du réseau de transport et chargement - En général, il est recommandé que les installations des sous-projets soient situées à proximité des sous-stations existantes ayant une capacité sur le réseau de transport. Cela s'explique par le fait que les installations solaires deviennent moins économiques à des distances croissantes par rapport aux sous-stations en raison des coûts associés à l'extension des lignes de distribution ou de transmission vers la centrale solaire. Si le projet PV vend de l'énergie à une entreprise de services publics, il convient de prendre en compte la proximité du point d'interconnexion le plus proche du site et la capacité disponible des installations existantes pour les nouvelles connexions. La connexion au réseau peut être coûteuse en termes d'infrastructure et de coûts accessoires, ce qui peut inclure non seulement les coûts de conception et d'infrastructure du développeur, mais également les coûts de mise à niveau du réseau de la société de services publics (souvent pris en charge par le développeur). les études de faisabilité d'interconnexion, les coûts d'obtention des autorisations gouvernementales nécessaires et les droits fonciers de tiers pour établir les lignes de transmission. Ces coûts peuvent être aggravés si le point d'interconnexion est situé à une distance importante du site. La proximité des infrastructures existantes, telles que les lignes de transmission électriques, les routes et les zones urbaines, peut avoir un impact considérable sur les coûts globaux du projet et les impacts environnementaux attendus.

- **Les utilisations du sol et la propriété foncière existantes** - Cela doit également être pris en compte, car ces facteurs pourraient influencer la difficulté d'obtenir des baux et des permis dans certaines zones. L'utilisation actuelle des terres détermine également l'étendue des effets cumulatifs tels que les effets visuels et paysagers. Le projet PV solaire influe sur les activités socioéconomiques, notamment les changements dans les activités génératrices de revenus, les modes de vie, etc.

- **Effets cumulatifs** - les effets cumulatifs limitent considérablement l'implantation de projets solaires photovoltaïques. Celles-ci incluent les effets sur les utilisations du sol existantes, les activités socio-économiques, les impacts associés aux effets visuels et paysagers. Étant donné que la majeure partie de la population burkinabé dépend de l'agriculture comme activité économique majeure, une attention particulière devrait être accordée à l'impact de la concentration de plusieurs fermes solaires dans une région à fort potentiel socioéconomique, par exemple sols. Les effets cumulatifs potentiellement importants associés à l'énergie solaire sont présentés dans le tableau AN-2 ci-dessous.

Tableau AN-2: Problèmes d'effets cumulatifs associés à la production d'énergie solaire et aux mesures d'atténuation

Problème	**Ressources valorisées**	**Limite géographique**	**Limite temporaire**	**Mesures d'atténuation potentielles**
Perte cumulée de La production agricole liée au développement des installations	Sols de grande valeur	Étendue des sols cartographiés à valeur élevée	Projet de construction jusqu'à la démobilisation	Mesures régionales d'aménagement du territoire pour limiter l'implantation de sites dans des zones de sol de grande valeur

Dans ce cas, des directives spéciales pour l'évaluation de l'impact cumulatif devraient être incluses dans le programme. Celles-ci seront utilisées à la demande de la cellule d'exécution du projet pour établir la méthodologie en cas d'impact cumulatif potentiel.

Les résultats de l'étude d'évaluation environnementale doivent être utilisés pour élaborer des plans de gestion environnementale et sociale (PGES) afin de définir les mesures d'atténuation des risques et impacts environnementaux et sociaux identifiés. Le PGES, qui peut contenir plusieurs plans (par exemple, un plan d'action de réinstallation abrégé ou un plan d'engagement des parties prenantes), guidera le développeur lors de la mise en œuvre et de l'exécution du projet.

ANNEXE 3: Résumé des notes d'orientation sur l'évaluation de l'impact environnemental et social intégré (IESIA)

Les directives de l'IESIA sont des outils utilisés dans la mise en œuvre des procédures d'évaluation environnementale et sociale de la Banque. L'objectif principal des lignes directrices de l'IESIA est de fournir des orientations au personnel de la Banque et des PMR sur la manière de prendre en compte de manière adéquate les thèmes transversaux tout en évaluant les impacts environnementaux et sociaux d'un projet. Les notes d'orientation sur l'évaluation intégrée de l'impact environnemental et social (IESIA) fournissent un processus systématique pour traiter les impacts environnementaux et sociaux des projets en comprenant clairement les caractéristiques spécifiques du secteur. Ces lignes directrices présentent les impacts potentiels les plus fréquents et les mesures d'amélioration / d'atténuation pour le sous-secteur considéré. Ils fournissent également un bref résumé des facteurs externes et des principaux risques pouvant influencer les projets sectoriels. Les directives décrivent également des indicateurs qui pourraient être utiles pour suivre le projet considéré ainsi que des séries de références pour des lectures ultérieures. The IESIA Guidance Notes are presented in three standalone volumes that provide guidance in the three essential components of (i) the Environmental and Social Assessment process, (ii) specific topics and operational safeguard requirements, and (iii) technical guidance on key sectors and subsectors that have been proposed by operational departments as areas where guidance is needed:

Volume 1: Instruments d'évaluation environnementale et sociale et résultats

Dans la SO-1 et le GCES, plusieurs nouveaux instruments et produits d'évaluation environnementale et sociale sont introduits. Celles-ci comprennent l'utilisation de l'évaluation environnementale et sociale stratégique (SESA) pour les prêts, politiques et de programmes et l'utilisation de cadres et de systèmes de gestion environnementale et sociale (CGES et SGES) pour les prêts de programmes et les intermédiaires financiers. L'accent est également mis sur la surveillance de la conformité lors de la mise en œuvre du projet, ainsi que sur les systèmes nationaux. Pour le personnel des opérations de la Banque et leurs homologues des emprunteurs ou des clients, il est essentiel qu'ils disposent d'orientations claires et faciles à utiliser sur ces différents instruments et produits. Ces directives sont donc conçues spécifiquement pour compléter les annexes du GCES, qui fournissent des modèles et des formats de rapport dans de nombreux cas. L'objectif principal de cette catégorie de conseils devrait être de:

✓ préciser au personnel quelle est la nature des différents instruments dans le contexte spécifique des systèmes ;

✓ les aider à préparer les termes de référence, les formats de rapport et la sélection de consultants de haute qualité ;

✓ Évaluer la qualité des rapports et des livrables pour juger si les exigences de l'OS1 sont respectées de manière satisfaisante ;

✓ Mettez en évidence les questions clés importantes pour une bonne conformité.

Volume 2: Thèmes d'évaluation environnementale et sociale

Les sauvegardes opérationnelles introduisent ou élaborent un certain nombre d'exigences et de sujets clés de l'EES. Il est très important de fournir au personnel de la Banque et des emprunteurs des directives claires et faciles à utiliser pour garantir un niveau élevé de compréhension de ce qui est requis, des meilleures pratiques pour satisfaire aux exigences et, le cas échéant, des sources de bonnes informations techniques.

Certains de ces sujets reflètent des exigences spécifiques en matière de système d'exploitation, telles que l'application de sauvegardes aux prêts de politiques et de programmes, la consultation publique (gratuite, préalable et éclairée) et les mécanismes de réclamation. Certains concernent des domaines spécifiques de risques environnementaux et sociaux qui n'étaient pas couverts auparavant par les politiques de la Banque, tels que les groupes vulnérables, le patrimoine culturel, les flux environnementaux, la biodiversité, les émissions de GES et les normes du travail. D'autres couvrent des sujets reconnus depuis longtemps comme ayant une grande importance et où la conformité peut être améliorée grâce à de meilleures directives techniques, telles que la réinstallation ou le contrôle de la pollution.

Volume 3: Directives sur des secteurs spécifiques appelés feuilles de calcul sectorielles

Dans ce volume, 30 types de projets spécifiques dans quatre secteurs clés pour lesquels des listes de contrôle ont été préparées. Le but de ces listes de contrôle devrait être d'identifier les composants typiques du projet, les sources d'impact, les méthodes d'évaluation couramment appliquées et les options de gestion probables. Celles-ci peuvent être utilisées par le personnel de la Banque pour aider au processus de sélection des projets au début du cycle du projet et pour adapter les termes de référence de l'évaluation environnementale et sociale.

ANNEXE 4: Liste des parties prenantes consultées

Les parties prenantes impliquées dans les consultations qui ont eu lieu lors du développement et de la restructuration du projet sont:

- Agence Burkinabè de l'Electrification Rurale (ABER);
- Le ministère de l'énergie à travers un comité de coordination et de planification qui suit le projet (cellule de coordination et de formulation du projet Yeleen). Ce comité comprend des représentants de la Direction nationale des énergies renouvelables (DGEC), de la Direction générale de la transition énergétique (DGTE/ex-DGER), de la Direction générale des études et des statistiques et sectorielles (DGESS), la SONABEL, l'ANEVE l'Agence nationale des énergies renouvelables et de l'efficacité énergétique (ANEREE), les conseils régionaux des régions bénéficiaires, les délégations spéciales, les CVD et certaines personnes ressources au niveau des localités concernées.

ANNEXE 4a : personnes consultées lors de la préparation du programme

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OULAY Labidi	Sn Charge de commande au CNOSC BF	labnico@yahoo.com
OUEDRAGO Adama	SG SEEA B	labnico@yahoo.fr
SANDWIDI Harourice	Président FESCOOPEL LB	paradhey@yahoo.fr
ROOMDO Lotifatou	FASO Energy	Latifakoabda5@gmail.com
ZONGO Judicael	DirecteurSAHELIA Solar et SG ACEMS	Judicial.zongo@saheliasolar.com
KONDITAMDE Y Domnique	OPEL	d.konditomde@gmail.com
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TRAORE Cheick Ady	FASO Energy	traoredady@gmail.com
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CONGOIZAGARE Solange	AFTI	wenegcongo@yahoo.com
SANFO Rosmone	AISPSS – PV	mousstakbolbenagace@gmail.com
SOW Souleymane	Président, APER – BEF, Directeur Microsow	souleymane.sow@mircorsow.com

ANNEXE 4b : Liste des autorités consultées en 2023

Communes	Localités	Nom & Prénom	Fonction	Contact
Sourgoubila	*Sandogo* *Bantogdo*	*SOUGUE Benaîs*	*SG/Mairie*	*78 69 34 02*
Guibaré	Koundla	OUEDRAOGO Rasmané	SG	74 18 65 39
		OUEDRAOGO Richard	Secrétaire SG	76 09 44 70
Dapélogo	Manessa	GUIRA Salif	SG	76 05 08 10
Boussouma	Tagalla	SAWADOGO R. Bruno	SG	70 92 28 22
		Mme SAWADOGO Florence	Secrétaire SG	70 99 55 73
Zitenga	Sadaba	BADO/OUEDRAOGO Odette	PDS	70 38 67 82
Zabré	Sampema	NANGA Honoré	2ème vice-président /DS	64 98 01 80
Tenkodogo	Douré Koughin	DICKO Amadou	SG	76 88 07 73
Bittou	Mogomnoré Loaba	DITANGA Mathieu	SG	72 84 53 68

Communes	Localités	Nom & Prénom	Fonction	Contact
Gaongo	Wardogo	DONDASSE Salam	PDS	74 06 27 57
	Nafbanga	ROUAMBA	Responsable action sociale	07 20 04 18
Gaoua	-	Rouamba Ismael	DR- environnement Sud-Ouest	78 56 26 03
Bobo	-	KANDE Mahamoudou	Chef service régional Hauts-Bassins	71 06 23 10
Banfora		BAMA Théophile	DR-environnement	77 26 02 41
Ouahigouya		KOUDOUGOU Mohamadi	DP-environnement	71 07 07 18
Réo	-	COULIBALY Sounkalo	DP-environnement/Sanguié	70 85 39 10
Koudougou	-	OUEDRAOGO Akim	DP-Boulkiemdé	70 35 52 51

ANNEXE 4c : Liste des personnes ressources consultées dans certaines localités

Localités	Nom & Prénom	Fonction	Contact
Sandogo	CONSEIBO Didier	CVD	69 35 35 14/65 37 48 09
Bantogdo			
Koundla	SAWADOGO K. Inoussa	CVD	73 81 02 49/67 81 21 01
Manessa	SORE Marou	CVD	64 76 36 02/76 03 14 36
Tagalla			
Sadaba	NIKIEMA Rasmané	CVD	75 03 17 41
Sampema	BANCE Assane	CVD	72 77 44 90
	OUARE Seydou	Représentant chef	55 63 14 49/70 70 61 09
Loaba	YEMBONE Mahamoudou	CVD	71 74 22 69
	Chef Loaba		54 57 44 47/62 91 00 01
Mogomnoré	BANCE Moumouni	CVD	66 73 88 89
Koughin	SORGHO Moussa	CVD	71 01 75 19
	Chef Koughin		71 77 10 26
Douré	Boureima	CVD	71 62 43 06
Wardogo	CONGO Alidou	CVD	76 93 19 73
Nafbanga			
Bissaya	NANGA Honoré	2ème vice-président /DS	64 98 01 80
Ounzeogo	DICKO Amadou	SG	76 88 07 73
Kossilci-Sondré	*Mme DRABO/NOMBRE Monique*	*PDS/Mairie*	*70 31 67 90*
Wayalgui-V3	YAMEOGO Aristide	SG/mairie	67 09 87 58
Kossilci-Sondré	OUEDRAOGO Issaka	Président CVD	75 61 26 47
	SONGNABA Moise	Membre CVD	65 51 28 93
	SONGNABA Joseph	Adjoint CVD	74 61 50 22
	SONGNABA Michel	Personne ressource	77 16 76 06/58 09 78 80
Bissaya	ZABA Seyni	Personne ressource	66 76 38 97
Ounzeogo	ZOMBRA Barké	CVD/représentant du chef	70 38 17 32/74 11 67 11
Wayalgui-V3	KABORE Albert	CVD	74 99 22 33

ANNEXE 5: Intégration de la dimension de genre et évaluation de la vulnérabilité

Cadre indicatif pour l'évaluation et l'intégration des questions de genre Préambule

Le Burkina Faso a pris plusieurs engagements pour faire en sorte que les questions de genre et de vulnérabilité ne fassent pas seulement partie du discours national, mais qu'elles soient également intégrées dans les politiques et les programmes de développement. Ces engagements sont contenus dans différents cadres législatifs tels que présentés dans les informations de base de ce CGES.

Cette fin et dans le cadre de la préparation du projet, une étude de la problématique hommes-femmes et de la vulnérabilité et des consultations avec les communautés devraient être menées pour évaluer les défis et les opportunités de prise en compte

Objectif

i. Déterminer comment promouvoir la participation des femmes et des autres groupes vulnérables au projet et à des activités particulières.

ii. ii. Déterminer dans quelles conditions les femmes et les autres groupes vulnérables pourraient participer aux activités communautaires.

Dans le cadre de la préparation du projet, une étude de la problématique hommes-femmes et de la vulnérabilité et des consultations avec les communautés devraient être menées pour évaluer les difficultés et les opportunités d'intégration du genre et de la vulnérabilité dans le projet.

Focus / Portée de l'étude

En particulier, l'étude devrait fournir des informations sur les femmes et autres groupes vulnérables:

- Besoins: vise à évaluer les besoins de transport des femmes et à identifier les moyens de répondre à ces besoins, notamment lors de la sélection des sous-projets ;
- Leur voix dans la consultation de la communauté: vise à identifier des mécanismes pour garantir que leurs préférences se reflètent dans les consultations communautaires, que ce soit pour des consultations sur les sauvegardes sociales ou la sélection des sous-projets ;
- Participation à la maintenance à base communautaire: elle vise à identifier des points d'entrée et des mécanismes propres au contexte (quotas, par exemple) pour la participation des femmes et autres groupes vulnérables à la maintenance des infrastructures réhabilitées telles que les routes.
- Impact du projet sur les moyens de subsistance des femmes et des autres groupes vulnérables: recommander des indicateurs ou donner des indications pour refléter l'impact direct et indirect du projet sur les moyens de subsistance des femmes et des autres groupes vulnérables, par exemple la ventilation par sexe des indicateurs existants sur l'impact des projets sur les moyens de subsistance des femmes.

ANNEXE 6: Fiche d'enregistrement et de notification des EAS/HS (y compris VBG et VCE)

Je crois être victime de :	
Harcèlement/discriminatoire	
Harcèlement psychologique	
Exploitations et abus sexuel	
Discriminations	
Autres (préciser)	

ANNEXE 7: Mesures d'atténuation génériques E & S La faune et la flore

Le promoteur du projet veillera à ce que la zone du projet soit affectée par les travaux de construction du sous-projet. Cela visera à garantir que toute perturbation de la flore soit limitée à la zone du sous-projet et à éviter les effets de débordement sur les zones voisines. Dans le même ordre d'idées, il y aura un contrôle strict des véhicules de construction pour s'assurer qu'ils ne fonctionnent que dans la zone à perturber. Le promoteur doit mettre en place un programme de plantation d'arbres afin de remplacer la végétation ou les arbres défrichés dans la zone, probablement dans une institution publique comme les écoles.

Impacts sur la qualité de l'air des émissions d'échappement des véhicules

- Les conducteurs de véhicules de construction doivent être sensibilisés afin qu'ils ne laissent pas les véhicules tourner au ralenti, que les émissions d'échappement soient réduites ;
- Maintenir toutes les machines et tous les équipements en bon état de fonctionnement afin d'assurer des émissions minimales de monoxyde de carbone, de NOX, de SOX et de particules en suspension.

Émissions de poussières

- La zone de construction devrait être clôturée pour réduire la poussière au public ;
- Il convient de plier correctement les écharpes pour minimiser les émissions de poussières dans le public
- Arroser les surfaces de la terre meuble pour maintenir les niveaux de poussière ;
- Les camions de construction transportant des matériaux sur le site, livrant du sable et du ciment au site devraient être couvert pour éviter les émissions de poussières dans les zones environnantes;
- Des masques doivent être fournis à tout le personnel dans les zones sujettes aux émissions de poussières pendant la construction ;
- Les tas de terre excavée doivent être fermés / couverts / arrosés par temps sec ou venteux pour réduire les émissions de poussières ;
- Les conducteurs de véhicules de chantier doivent être sensibilisés afin de limiter leur vitesse afin de réduire les niveaux de poussière.

Déchets solides

- S'assurer que les déblais provenant des excavations sont disposés en fonction des différentes couches de sol. Ce sol peut alors être retourné lors de l'aménagement paysager et de la réhabilitation, dans le bon ordre où ils ont été enlevés, ce qui constitue la dernière couche de sol ;
- L'entrepreneur doit mettre en place et respecter un plan de gestion des déchets du site ;
- Fournir des installations de collecte des déchets telles que des poubelles ;
- L'entrepreneur doit respecter les exigences nationales et les règles de construction relatives au stockage des matériaux de construction
- L'utilisation de matériaux durables et durables qui n'auront pas besoin d'être remplacés aussi souvent, réduisant ainsi la quantité de déchets générés au fil du temps.

Acquisition de terres et réinstallation

Aucune construction ne devrait être entreprise tant que les PAP ne sont pas indemnisés pour leurs pertes et ont reçu leurs droits de réinstallation. Autrement dit, avant toute activité de projet, les PAP devront être indemnisées conformément au cadre de la politique de réinstallation du projet. Dans les cas où un litige ou une absence ne permet pas d'indemniser rapidement la ou

les parties affectées, le tribunal ou une autre partie responsable peut bloquer les paiements à condition que la partie concernée ne perde pas le droit de recours et d'appel.
Pour les activités impliquant l'acquisition ou la perte de terres, le refus ou la restriction d'accès, ces mesures comprennent la fourniture d'une indemnisation et de toute autre assistance nécessaire pour la réinstallation avant le déplacement et la préparation de sites de réinstallation dotés de L'exploitation des terres et des biens connexes ne peut avoir lieu qu'après l'indemnisation et, le cas échéant, les sites de réinstallation et les indemnités de déménagement ont été accordés aux personnes déplacées. Pour les activités de projet nécessitant une réinstallation ou une perte de logement, la politique exige en outre que des mesures visant à aider les personnes déplacées soient mises en œuvre conformément aux différents PAR.

Risques pour la sécurité et la santé des travailleurs

- Le projet veillera à ce que les entreprises privées / exploitants de mini-réseaux et leurs sous-traitants dispensent une formation en SST pouvant inclure la sensibilisation aux dangers, des pratiques de travail sûres et la préparation aux urgences afin blessure à des collègues de travail ;
- Le projet exigera que toutes les entreprises / opérateurs privés de mini-réseaux et leurs sous-traitants mettent en œuvre des plans d'environnement, de santé et de sécurité décrivant les procédures à suivre pour éviter les incidents de santé et de sécurité et les traitements médicaux d'urgence. Cela sera réalisé en en faisant une composante de l'accord contractuel ;
- Le projet nécessitera que toutes les entreprises / opérateurs privés de mini-réseaux et leurs sous-traitants fournissent des équipements de protection individuelle (EPI) appropriés sur les chantiers pour prévenir et minimiser l'exposition aux blessures ;
- Les entreprises de mini-réseaux / opérateurs privés et de leurs sous-traitants devront effectuer des inspections de sécurité régulières afin de garantir des mesures pour gérer les risques potentiels de SST.

Risque pour la santé publique

- Sensibilisation de l'équipe ESIA au public / à la population locale avant la construction.
- L'entrepreneur est impressionné de ne pas installer de camp de construction sur le site.

Demande accrue de consommation de matériaux

- L'entrepreneur doit se procurer tous les matériaux de construction tels que la pierre, le sable, le ballast et le noyau dur provenant de sites agréés et approuvés.
- Assurer une budgétisation et une estimation précises des matériaux de construction réels pour éviter le gaspillage.
- Réutilisation des matériaux de construction dans la mesure du possible.

Risques de déversement d'hydrocarbures

- En cas de fuite accidentelle, le sol contaminé doit être évacué et éliminé de manière appropriée.
- Il est proposé que le ravitaillement et l'entretien des gros véhicules ne se déroulent pas sur le chantier.

- Des entreprises mini-réseaux privées / opérateurs et de leurs sous-traitants pour sensibiliser les employés sur les procédures de l'entreprise en cas de déversements et de fuites des réservoirs de stockage d'huile pour les engins de construction.
- Les véhicules et les équipements doivent être entretenus régulièrement et maintenus en bon état pour éviter les fuites.
- En cas de déversement, l'entrepreneur doit isoler la source du déversement d'huile et contenir le déversement à l'aide de sacs de sable, de sciure de bois, de matériaux absorbants et / ou d'autres matériaux approuvés par les matériaux.
- Les sociétés de mini-réseaux / opérateurs privés et de leurs sous-traitants doivent également assurer la sécurité contre le vandalisme lorsque le site est sans surveillance.
- Formation appropriée pour la manipulation et l'utilisation de carburants et de matières dangereuses pour les travailleurs de la construction.
- Tous les produits chimiques doivent être entreposés dans les zones bourgeonnées et clairement étiquetés, en précisant la nature et la quantité de produits chimiques dans les conteneurs individuels.

Eaux pluviales et eaux usées

- Le système de drainage devrait être construit de manière à ce que les eaux de ruissellement ne touchent pas ou ne se déversent pas sur les terres avoisinantes.
- Construisez le système de drainage de manière à suivre la route et à suivre les voies d'évacuation naturelles.
- Ne bétonner que la surface requise pour l'installation et laisser le reste du terrain avec une végétation comme de l'herbe.
- Construire un système de récupération de la pluie sur les bâtiments de contrôle et le harnais dans les réservoirs de stockage pour une utilisation dans les activités d'irrigation ou domestiques.

Bruit et vibration pendant la construction

Ces mesures d'atténuation proposées visent à garantir que le bruit généré par les activités de construction et d'exploitation est réduit au minimum et respecte les normes de bruit pertinentes. Ils comprennent:

- Clôture du chantier avec des tôles de fer pendant la construction
- Installer des barrières portatives pour protéger les compacteurs, réduisant ainsi les niveaux de bruit.
- Utilisation de techniques de suppression du bruit pour minimiser l'impact du bruit de construction sur le site du projet.

Utiliser un équipement conçu avec des éléments de contrôle du bruit.

- Coordonner avec les organismes compétents pour toutes les constructions.
- Contrôler la zone du projet pour éviter les accès inutiles par les utilisateurs.
- Limiter les véhicules au temps de ralenti minimal et observer une approche sensée de l'utilisation du véhicule et encourager les conducteurs à éteindre les moteurs du véhicule chaque fois que cela est possible.

Fixer et observer les limites de vitesse et éviter de casser les moteurs

- L'entrepreneur doit s'assurer que les activités de construction sont limitées aux heures de travail (c'est-à-dire entre 8 h et 17 h tous les jours) du lundi au vendredi ou selon les exigences de la législation.

- **Impacts visuels et esthétiques du paysage**

Les impacts visuels négatifs peuvent être atténués en installant un mur autour de l'installation pour empêcher / filtrer les piles, les poteaux, les câbles et les transformateurs du projet par le promoteur du projet.

- **Érosion du sol**
- Les entreprises / opérateurs privés de mini-réseaux et leurs sous-traitants doivent éviter les ruptures de terrain pendant les saisons de fortes précipitations pour éviter l'érosion.
- Surveillance des zones de sol exposé pendant la saison des pluies pendant la phase de construction du projet pour s'assurer que tout incident d'érosion est rapidement maîtrisé.
- Les entreprises / opérateurs privés de mini-réseaux et leurs sous-traitants devraient assurer la récupération des sols exposés avec de l'herbe et d'autres surfaces végétales dès que possible.
- Les zones compactées par les véhicules lors de la préparation du site et de la construction doivent être scarifiées (déchirées) par l'entrepreneur afin de permettre la pénétration des racines des plantes et la repousse de la végétation naturelle.
- Diriger le drainage pour suivre le parcours naturel, par ex. le long de la route pour éviter de drainer l'eau dans les terres, surtout une fois la construction terminée.
- Des canaux de drainage appropriés et le nivellement, en particulier de la route d'accès, pour réduire la vitesse de ruissellement et augmenter l'infiltration des eaux pluviales dans le sol.
- Un compactage correct sera également effectué le long de la route d'accès.

Risques sociaux liés à l'afflux de main-d'œuvre et à la violence sexiste

- Fourniture d'une formation de sensibilisation culturelle aux travailleurs concernant l'engagement avec la communauté locale.
- recherche de main-d'œuvre locale;
- Introduction de sanctions (par exemple, licenciement) pour les travailleurs impliqués dans des activités criminelles;
- la mise en place de programmes de prévention et de gestion de la toxicomanie;
- Code de conduite des travailleurs reconnaissant la tolérance zéro pour la VBG;
- Mise en œuvre du programme d'éducation sur le VIH / sida;
- Campagnes d'information sur les MST parmi les travailleurs et la communauté locale;
- éducation sur la transmission des maladies;
- une formation obligatoire et régulière pour les travailleurs sur le comportement légal requis dans la communauté d'accueil et les conséquences juridiques du non-respect des lois;
- veiller à ce que les enfants et les mineurs ne soient pas employés directement ou indirectement dans le projet;
- fournir des emplois occasionnels aux hommes et aux femmes tout au long du cycle de mise en œuvre;
- Toute violence basée sur le genre doit être rapportée et traitée conformément à la loi;
- Tout décrochage d'enfant doit être signalé à l'organisme gouvernemental concerné.

Mesure d'atténuation des déchets dangereux et plan de gestion / d'élimination

- Achat de matériel électronique auprès de fabricants crédibles

- Élimination et recyclage appropriés chaque fois que possible.
- les mesures d'atténuation correspondantes pour gérer avec succès les impacts E&S négatifs fonction de l'étape du projet.

ANNEXE 8: Exemple de plan de mobilisation des parties prenantes

Un bon plan de mobilisation des parties prenantes devrait:

- Décrire les exigences en matière de réglementation, de prêteur, d'entreprise et / ou autres en matière de consultation et de divulgation.
- Identifier et hiérarchiser les groupes de parties prenantes clés, en se concentrant sur les communautés affectées.
- Fournir une stratégie et un calendrier pour partager des informations et consulter chacun de ces groupes.
- Décrire les ressources et les responsabilités pour la mise en œuvre des activités d'engagement des parties prenantes.
- Décrire comment les activités d'engagement des parties prenantes seront intégrées au système de gestion d'une entreprise.

Processus en cours pour documenter ces activités et faire rapport aux parties Parties prenantes du projet. Énumérez les principaux groupes de parties prenantes qui seront informés et consultés sur le projet. Celles-ci devraient inclure des personnes ou des groupes qui:

- ont directement et / ou indirectement affectés par le projet ;
- avoir des «intérêts» dans le projet qui les déterminent en tant que parties prenantes
- ont le potentiel d'influencer les résultats du projet ou les opérations de l'entreprise

5. Programme de mobilisation des parties prenantes

- Résumer le but et les objectifs du programme
- Décrivez brièvement quelles informations seront divulguées, dans quels formats et les types de méthodes qui seront utilisés pour communiquer ces informations à chacun des groupes.
- Décrivez brièvement les méthodes qui seront utilisées pour consulter chacun des groupes.
- Décrivez comment les points de vue des femmes et d'autres sous-groupes pertinents seront pris en compte au cours du processus.
- Décrivez toute autre activité d'engagement qui sera entreprise

6. Horaires

- Fournir un calendrier indiquant les dates et les lieux où se dérouleront diverses activités d'engagement des parties prenantes, y compris la consultation, la divulgation et les partenariats, et la date à laquelle ces activités seront intégrées au système de gestion de la société.

7. Ressources et responsabilités

Qui au sein de l'entreprise sera responsable de la réalisation de ces activités? Quel budget a été alloué à ces activités? Indiquez le personnel et les ressources qui seront consacrés à la gestion et à la mise en œuvre du programme d'engagement des parties prenantes. L'intégration de la fonction de liaison avec la communauté avec d'autres fonctions de base est également importante, tout comme l'implication et la supervision de la direction.

8. Mécanisme de règlement des griefs

- Décrivez le processus par lequel les personnes touchées par le projet peuvent présenter leurs griefs à l'entreprise pour examen et réparation. Qui recevra les griefs publics, comment et par qui seront-ils résolus et comment la réponse sera-t-elle communiquée au plaignant?
- La portée et le niveau de détail du plan doivent être adaptés aux besoins du projet.1. Introduction Décrivez brièvement le projet, y compris les éléments de conception et les problèmes sociaux et environnementaux potentiels. Dans la mesure du possible, inclure des cartes du site du projet et des environs.

2. Règlements et exigences

Résumez les obligations légales, les règles et les règles de prêt ou de société. Cela peut impliquer une consultation publique et des obligations de divulgation liées au processus d'évaluation sociale et environnementale.

3. Résumé de toutes les activités précédentes de mobilisation des parties

Si l'entreprise a des activités à ce jour, elle comprend la divulgation d'informations et / ou la consultation, fournissez les informations suivantes:

- Type d'information divulguée, sous quelles formes et comment elle a été diffusée
- les lieux et dates de toutes les réunions entreprises à ce jour
- Personnes, groupes et / ou organisations consultés
- Problèmes clés abordés et principales préoccupations soulevées
- Réponse de l'entreprise aux questions soulevées, y compris tout engagement ou action de suivi.

9. Surveillance et rapports

- Décrivez tout projet visant à impliquer les parties prenantes du projet (y compris les communautés affectées) ou les observateurs tiers dans le suivi des impacts du projet et des programmes d'atténuation. Décrivez comment et quand les résultats des activités d'engagement des parties prenantes seront rapportés aux parties prenantes concernées ainsi qu'aux groupes de parties prenantes plus larges?

10 Fonctions de gestion

- Comment les activités d'engagement des parties prenantes seront-elles intégrées au système de gestion environnementale et sociale de la société et à d'autres fonctions essentielles de l'entreprise?
- Who will have management oversight for the program?
- What are the plans for hiring, training, and deploying staff to undertake stakeholder engagement work?
- What will be the reporting lines between community liaison staff and senior management?
- How will the company's stakeholder engagement strategy be communicated internally?
- What management tools will be used to document, track, and manage the process?
- For projects or company operations involving contractors, how will the interaction between contractors and local stakeholders be managed to ensure good relations?

ANNEXE 9: Approche de gestion de l'élimination des déchets et des piles

En Afrique, de nombreux pays et communautés sont déjà aux prises avec des sites contaminés et la pollution des sols due à la récupération et au recyclage de batteries de voitures non réglementées. Une gestion et un recyclage en fin de vie peu fiables peuvent provoquer un empoisonnement grave, voire mortel, des personnes travaillant dans le secteur du recyclage des batteries. La santé des habitants des petites et grandes fonderies à l'échelle industrielle, en particulier des enfants, peut être gravement compromise. Un récent rapport du projet Lead Recycling Africa a révélé que chaque année, plus de 1,2 million de tonnes de batteries au plomb utilisées et 800 000 tonnes de plomb nécessitent une gestion rationnelle en Afrique.

Sur le plan environnemental, lorsque les ordures ménagères sont éliminées, les piles se retrouvent dans les décharges / dépotoirs. Au fur et à mesure que le boîtier de la pile se corrode, les produits chimiques pénètrent dans la nappe phréatique d'où ils contaminent les plans d'eau. Les particules d'acide et de plomb contaminent également le sol et deviennent des aérosols qu'elles sont sèches. Sur le plan sanitaire, le cadmium et le nickel sont des produits carcinogènes connus. Le plomb a été associé à des malformations congénitales et à des dommages neurologiques et développementaux, et le mercure est également très toxique, en particulier sous forme de vapeur. Des niveaux excessifs de plomb peuvent affecter la croissance de l'enfant, provoquer des lésions cérébrales, nuire aux reins, altérer l'ouïe et induire des troubles du comportement. Chez l'adulte, le plomb peut entraîner une perte de mémoire et réduire la capacité de concentration.

Le Burkina Faso ne dispose d'aucune installation d'élimination / recyclage des batteries au plomb-acide usagées. Par conséquent, dans le cadre d'une solution à long terme à ce défi, le développement d'une approche stratégique incluant le gouvernement, les développeurs de mini-réseaux, les entreprises SHS et d'autres entreprises du secteur privé au Burkina Faso) et leurs partenaires financiers mettront en place une approche cohérente de stockage, de recyclage et d'élimination des batteries dans le pays.

Le secteur privé peut jouer un rôle important dans la gestion du recyclage des batteries au plomb. Une implication du secteur privé efficace et rentable dans le recyclage des batteries peut constituer une approche très efficace dans le traitement de l'ULAB au Burkina Faso. La fabrication de batteries locales devrait également être encouragée, car la pratique évitera les boucles globales de matières toxiques.

La mesure d'atténuation recommandée pour le programme Yeleen consiste à disposer d'un système bien établi et bien coordonné de collecte et de stockage des piles usagées des sites de mini-réseaux et des utilisateurs autonomes du système solaire une fois les piles obsolètes. Des sites centraux de collecte et de stockage doivent être établis dans différentes régions du pays pour répondre aux besoins de toutes les batteries collectées à partir des mini-réseaux existants et des mini-réseaux proposés, ainsi que des systèmes solaires autonomes dans le pays. Ces zones de collecte et de stockage serviront de sites contenant des piles usagées, tandis qu'une option meilleure et réalisable d'élimination et de recyclage est développée grâce à un dialogue national établi impliquant le gouvernement et les autres parties prenantes concernées.

À cet égard, toutes les entreprises de mini-réseaux et les entreprises autonomes doivent inclure une politique de collecte et de recyclage des batteries dans leur SGES établi et stipuler une approche pertinente pour la collecte et le stockage dans leurs études d'évaluation environnementale (EIES ou études environnementales).

Pour réglementer la gestion des déchets de ces substances toxiques, la Convention de Bâle est très importante au niveau international pour les deux batteries au plomb-acide utilisées. En outre, le Secrétariat de la Convention de Bâle a établi des directives pour un traitement sûr des piles au plomb-acide usagées. En mars 1989, la Convention de Bâle sur le contrôle des mouvements transfrontières de déchets dangereux et de leur élimination a été adoptée. Le traité est entré en vigueur en 1992. S'appuyant sur les principes de la gestion écologiquement rationnelle, la convention vise à protéger la santé humaine et l'environnement des risques posés par les déchets dangereux. Cela nécessitera de modifier l'équation économique pour les déchets afin de motiver les producteurs de déchets dangereux et les personnes qui bénéficient des biens associés à prendre des mesures. Pour ce faire, la convention définit une stratégie en trois étapes:
1. Minimiser la génération de déchets.

2. Traiter les déchets aussi près que possible de l'endroit où ils ont été générés.

3. Minimiser les mouvements internationaux de déchets dangereux.
Les directives techniques pour la gestion écologiquement rationnelle des batteries au plomb-acide usées (source: www.basel.int) offrent aux responsables un ensemble de bonnes pratiques et de principes pour la mise en place de systèmes efficaces de recyclage des batteries. Ils décrivent comment collecter, transporter et stocker les batteries usagées; donner des spécifications pour les chambres de stockage et les installations de transport; décrire comment les batteries livrées à l'usine de recyclage devraient être vidées de leurs électrolytes, identifiées, séparées et stockées; expliquer comment le plomb récupéré doit être raffiné afin d'éliminer les contaminants indésirables; et aborder les problèmes médicaux et la sensibilisation du public. Les lignes directrices concluent que la méthode la plus efficace de collecte consiste à faire appel aux fabricants, aux détaillants, aux grossistes et aux stations-service pour conserver les piles usagées au moment où de nouvelles piles sont fournies au client. De manière générale, les bonnes pratiques en matière de recyclage des batteries au plomb-acide comprennent:

- Séparer les zones de travail afin que les zones de traitement ne contaminent pas les zones non traitées ou les zones de restauration ;
- Des politiques de santé et de sécurité complètes ;
- Surveillance médicale pour tout le personnel d'exploitation exposé aux opérations de plomb ;
- Installations de traitement des eaux usées
- Procédures de contrôle des émissions
- Gestion des déchets solides de tous les sous-produits et résidus de fusion.

Un programme de sensibilisation communautaire qui sensibilise la population environnante aux opérations secondaires au moyen de communications bidirectionnelles efficaces.
La Banque mondiale fournit des orientations générales sur le recyclage et la réutilisation des déchets dans ses directives sur l'environnement, la santé et la sécurité. Les éléments suivants doivent être pris en compte lors du recyclage de la batterie:

- Evaluation des processus de production de déchets et identification des matériaux potentiellement recyclables ;

- Identification et recyclage des produits pouvant être réintroduits dans le processus de fabrication ou l'activité de l'industrie sur le site ;
- Enquête sur les marchés extérieurs pour le recyclage par d'autres opérations de traitement industriel situées dans le voisinage ou la région de l'installation (par exemple, échange de déchets) ;
- Établissement d'objectifs de recyclage et suivi formel des taux de production et de recyclage des déchets ;
- Offrir de la formation et des incitations aux employés pour atteindre les objectifs.

Certains pays et zones développés disposent de réglementations complètes sur le recyclage des batteries, qui peuvent être apprises, telles que:

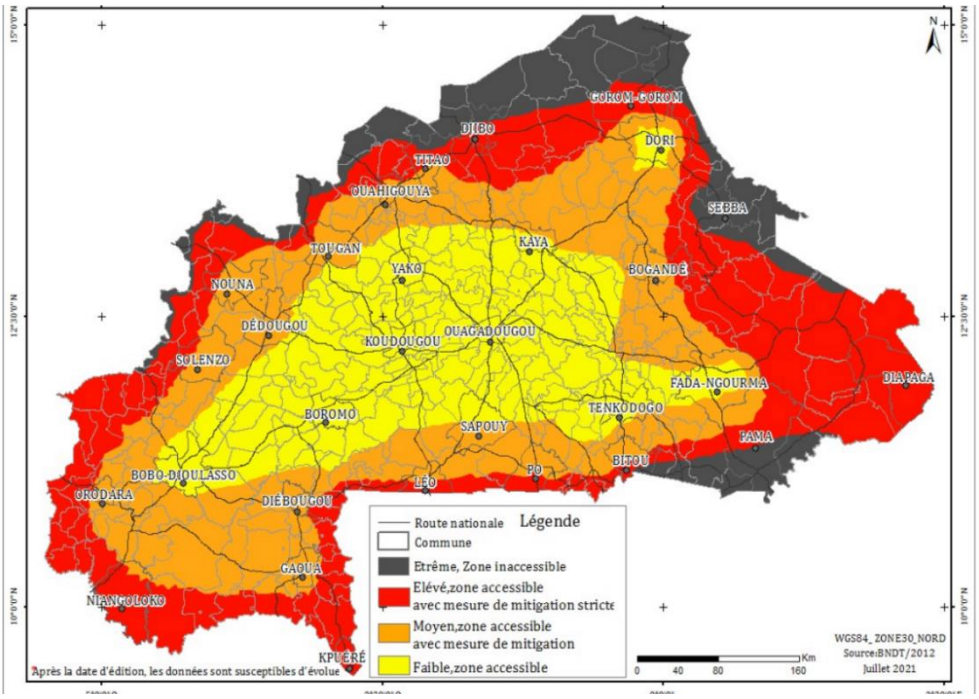
- Islands: au début de 2009, Guernsey a pris l'initiative en installant l'installation de recyclage de Longue Hougue qui, entre autres fonctions, offre un point de dépôt pour les piles usagées afin qu'elles puissent être recyclées hors île ;
- Royaume-Uni: une directive de l'UE sur les batteries, entrée en vigueur en 2009 - oblige les producteurs à payer pour la collecte, le traitement et le recyclage des piles. Amérique du Nord: L'industrie des piles rechargeables a créé la Corporation des piles rechargeables (RBRC), qui exploite un système de recyclage gratuit des piles ;
- Union européenne: en 2006, l'UE a adopté la directive sur les piles - l'un des objectifs est un taux plus élevé de recyclage des piles. La directive de l'UE visait des objectifs de 25% pour la première année et de 45% après quatre ans.

Annexe 10: Aperçu de la situation sécuritaire au Burkina Faso

Le Burkina-Faso connait une crise sécuritaire et politique qui a conduit la Banque à adapter la mise en œuvre de ses opérations dans le pays. La situation politique n'a pas eu un impact majeur sur la stratégie de la Banque dans le pays et sa réponse aux principaux défis de développement. Les modifications à la suite du coup d'Etat ont porté sur les questions sécuritaires et un recadrage des actions militaires et les défis identifiés sur les questions socio-économiques de court, moyen et long termes, sont restés inchangés. Le management de la Banque a approuvé le DSP-intérimaire (DSP-i) 2022-2025 et la préparation et l'approbation des opérations prévues pour le pays se poursuit. La mise en œuvre des opérations de la Banque tient compte de la situation de fragilité et de l'insécurité dans le pays. A cet effet, la Banque a adopté un approche territoriale qui exploite au maximum les compétences disponibles au niveau local pour la mise en œuvre de ses projets dans les zones d'insécurité et des partenariats stratégiques avec les autorités pour faciliter l'aide à la décision en matière de sécurité.

Toutefois, il faut reconnaitre que la situation sécuritaire du pays est toujours préoccupante avec la montée des exactions des groupes armés qui classent le pays au 2ème rang du classement mondial des décès liés au terrorisme (10%) après l'Afghanistan (20%). L'analyse CRFA de la banque a montré une baisse des capacités du pays au niveau de plusieurs dimensions dont celle des institutions de Défenses qui ont connu une baisse malgré les efforts déployés par le gouvernement et ses alliés face au terrorisme. La multiplication des zones d'insécurité et la recrudescence du nombre d'attaques pourraient expliquer cet effet de dilution des efforts du pays en matière de sécurité. Le Burkina-Faso est affligé à la fois par les exactions de groupes armés terroristes non identifiés et de groupes armés affiliés à Al-Qaïda et à l'Etat islamique au grand Sahara. Les attaques visent à la fois les forces de défense et les populations civiles. L'insécurité est sévère dans les régions du sahel, du Nord et au niveau de toute la zone des trois frontières entre le Burkina-Faso, le Mali et le Niger. Les régions du centre-Nord, de l'Est, de la boucle du Mouhoun et même celle des cascades sont aujourd'hui affectées. Près de 40% du territoire échappe au contrôle de l'Etat et plusieurs ville au Nord sont sous blocus terroristes depuis février 2022. L'insécurité est le moteur d'une crise humanitaire qui fait plus de 1,7 millions de déplacés dont 53% de femmes et 52% d'enfants.

Classification des régions selon le risque sécuritaire



Source : ***Etude globale de sécurité projet PAEA, 2021.***

Les zones d'intervention du projet YELEEN sont situées dans des régions accessibles (au moins 50%) et des régions accessibles avec mesures de mitigations. S'agissant des activités, le risque sécuritaire concerne plus l'installation des ***100 mini-réseaux*** car cette réalisation nécessite l'utilisation de matériels qui ne passent pas inaperçu. Toutefois, une fois les travaux achevés, la sécurisation des mini-réseau est plus aisée que celle des lignes électriques du réseau conventionnel car ils sont circonscrits dans des espaces délimités.

Zones d 'intervention du projet YELEEN

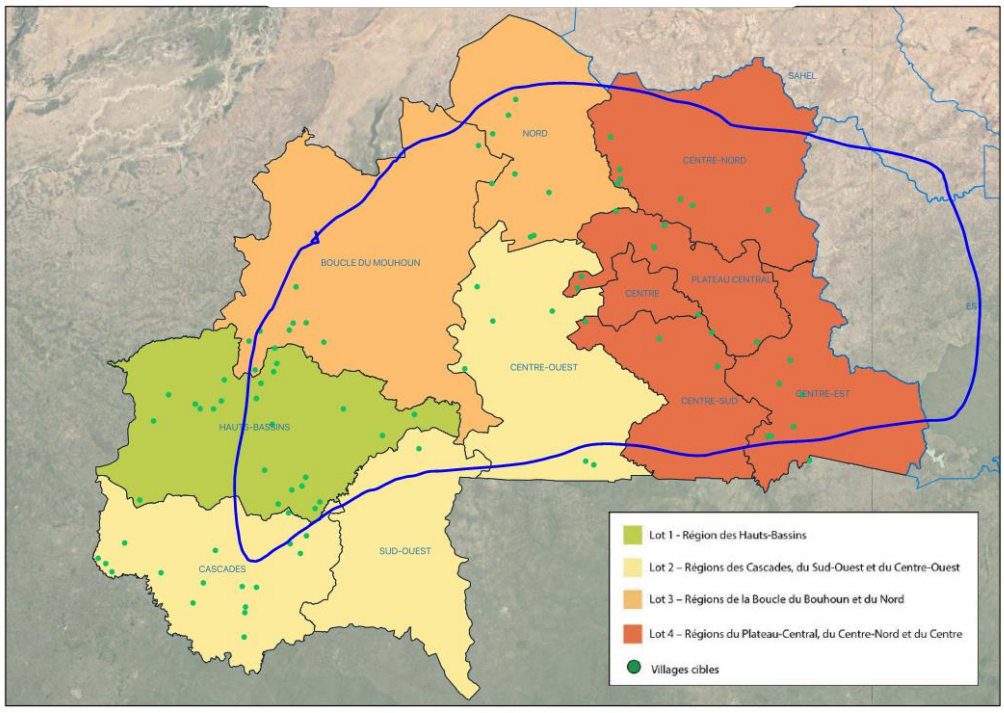


Figure 1 : Localisation des 100 villages cibles par lot

Source : ***ABER, rapport sur les sites GMG.***

En contribuant à l'amélioration des opportunités d'emplois pour les jeunes et les femmes dans les zones rurales reculées, le projet est susceptible d'atténuer le recrutement des jeunes par les groupes terroristes. En effet, le projet dans sa restructuration accordera une attention particulière à la création d'emplois pour les

femmes et les jeunes notamment dans la transformation agroalimentaire et les métiers de l'électricité. Aussi, l'électrification contribuera à améliorer les offres de soins et d'apprentissage dans les zones d'interventions à travers l'électrification des centres de santé, des écoles et des centres de formation.

Conclusions et recommandations

Une grande partie des localités d'interventions du projet YELEEN se trouve dans des zones accessibles ou accessibles avec mesures de mitigations. Toutefois, en matière de sécurité, les défis qui pourraient se poser sont : (i) la sécurité des ressources humaines mobilisées dans le cadre de la mise en œuvre du projet, (ii) l'accès aux sites des travaux pour la mise en œuvre des activités, (iii) la durabilité des réalisations qui peuvent être vandalisées et (iv) la sécurisation de la zone d'intervention nécessaire pour l'utilisation effective des infrastructures en vue de leur rentabilisation économique. En concertation avec le gouvernement, la Banque met en place des mesures d'atténuations pour pallier les risques sécuritaires sur les projets au Burkina-Faso. Pour le cas du YELEEN, les recommandations suivantes sont formulées :

- Engager le dialogue pour évaluer les risques réels sur le projet : les risques présentés dans cette note sont des risques potentiels. Collecter les données sur les incidents sécuritaires au niveau des sites de travaux au Burkina (particulièrement dans la zone d'intervention du projet YELEEN), collecter des données sur les occurrences des actes de vandalismes sur les infrastructures électriques dans les zones d'insécurité au Burkina-Faso. Il est nécessaire d'identifier tous les risques de litiges/conflits liés à la mise en œuvre du projet afin que sa mise en œuvre n'aggrave aucun prémices de conflits (do not harm).
- Engager le dialogue avec les autorités sur les capacités d'utiliser une expertise locale pour le suivi des travaux (firmes locales, ou ABER ou SONABEL)
- Au niveau des acquisitions, le projet pourrait envisager une association de firmes internationales (achat matériel) et locales (installation et pose du matériel).
- Engager le dialogue avec les autorités pour sécuriser les sites des centrales solaires et garantir le recours à l'escorte militaire dans certaines localités pour le transport et la réception du matériel.
- Le projet doit envisager de faire une provision pour une intermédiation sociale en amont du démarrage des travaux en vue de sensibiliser les populations sur les bénéfices du projet à leur endroit.
- Dans son montage, le projet devra accorder une attention particulière à la promotion des usages économique de l'électricité en milieu rural et à l'amélioration des opportunités d'emplois pour les jeunes et les femmes en lien avec l'électrification des localités.

Annexe 11 : Quantité de batteries importées au Burkina Faso entre 2015 et 2018

Tableau 4: **Quantités de batteries importées et enregistrées auprès des services de la Douane**

Année	**Quantités de batteries importées et enregistrées auprès des services de la Douane (tonnes)**
2018	4715
2017	9933
2016	9207
2015	2843
Total	**26698**

Source : Direction Générale de la Douane, mai 2019

Annexe 12: Quantités batteries usagées issues du système solaire entre 2018 et 2021

Tableau 5: Quantités de batteries usagées provenant du système photovoltaïque devant être recyclées par an

Année	Quantité de batteries usagées (tonne)
2021	4715
2020	9933
2019	9207
2018	2843
Total	**26698**

Source : BGB-Méridien à l'aide des données de la Douane, juin 2019

Annexe 13 : Contenu d'un plan abrégé de réinstallation

1. Description du projet, zone du projet et zone d'influence
2. Impacts potentiels
3. Études socioéconomiques
4. Consultations
5. Indemnisation et aide à la réinstallation
6. Mécanisme de recours
7. Calendriers de mise en œuvre
8. Coûts et budget
9. Suivi et évaluation