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MINISTRY OF INFRASTRUCTURES		**BURKINA FASO** ******** *Unity - Progress - Justice*

AFRICA HYDROMETEOROLOGICAL PROGRAM STRENGTHENING CLIMATE RESILIENCE IN SUB-SAHARAN AFRICA - PHASE I, BURKINA FASO COUNTRY PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

Final report

FUNDING

INTERNATIONAL ASSOCIATION FOR DEVELOPMENT (IAD)

May, 2017

EXECUTIVE SUMMARY

Burkina Faso is faced with extreme and varied climatic conditions that cause droughts and floods that are often disastrous. It is expected that climate change will make these events more frequent and severe. Better weather and climate information is needed at both national and local levels to enable Governments, communities, the public sector and the private sector to better plan and adapt to these changes.

Is in this context that the World Bank is requesting a grant from the Green Climate Fund for the Government of Burkina Faso to implement a project under the African Hydro-meteorological Program (Strengthening Climate Resilience in Sub- Saharan Africa).

1. Brief description of the project

• Project Objectives

The general objective of the project is to increase Burkina Faso's resilience to climate and disaster risks by strengthening national institutions responsible for meteorology, hydrology and warning.

The specific objectives of the project are (i) improving early warning capacities for food security or nutrition, (ii) developing early warning capacities for extreme events (including violent rains, urban floods, winds , etc.), and (iii) the appropriation, improvement and operationalization of contingency plans and relief planning.

• Components of the project

The project is composed of four (4) components that are:

- **Component A**: Strengthening the institutional capacities of DGM, DGRE, SAP, DGPC and CONASUR;
- **Component B**: Modernization of observation, prediction, warning and response infrastructures;
- **Component** C: Improvement of services providing to final-users;
- **Component D** - Project management.

• Sub-projects that may be subject to screening

About Component B, "Modernization of observation, forecasting, warning and response infrastructures", funding is planned for civil engineering infrastructures and observation equipment to improve:

- data collection networks (hydro-meteorological stations;)

- physical infrastructures (construction / rehabilitation of buildings) and software for data analysis and decision support;
- means of response to improve civil protection, food security and nutrition (construction / rehabilitation of buildings).

Thus, the implementation of component B sub-projects, which includes purchases of building materials and equipment to be installed, site development operations, building construction and installation of equipment, will be subject to the environmental and social screening.

However, sub-projects of components A, C and D related to institutional capacity building, improved service delivery to final-users and project management will have predominantly positive socio-economic impacts. For this reason, they will not need screening.

2. Brief description of the major environmental and social stakes of the project

The implementation of the project involves several environmental and social issues, the most relevant of which are :

- socio-economic benefits for the populations in the areas of the project's intervention and the BTP enterprises , technical control and import-export companies (jobs, income, business opportunities, improvement of living conditions, etc.) ;
- the partial destruction of the vegetation cover, when work is carried out for the majority of cases on existing sites;
- the preservation of cultural property and the environment;
- better gender consideration and improvement of the living conditions of vulnerable people living in the areas of intervention;
- the achievement of food security and the protection of integrity and human health through the anticipation and proper management of disaster risks.

3. The Legal and Institutional Framework for Environmental and Social Assessments

In the context of the implementation of the project, the bulk of civil works (construction / rehabilitation of buildings) will take place on lands located in the communal area. There are no plans to acquire new land outside the communal area for sub-projects. Thus, expropriating people on the sites that will be selected for the execution of the subprojects is not planned.

The legal framework for environmental and social assessments takes into account that of Burkina Faso and the Operational Policy of the World Bank, which is triggered by this ESMF (OP / BP 4.01).

On the basis of the environmental and social provisions in force at the national and World Bank level, the project is classified as Category B of activities subject to environmental assessment (OP 4.01, Decree No. 2015-1187 / PRES / TRANS / PM / MERH / MATD / MS / MARHASA / MRA / MICA / MHU / MIDT / MCT on the conditions and procedures for conducting and validating the Strategic Environmental Assessment (SEA), survey and Environmental and social impact notice).

To meet the requirements related to the objectives of this policy, an Environmental and Social Management Framework (ESMF) was prepared. For sub-projects under component B, Environmental and Social Impact Notices (NIES) or Environmental and Social Requirements (ESR) will be required, depending on the case, before they are implemented.

From the point of view of the labor legislation, the construction works will comply with Law 28-2008 / an of 13 May 2008 on the Labor Code in Burkina Faso. The Act prohibits discrimination in respect of employment and occupation, and section 149 of the Act provides that children and young people cannot be employed for work that is detrimental to their development and reproduction capacities.

Concerning the safety of workers, residents and users on the different project sites, Article 36 of the above mentioned law stipulates that "the employer must comply with the standards of hygiene and safety applicable regulations ".

As regards the institutional framework, the National Bureau of Environmental Assessments (BUNEE) will review and approve the environmental classification of sub-projects as well as the approval of the surveys / notices impact and ESMPs. This institution will also participate in external environmental monitoring and supervising, in particular with regard to pollution and nuisances, improving habitat and living conditions. The BUNEE will be responsible for the validation of the NIES reports.

4. Generic impacts / risks by type of sub-projects

Sub-projects of component B

Positive impacts

The sub-projects of component B concern: (i) purchases of construction materials and equipment to be installed, (ii) site arrangement operations, (iii) construction / rehabilitation of buildings and installation of equipment.

During the works, several positive impacts are expected from the implementation of these sub-projects:

- the creation of jobs / income and the reduction of the temporary;
- Increased business opportunities for BTP companies, technical control and import-export companies.

During the operational phase, the anticipation and proper management of disaster risks through the implementation of these sub-projects will promote the attainment of food security and the protection of integrity and human health.

Negative impacts and risks

The negative impacts / risks associated with the implementation of the B component sub-projects include:

- partial loss of vegetation on construction sites;
- cases of accidents and nuisances on construction sites;
- local pollution of surface waters by mercury in the event of non-compliance with standards for the choice of sites for the establishment of observation stations;
- increasing of dust emissions during demolition work during the rehabilitation of buildings;
- degradation of the living environment due to the uncontrolled discharge of construction waste (residues, cuttings, etc.);
- the inconveniences and nuisances linked to the poor choice of location of observation stations;
- the loss of archaeological vestiges in the event of non-observance of norms during fortuitous discoveries;
- the spread of STI / HIV / AIDS with the presence of staff on construction sites.

The sub-projects of components A, C and D

The implementation of sub-projects of components A "Institutional capacity-building", C "Improving the provision of services to final-users "And D" Project management "will mainly result in positive impacts, including:

- increasing the individual performance of project staff;
- Improving the intervention and organizational capacities of beneficiary structures;
- optimizing the management of the project.

5. Environmental and Social Management Framework Plan

5.1. Generic environmental and social management measures

- carry out NIES / PES for sub-projects of component B (including validation by BUNEE); - Implement ESMPs and SEPs;
- sensitize local residents and local elected representatives on the environmental and social stakes of the sub-projects;
- provide training on environmental and social safeguards for the environmental focal points of the five (5) beneficiary structures;
- carry out communication and sensitization campaigns before, and during work for local populations and local elected representatives;
- collect solid / liquid waste with appropriate containers and dispose of them in places decided by the Commune;
- collect waste containing mercury with appropriate containers and dispose of them in storage places decided by the Government;
- avoid as far as possible earthworks, excavations and cutting of trees outside the scope of the works;
- train personnel in the handling, storage and containment of chemical wastes and dangerous materials, including mercury;
- rehabilitate the land after work;
- greening the sub-project sites after work;
- ensure the rescue of archaeological remains in the event of discovery in collaboration with the competent services;
- avoid the choice of sites with endemic species;
- build temporary latrines according to environmental safeguard standards or use mobile latrines for workers;
- water the works;
- ensure the wearing of protective equipment for workers;
- check the speed and traffic frequency of vehicles;

- ensure environmental and social monitoring and environmental supervision of sub-projects.

5.2. Procedures for the environmental and social management of eligible sub-projects

The Environmental and Social Management Framework (ESMF) sets out the major guidelines for environmental and social management to mitigate and / or improve the impacts of different sub-projects. It consists to:

- implement the environmental and social screening scheme;
- realize NIES and implement them through the ESMF;
- prepare environmental and social requirements and implement them;
- strengthen the capacities of the actors involved in the implementation of the ESMF;
- ensure the periodic reporting of the implementation of the ESMF;
- carry out a periodic audit of the implementation of environmental and social measures.

5.3. Communication / Public Consultation Plan

This will be for the project during construction, to:

- inform and sensitize actors and stakeholders on the positive or;
- negative impacts of constructions on the environment and the social ;
- inform and sensitize actors and stakeholders on the safety risks associated with the work;
- promote good practices of collaboration through the dissemination of information in real time ;
- carry out sensitization-raising campaigns in order to enable local populations to adopt good behavior and to respect the basic principles of safety on the site of building sites.

The communication / public consultation plan also aims to get actors to have a common vision and shared objectives of the actions undertaken by the project in a three-dimensional logic at the level of the sub-project intervention areas: Before the project (identification and preparation phase); In the course of the project (implementation phase); After the project (phase of management, exploitation and retrospective assessment). Local cultural contexts and traditional channels of communication will be taken into account.

Also, the tools and techniques of consultation that will be used will conform to a logic of educational communication and social communication.

5.4. Specific Capacity Building

The capacity building of the actors will be carried out through the following actions:

- training / retraining of specific DGM and DGRE personnel in the handling, storage and containment of chemical wastes and hazardous materials (mercury, batteries);
- training on environmental and social safeguards for the environmental focal points of the five (5) beneficiary structures;
- dissemination of safeguard documents;
- raising awareness on the environmental and social issues involved in the project to benefit local residents and local elected representatives.

5.5. Complaints and Conflicts Management Mechanisms

The complaint and conflict resolution mechanisms under this ESMF take into account the national legal framework for claims management and OP4.12.

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and

The World Bank Country Office
Ouagadougou

and

The World Bank Grievance Redress Service
Email: grievances@worldbank.org
Fax: +1-202-614-7313
Grievance Redress Service (GRS)
MSN MC 10-1018
1818 H St NW
Washington, DC 20433, USA

They can be classified into two main categories, namely, preventive mechanisms and conflict management mechanisms arising from possible cases of resettlement / compensation of PAPs.

At the preventive level, it is necessary to identify potential conflicts and to implement mitigation measures early in the project, by using a participative approach that integrates all potentially interested social groups. For this reason, it is particularly important to ensure information and involvement in activities that generate negative impacts through a process of participation by the entire community, particularly those affected by the project.

However, when a conflict has already occurred, two approaches can be used:

- first, a friendly settlement is sought by involving actors who know the main protagonists and the traditional and religious authorities well in order to reach a consensus on the issue. It is the most common form of conflict resolution in rural areas;
- in case this strategy fails, a formal settlement procedure may be initiated. The procedure for the official settlement of disputes is often placed under the jurisdiction of the departments and municipalities which ensure conciliation;
- if conciliation has not been possible at the departmental or communal level, the complaining party can refer to the higher courts. In this case, the costs inherent from the files are borne by the sub-project holder.

5.6. Main indicators for the implementation of the ESMF

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

- number of NIES / PES elaborated and validated;
- number of tender and execution dossiers that have incorporated environmental and social requirements;
- number of building sites completed and cleared of all waste;
- number of NIES carried out and implemented;
- number of complainants (noise, dust, etc.);
- level of workers' equipment (insecurity, injuries);
- number of trees planted / cut;
- number of workers sensitized on safety, hygiene and STI / HIV / AIDS.

5.7. Institutional settlements for the implementation of the ESMF

For the implementation of the ESMF, institutional arrangements will be required. The fiduciary aspects and those related to the environmental and social safeguards of the project management will be entrusted to the PST2 Coordination Unit, which will pool the mobilized resources. It may be strengthened with the recruitment of consultants when need be.

As for the technical aspects of project coordination, they will be directly entrusted to the entities (DGRE, CONASUR, DGPC, SAP, DGM) in accordance with their respective mandates.

Thus, the organizational framework for the implementation of ESMF includes:

- the Project steering committee : it is responsible of the appropriate orientation of the project. Therefore it examines all the documents and reports and provides recommendations for a the good execution to the Permanent Secretary of the PST2 and the different partners involved in the project lifetime.
- the Project Coordination Unit (PCU) of the Sectorial Transport Program (PST2): it will have the overall responsibility for the implementation of this ESMF and the environmental and social safeguards and instruments relating to the project. It ensures the preparation of the documents, obtains the certificates and permits required by the relevant national regulations before any action is taken. It reports to the Minister of Infrastructures on all due diligence and ensures that the World Bank and other stakeholders receive all environmental and social monitoring reports. To this end, it has an environmental and social management unit (UGES) composed of a specialist in environmental and social safeguarding.
- the project implementation entities through their Environmental Focal Points (EFPs), will work closely with the UGES of the PST2, to implement operational environmental and social measures on the sites depending on entity;
- the BUNEE: it examines and approves the environmental classification of projects and approves the NIES / PES of the sub-projects and participates in the external monitoring of implementation.
- -the works companies: they implement the (contractualized) mitigation measures as well as the environmental and social clauses with the periodic production of reports on the implementation of these measures.
- the consultants in charge of building sites supervision: they supervise the works carried out by the companies for the final client.
- local authorities (Town halls): they participate in the implementation of the project through the pre-selection of the sub-project sites, take part to the identification of PAPs and the registration of complaints, and the close monitoring of actions on the field.
- the Department of the Environment, the Green Economy and Climate Change (SDEEVCC): it supports the implementation of environmental and social measures on the field, in particular the pre-selection of sub-project sites and a support in monitoring-reporting.
- -the Associations, NGOs and local populations: they support the implementation of the communication plan and the prevention of conflicts.
- the Village Development Councils (CVDs): they support the implementation of sub-projects, particularly in the areas of PAP identification, conflict prevention / resolution and loss compensation.
- the traditional and religious authorities: they support the implementation of mitigation measures in the public consultation level and the process of managing disputes and litigation related to PAPs.

5.8. Roles and responsibilities for the implementation of environmental management measures

For the implementation of environmental and social management measures, several stakeholders will assume roles and responsibilities. These include:

- the Permanent Secretary of the PST2: he ensures the proper implementation of the project (coordination, support and follow-up on fiduciary and environmental safeguards) in accordance with the implementation procedures established with the World Bank; he ensures the approval of the categorization by the BUNEE and the World Bank, the dissemination of the internal monitoring report and supports the validation of the ESMF and the obtaining of the environmental certificate, the publication of the document.
- the Director General of BUNEE: with the World Bank, he is the main operator in the approval of the categorization of the sub-projects, the validation of the ESMF including the NIES / PES, the obtaining of the certificate. he provides support in the preparation of TORs and required surveys.
- the Environmental and Social Safeguard Specialist of the UGES / PST2: he assumes the role of supervision, support and monitoring (reporting) of the environmental and social measures of the project; he ensures the proper execution of environmental selection of the sub-projects, the preparation and approval of TORs for required instruments, conducts safeguard studies including public consultation, the implementation /execution of non contractualized measures with the construction company and ensures the environmental and social monitoring of the sub-projects.
- the technical managers (RTs) of eligible activities at the level of the implementing entities: they ensure that the sub-projects are included in the tender dossier (DAO) as well as all measures in the phase of contractualizable work with the company, the elaboration and approval of the PGSE in the event of NIES / PES They support the SSES in the implementation of safeguard measures.
- -the Environmental Focal Points (PFE): in close collaboration with the SSES of the UGES of PST2, they ensure the operational implementation of environmental and social measures on the work sites of each entity.
- the UCP / PST2 Procurement Specialist: he ensures that the actions taken for environmental and social safeguards are taken into account in the procurement plan. .). He supports the SSES in the implementation of safeguard measures.
- the Chief Financial Officer of the UCP / PST2: he oversees the financial planning of all the actions selected in the environmental and social safeguards context; (Capacity building,

mitigation, loss, compensation, etc.). He supports the SSES in the implementation of safeguard measures.

- the Monitoring and Evaluation Specialist of the PCU / PST2: he provides a support to the SSES in the implementation of the safeguard measures.
- the Enterprise: it ensures the implementation of all the mitigation measures contractualized with the project for the mitigation of impacts.
- the Consultant in charge of the project supervisor: under the supervision of the implementing entities, he ensures the internal monitoring of the implementation of the environmental and social measures.
- the local authority (city council, sub-prefect, etc.): he provides support for the normal running of the sub-project activities within the limits of his territorial jurisdiction.
- the following table summarizes the roles and responsibilities of the actors in the implementation of the environmental and social management procedure of the sub-projects.

Table 1 : Stages and responsibilities of the actors involved in the implementation of the ESMF

No.	Steps / Activities	Responsible	Support / Collaboration	Provider / Operator
1.	Identification of the location / site, and the main technical characteristics of the sub project	SSES of UCP of the PST2	• SDEEVCC • Beneficiaries;	Implementation Entities (EME)
2.	Environmental Selection(Screening-filling of forms), and determination of the type of specific safeguard instrument (NIES, PES)	SSES of UCP of the PST2	• Beneficiaries ; • Local authority	Implementation Entities (EME)
3.	Approval of the categorization by the BUNEE and the Bank	SP / PST 2	SSES / DCS PST 2	• BUNEE • World Bank
4.	Preparation of the specific safeguard tool E & S of class B or C sub-project			
	Preparation and approval of TOR	SSES the PCU PST2	BUNEE	World Bank
	Implementation of the survey including public consultation		Procurement Specialist (SPM); BUNEE; Local Authority	Consultant
	Validation of the document and obtainment of the environmental certificate		SPM, Local authority	• BUNEE, • World Bank
	Publication of the document		SP / PST 2	• Media; • World Bank
5.	(i) Integration of all the measures of the phase of contractible work with the enterprise in sub-project tender dossier (DAO); (ii) approval of the ESMP of the enterprise	SPM PCU / PST 2	• SSES of U C P / PST2	RT of implementation entities
6.	Execution / Implementation of non-contracted measures with construction company	SSES of the UCP PPS2	• SPM / UCP • RT of entities • Financial Manager (RF) UCP • Local authority	• Consultant • NGO • Others
7.	Internal monitoring of the implementation of E & S measures	SSES of PST2	• Specialist in Monitoring and Evaluation PST 2 (S-SE) • PFE /EME • RT / TH • RF UCP / PST 2 • Local authority • SSES UCP / PST2	Supervising Office

No.	Steps / Activities	Responsible	Support / Collaboration	Provider / Operator
	Dissemination of internal monitoring report External monitoring of the implementation of E & S measures	SP-UCP / PST 2 BUNEE	• SSES of PACT • SSES UCP / PST 2 • EFP / TH	
8.	Environmental and social monitoring	SSES / U CP / PST2	• SSES PNGT2 • S-SE / TH • S-SE UCP / PST2	• SDEEVCC • EFP / TH
9.	Strengthening capacity of actors in implementation of E & S measures	SSES of UCP / PST 2	• SPM	• consultants • Competent Public structures
10.	Implementation Evaluation of E & S measures	SSES PCU / PST 2	• DREPs • SPM / PST 2 • S-SE / TH • RT / TH • BUNEE • Local authority	• consultants

The Roles and responsibilities as described above will be incorporated into the Project Implementation Manual (MEP).

5.9. Implementation budget for ESMF measures

The budget of the Environmental and Social Management of the Project is estimated at **two hundred and fifty-four million CFA francs (254 million FCFA) distributed** as follows:

Table 2 : Budget of the ESMP implementation

No.	Activities	Quantity	**Cost** per unit **(CFA)**	**Total Cost** **(CFA)**
1	Implementation of ten (10) NIES & PES	10	10, 000 000	100, 000 000
2	Sensitization of residents and local officials on the issues of the project	6 sessions	2,500000	15,000 000
3	Strengthening capacity of PFE implementation entities (training)	2 sessions	10,000 000	20, 000 000
4	Training / recycling the specific personnel of DGM and DGRE in the handling, storage and containment of chemical waste and dangerous materials (mercury , batteries)	2 sessions	10,000 000	20,000 000
5	Dissemination of environmental and social safeguard documents	-	Flat rate	5, 000 000
6	Environmental and social monitoring during	-	-	30, 000 000

	construction			
7	Protocol with BUNEE for monitoring the implementation of ESMF over 4 years	4	6,000 000	24, 000 000
8	Feedbacks (midterm and final) of the implementation of the ESMP (Annual)	4	10,000 000	40, 000 000
	Total			**2 54 millions**

Consultant, 2017

5.10. Conducted public consultations

Public consultations were performed during the whole length of the ESMF elaboration through interviews and data collection with the project implementing entities (DGRE, DGM, SP-CONASUR, DGPC and SAP). A very important step occurred on December 23, 2016 when the validation session of the temporary report on the ESMF was performed by the Environmental Assessment Technical Committee (COTEVE). This session that took place in the boardroom of the Liptako Gourma Authority (ALG) in Ouagadougou, permitted to examine the report and formulate recommendations for its finalization.

At the regional level, many actors in the project intervention areas were consulted during the month of May 2017 in the following areas: Centre, Central Plateau, West-Centre, North and North-Centre.

During these meetings, the objectives and activities of the project, its economic, social, cultural and environmental stakes were submitted and discussed with the involved actors including the beneficiary populations.

Through the consultations, it has been noticed that the actors (Experts of the project implementing entities, Mayors, Regional Authorities, residents, etc.) knew the project activities very well and showed their adhesion to the project and promised to be available and involve themselves for the monitoring of the social and environmental aspects of the ESMF.

Yet, a strong capacity building need, (training sensitization) has been raised by the majority of people met, especially at the level of the project implementing entities, communal local elected representatives and future sub-projects sites residents.

The present ESMF will be completed by further specific surveys (NIES&PES) that will be elaborated to ensure the project compliance to national rules and the World Bank environmental and social safeguards.

Table of Contents

List of pictures

List of tables

Abbrevviations and acronyms

NA : National Assembly
WB : World Bank
NBEA : National Bureau of Environmental Assessments (BUNEE)
ESMF :Environmental and Social Management Framework
ITCFFSDE : International Trade Convention on wild Fauna and Flora Species in Danger of Extinction
SDNC : Sustainable Development National Council
NCFS : National Committee Food Security
NCSF : National Climatological Services Framework
NCERR : National Council for Emergency Relief and Rehabilitation
ESDC : Environment and Sustainable Development Council
EATC : Environmental Assessment Technical Committee
DILAD : Directorate of Institutional and Legal Affairs Development
DGA : Directorate General of Sanitation
DGDW : Directorate General of Drinking Water
DGFF : Directorate General of Forests and Fauna
DGM : Directorate General of Meteorology
DGPC : Directorate General of Civil Protection
DGEP : Directorate General of Environment Preservation
DGRE : Directorate General of Water Resources
DPEGECC : Directorate Provincial of Environment, Green Economy and Climate Change

DPGECC : Directorate Provincial of Environment, Green Economy and Climate Change

SEA : Environmental Assessment Strategy

EIS : Environmental Impact Survey

ESIS/ESIN : Environmental and Social Impact Survey/Social and Environnemental Impact Notice

IPE : Individual Protective Equipments

FAFC : French African Financial Community

IMF : International Monetary Fund

GCF : Green Climate Fund

NPWFDPR : National Plan for Worldly Facility Disasters Prevention and Recovery

IEGCE : Intergovernmental Experts Grouping on Climate Evolutions

RDM : Risks and Disasters Management

IST/VIH/SIDA: Sexually Transmissible Infections/ Human Immune Virus/Acquired Immune Deficiency Syndrom

MAHP : Ministry of Agriculture and Hydraulic Planning

MTADHS : Ministry of Territorial Administration, Decentralization and Homeland Security

MWS : Ministry of Water and Sanitation

MEGECC : Ministry of Environment, Green Economy and Climate Change

MWFNS : Ministry of Womenof Family and National Solidarity

MW : Mega Watt

EIN : Environmental Impact Notice

SDO : Sustainable Development Objective

WHO : World Health Organization

NGO : Non Governmental Organizations

RO : Relief Organization

FSFRO **:** Foreign Scientific and Foreign Research Office

IWRM : Integrated Water Resource Management

NAPCCA : National Action Program to Climatic Change Adaptation

ESFMP : Environmental and Social Framework Management Plan

EFP : Environmental Focal Points

ESMP : Environmental and Social Management Plan

ESMP-Enterprise: Environmental and Social Management Plan -Enterprise

GDP : Gross Domestic Product

AR : As a Reminder

SME : Small and Medium Enterprises

SDNP : Sustainable Development National Policy

NPESD : National Plan of Economic and Social Development

NEP : National Environmental Policy

NFP : National Forestry Policy

GNP : Gender National Policy

NPEROC : National Plan of Emergency Relief Organization and Coordination

NNFSP : National Nutritional and Food Security Policy

UNDP : United Nations Development Program

OP : Operational Policy

ALR : Agrarian and Land Reorganization

EIRBF : Environmental Inventory Report in Burkina Faso, Edition no 2

RLR : Rural Land Regime

GAC : General Agricultural Census

EWS : Early Warning System

AGSDS : Accelerated Growth and Sustainable Development Strategy

EGECCDS : Environmental, Green Economy and Climate Change DepartementalServive

PS/SPP2 : Permanent Secretariat of the Sectorial Program Phase2

ESSS : Environmental and Social Safeguard Specialist

AAT : African Animal Trypanosomiasis

ToR : Terms of Reference

ESU : Environmental and Social Unit

PMU : Project Management Unit

USD : US dollars

1. INTRODUCTION

1.1. Background and justification of the project

Burkina Faso is a Sahelian country that already faces extreme climatic conditions and high variability of these conditions , which strongly exposed to extremes of flood and drought. With the exception of the Mouhoun basin and Comoé west, the rivers are not permanent.

It is foreseeable that the climatic rendr more frequent and more severe these events. Better weather and climate information is needed at both national and local levels for the Government, the private sector and communities can better plan and adapt to these changes announced .

Also, the are natural disasters (drought, floods and locust invasions) and other factors such as the lack of arable land, environmental degradation and the high fluctuation in consumer goods prices led Burkina Faso, to have to face many challenges in terms of food safety and public health where more than 80% of the population depends on agriculture, which represents about 40% of GDP.

The Government of Burkina Faso recognizes that strengthening the country's economic growth and significant poverty reduction will require consider climate risk and disaster associated with it. Adopted by the Government of Burkina Faso July 20, 2016, the National Economic and Social Development (PNDES) replaces the Strategy for Accelerated Growth and Sustainable Development (SCADD) developed in 2010 for a period of 5 years either 2011- 2015.

Built around three strategic axes, the PNDES aims to reform the institutions and modernize the administration, develop human capital and boost growth sectors for the economy and employment. It expects to have a participatory approach, a national economic and social development repository that enables the definition and implementation of sectoral and regional priority actions for the period 2016-2020. It builds on the vision "Burkina 2025", the guidelines of the presidential program and takes into account the Sustainable Development Goals (SDGs) as well as new emerging areas.

n this context Because of challenges that previous and recent estimates, confirmed by direct technical discussions with key institutions responsible for meteorology, hydrology, climate, and management of disaster risk in Burkina Faso were conducted. These evaluations with those institutions (the General Directorate of Meteorology (DGM), the General Directorate of Water Resources (DGRE), the General Directorate of Civil Protection (DGPC), the Early Warning System (EWS) and the National Council of Emergency Relief and Rehabilitation (CONASUR) reveal very severe obstacles in the provision of hydrometeorological services to potential users, public and private sectors and in communities.

These barriers include:

- For meteorology and hydrology :
    - Lack of qualified personnel and lack of continuous staff training strategy;
    - Weakness of institutional capacities mainly partners, and service providing procedures ;
    - Overall poor status of the main observation infrastructures;
    - Unreliable and slow communication systems particularly in areas where demographic density is low;
    - Limited data storage capacity and data facilities;
    - Limited meteorologigal and hydrological modeling forecasting ;

- For THE EWS(SAP) :
    - Urban and peri urban areas are taken into account in a small scale ;

- Inadequate management of collected information ;
- Deficiency in communication of Early Warning and direct actions for the concerned populations.

- For the DGCP (DGPC) and NCERR(CONASUR) :
  - The available tools in CONASUR and DGPC don't allow an effective implementation of their coordinating mandate ,advocacy and facilitation of interventions for the key sectors involved in disaster risk management linked to Early Warning to floods ;
  - Unsufficient capacity for emergency response and coordination of activities of prevention activities in various sectors.

As a result, climatic and meteorological information are minimally used in Burkina-Faso.

This is in order to respond to this situation that the World Bank is seeking from the Green Climate Fund (GCF) funding as a grant to the Government of Burkina Faso implemented a project view within the Africa Hydrometeorological Program (Strengthening climate resilience in sub-Saharan Africa).

1.2. Objectives of the Environmental and Social Management Framework (ESMF)

The ESMF is a tool to identify and assess the future potential environmental and social impacts of sub-projects whose realization sites are not known at the time of the project evaluation. Its objective is to establish an environmental and social screening process that will allow structures responsible for the implementation of the project, to identify, assess and propose measures to mitigate the potential, social and environmental impacts related to the project activities from the planning stage.

On an operational way for the other steps, the ESMF:

- defines the monitoring and supervising framework as well as the technical institutional arrangements to take before, during and after the implementation of the project to mitigate negative environmental and social impacts ,eliminate or reduce them to acceptable levels.
- also determines the various stages of environmental and social selection process for determining category sub-projects and required instruments (ESIA / NIES / PES);
- also determines the needs of training, capacity building and other technical assistance for the implementation of mitigation measures ;

- lays the stress on the consultation process to ensure that the various potentially affected stakeholders are informed of the project objectives and that their concerns have been adequately taken into account.

The environmental and social review procedure of ESMF will be integrated to the approval procedure and the general financing of the sub-projects, and will be conducted under the laws of Burkina Faso and the Safeguard Policies of the World Bank.

1.3. Methodological approach

The first step was the collection and analysis of the documentation of the project environment, the context, the laws and regulations governing the environment in general and land management, environmental policies and policies of populations resettlement in Burkina Faso in parallel with the operational policies of the World Bank. The analysis of environmental and social impacts, after conducting site visits planned for the installation of facilities and equipment for their assessment was made on the basis of their nature, their intensity, scope and duration.

This review of the existing literature has been closely associated with a participative approach that involved a broad consultation with all project stakeholders. In the present case, the main structures and institutions were consulted. These are: the General Directorate of Meteorology (DGM), the General Directorate of Water Resources (DGRE), the General Directorate of Civil Protection (DGPC), the Early Warning System (SAP) and the National Council of Emergency Relief and Rehabilitation (CONASUR).

This measure has the advantage of promoting a common understanding of the problem, but mostly for sharing the benefits and inconveniences of the different investments in the project environmentally and socially. These talks facilitated the identification of roles and responsibilities of various actors, their needs in training, capacity building as well as the assurance of the implementation of the ESMP proposed in these works.

These talks were reinforced by consultation with stakeholders at regional and local levels (local elected officials, populations of potential areas of intervention, representatives of local government) about the impacts and environmental and social issues of the project. These meetings permitted to measure the degree of involvement of these actors in the implementation of the project.

After collection, data analysis, the temporary report of the ESMF has been prepared and submitted on December 23, 2016 to the Validation workshop organized by the Technical Committee on Environmental Assessments (COTEVE) with a multidisciplinary composition.

The work of this committee has significantly contributed to the enrichment of this ESMF and the strengthening of the effective popularization of environmental and social safeguard measures.

The temporary report approved by the COTEVE has then been published at the national level from 2 to 31 May 2017 in the thirteen (13) regions of the country and for five (5) beneficiary institutions and BUNEE.

1.4. Structuration of the ESMF

Accordingly to the Tors of the current survey validated by the National Bureau of Environmental Assessments (BUNEE),the report of the ESMF will be composed of the following points:

- List of acronyms ;
- Summary ;
- Analytic summary in French and English ;
- Short description of the project and of the potential sites including the mechanism that will be applied for the preparation ,the approval and the execution of the proposed investments ;
- Reference of environmental situation (present biophysical and social challenges) in the area of intervention of the project ;
- Political, administrative and legal framework on environmental matters / on environmental evaluation and display of the environmental safeguard applicable policies , as well as an analysis of the conditions required by the different policies;
- Identification and brief evaluation of environmental and social risks and their measures of management ;
- ESMP composed of the following elements:
  - The environmental and social criteria of micro projects eligibility.
  - The process of environmental screening of sub- projects to define the level of environmental and social analysis required according to the rule;
  - The process of environmental analysis and validation of the sub projects that have been screened;
  - The framework of environmental survey including some key indicators, the institutional dispositions, the roles and responsibilities, a calendar of a follow-up and the responsible of the implementation;
  - Detailed program for capacity building ;
  - A budget of the implementation of the ESMP ;
- Summary(discussion about the most important subjectsand answers to participants) ofpublic consultations of ESMF ;
- Appendix:
  - A system of environmental and social review (Screening);
  - A special distinctive form of the environmental and social common impacts per type of sub-project;

- A list of checking measures of appropriate genetic mitigation on each sub project;
- Bibliographical References.

2. DESCRIPTION OF THE PROJECT

2.1. Project objectives

The project for strengthening hydro-meteorological services in Burkina Faso is in the intervention area of adaptation to climate change. Scheduled for four (4) years, it will benefit the funding of Green Climate Fund, of the World Bank and of the Government of Burkina Faso.

The general objective of the project is to increase the resilience of Burkina Faso to climate risks and disasters, through the strengthening of national institutions responsible for meteorology, hydrology and warning.

The specific objectives of the project are:

- **to improve the early warning capacity for Food Security and nutrition**
- **to develop capacities linked to Early Warning System for extreme events (including heavy rains, urban floods, winds, etc.)**
- **to promote the appropriation , the improvement and operationalization contingency plans and plans of relief organization .**

2.2. Components, activities and expected results of the project

The project activities are organized in four (4) components: (i) Institutional capacity building of DGM, the DGRE, SAP, CPB and CONASUR; (ii) Modernization of observation, forecasting, alert and response infrastructures; (iii) Improving the provision of services to final users, iv) Project Management.

The activities per component of the project are:

- **Component A:** Institutional Capacity building of the DGM, the DGRE, SAP, DGPC and CONASUR. It will finance the following activities:
  - **Activity1 :** Training of staff and experts in various disciplines to ensure sustainability of project results, with university training (Master) and technical training on the installation, operation and maintenance of hydro-meteorological networks;
  - **Activity2:** Strengthening the institutional and legislative framework, particularly through the development of specific operating procedures for

the prevention, anticipation and emergency response to extreme hydro-meteorological events (fluvial flooding, rainwater flooding, storms, droughts, lightning, forest fires, etc.).

- **Activity3:** Support for the integration, the coordination and the detailed technical specification activities.

The expected result through the A component is the institutional capacity building (including the key personnel of these structures) and interdepartmental coordination.

- **Component B:** Modernization of observation, forecasting, warning and response infrastructures. It will finance equipment and infrastructure to improve:
  - **Activity 1 :** data collection networks
  - **Activity 2 :** The physical and software infrastructures for data analysis and decision support
  - **Activity 3 :** Response ways to improve civil protection, food security and nutrition

The expected result through the B component is the modernization and sustainable operation of the data collection, management and access to information structures in the four targeted institutions

- **Component C:** Improving the provision of services to final users. It will finance the following activities:
  - **Activity1 :** Establishment and operational implementation of the National Framework for Climatological Services (CNSC), defining user requirements across different sectors and detailed planning to respond to
  - **Activity 2 :** Improvement of forecasts and warnings relating to droughts and floods, and development of new products for the specific needs of sectors such as agriculture, health, energy, water resources, management of disaster risk
  - **Activity 3:** Enhancing connectivity to enable an understanding and effective use of information and community awareness and establishing effective feedback procedures for those at risk.

The expected result is the optimum use of hydro-meteorological services, reducing the risk of disasters and food security by users of different sectors across all existing distribution channels and dissemination in Burkina Faso (traditional, newsletters, internet, television, radio, SMS) and through all available devices (agricultural cooperatives, municipal committees, suppliers, etc.).

- **Component D -** Project Management: This component includes financing of the four components for the coordination, monitoring and evaluation and reporting, financial management, environmental and social management, security, auditing, production project implementation manual and communication equipments.

2.3. Sub-projects subject to environmental and social screening

The sub-projects of the components A, C and D related to institutional capacity building, to improving the provision of services to final users and the management of the project, will essentially have socio economic positive impacts. For this reason, they do not require screening.

For the B component "Modernization of observation forecasting, warning and response infrastructures, it is expected the financing of equipment and civil engineering and observation infrastructures are planned to improve:

- data collection networks (hydro-meteorological stations);
- physical infrastructure (construction / rehabilitation of buildings) and software for data analysis and decision support;
- the response means to improve civil protection, food security and nutrition (construction / rehabilitation of buildings).

Thus, the implementation of component B sub-projects that includes purchases of building materials and equipment to install, sites arrangement operations, construction of buildings and installation of equipment, will be subject to environmental and social screening. Thus, a preliminary analysis on the basis of technical, financial, social and environmental criteria will allow a better understanding of the conditions of approval of the various sub-projects of this component.

2.4 Implementing modalities of the project

While focusing on the institutional capacity building of the five(5) beneficiary institutions (DGM, the DGRE, of SAP, DGPC and CONASUR.) at the national level, the project will lay the stress on five "hydro-meteorological information channels" that are particularly relevant to adapting the economy and means of livelihoods of Burkina to climate risks. They were identified during a workshop with key beneficiaries on September 8, 2016 in Ouagadougou:

- early warning of flooding due to runoff: urban and semi-urban;
- monitoring of food and nutritional vulnerability in priority rural areas
- Production of agro-meteorological services adapted to agricultural areas with high output;

- monitoring of river levels and reservoirs in areas subject to specific risks linked to floods and severe low water levels;
- Knowledge development on hydro-meteorological hazards related to climate change for the design of structures and risk management.

Fiduciary and environmental and social safeguards coordination will be provided by the Permanent Secretariat of the Transport Sectorial Program (SP / PST 2).

2.5 Project Funding

The project has a total estimated budget of 27 million US $ (funding requested from the Green Climate Fund / FVC and co-financing).

Table 2: Budget requested from the FVC

Table 3: Budget requested from the FVC

Staff	**Amount (US $)**
individual consultants	800,000
Training	2 ,750 000
Services (firms)	8,350 000
Travel and field missions	1,540 000
Consumer goods	9,060 000
Works	
Total	**22,500 000**

Source : Project Document

In addition to the funding requested from the FVC, the project has secured co-financing of 4.5 million US $. Co-financing is secured for an amount of US $ 4.5 million, with:

- 2.5 Million USD from the World Bank (GFDRR) and
- 2.0 Million USD of the Government.

The indicative allocation of government funds is as follows:

- US $ 585,000 DGM;
- US $ 480,000 DGRE;
- US $ 450,000 DGPC;
- US $ 220,000 SAP;
- US $ 265,000 CONASUR.

3. DESCRIPTION OF ENVIRONMENTAL AND SOCIAL MAJOR ISSUES OF THE PROJECT

The project implementation has several environmental and social issues the most relevant of which are shown below. However, a more comprehensive monograph is displayed in Annex 4 of this ESMF.

3.1The socio-economic benefits

As part of the implementation framework of the B component of the project "Modernization of observation, forecasting, warning and response infrastructures," the people of the project intervention areas as well as the BTP construction companies, technical inspection, import and export will benefit from the creation of jobs, income, business opportunities and improved living conditions.

During the works, many construction materials used in the civil engineering part will be acquired in the project area, labor in the intervention regions will be sought among the people of surrounding communities.

3.2The partial destruction of vegetation cover

During the civil engineering works (construction / extension / rehabilitation of buildings), there could be a partial destruction of vegetation on the influence of the sub-project sites in case avoidance measures would not be possible

3.3The preservation of cultural property and the environment

Cultural properties have a high social value in riparian communities of execution sites sub-projects.

During the picket operations or excavation phase of work, there are risks with regard to the destruction of cultural property. Rescue Measures must be taken to ensure the protection of this cultural property.

3.4 Taking a better account of gender and improving living conditions of vulnerable people

As part of the implementation framework of the project, there will be the improvement of service providing and warnings to rural communities to adapt local economies and livelihoods to climate risks. These social and environmental connected benefits will profit recognized vulnerable populations.

3.5 Achieving food security and protection of the integrity and human health

The project plans to focus not only on the modernization of data collection infrastructures but also on the management systems and access to information to ensure optimal use of hydro-meteorological services. The use of information by different sectors through all existing distribution channels and dissemination in Burkina Faso will increase the capacity to anticipate and contribute to reducing disaster risk and food safety.

4. POLITICAL, LEGAL AND INSTITUTIONAL OF ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

4.1. Political framework

The policy of environmental and social management in Burkina Faso is marked by several policy documents and strategies that challenge the Project, the first of which we note: the PNDES, the policies and sectorial strategies for environmental protection and climate risk management.

- ***The National Economic and Social Development (PNDES)***

Adopted by the Government of Burkina Faso in July 20, 2016, the National Economic and Social Development (PNDES) now replaces the Strategy for Accelerated Growth and Sustainable Development (SCADD) developed in 2010 for a period of 5 years from 2010 to 2015.

Built around three strategic axes, the PNDES aims to reform the institutions and modernize the administration, develop human capital and boost growth sectors for the economy and employment. It expects to have a participative approach, a national economic and social development repository that enables the definition and implementation of sectorial and regional priority actions for the period 2016-2020. It focuses on the vision "Burkina 2025", the guidelines of the presidential program and takes into account the Sustainable Development Goals (SDGs) as well as new emerging areas.

- ***The National Sustainable Development Policy (PNDD)***

Adopted by the Government in September 2013, the National Policy for Sustainable Development (PNDD) defines the principles and strategic directions for development planning, that is to say, the elaboration of plans, strategies, programs and development projects. The PNDD's guidelines are based on the fact that the national economy is based mainly on the primary sector which supports more than 80% of the population. Its Environmental Protection Principle states that "environmental protection is an integral part of the sustainable development process.

- ***National Multi risk Contingency Plan for Preparedness and Response to Disasters*** .

- The multi risk contingency of national preparedness and disaster response aims to: i) clarify relations / responsibilities between the different technical services of the State and

humanitarian partners; ii) facilitate the coordination of actions and enable coherence of sectorial plans; iii) identify and reduce the most probable risks; iv) provide a framework for joint planning covering emergency risks; v) Integrate the process of prevention, preparedness and response to emergencies in national plans and development programs; vi) reduce response delays and the number of losses in life.

- ***The National Strategy for disaster risk prevention and management***

The national prevention strategy for risk and disaster management, conceived for a five year duration from 2013 to 2017 was adopted in February 2012 as a main reference in this matter.

Burkina Faso is involved in the implementation process of the "Hyogo Framework for Actions of Nations and resilient communities to disasters "adopted in 2005 in Kobe at the World Conference on disaster reduction; among other initiatives, the Government has developed and adopted in July 2007 the National Policy for Social Action which takes into account the issue of Disaster Risk Reduction (axis 2; program 7).

- ***National Environmental Policy (PNE)***

Adopted by the Government in January 2007, the National Environmental Policy (PNE) aims to create a framework of reference for the consideration of environmental issues in development policies and strategies. Among the guidelines defined there we can note:

- the rational management of natural resources;
- the assurance of environmental quality to people in order to guarantee a healthy living environment.

- The National Forest Policy (PNF)

The main objective of the national forest policy developed in 1998 is to contribute to the fight against desertification, to achieve food self-reliance and meeting national energy service wood and timber needs. It is centered on three options which are:

- reducing in a significant way the balance between ‘’supply and demand’’ of wood for energy, construction wood, and picking wood products to food use and medicinal purpose ;
- rehabilitating degradated forests ;

- Improving the living environment by the development of green belts around urban centers and the promotion of forest entities in rural lands.

- ***The National Policy for Territory Planning***

The National Policy for Territory Planning of Burkina Faso adopted by Decree No. 2006-362 / PRES / PM / MEDEV / MATD / MFB / MAHRH / MID / MECV of 20 July 2006 is based on three fundamental directions below in which the issue is acute: i) economic development, that is to say the effective achievement of wealth-creating activities; ii) social integration taking into account the human factors, culture and history in development activities; iii) sustainable management of the natural environment which is to ensure the best living conditions for the population, without jeopardizing the lives of future generations. The National planning policy states the role of the different actors.

- ***The National Gender Policy (PNG) of Burkina Faso (2009-2019)***

The overall goal of the National Gender Policy is to promote a participative and equitable development of men and women (ensuring access and equal and fair control to resources and decision-making spheres) in the respect of their fundamental rights.

- ***The National Adaptation Plan to Climate Change (PNA)***

The National Adaptation Plan of Adaptation (PNA) to climate change was adopted by the Decree n°2009-948/PRESS/PM/MASSN of 31st December 2009. Its vision is called : '' Burkina Faso manages its social and economic development more efficiently thanks to the implementation of planned mechanisms and measures taking into account the resilience and adaptation to climate change until 2050.''

Starting from this vision, the long term adaptation objectives are the following:

-to protect the pillars of accelerated growth;

-to guarantee a sustainable and nutritional food security;

-to preserve water resources and improve the access to sanitation;

- to protect people and property against severe climatic events and natural disasters;

-to protect and improve the natural eco-systems functioning;

-to protect and improve population health.

For each sector of development, there has been a detailed and accurate statement on (i) the structural vulnerability, (ii) the priority adaptation areas, (iii) the adaptation measures for a short, average and long term, (iv) a five-year adaptation action plan, 'v) the cost of adaptation measures for a period of 1 to 15 years.

- ***The National Policy for Food and Nutritional Security (PNSAN)***

The National Security Policy and Nutrition draws on international, regional and national framework principles. Its vision is as follows: "to ensure anytime, to all people equal access to a balanced and healthy diet and sufficient quantity to contribute to poverty reduction, consolidation of social peace and the achievement of sustainable development. »
It has set the overall goal of achieving sustainable food and nutrition security realization by 2025.

- **National Civil protection policy**

- Adopted on 21st September 2010, the general objective is to ensure an efficient and coordinated management of accidents, calamities and disasters. This general objective is divided into four (4) specific objectives explained below:
- - to ensure a better management of risks;
- -to set up the principles of protecting the populations;
- -to organize the response of civil protection;
- -to reinforce the institutional capacities.
- The organism of civil protection in Burkina is the General Directorate of Civil Protection (DGPC). It's essentially an organ of reflexion and advice. The governmental structures responsible of implementing the national policy of civil protection are composed of:
-
- *-the specialized structures of MATD which are the Directorate General of Civil Protection and the National Fire Brigade;*
- *-the specialized structure of the Ministry in charge of Social Action represented by the National Council for Emergency Relief and Rehabilitation;*
- *-the specialized structures of the other ministerial departments*

- ***The Action Plan for the Integrated Management of Water Resources (PAGIRE)***

The overall objective of PAGIRE, which stems from the national water policy adopted in July 1998, is to "contribute to the implementation of integrated management of water resources in the country, adapted to the national context, consistent with guidelines set by the Government of Burkina Faso and respecting internationally recognized principles sustainable and environmentally sound management of water resources."

The PAGIRE, the implementing tool of GIRE is a comprehensive approach to water, in terms of uses and impacts, which promote the development and coordination of water management, and land related resources in order to maximize equitable, economic and social welfare without compromising the sustainability of vital ecosystems.
It should be noted that the second phase PAGIRE (2010-2015) is replaced by the post PAGIRE.

4.2 Legal framework

This project is concerned with several pieces of legal significance at national level, but also through agreements, treaties and conventions ratified by Burkina Faso and the policies of environmental and social safeguards of the World Bank.

National legal texts applicable to the project

On the legislative level

- ***The Constitution of 2 June 1991*:** it defines the rights and fundamental duties of citizens, determines the organization form of the State, and organizes the universal republican implementation *principle* of the dissociation of powers. The IVth constitution promulgated on 11 June 1991 and reread in 2012 contains many environmental references. That's why its preamble asserts the awareness of the Burkinabe people concerning their ''awareness of the absolute necessity to protect the environment''. The constitution acknowledges (article n°29) the right to a healthy environment for the Burkinabe citizen, but asserts that "the protection, the defense and the promotion of the environment are a must for all".
- ***The Law N° 008-2014/AN on orientation law on sustainable development in Burkina Faso***: Adopted in 08 April 2014.It aims to:

-set up a national unified reference framework to ensure the cohesion of actors' interventions through legislative, political and institutional appropriate reforms.
- ensure economic efficiency, environmental viability and social equity in all developing actions.

- **The orientation law on agro sylvo-pastoral activities, fisheries and wildlife**

Adopted on October 22nd 2015, this law aims to determine the natural resources status and their protection in the activities framework, to determine the production spaces and to ensure their safety but above all to ensure the respect of human rights and social equity.

- ***The*** law ***Code of the Environment*** Adopted by Act No. 006-2013 / AN of April 2, 2013, the Environmental Code is devoted to the Strategic Environmental Assessment (AES), the Survey of Environmental Impact (EIE) and to the Impact Notice (EIA NIE) in its Articles 25 to 34. According to Article 25 of this Act, the activities likely to have significant impacts on the environment are subject to the prior opinion of the Minister the environment. The notification is prepared on the basis of a Strategic Environmental Assessment (EES), of an Environmental Impact Survey (EIE) or an Environmental Impact Notice (NIE).

- ***The Forestry Code***: Adopted by Law No. 003/2011 / AN of 05 April 2011, "This Code aims to set the basic principles of sustainable management and utilization of forest resources, wildlife and fisheries' (Article 1). The Paragraph 2 of Article 4 states: "... the sustainable management of these resources is a duty for all. It implies respect for the regulations in force on the protection, exploitation and valorization of the forest heritage, wildlife and fisheries. "For this, it provides in its Article 48 that any implementation of major work involving a clearing is subject to prior authorization of the Minister of Forests on the basis of an environmental impact assessment."

- ***The law of orientation relative to the prevention and to risk management, humanitarian crises and disasters*** : the Law No. 012-2014 / AN adopted on 22 April 2014 focuses on the prevention and management of risks, humanitarian crises and disasters in Burkina Faso, whatever their nature, origin and extent. It aims to ensure the minimum of public services, security and public order, the protection of people, property and the environment as well as informing the populations.

- ***The law of orientation relative to the management of water*** : Act No. 002/2001 / AN on orientation law on water management adopted on August 8, 2001 relates to a series of measures to protect the resource 'water' and turn it into a pillar of sustainable development.
- ***The law code of public health***: Adopted by Law No. 23/94 / ADP of 19 May 1994 on the Code of Public Health, the code is particularly interested in the health protection of the environment (pollution air and water) and provides thereby a battery of measures to prevent pollution of water supplied for

consumption because of the uncontrolled use of pesticides, poor waste management and all kinds of unsanitary settlements.

- ***The Investment Code*** : It consists of Law No. 62/95 / ADP of 14 December 1995 Investment Code in Burkina Faso, all its amendments, together with its implementing Decree No. 2010-524 / PRES / PM / MCPEA / MEF fixing the application conditions. This law in its Article 1 aims to promote productive investment contributing to economic and social development of Burkina Faso.

- ***The law on Agrarian and Land Reform (RAF)*** : Adopted by Act No. 034-2012 / AN of July 02, 2012, the Law on Agrarian and Land Reform (RAF) in Burkina Faso, aims to govern standards of use, management and exploitation of natural, permanent or renewable resources.

- ***The law relating to land security in rural areas*** : the Law No. 034-2009 / AN of 24 July 2009 on Rural Land Regime (RFR) on land tenure in rural areas seeks to recognize and secure the rights of three (03) actors on rural land. This is the: i) rural land of the state, ii) rural land of local authorities and rural land tenure rights of individuals.

- ***The General Code of Local Collectivities*** : This code transfers to local communities important responsibilities in protecting and managing their natural resources and environment;

- ***The law 28-2008 / AN of 13 May 2008 on the Labor Code in Burkina Faso*** **:** in the context of infrastructures construction, this Act regulates working conditions through its provisions (Articles 149 and 153) on prohibition of discrimination in employment and labor and the worst forms of child labor. Also, under the Article 36 of the same Act, it is an obligation for the employer on the site, "to comply the hygiene and safety conditions to the norms stipulated by the enforced regulations."

4.2.2. The international conventions, agreements and treaties

The project implementation also involves a number of international conventions and agreements that are translated into the national legal framework:

- the RAMSAR Convention on Wetlands of International Importance especially habitats of water birds, ratified by Zatu AN VII-02 of August 23, 1989;
- the UN Convention on Biological Diversity ratified by Decree 93-292 RU of September 20, 1993;
- the African Convention on the Conservation of Nature and Natural Resources (called the Algiers Convention), ratified by Decree No. 68-227 of 23 November 1968;
- the Stockholm Convention on Persistent Organic Pollutants, ratified by Decree No. 2004-300 of 20 July 2004;
- the United Nations Framework Convention on Climate Change, ratified by Decree 93-287 RU of September 20, 1993;
- the Kyoto Protocol at the United Nations Framework Convention on Climate Change, ratified by Decree No. 2004-536 / PRES / PM / MAECR / CVEM / MFB of 23 November 2004;
- the UN Convention on the fight against desertification in countries experiencing serious drought and / or desertification, particularly in Africa, ratified by Decree 95-569 UK 29 December 1995;
- The "Hyogo Framework for Action 2005-2015 and CaH2 for the prevention and the implementation of the reduction of disaster risk";
- The Minamata Convention on Mercury (2016) for the protection of human health and the environment;
- The Paris Convention (1972) on the protection of world cultural and natural heritage.

These international conventions signed and / or ratified by Burkina Faso contribute to supervising environmentally project activities.

At the level of regulation

The implementation of the project will involve several regulatory texts including:

- The Decree No. 2006-590 / PRES / PM / MAHRH / CVEM / MRA of 6 December 2006 on the protection of aquatic ecosystems;
- Decree No. 2001-185 / PRES / PM / MEE 07 May 2001 setting standards for discharges of pollutants in the air, water and soil;
- Decree No. 2010- 567 / PRES / PM / MATD / MASSN of 21 September 2010 concerning implementation of ORSEC Plans

- Decree No. 2015- 1187 / PRES TRANS / PM / MOEHR / MATD / MS / MS / MARHASA / MRA / MICA / MHU / MIDT / MCT of 22 October 2015 concerning conditions and procedures for implementation and validation of the environmental strategic assessment (EES), of the survey and environmental and social impact notice.
- ***The decree on environmental impact and social notice survey (EIES / NIES) :*** In order to implement the legal provisions for environmental and social assessment, the Government of Burkina Faso has promulgated * the Decree No. 2015- 1187 / PRES TRANS / PM / MOEHR / MATD / MS / MS / MARHASA / MRA / MICA / MHU / MIDT / MCT of 22 October 2015 concerning conditions and procedures for implementation and validation of the strategic environmental assessment (EES) of the study and the environmental and social impact notice. This decree includes in appendix a classification of works, structures, facilities, activities and planning documents subject to the EIE or the NIE or to the EES.

Thus, under Article 4 of the decree, works, works, facilities and activities likely to have significant direct and indirect environmental impacts are classified into three (3) categories as follows:

- Category A: Activities submitted to an Environmental and Social Impact Assessment (EIES);
- Category B: Activities subject to environmental and social impact notice (NIES);
- Category C: Activities being subject to environmental and social requirements.

The different phases of the procedure can be summarized in the following table:

Table 5 : Different stages of the procedure ESIA and institutional responsibilities

PHASES	ACTIVITY	ACTORS INVOLVED
Phase 1: Three, carrying out the study and public consultation	Environmental and social screening / Proposal of th project category	UCP
	Elaboration of terms of references	UCP
	Three : Determination of the project category and validation of TOR	BUNEE, CONSULTANTS, UCP
	Field investigations / stakeholders consultation	CONSULTANTS, UCP
	Survey report redactions	CONSULTANTS

	Deposit of the survey report at the Ministry responsible of the activity	UCP
	Deposit of a copy of the report at the Ministry of Environment.	UCP
Stage 2: Examination of the report and issuing of the reasoned notice	Public Investigation public in the case of a full impact study • *Appointment of investigators by the Minister of environment ;* • *Information of the authorities and local populations on the opening of public investigation ;* • *Opening of the public investigation and redaction of the investigation report*	Ministry of Environment Ministry in charge of the project MATD
	Analysis of the survey report in addition to the public inquiry report; Analysis of the impact notice report;	BUNEE COTEVE
	Preparation of environmental compliance notice of the sub-project	BUNEE
	Issuance of Notice of Compliance Notice from the subproject	Minister of Environment
Phase 3: Environmental monitoring	Field investigations and data collection	• BUNEE, World Bank ; Beneficiaries, • UCP • DREEVCC
	Follow - up of project execution conditions	• BUNEE, BM Beneficiaries, UCP • DREEVCC
	Control and verification of compliance with the environmental and social management plan	• BUNEE, BM Beneficiaries, UCP • DREEVCC

Source: Consultant

4.2.3. The policies of environmental and social safeguards of the World Bank

The project has potential average reversible negative environmental and social impacts resulting from the activities of modernization of observation infrastructure, forecasting, warning and response. In accordance with the operating policies of the World Bank, it is subject to the requirements of environmental and social safeguard policies of the Bank. It is classified in category "B" in accordance with OP / BP 4.01 on Environmental Assessment. The detail on the environmental and social safeguard policies is shown in Annex 3.

4.3 Institutional framework

4.3.1 The governmental departments

- **the Ministry of Environment, Green Economy and Climate Change (MEEVCC)**

The Ministry of Environment, Green Economy and Climate Change (MEEVCC) guarantees the institutional coordination of environmental quality in Burkina Faso.
In this respect, it ensures the implementation and monitoring of government policy on the environment and sustainable development.

In the implementation framework of environmental regulations on the EIES / NIES, the structures involved in this ministry are:

- the National Council for Sustainable Development (CNDD)
- the General Directorate of the Environment Preservation (DGPE);
- the General Directorate of Forestry and Wildlife (DGFF);
- the directorate of Institutional Development and Legal Affairs (DDIAJ);
- the National Bureau of Environmental Assessments (BUNEE) whose mission among others is to ensure that development actors perform according to the standards of an environmental assessment (EIES, NIES, Audit, ESMF) depending on the project size. So it is up to the National Bureau of Environmental Assessments (BUNEE) to promote the ESS EIE and NIE through its Strategic Assessments Direction, Surveys and Environmental Impact Notices. Another role of BUNEE is the application of Audit and environmental inspection. Also, the technical evaluation of this ESMF and all the other documents which will use this repot as will reference, including environmental and social impact studies, falls to the BUNEE.

- The decentralized services, namely the Regional Provincial and Departmental Directions of the Environment, Green Economy and Climate Change (DREEVCC, DPEEVCC,SDEEVCC) will ensure that the management of natural resources by the population and development actors meets international and national norms.

Finally, an implementation process of environmental units that will ensure the relay by the action of Bunee in the strategical ministries has been undertaken since 2002.
Under the project, the MEEVCC will monitor the implementation of activities in the environmental, human and animal health, and particularly the implementation of environmental and social measures. This will particularly engage the BUNEE, the DGPE, the CNDD, the DGFF and decentralized services.

- ***the Ministry of Agriculture and Hydraulic Arrangements (MAAH)***

Responsible for driving agricultural policy in Burkina Faso, the MAAH is organized into several Directorates General for the Promotion of Rural Economy (DGPER) which houses the service responsible of the Early Warning System - SAP. One of the also involved supporting structures involved in this is the Executive Secretariat of the National Committee of Food Security (CNSA).
The high level of this ministry decentralization in the 13 regional directions and the 45 provincial directions and departments of the country, is an asset for the implementation of actions on disaster risk matters

- the Ministry of Women,, National Solidarity and Family

Through the Permanent Secretariat of the National Council of Emergency Relief and Rehabilitation (SP / CONASUR) and its decentralized structures, this institution responsible for planning and implementation of emergency response and coordination of prevention activities among different sectors.

- ***The Ministry of Transport, Urban Mobility Urban and Road Safety***

Through the General Directorate of Meteorology (DGM) it provides the exploitation of meteorological observation infrastructures, storage and management of a large mass of data to anticipate disaster risks.

- the Ministry of Water and Sanitation

The Ministry of Water and Sanitation includes among others the following general dierections: General Directorate of Surveys and Sectorial Statistics (DGESS), General Directorate of Sanitation (DGA), Directorate General of hydraulic Infrastructures (DGIH) and General Directorate of Water Resources (DGRE) competent in observing and hydrological forecasting and through which the Department is involved in the project.

- Ministry of Territorial Administration, Decentralization (MATD)

This ministry will intervene in the implementation of the project through DGPC involved in disaster risk management particularly in connection with flood warnings / flooding.
Another actor involved in the local management of disaster risk consists of decentralized communities. They also provide assistance in the selection of sites to house the civil protection investments such as barracks of fire brigades.

- the Ministry of Infrastructures

The implementation, coordination and follow up of fiduciary aspects and environmental and social safeguards of the project will be provided by the Permanent Secretariat of the Transport Sectorial Program (SP / PST).
The technical aspects of project coordination would rely directly to the entities in respect of their mandate.

4.3.2. Local authorities

The Local authorities are a vital link in the implementation of local actions on the field. In the project framework, they should be intimately involved in selecting sub-project implementation sites. They also will provide all the administrative support the project needs.

4.3.3. Non Governmental Organizations and Associations

The Non-governmental organizations (NGOs) and those of civil society are partners of the project as most of the time they intervene to equip the beneficiaries of the project, allowing it to have more impact in its implementation. To date, several national and international NGOs are active in Burkina Faso in the management of risks and disasters, but also in the management of natural resources and protection of the environment. They also have expertise in several areas: capacity building on management of disaster risks but also information, sensitization, mobilization and social support to affected victims of natural disasters. These local structures can play an important role in monitoring the implementation of disaster risk reduction activities.

5. POTENTIAL, ENVIRONMENTAL AND SOCIAL IMPACTS OF THE PROJECT

The implementation of the project will generate positive as well as negative environmental and social impacts

5.1. Positive, environmental and socio economic impacts of the project

During the works, many positive environmental and socio economic impacts of the project are expected from the implementation of the sub-projects of Component B: "modernization of observation, forecast, warning and response infrastructures". These concern the following positive impacts:

-job creation/incomes and temporary reduction of unemployment in the communities integrated in the work sites;

-increasing of business opportunities for the BTP enterprises, technical control and import-export.

The planned investments are taking into account purchases of construction materials and equipment to be installed and development operations, building construction and equipment installation. Thus, the project start is still a business opportunity for construction companies, technical monitoring, and import-export. In addition, development work sites require staff, therefore reducing unemployment and improving living conditions.

5.2. Negative, environmental and social impacts and risks

Project activities which could have negative environmental and social impacts are the establishment of hydro-metrological stations and construction or rehabilitation of civil engineering infrastructures.

• **Negative impacts on air quality**: During the construction phase, site facilities and construction / rehabilitation of buildings locally increase the dust in the air during strong winds and during labor, with changes speed and direction. The demolition work for rehabilitation will also cause the release of dust. These harmful dust can easily be inhaled and cause lung diseases.

• **Negative impacts on soil**: During the construction phase, the risk of impaired soil texture around the site will be relatively low due to the presence of machinery works and storage of materials. However, the use of mechanical devices (or exceptionally explosives) could have moderate adverse effects on soil structure. The risks of degradation and contamination with construction waste exist, but will be very limited and could be easily avoided. During the operation of buildings, there will be no significant impact on the ground.

• **Negative impacts on water**: In the work phase, there is the risk on water courses alteration and of their immediate environment, particularly the disturbance of ecologically sensitive areas. These risks also exist during the operating phase.

• **Impacts on flora and fauna**: The work mostly takes place on existing sites. However, it is possible that the trees are removed on some sites. In the operation phase, there will be no significant adverse effects.

• **Impacts on resident populations**: During construction, the uncontrolled landfills for solid waste and construction liquids (waste, cuttings, etc.) could degrade the surrounding environment, such as discharge points could be transformed into wild landfills, especially if the demolition waste and cuttings are very important. The rotations of vehicles carrying equipment and building materials may also interfere with the movement and the movement in general and the (noise, dust) which residents will be exposed to. There are opportunities for risk of traffic accident. The work will not cause inconvenience in the provision of water, electricity and telephone in riparian areas to work. The risk of disruption of socio-economic activities appears very low.

• **Risks related to accidents during the construction**: During the construction phase, there are risks of accidents related to the construction of equipment and poorly protected or used inappropriately materials. The risk of falls during walks - exists for any person authorized or not on the site in terms of narrow and congested traffic areas. The risk of accidents also related to road traffic for delivery of construction materials is feared (movement of vehicles: collision, skidding, hitting, pinch, crush, or load - fall, striking reversal during operations).

• **Risks related to installation and maintenance of hydro-meteorological stations** The mercury is in different devices chosen to help protect the environment and the population through hydro meteorology. Compared to international instruments, hydro-meteorological services are not clearly mentioned in international regulations. Mercury is a chemical element present everywhere in nature (water, air, land). It is used in many fields due to its outstanding physicochemical properties. However, its accumulation in nature has serious consequences on the environment. According to the WHO, mercury is one of ten chemicals of high concern for public health. Inhaled or ingested, it is still very harmful to human health. The negative impacts of mercury on human health are also the cause of a considerable decrease in human resources available for affecting the brain; it has the ability to reduce the IQ of intoxicated persons.

• Mercury also has many negative impacts on the environment because of its high level of toxicity. In the air, it can be driven into the ground by rain and pollute plants, wildlife, soil, ground water and at the same time the water available for the population as well as for fish and land wildlife. In water,

it is able to absorb suspended solids and sediment and inhibit the metabolism of microorganisms, thus blocking their function in the waste water treatment.

5.3. Other negative impacts of the project

• **Inconvenience and nuisance caused by bad choice of location observation stations** the non-compliance of norms to the choice of location of the observation stations can have negative consequences in terms of risks (tidelands or hazardous slips, etc.), which will increase the risk of accidents .

• **Nuisances due to the movement of vehicles and construction machinery**: On the human environment, the vehicles carrying the equipment will risk to temporarily impede movement and mobility in general, in addition to nuisances (noise, dust) which populations will be exposed. It is the same risk with traffic accidents.

• **Risk of spread of STI / HIV / AIDS** must also point out the risk of spread of STI / HIV / AIDS with the building construction sites of staff, when we know that some staff working in construction sites will reside temporarily in these places, which can promote contact with women or men of riverside communities.

• **Risks of social frustration when not using the local workforce**: The non-use of the resident labor during work may cause frustration (and even conflict at the local level). Local recruitment of unskilled labor should be encouraged, which would not only provide jobs for some unemployed young people, but especially local ownership of the project. Born of frustration not use "local workforce" can lead to acts of vandalism during and after construction. However, recruitment can be a security pattern, warranty and maintenance and infrastructure protection. Vandalism can constitute acts of sabotage, looting or damage to infrastructures.

Risks of social conflicts in case of occupation of public or private land: the unauthorized storage of materials and / or works vehicles on private land even temporarily could generate conflicts with owners, especially in case of pollution /degradation. These risks are insignificant as the works will be performed within the communal area.

The following table displays the synthesis of potential negative risks and impacts

Table 8: Synthesis of negative environmental and social impacts and risks

Activities	Sources of impacts	Negative potential impacts

		and risks
civil engineering opérations	- Felling trees - land waste - Vehicles Movement Poor signaling site - Recruitment of labor - Presence of foreign staff	- - Partial Reduction of vegetation cover - Pollution of soil and water with anarchical solid wastes rejection and liquids - Erosion of the land with the movement of construction machinery Local disturbance of air quality by dust from the works Noisy nuisances due to noise and vibration of engines Work accidents with the machines Social frustration linked to the non employment of local labor Potential risks of IST/VIH-SIDA spread Disturbances of traditions and customs Disturbances of activities in surrounding areas Traffic disruption Loss of bio-diversity

Installation and maintenance of equipment	- Mercury Exhaust in hydro-meteorological equipment	- Air , water and soil pollution, by mercury - Affected human health - Wildlife and polluted aquatic flora - Reduction of the natural purification capacity of - Ecosystems

6.THE ENVIRONMENTAL AND SOCIALMANAGEMENT FRAMEWORK PLAN (ESMP)

The Environmental and Social Management Framework Plan (ESMP) is a reminder on the main mitigation measures to implement.Then it provides the major guidelines for the environmental and social management of the project that are cleared from the national priorities above explained and taking into account of the World Bank safeguard policy requirements.These guidelines include the screening device, the elaboration of environmental and social prescriptions (PES), the capacity building for the implementation of EMSF, the periodical reporting of the ESMF implementation and finally the periodical supervising of the environmental and social measures implementation.

6.1MITIGATION OF NEGATIVE ASPECTS

The negative impacts of the project are minor and localized which explains its classification in Category B Class B according to the criteria of the World Bank and the Burkina Faso legislation. Thus, some activities need the NIES in association with the Environmental and Social Management Framework (ESMP) before any start. These environmental and social surveys will determine more precisely the nature of the measures to be applied to each sub-project. In case of no need for such studies, simple environmental and social measures, to achieve both during the construction phase and in operation period, may be applied.

The main recommendation in this framework relates to the strict application of international standards, namely environmental, health and safety guidelines of the World Bank, the European Union and the World Health Organization guidelines for health in relation to the environmental texts in Burkina.

The table below summarizes the mitigation measures previously identified impacts. Guidelines and environmental and social clauses to be included in the bidding documents and works are available in the Appendix. Given the danger of potential impacts of mercury, an additional analysis was reserved for specific measures to be adopted for mitigating such impacts.

Spaces/Impacts		mitigation measures
Soil	Risk of potential erosion of Embankments	Use again or dispose of embankments in the shortest possible time
		Lead the work generating sediment accumulation in the dry period
		Establish temporary mechanical structures for soil conservation
	potential soil erosion during construction	Use again or dispose of material deposits in the shortest time
	Disruption of the surface layer of Topsoil or arable soil (deposit of	Collect waste containing mercury with suitable containers and dispose of in landfill

Spaces/Impacts		mitigation measures
	materials, construction wastes etc.)	sites.
	construction waste	
Vegetation	Landscape affectation	Avoid, among others, as much as possible earthworks, excavation and tree cutting
	Risk of absorption of the mercury content escaped into the atmosphere by plants'(by the aerial parts)	Collect appropriate solid waste and eliminate them in technical landfills.
	Loss of biodiversity	Avoid sites with endemic species
		Avoid the elimination of animals and habitats out of the grip of the work
		Restore or rehabilitate sites
Aquatic Fauna	fish contamination risk by food (plankton), or by breathing through the body surface	Collect the solid / liquid waste with suitable containers and dispose of them in places determined by the Government.
Surface waters and ground water	Risk of water pollution (rivers and sea) from solid waste and unintentional spills of chemical waste	Train staff in the handling, storage and containment of chemical waste and hazardous materials
		Use of machinery and equipment in good condition.
		Collection, reuse / disposal of solid wastes by the standards of environmental safeguards, sediment and waste of the sites
		Collection, use or disposal by the standards of environmental sediment safeguards and

Spaces/Impacts		mitigation measures
		waste of the sites
	Risk of deterioration of the water quality of the river due to the transport of sediment and construction waste	Collection, use or disposal by the standards of environmental safeguards toxic waste
	Risk of contamination and / or disturbance of aquatic ecosystems from runoff of toxic wastes (residual cement, scrap metal, oils and fluids of equipment, paints, etc.)	Build / use of temporary latrines by the standards of environmental safeguards or use of mobile latrines for workers
	Risks of contamination of water reserves by the workers faecal wastes	
Air	Dust increase risk due to the movement of vehicles and work	site watering, checking the wearing of protective equipment for workers control speed and frequency of vehicle traffic
	Risk of contamination or air pollution by mercury	Collect waste containing mercury with suitable containers and dispose of them in storage places decided by the Government
Animals	Contamination of fish-eating birds	Collect waste containing mercury with suitable containers and dispose of them in landfill sites.
The	Influx of workers, laborers and other unknown people in the area	Look for the participation of local elected officials, heads of Base Organizations and

Spaces/Impacts		mitigation measures
Populations	looking for opportunities related to the project resulting in cases of criminality and violence.	other local leaders in the recruitment process
	Population exposure risks to mercury pollution.	Collect waste containing mercury with suitable containers and dispose of them in storage places decided by the Government
The laborers	risk of accidents during construction	Ensuring the wearing of protective equipment
	Risks related to the implementation of equipment	Ensuring the wearing of protective equipment
	risks related to respiratory problems due to dust	Site watering, wearing Ensuring the wearing of protective equipment

Source: Consultant

6.2. ENVIRONMENTAL AND SOCIAL MANAGEMENT OF ELIGIBLE SUB-PROJECTS PROCEDURES

6.2.1. The process of environmental and social selection of the project

The results of the selection process will determine the environmental and social measures necessary for the activities of the Project. The various activities of the Project, namely those related to the construction of buildings and infrastructures, could be submitted to an environmental and social screening process. The selection process will allow to:

- identify project activities that may have negative impacts at the environmental and social level;
- identify appropriate mitigation measures for activities with adverse impacts;
- identify activities that require the development of the Environmental and Social Management Plans (ESMP);
- describe the institutional responsibilities for (i) the analysis and approval of the results of the selection, the implementation of proposed mitigation measures, and the preparation of NIES

/ PES reports; (ii) monitoring of environmental indicators in the realization of activities and their implementation;

The environmental and social screening process includes the following steps:

Step 1: preparation of sub-project (technical files of the execution of the infrastructures)

The preparation of technical files of sub-projects to realize will be performed by the Environmental Focal Points (PFE),of the beneficiary structures (DGM,DGRE,SAP,DGPC and CONASUR), for the operations of the component B "Modernization of observation infrastructure, forecasting, warning and response." It is at this preparatory stage that the environmental and social aspects must begin to be addressed, especially with the filling of the environmental and social screening forms.
To do so,each implementing entity will choose an Environment Focal Point (PFE) who will be the responsible for this step.
This step will be under the responsibility of the Specialist in environmental and social safeguard of environmental and social management Unit SSE-UGES/SP-PST2

Step 2: Filling of the selection form and environmental and social classification

Once the implementing technical documents have been realized according to the components, the Environmental Focal Units (PFE) of the five institutions (according to the component to be financed), will conduct the environmental and social screening of targeted activities to see whether or not an environmental work is required. For this, each unit will (i) fill the environmental selection form (see Annex 1) or the environmental and social checklist (Annex 2); (ii) analyze the planned activities and (iii) proceed with a classification proposition of the concerned activity.
The classification and approval of projects will be as follows:

- If no backup policy is triggered, the process of preparation and implementation is ongoing;
- If the project triggers a backup of the World Bank policy, the PFE will ensure that required procedures are followed, such that an Environmental and Social Management Plan (ESMP) is prepared, with the support of MEEVCC

The evaluation grids help to minimize from the start the negative impacts of the project. Thus, the Project activities that may have negative impacts on the environment are classified into three categories:

- Category A: Project with some major environmental and social risk;

- Category B: Project with moderate environmental and social risk;
- Category C: Project without significant impacts on the environment.

The project being on the environmental category B, any sub project classified in category A after the filling of the form, will not be financed unless its design or site is reviewed to decrease the categorization.

This stage will be conducted in parallel with the technical file preparation phase to incorporate in the design of the identified environmental and social concerns.

This step will be under the responsibility of the Specialist in environmental and social safeguard of the environmental and social management Unit.(SSE-UGES/SP-PST2,

.BULLE ***Step 3 : Validation and approval of the screening and activities classification***

Once fixed by the PFE with the support of UES-PST2, the environmental and social selection form will be submitted to BUNEE for comments and approval.

The BUNEE will examine the form for its approval (or refusal). In this framework of examining the form, the BUNEE may ask more information from the team responsible of the project. After an analysis the BUNEE will provide an answer.

Step 4: Execution of environmental and social work

After analyzing the information contained in the results of the selection and after determining the good environmental category, and the extent of the environmental work required, the SSES of UCP of the PST2 will ensure the preparation and approval of the TDRs if a NIES with a specific Environmental and Social Management Plan (ESMP) is required.

If on the contrary, according to the case, an environmental work will not be necessary or if the application of simple mitigation and security measures is sufficient, the SSES of the UCP of PST2 will take the necessary decisions in collaboration with the PFE of the beneficiary institutions to give an answer.

Step 5: Review and approval of the EIES reports

The Decree on environmental and social impact surveys (EIES) previously described give precisions on the important elements concerning their scope, the compulsory aspect of the procedure for certain types of projects, the contents of the reports, the obligation of public consultation, the elaboration of the ESMP including the mitigation measures costs, the actors and

the persons responsible of respect of maturity for the implementation. For all the projects submitted to EIES/NIES, the realization of the work depends on the acquirement of a notice of environmental conformity issued by the Ministry of Environment. The validation of eventual EIES/NIES reports is supervised on the national level by BUNEE which is the responsible. A Technical Examination Committee of Environmental Assessment (COTEVE) composed of members from several administrations will examine the reports and give their opinion on an eventual allotment of an environmental conformity notice.

The validated reports of NIES will be submitted to the World Bank for non-objection.

This step will be under the responsibility of the Specialist in environmental and social safeguard of the Unit of environmental and social management (SSE-UGES/SP-PST2).

Step 6: Public consultations and dissemination

The National legislation in relation with EIE/NIES states that the information and public participation should be ensured during the implementation of the environmental impact assessment, in collaboration with the competent organs of the administrative district and local authority concerned. Public consultations already initiated during this development phase of ESMF should equally continue during the preparation of future ESMP, so that the feedback from these consultations can be incorporated in these documents.

The consultation results will be incorporated in the NIES/ESMP reports and will be available to the public and in accordance with the requirements of consultation and dissemination of the World Bank.

Step 7: Integration of the environmental and social provisions in the tender files

In case of environmental work, the PFE with the support of the environmental safeguard expert from the UCP of PST2 will integrate the recommendations and other environmental and social management measures in the bidding files and implementation by the companies.

The responsibility of this step will be ensured by the SPM of the UCP/PST2.

Step 8: Environmental and Social Monitoring

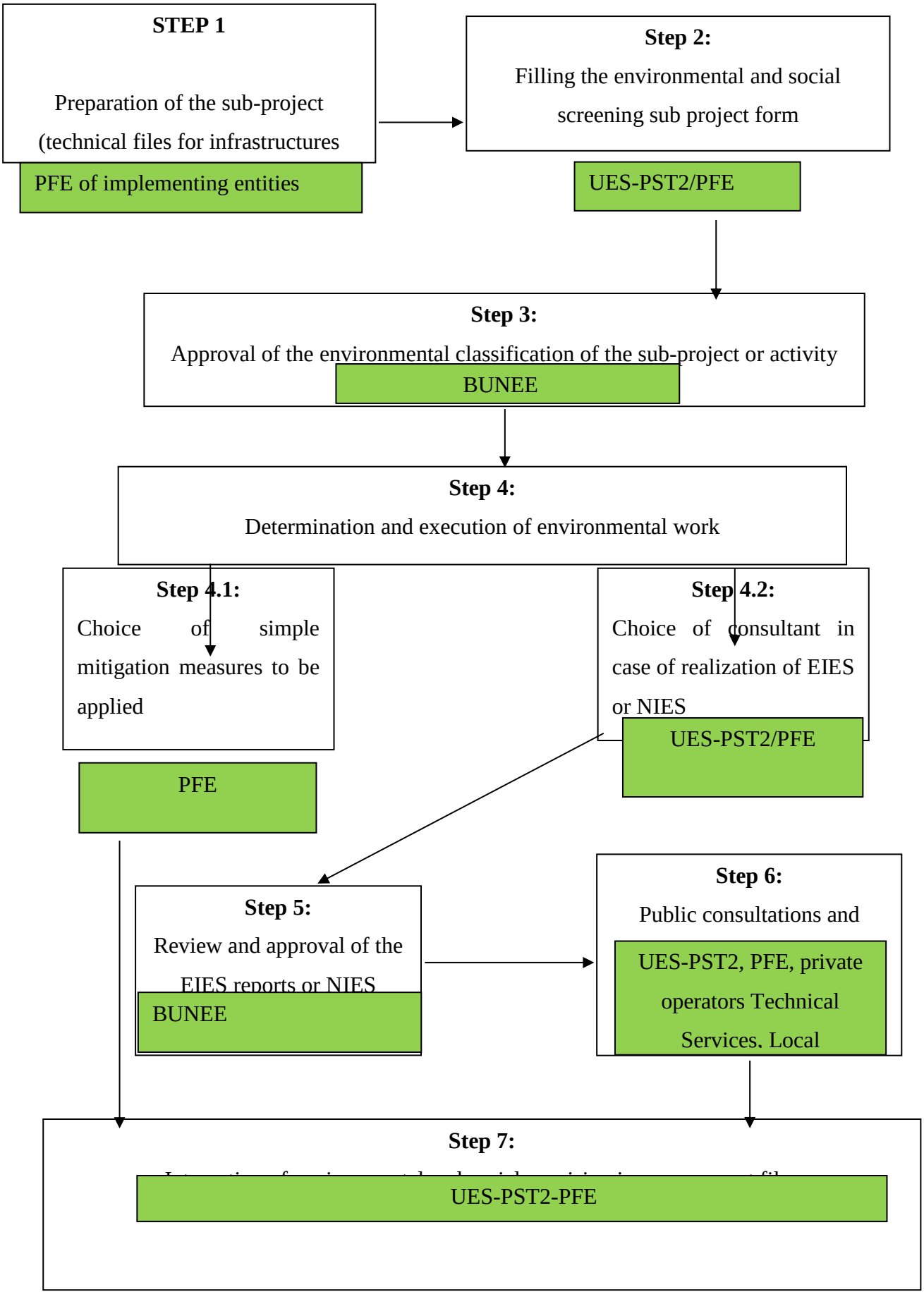
The eventual ESMP should be transmitted for information to the entities concerned by the sub projects according to the components to run, to coordinate monitoring by the PFEs.

- The environmental and social monitoring will be done by the Environmental and Social Unit of SP/PST2 through the monitoring entities.
- The internal monitoring of the execution of the components will be performed by the PFE.
- The external monitoring will be conducted by the MEEVCC through the BUNEE, the decentralized services and the Local Authorities, etc.
- The evaluation will be carried out by the consultants (national and / or international), at the end of the project. The final evaluation will be done once for all the executed sub-projects.

6.2.2. Diagram of screening of the sub project activities

The following diagram shows the synthesis of screening flow for the different sub projects.

Picture2: Diagram of the sub projects screening flow


STEP 1
Preparation of the sub-project (technical files for infrastructures
PFE of implementing entities
Step 2:
Filling the environmental and social screening sub project form
UES-PST2/PFE
Step 3:
Approval of the environmental classification of the sub-project or activity
BUNEE
Step 4:
Determination and execution of environmental work
Step 4.1:
Choice of simple mitigation measures to be applied
PFE
Step 4.2:
Choice of consultant in case of realization of EIES or NIES
UES-PST2/PFE
Step 5:
Review and approval of the EIES reports or NIES
BUNEE
Step 6:
Public consultations and
UES-PST2, PFE, private operators Technical Services, Local
Step 7:
UES-PST2-PFE

Step 8 Implementation/ Follow up	UES-PST2, BUNEE—communes, WB, technical services and consultants

6.3. Plan of communication/consultation of the public

The ambition of the plan of communication/communication with the public is to bring the actors to have at the sub-projects zones of intervention level, a common vision and shared objectives on the actions undertaken by the project in a three-dimensional logic: before the project (preparation and identification phase) ; during the project (implementation phase); after the project (management, exploitation and retrospective assessment phase).The local cultural contexts and the traditional communication channels will be taken into account.

Therefore, the tools and techniques of consultation that will be used,will comply with a logic of educative communication and social communication.

The SSES of the UGES of PST2 and the PFE OF implementing entities of the project must lead campaigns of information and sensitization for the local collectivities beneficiary of civil engineering work. These campaigns will focus on the nature of the works and the environmental and social issues during the implementation of the project activities.

In this process, the local associations and the NGO should be involved on the first place In this vision, the local elected officials and their technical teams must be better trained to manage these activities better.

The pedagogic material that is already available with the implementing entities and the UCP/PST2 should be reasonably be used in all the channels and existing information supports for the transmission of appropriate messages.

In an operational way, the UCP and the implementing entities of the project during the construction works must:

-inform and sensitize the actors and the stakeholders on the positive or negative impacts of the constructions on the social and the environmental;
-inform and sensitize the actors and the stakeholders on the safety risks related to the works;

-promote good practices of collaboration by broadcasting information in real time;
-perform sensitizing campaign to allow the residents to adopt good behaviors and respect the elementary principles in security matters on the building sites.

6.*4. Specific capacity building*

6.4.1Environmental and social capacity building review at the level of actors involved in the project implementation

The ministerial department, taking into account the environmental and social aspects in the implementation of the project must first concern the following actors:
-the ministry of Environment, Green Economy, and Climate Change (MEEVCC);
-the Ministry of Infrastrutures;
The Ministry of Territorial Administration, and Decentralization (MATD);
-the Ministry of Water and Sanitation (MEA);
-the Ministry of Transport, Urban Mobility and Road Safety;
-the Ministry of Women, National Solidarity and the Family (MFSNF);
-the Ministry of Agriculture and Hydraulic Arrangements (MAAH)
-the local collectivities;

If this is effectively taken into account, it will help check that the national rules and environmental procedures of the World Bank are respected.

However, it is important to notice that in these ministries, few top executives have capacities on the environmental and social safeguards, except those in charge of the environment and infrastructures,

.the project implementing entities

Many things can be noticed:
-The lack of the "environment" function among them and required aptitudes for a better involvement in the environmental screening and the execution of the environment and social safeguard measures;
-the weakness of capacities to grasp the environmental and social issues of the project and the potential impacts efficiently;
-the lack of appropriation of the environmental applicable rules to the project and guidelines and the World Bank safeguard tools;

The lack and/or insufficiency of good environmental and social practices.

.the beneficiary local collectivities

The same issues above explained can be noticed here too. In effect, one can notice a weak capacity in environmental and social safeguard.

.The NGOs/associations and local building enterprises

The deficit in environmental and social safeguard capacity is the same with the NGOs and associations and some local building enterprises that could be involved in the realization of infrastructure buildings.

6.4.2 Recommendations for capacity building

The capacity building of actors will be done through the following actions:
-training/recycling of the specific staff of DGM and DGRE to the handling, storage and containment of chemical wastes and dangerous products (mercury, batteries);
-training for the focal points of the five (5) beneficiary structures on social and environmental safeguards;
-sensitization on the environmental and social issues of the project for the residents and the local elected officers.

6.5 Grievance Redress Mechanism

The mechanisms of complaints and conflicts managements in the framework of the present ESMF take into account the national legal framework in claims management and the OP4.12.
They can be classified into two big categories that are the preventive mechanisms and the mechanisms of conflicts management derived from resettlement/compensation cases of the PAP.

6.5.1 Preventive mechanisms

At this level, it is necessary to identify the potential conflicts and to implement very early the mitigation measures in the project through a participative approach integrating all the social categories that are potentially interested. For this reason, it is very important to be watchful in informing and involving all the community in the activities that are sources of negative impacts

through a participative process of all the community and more particularly the persons affected by the project.

In the framework of the communication/consultation plan of the public, the PFE of implementing entities are the first actors for the execution of preventive mechanisms. They are supported by the mayors of the beneficiary communes. In the context of the present decentralization in Burkina, the mayors are very experienced in citizens proximity problems management.

6.5.2 Conflicts management mechanisms

When a conflict has already occurred, two approaches can be used:
-First, a friendly settlement is sought by associating the actors who know the protagonists well and the traditional and religious authorities of the concerned localities to find a consensus on the problem. This is the most common form of conflicts management in rural areas and villages.
- In case the friendly settlement fails, an official settlement process can be engaged. This process is often placed under the jurisdiction of departments and communes responsible of conciliations. These claims should be recorded by the PFEs who must ensure that each claim gets an answer in a reasonable delay at the village level.

If the conciliation was impossible on the departmental and communal levels, the complainant can refer to higher jurisdictions such as the higher law court according to the legal forms. This law court is made competent by the Burkinabe legislation in the management of land litiges then the protagonists are individuals. When the reference is against an administrative act, it is the administrative judge's responsibility to manage it. In these two cases, the inherent charges of the files are born by the sub-project bearer.

6.6 Main indicators of ESMF implementation

The main indicators in this implementation are the following:
-number of elaborated and validated NIES/PES;
-number of tender executed files that have integrated environmental and social prescriptions;
-number of completed building sites cleared of all wastes;
-number of complainants (noisy nuisance, dust, etc.);
-number of NIES validated and implemented;
-equipment of workers (insecurity, injuries);

-number of trees planted/cut;
-number of laborers sensitized on the security measures of hygiene and the IST/VIH/SIDA

6.7 Institutional dispositions for the implementation of the ESMF

Institutional dispositions will be needed for this implementation. The fiduciaries aspects and those related to the environmental and social safeguards of the project management will be entrusted to the coordination Unit of the PST2 which will put the mobilized resources together. If need be, this unit can be reinforced by consultants recruitment.

As for the technical aspects of the project coordination, they will be the responsibility of the entities (DGRE, CONASUR, DGPC, SAP, DGM) in the respect of their mandates.

Thus, the organizational framework of the implementation measures of the ESMF is composed of:
-the Project Coordination Unit (UCP) of the Transport Sectorial Program (PST2); it will have the global responsibility of the implementation of the present ESMF and instruments and other measures of environmental and social safeguard related to the project. It will ensure the preparation of the documents, the obtainment of certificates and licenses required by the national relevant rules before any action. It reports to the Ministry of Infrastructures about all the activities and ensures that the World Bank and the other actors receive all the monitoring environmental and social reports. For this reason, it possesses a Unit of Environmental and Social Management (UGES), composed of:
- A specialist in environmental and social safeguards.
-the entities of implementation of the project in close collaboration with the UGES of the PST2 will ensure the operational execution of the environmental and social measures on the building sites of each entity;
-the BUNEE: it will ensure the examination and approval of the environmental classification of the projects as well as the approval of NIES/PES of the sub-projects and takes part to the external monitoring implementation;
-the working enterprises: they execute the mitigation measures (contractualized) and the environmental and social clauses with periodic production of reports on the execution of these measures.
-the consultants in charge of building sites supervising: they perform the supervision of the works performed by the enterprises on behalf of the owner.

-the territorial collectivities (town halls): they take part to the execution of the project through the preselection of sub-projects sites, to the identification of PAP and the recording of complaints and the close follow up of actions on the field.
-the Departmental Service of the Environment, Green Economy and Climate Change (SDEEVCC): it gives a support to the implementation of the environmental and social measures on the field, namely the preselection of sub-projects sites and a support in the follow up -report.
-the associations, the NGOS and local populations: they help in the implementation of the communication plan and conflicts prevention.
-The Villages Development Councils (CVD): they help in sub-projects implementation particularly in the identification aspects of PAP, the prevention/conflicts settlements and losses compensation.
-the traditional and religious authorities: they help in the implementation of mitigation measures in the public consultations and the process of conflicts and litiges management related to the PAP.

6.8 Roles and responsibilities for the implementation of environmental measures management

Many actors will be entrusted with roles and responsibilities for this implementation. The following actors are concerned:

-the Permanent Secretary of PST2: he ensure the good execution of the project (coordination, support and follow up on the fiduciary level and environmental safeguards) in compliance with the implementing procedures of the World Bank; it ensures the approval of the categorization by the BUNEE and the World Bank and ensures the dissemination of the report of internal monitoring and helps in the validation of the ESMF and the obtainment of the environmental certificate, the dissemination of the document.
-the Managing Director of the BUNEE: with the World Bank, he is the principal actor in the approval of the sub-projects categorization, the ESMF validation including the NIES/PES, the obtainment of the certificate. It supports the preparation of the TDRs and required surveys.
-the Specialist of environmental and social safeguard of the UGES/PST2: he plays the role of supervision, support and follow up (reporting) of the environmental and social measures of the project; he ensure the good execution of the environmental sub-projects selection , the preparation and approval of the TDRs for all the required instruments, of the safeguard survey with public consultation, the implementation of the non contractualized measures with the building enterprise and the environmental and social monitoring of the sub-projects.
-the Technical Responsible (RT) of eligible activities at the level of the implementing entities : they ensure the integration of all the measures of the work phase of contractualizable with the enterprise

in the tender file, and the elaboration and approval of the ESMP in case of NIES/PES. They bring a support to the SSES in the safeguard implementation.

-the Financial Responsible of the UCP/PST2: he checks the financial programming of all the actions chosen for the environmental and social safeguard framework; (capacity building, impacts mitigation, loss compensations, etc.). He helps the SSES in the safeguard implementation safeguard measures.

-the Specialist in follow up of the UCP /PST2: he helps the SSES in the safeguard implementation measures

-the Enterprise: looks after the execution of all the mitigation measures contractualized with the project for impact mitigation.

-the Consultant in charge of supervising the works: he ensures internal and external supervision of environmental and social implementing measures

-the local authority (Town hall, Sub- Prefect, etc): it helps in the normal development of the sub-projects activities in the limits of its territorial limits

The following table shows the synthesis of roles and responsibilities of actors for the execution of the sub-projects environmental and social management procedure

No.	**Steps / Activities**	**Responsible officer**	**Support / Collaboration**	**Provider / Operator**
1.	Identification of the location / site, and the main technical characteristics of the sub-project	SSES of UCP of the PST2	• SDEEVCC • Beneficiaries;	Implementation Entities (EME)
2.	Environmental Selection(Screening-filling of forms), and determination of the type of specific safeguard instrument (NIES, PES)	SSES of UCP of the PST2	• Beneficiaries ; • Local authority	Implementation Entities (EME)
3.	Approval of the categorization by the BUNEE and the Bank	SP / PST 2	SSES / DCS PST 2	• BUNEE • World Bank
4.	Preparation of the specific safeguard tool E & S of class B or C sub-project			
	Preparation and approval of TOR	SSES the PCU PST2	BUNEE	World Bank
	Implementation of the survey including public consultation		Procurement Specialist (SPM); BUNEE; Local Authority	Consultant
	Validation of the document and obtainment of the environmental certificate		SPM, Local authority	• BUNEE, • World Bank
	Publication of the document		SP / PST 2	• Media; • World Bank

5.	(i) Integration of all the measures of the phase of contractible work with the enterprise in sub-project tender dossier (DAO); (ii) approval of the ESMP of the enterprise	SPM PCU / PST 2	• SSES of U C P / PST2	RT of implementation entities
6.	Execution / Implementation of non- contracted measures with construction company	SSES of the UCP PPS2	• SPM / UCP • RT of entities • Financial Manager (RF) UCP • Local authority	• Consultant • NGO • Others
7.	Internal monitoring of the implementation of E & S measures Dissemination of internal monitoring report External monitoring of the implementation of E & S measures	SSES of PST2 SP-UCP / PST 2 BUNEE	• Specialist in Monitoring and Evaluation PST 2 (S-SE) • PFE /EME • RT / TH • RF UCP / PST 2 • Local authority • SSES UCP / PST2 • SSES of PACT • SSES UCP / PST 2 • EFP / TH	Supervision Office
8.	Environmental and social monitoring	SSES / U CP / PST2	• SSES PNGT2 • S-SE / TH • S-SE UCP / PST2	• SDEEVCC • EFP / TH
9.	Strengthening capacity of actors in implementation of E & S measures	SSES of UCP / PST 2	• SPM	• consultants • Competent Public structures
10.	Implementation Evaluation of E & S measures	SSES PCU / PST 2	• DREPs • SPM / PST 2 • S-SE / TH • RT / TH • BUNEE • Local authority	• consultants

6.9. Implementation Budget for the ESMF

The estimated costs taking into account environmental and social mitigation measures amount to **two hundred and fifty four thousand millions CFA (254, 000 000 CFA**) and are distributed in the table 11.These costs should be taken into account in the project.

N°	Activities	Quantity	Unit Cost	Total Cost

			(FCFA)	(FCFA)
1	Realization de dix (10) NIES&PES	10	10, 000 000	100, 000 000
2	Sensitizing the residents and the locally elected on the project issues	6 sessions	2, 500 000	15, 000 000
3	Reinforcing PFE entities implenting capacity building	2 sessions	10, 000 000	20, 000 000
4	Formation/recyclage du personnel spécifique de la DGM et de la DGRE à la manipulation, l'entreposage et au confinement des déchets chimiques et des matières dangereuses (mercure, batteries)	2 sessions	10, 000 000	20, 000 000
5	Diffusion de documents de sauvegarde environnementale et sociale	-	Forfait	5, 000 000
6	Suivi environnemental et social durant les travaux	-	-	30, 000 000
7	Protocole avec BUNEE pour le suivi de la mise en œuvre du PESMF sur 4 ans	4	6, 000 000	24, 000 000
8	Evaluations (mi-parcours et finale) de la mise en œuvre des ESMP (Annuel)	4	10 000 000	40 000 000
-	**Total**			**254 000 000**

6.10. Public Consultations

In order to develop the Environmental and Social Management Framework (ESMF) of the Africa Hydrometeorological Program: "Strengthening Climate Resilience in Sub-Saharan Africa, Burkina Faso Country Project" a series of public consultations was conducted in a participatory manner. These consultations took place in two stages:

- During the collection and analysis of data for the preparation of the ESMF report ;
- During the period of publication of the ESMF report in the thirteen (13) regions of the country.

6.10.1. Public consultations during the data collection and analysis phase

The public consultations were conducted from mid-November to December 22, 2016 throughout the development of the ESMF through interviews with the project implementation entities (DGRE, DGM, SP-CONASUR, DGPC and SAP).

The meetings brought together the focal points of each structure and a core of experts involved in the project. The objectives and activities of the project, in terms of economic, socio-cultural and environmental issues, as well as anticipated impacts and mitigation measures, were presented and discussed with a view to collect feedback, concerns, suggestions and recommendations.

An important step in these public consultations was the December 23 rd 2016 session of the Technical Committee on Environmental Assessment (COTEVE) validation of the interim report of the ESMF. This session, held in the meeting room of the Liptako Gourma Authority (ALG) in Ouagadougou, examined the report and made recommendations for its finalization.

It is evident from the preoccupations expressed that the project is rather very well accepted by the various partners. The overall assessment is that the project has low environmental and social negative impacts and high environmental and social positive impacts. The validation session organized by the Technical Committee on Environmental Assessments (COTEVE), in addition to its statutory evaluation, also constituted a wide debate on the opportunities and constraints of this Project.

Workshop to validate the interim report by COTEVE in Ouagadougou

The main recommendations from all these interviews / consultations are:

<u>Project planning / preparation (actions to be prioritized):</u>

- construction of infrastructures and equipment;
- capacity building;
- awareness of the risks associated with the project and arrangements to be made;
- prevention and early warning system.

Implementation of the project :

- Consultation, collaboration and synergy with other local projects;
- Protection of sensitive ecological zones and protected species;
- Capacity building for communities and populations;
- Involvement of all stakeholders;
- Monitoring and follow-up measures;
- Maintenance and maintenance of infrastructure;
- Development of a strategic communication plan for warning modalities and mandatory responses;
- Education, sensitization and training of the populations to these new tools.

6.10.2. Public consultations during the period of publication of the ESMF report in the thirteen (13) regions of the country

At the regional level, several stakeholders in the project areas were consulted during May 2017 in the following regions: Central, Central Plateau, Central West, North, North-Central and Eastern.

The first group of stakeholders was consulted from 03 to 09 May 2017. It consists of one hundred and five (105) agricultural producers in the Eastern, Northern and Central North regions (see attendance list). The themes discussed during the meetings focused on knowledge of project issues, control of potential impacts and participation in the implementation of mitigation measures.

Photo : Public consultation sessions with producers (Gnagna et Passoré)

From these meetings, it is clear that producers in the regions concerned have a good understanding of the project's stakes and of the negative and positive impacts that will occur during the implementation phase. They called for the implementation of capacity building actions to better integrate climate risks into their daily actions. They said they were committed to the project during the implementation phase because they were the first beneficiaries on the ground.

The second group of stakeholders at the regional level was consulted from 19 to 24 May 2017 in the Central (Ouagadougou), Central West (Koudougou) and Central Plateau (Ziniaré) regions. This consultation follows the public release of the ESMF report by the Ministry of Transport, Urban Mobility and Road Safety and the World Bank for consultation with a view to obtaining opinions and concerns.

The exchanges with the Secretaries-General of the governorates of Ouagadougou de Koudougou and Ziniaré aimed to ensure that:

- The reports had been well received and made available to the public from an accessible place;
- The reports are consulted by the persons concerned;
- A register has been made available for the registration of different opinions and concerns.

The interviews focused on:

- The knowledge of the project by the municipal authorities;
- The positive and negative impacts of the project;
- The capacity of town councils to get involved in the implementation of the project;
- The issues and concerns.

From the interviews with the stakeholders cited, it emerges:

- **At the level of the governorates:**

- The ESMF reports are effectively made available to the public;
- A register is made available for the recording of any opinions, concerns and suggestions;
- No record was made in the register at the time of the mission.

- **At the level of Town Halls:**

- The municipal authorities are informed about the program and its components, but wish to know more about the benefits for their municipalities;
- There is an acceptability of the program because of its positive social and economic impacts;
- The need to better inform the actors of the commune on the African hydrometeorological program for more involvement and appropriation.

6.11. Chronogram of the PESMF environmental and social implementation measures

This chronogram is scheduled for a four year program (4).The institutional measures and trainings will be executed during year 1 whereas those for impacts mitigation measures and environmental follow up will last all the length of the project.

Tableau 3 : Chronogram of environmental and social measures implementation

N°	Measures	proposed Actions		Period of execution
1	**Mitigation measures**	• (See the list of generic mitigation measures annex 5)		During the implementation of the project
2	**Institutional Measures**	• Getting into contact with the locally elected officials, the persons responsible of beneficiary localities getting the investments (Mayors, CVD, environment Employees)		1st year, before the beginning of the implementation
3	**Technical measures**	• Elaboration of NIES/PES for some sub-projects		1st year, 2nd
y4		• Preparation of environmental and social clauses to be inserted in the works		From the 1st year, before the dissemination of the DAO
5	**Training**	• Training of the PFE on the environmental and social safeguards, the handling of dangerous products (batteries and mercury)		From the1st year
6	**Sensitization-Information**	• Sensitization and mobilization of the local elected officers and residents of the work sites Associations and NGOs		From the 1st year and during the project implementation
7	**Follow up measures**	Environmental and monitoring follow up of the project	Close follow-up	Durant la mise en œuvre du projet
			Supervision	Every month (PFE), Once semi annually SDEEVCC and BUNEE BM every six month
		Assessment ESMP/PES	Final	Mid 4th year (2 years)

***Source** : Consultant*

7. CONCLUSION

Activities under the African Hydrometeorological Program "Strengthening Climate Resilience in Sub-Saharan Africa" phase 1, project Burkina Faso, will generate positive impacts during the work phase, including:

- The creation of jobs / income and the temporary reduction of unemployment;
- The growth of business opportunities for construction, technical control and import-export companies.

In the operational phase, the anticipation and proper management of disaster risks through the implementation of these subprojects, will promote the attainment of food security and the protection of integrity and human health.

This will increase the individual performance of the project staff and improve the response and organizational capacities of the five (5) participating entities.

However, some negative impacts and risks will arise from the implementation of the B sub-projects, including:

- Partial loss of vegetation on construction sites;
- Cases of accidents and nuisances on construction sites;
- The local pollution of surface waters by mercury in the event of non-compliance with the standards for the siting of observation stations;
- Increased dust emissions during demolition work during the rehabilitation of buildings;
- Degradation of the living environment due to the uncontrolled discharge of construction waste (residues, cuttings, etc.);
- The spread of STIs / HIV / AIDS with the presence of staff on construction sites.

These negative but moderate impacts can be mitigated by taking specific measures to meet the environmental requirements of the project. The Environmental and Social Management Plan elaborated for this purpose was estimated at 254 million CFA francs or approximately 508 000 $ US.

The consultations carried out resulted in recommendations from the actors consulted and incorporated into the ESMF report. These stakeholders have all shown their commitment to the project and their readiness to be involved in the implementation and monitoring of mitigation measures.

Appendices

Appendix 1: Environmental and Social Selection Form

Project Location: .....

Project leaders: .....

Part A: Brief description of the book

.....

Part B: Identification of social and environmental impacts

environmental and social concerns	Yes	no	Observation
Resourcesof the sector			
Will the project mobilize significant volumes of construction materials in local natural resources (sand, gravel, laterite, water, construction timber, etc.)?			
Will it require a major clearing?			
Bio diversity			
May the project cause effects on rare species, vulnerable and / or economically important, ecologically, culturally			
Are there any areas of environmental sensitivity that might be negatively affected by the project? forest, wetlands (lakes, rivers, seasonal flood plains)			
protected areas			
Does the project area (or its components) include protected areas (national parks, national reserves, protected forests, world heritage site, etc?)			
If the project is outside, but close to protected areas, could it adversely affect the ecology within the protected area? (Eg.interference with bird flights with mammal in migrations)			
Geology and Soils			
Are there unstable areas from a geological point of view or soil			

(erosion, landslide, collapse)?			
Are there areas at risk of salinisation?			
Landscape*I* esthetics			
Does the project have an adverse effect on the landscape values?			
historical, archaeological or cultural sites			
Could the project change one or more historic sites, archeological, cultural, or require excavation?			
Loss of assets and other			
Will the project trigger the temporary or permanent loss of habitat, crops, agricultural lands, pastures, fruit trees and household infrastructure?			
Pollution			
Will the project cause a high level of noise?			
Is there a risk for the project to generate solid and liquid waste?			
If "yes" does it have a plan for their collection and disposal			
Are there facilities and infrastructure for their management?			
Could the project risk affecting the quality of surface water, groundwater, drinking water sources?			
Could the project affect the atmosphere ?(dust, various gases)			
Way of life			
Can the project cause alterations in lifestyle of the local people?			
Will the project result in a widening of social inequalities?			
Will the project result in inconsistent use or social conflicts between different users?			
Health security			

Will the project lead to risks of accidents for workers and populations?			
The project may cause health risks for workers and the population?			
Will the project result in a population increase of disease vectors?			
local revenues			
Does the project allow the creation of jobs?			
Does the project promote the increase of agricultural production and others?			
Gender concerns			
Does the project promote integration of women and other vulnerable groups?			
Does the project support women's concerns and promote their involvement in decision making?			

Public consultation

Have public consultation and participation been sought?

Yes No___

If "Yes", briefly describe the measures taken for this purpose.

Part C: Mitigation measures

In view of the Annex, for all the answers "Yes" briefly describe the steps taken for this purpose.

Part D: Project classification and environmental work

Project type: A (Non-fundable) ☐ B ☐ C ☐

- Category C : environmental work will not be necessary
- Category B : the ' application of simple mitigation measures will be enough (ESMP); or a survey of Environmental Impact and Social Assessment (EIES) should be separetedly performed;
- Category A : Non- fundable ;

Necessaryenvironmentalwork:

No environmentalwork ☐

Simple mitigation measures (ESMP) ☐

Environmental Impact Assessment ☐

Note: This form is to be filled in taking into account environmental and social checklist results in Appendix 2 below.

Appendix 2: Environmental and social clauses

These clauses are intended to help the people in charge of writing micro projects so that they can integrate in these documents the requirements for optimizing the environmental and socio-economic background.

Environmental Guidelines for Contracting Companies

Generally speaking, the companies in charge of construction and rehabilitation of structures must also comply with the following environmental and social directives:

- Have necessary permissions in conformity with the laws and regulations in force
- Establish construction regulations (what is allowed and not on the building site)
- Perform an information and sensitization campaign for local residents before the works
- Ensure compliance measures of hygiene and safety on the sites
- Proceed to signaling the work
- Use the local workforce in priority
- Ensure compliance rules of safety during the work
- Protect the properties surrounding the site
- Avoid maximum production of dust and noise
- Ensure the collection and ecological elimination of waste from the work
- Conduct sensitization campaigns on STI / HIV / AIDS
- Involve closely local technical services in monitoring the implementation
- Ensure compliance of vegetal and protected species during the work
- Provide protection equipmentsto workers

Compliance with national laws and regulations:

The Contractor and his sub contractors must: know, respect and apply the laws and regulations in the country and on the environment, on the disposal of solid and liquid wastes, the rejection and noise standards, working hours, etc; take all appropriate measures to minimize environmental damage; assume responsibility for any claim related to non-compliance of the environment.

Permits and approvals before the work

Any construction work must be subject to prior information procedure and administrative permissions. Before starting work, the contractor must obtain all permits necessary for the implementation of work under the contract of the road project authorizations issued by local authorities, forest services (in case of deforestation, pruning, etc.), network managers, etc. Before starting work, the Contractor must consult with neighbors with whom he can make arrangements to facilitate the progress of projects.

Meetings before starting work

Before starting work, the Contractor and the Project Manager will organize meetings with the authorities, representatives of the populations in the project area and the relevant technical services, to inform them of the consistency of the work to be performed and duration, affected routes and

locations likely to be affected. This meeting will also enable the Project Manager to obtain people feedback, sensitize them on the environmental and social issues and their relationship with the workers.

Preparation and release of the site- Respect rights of way and tracks

The Contractor will inform the people concerned before any destruction of fields of activity, orchards, required as part of the project. The release of the grip must be done on a schedule defined in agreement with the affected population and the Project Manager. Before installing and starting work, the contractor must ensure that the reparation / compensation is actually paid to the entitled persons by the Project Manager. The Contractor must comply with the rights of way and plots defined by the project and in no

Way he should move away otherwise. All damages related to non-compliance paths and rights of way are defined its responsibility and repairs at his expense.

Locating dealers' network

Before starting work, the contractor must instruct a registration procedure of dealer networks (drinking water, electricity, telephone, sewer, etc.) plan to be formalized by a Minutes signed by all parties (Entrepreneur, Project Manager, dealers).

Release of public and private domains

The Contractor must know that the scope of public interest related to the transaction is the perimeter likely to be affected by the work. Work can begin in the areas covered by the private rights of way only after they are released after an acquisition procedure.

Environmental and Social Management Program:

The Contractor will develop and submit for the approval of the Project Manager, a comprehensive program of environmental and social management of the site.

Display of internal regulations and staff sensitization

The Contractor must post an internal rule visibly in the various base-living facilities prescribing specifically: respect for local customs and traditions; protection against STI / HIV / AIDS; the rules of hygiene and safety measures. The Contractor must sensitize employees including respect for customs and traditions of the people of the region where the work is performed and the risks of STIs and HIV / AIDS.

Apendix 3: Environmental and Social Safeguards Policies of the World Bank

In accordance with the operating policies of the World Bank, the Project is subject to the requirements of environmental and social safeguard policies of the Bank. It is classified as category "B" in accordance with OP / BP 4.01 on Environmental Assessment.

The following safeguard policies are in turn studied to assess how they are triggered by the Project:

- Safeguard Policy OP / BP 4.01 on **Environmental Assessment;**
- Safeguard Policy OP / BP 4.04 on **natural habitats;**
- Safeguard Policy OP 4.09 on **pesticide management;**
- Safeguard Policy OP / BP 4.11 **on Physical Cultural Resources;**
- Safeguard Policy OP / BP 4.12 on **Involuntary resettlement;**
- Safeguard Policy OP / BP 4.10 on **indigenous people;**
- Safeguard Policy OP / BP 4.36 on **Forestry;**
- Safeguard Policy OP / BP 4.37 on **dams Safety;**
- Safeguard Policy OP / BP 7.50 on **projects relating to international waterways;**
- Safeguard Policy OP / BP 7.60 on **the disputed area projects.**

The following table defines the applicability of different backup policies within the framework of the implementation of the Project.

Table 4: Applicability of the safeguard policies of the World Bank

Policy	***applicability***
OP / BP 4.01 Environmental Assessment	**Yes.** The project involves potential negative environmental and social means and reversible impacts resulting from the activities of modernization of observation infrastructure, forecasting, warning and response
OP / BP 4.04 Natural Habitats	**No.** The project activities are not likely to affect the critical natural habitats.
OP / BP 4.09 Pesticides Management	**No.** The purchase and use of pesticides are not planned in the project
OP / BP 4.11 Physical Cultural Resources	**No.** Project activities do not involve excavation, demolition and / or earth that could affect recognized sites of cultural interest
OP / BP 4.12 Involuntary Movements	**No.** Work of the project framework will not cause

of population	any resettlement of populations.The sub-project lands will be negotiated with the territorial collectivities.
OP 4.10 Indigenous Peoples	**No.** No object (no indigenous populations live there in Burkina according to this policy).
OP 4.36 Forests	**No.** No logging is planned in the Project framework
OP / BP 4.37 Safety of Dams	**No.** The draft has no business which could affect the dams safety.
OP 7.60 Projects in Disputed Areas	**No.** No part of the territory concerned is in dispute
OP / BP 7.50 Projects on International Waterways	**No.** The project will not affect international waterways in the area of intervention.

Source: Consultant, 2016

The project complies with all the policies of the World Bank analyzed above. However, the OP / BP 4.01 Environmental Assessment policy is triggered because of the expected realization of the modernization of observation infrastructure, forecasting, warning and response in the relevant structures.

Safeguard Policy OP / BP 4.01 Environmental Assessment

The environmental and social assessment of this object ESMF, is the preliminary stage of the backup policy as part of the project. This step corresponds to a strategic environmental and social assessments to assess potential impacts of the project outputs to identify mitigation measures that will be implemented through the proposed Environmental and Social Management Plan. A second stage of implementation of the backup policy will affect the achievement of specific environmental and social assessments (NIES, ESMP, audit, etc.) based on an evaluation of the real impacts of the listed achievements in the implementation of activities the Project, taking into account the actual specifications and selected implantation sites, in their real environmental and social context.

The current report of ESMF also takes account Burkina Faso requirements of existing regulations and legislation as well as the environmental and social context of the country.

APPENDIX 4: Monography on the intervention ideas of the project

1.GEOGAPHICAL AND BIOPHYSICAL ENVIRONMENT OF BURKINA FASO

Burkina Faso is a Sahelian country located in West Africa .

Geographical and administrative situation: Burkina Faso is a landlocked Sahelian country located in West Africa. It covers an area of 274,200 km ^{2} and is bordered by six countries: Mali to the north, Niger to the east, Benin to the southeast, Togo and Ghana to the south and Ivory Coast in the South -Where is. The country is divided into thirteen administrative regions. The regions are divided into: Provinces (45) Departments (330) 351 municipalities.

Climate: The climate of Burkina Faso is Sahelian characterized by a rainy season and a dry season. The dry season lasts from November to May (with a cool and dry period from November to February and hot weather from March to May) and the rainy season from June to October. The average temperature is 15 ° C at night and 30 ° C during the day, which can increase to over 38 ° C during the dry season. Burkina Faso is characterized by three climate zones:

the Sahelian zone (north), characterized by an average annual rainfall of less than 600 mm, a short rainy season (more than 4 months); Sudano-Sahelian zone (the Centre), characterized by an average annual rainfall between 600 and 900 mm, a rainy season from 5 months;

the Sudanese zone (south), characterized by an average annual rainfall exceeds 900 mm, a rainy season almost 6 months.

For some decades, the climatic conditions go through important spatio- temporal characterized year after year by the backing of isohyetes from the north to the south and an extreme increase of the temperature.(SP/CONEDD, 2010).

Water resources: The resources in Burkina Faso surface water are estimated to 10 billion cubic meters of water per year while those of groundwater are estimated at 6 billion cubic meters per year. (Ouedraogo NA., 1996) with some basins such as:

- The Volta Basin: It covers an area of 178,000 km2. It is watered by the Mouhoun Rivers, the Nakambe, and Nazinon; it covers central Somalia.
- The basin of the Comoé: With an area 1700 km2, it is watered by the river Comoé and its tributaries, and the Leraba Yanon and covers the south-west.
-

Soils: The country is covered by 9 different soils(BUNASOL 2015) which are impoverished from north to south. The soils are affected by runoff and wind erosion. According to research conducted by ORSTOM, nine soil types can be identified in Burkina Faso: The mineral raw soil, barely soils developed vertisols the isohumic soils, brown soils, lateritic soils, soils high in iron and manganese, hydromorphic soils and soils rich in sodium or salt.

Vegetation: There are 1,915 vegetal species including imported ones.In the north-Sudanese zone, savannas are dominated by species reserved for utilities, food above reasons. They are: *Adansoniadigitata, Butyrospermumparadoxum, Parkiabiglobosa, Tamarindusindica.*Sahelian elements are still present, but the most characteristic grasses are *Andropogon* annual *pseudapricus, Loudetiatogoensis, Pennisetumpedicellatum,* and perennials *Andropogongayanus* and *Cymbopogonschoenanthus.*

South Sudan region is the area of woodlands *IsoberliniaDoka.* This very characteristic species sign the boundary between the two phyto North Sudanese and South Sudanese sectors.

Besides the regular passage of fires each year, the South Sudanese savannas are infested with tsetse flies, the African animal trypanosomiasis vectors (TAA).

Wildlife: Wildlife, probably the most diverse in West Africa is confined in national protected areas that cover 3.9 square millions. They are composed of 77 classified zones including 65 classified forests (DIFOR, 2007). Most of these forest areas are in the eastern part of the country where 2/3 of the wildlife is concentrated.

.2. Human and socioeconomic environment

.Socio economic environment

Burkina Faso is a landlocked country in sub-Saharan Africa, with a low income ($ 615 gross national income per capita in 2015) and with limited natural resources. The population, which is growing at an average annual rate of 3%, was estimated at about 18.11 million in 2015 (**World Bank data**). The economy is heavily dominated by agriculture, which employs nearly 80% of the workforce. Cotton is the largest cultivated crop from the Burkinabe economy, although gold exports have grown in importance in recent years.

The combination of several factors, including exogenous shocks linked to the continuing decline in commodity prices, the socio-political crisis in the country in 2014 and 2015 and the impact of the Ebola outbreak in the sub-region, led to a slowdown in economic growth. The GDP growth rate in

real terms amounted to 4% in 2014 and 2015, significantly below the average of 6% recorded during the previous decade.

During this period, inflation remained low at less than 1%.

Burkina's external position has improved in 2015 with a current account which is 7, 7% of GDP, against 11.1% in 2013. This improvement is due to lower imports (following the decrease of oil prices) combined with the increase in exports. The external deficit could be filled through external support and financing of commercial banks

.Human Environment

We note the positive developments in the field of human development: (i) infant mortality has fallen from 65 per 1 000 live births in 2010 to 43 per 1000 live births in 2015; (ii) maternal mortality fell from 484 deaths per 100 000 live births in 1995 to 341 deaths in 2010. Life expectancy at birth is 58.6 years (2014).

. Schooling gross rate at primary school increased from 57% in 2005 to 86.9% in 2014.Access to secondary school improved from 20% to 39.7% in 2013-2014(first cycle) and 5.6% to 14% (second cycle).

The poverty rate declined slightly between 2009 and 2014, from 46% to 40.1%. Burkina Faso has won two seats in the 2015 UNDP report on human development, ranking 183rd out of 188 countries.

Environmental and major social challenges

According to the third (3rd) report on the state of the environment in Burkina Faso (SP/CONEDD, 2010), identifies the following priority environmental problems:

- land degradation: 34% of the territory, or 9,234,500 hectares of production land aredegradated by anthropogenic and climatic causes, with an increase of the country's land degradation per year estimated to 105 000 to 250 000 ha. Climate change will contribute to increase the risk, to accelerated land degradation (erosion, of desertification) and accentuate the problem of household livelihood because of lower yields.
- Degradation of water resources: from a moderate hydricstress in a normal year, moderate to high in a very dry year at the beginning of the year 2000, Burkina Faso will live a high permanent hydric stress in 2010 - 2015.
- The fragility of the energetic system: it is based on the biomass (85%) and oil products (14%) in a context of strong growth in demand for energy needs. Given the productivity benefits firewood from forests, the deficit between availability and needs tends to worsen, the needs being covered from now only at 61%, against 77% in 1992.
- The exacerbation of urban environmental problems: a relative increase of about 10% of the urban population from 2007 is expected in 2020 with about a third of people (31.3%) living in the city.

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The environmental challenges identified are: (i) sustainable land management in a changing climate; (ii) access to safe drinking water; (iii) sustainable mining; (iv) improving the living environment; (v) the prevention and management of natural and technological disasters; (vi) the promotion of environmental assessment in all development programs and projects; (vii) the implementation of economic and financial instruments for the environment; (ix) strengthening environmental governance at the community level; (x) the promotion of decent green jobs and gender equity in the management of natural resources.

As for the social challenges, Burkina remains vulnerable to shocks due to rainfall variations and world of its export products. Their economic and social developments depend in part on the political stability of the country and the sub-region, its openness to international trade and diversification of exports. The second generation reforms on liberalization of the economy and promote employment by small and medium enterprises (PMEs) are expected to support sustainable growth.

Country profile on disaster risk and vulnerability

Burkina Faso as a Sahelian country faces several climatic hazards. The most important are the droughts and floods due to their frequency and their consequences on people's lives. Indeed, from 1991 to 2009, the country experienced eleven (11) [2] major floods have affected 383,203 people and killed 95 people, three (3) major droughts that affected 96,290 people, a locust invasion and many episodes of illness epidemics such as water-borne diseases, diarrhea, etc. (Source: conceptual project Note, World Bank, 2011).

.Floods

A frequent flood is the main disaster that the authorities face every year. Over the last twenty years, including 1988, 1992, 1994 and 1999, some parts of the country have been severely affected. As an illustration, the loss of agricultural production due to flooding of crop fields was estimated at 1.803 billion FCFA in 1992 and 63,937,680 CFA in 1994. Besides the cost of repairing damaged dams in 1994, was estimated at 192 776 576 FCFA (PAGIRE, 2000). According to the report on the environment(REEB 3, 2010), the floods of 2009 affected 63 426 persons in the countryside which is the equivalent of 6 899 households, 37 deceased people,63 injured and more than 9 188 houses .

The catastrophic floods in September 2009 in Ouagadougou have affected more than 150,000 people [2] . According to the results of the evaluation by sector, floods affected 11 regions on the 13 in the country: 20 public health structures and 2 private schools were touched 351, 42,000 buildings destroyed, 22,200 ha area of cereal and market gardening operation and 2 004 ha of developed areas

around dams were flooded. Flooding also causes partial or total destruction of production facilities for sub-sectors of livestock and fisheries. Hotels, cycle sales companies, spare parts, book shops, second hand cars, small businesses were seriously affected.

Floods cause destruction of hydro-agricultural infrastructure (fifteen dams and irrigation channels), transport infrastructure (degradation and cut roads, bridges, buildings), rainwater drainage infrastructure (gully and falling slope on the main channels of the city of Ouaga (Wemtenga, Moghonaba, Zogona and Central), overflow of the main outlet of the city located in the Bangreweogo Park (70% of the water goes there).

On the energetical level, the flood affected OUAGA 1 thermal power plant (14 MW) causing disruption in the electricity supply for a week, adding to the existing load shedding.

Droughts

Several periods of food crises in periods of drought punctuated the history of the last thirty years of the country (especially the northern and center): major crises which culminated in 1972/73 and 1983/84 and others of lesser extent (1990/91 1995/96 and 1997/98) (PNOCSUR, June 1999).

Locust infestations

Burkina Faso also faces attacks from pests (locusts, aphids, beetles, caterpillars, seed-eating birds, locusts, disease) in 1986, 1988, 1989, 1990.1991, 1992.1994, 2004. The most affected provinces were: Yatenga, Soum, Seno, Bam, Yagha, Sourou, Passoré, Sanmatenga, Houet, Gourma andKouritenga.

These attacks have caused huge losses of crops, the destruction of trees, low yields. The locusts from breeding areas in neighboring countries such as Mauritania, Niger, Chad and Mali have been particularly devastating. The invasion of the latest and most serious of 2004, has affected the country and more severely the North.

Epidemics of meningitis occur repeatedly in Burkina. The largest outbreak occurred in 1996-97 that killed more than 42 000 cases and 4000 deaths.

Cholera epidemics are also a cyclical threat to the rainy season.

Food security-related to risks and disasters

In Burkina Faso, agriculture is the main source of livelihood especially for the rural population. And food security for populations largely depends on the evolution of agricultural activity which itself remains highly dependent on the variability of agro-climatic conditions. The Burkinabe agriculture is dominated by small, mixed family farms (agriculture and livestock) characterized by size of area of between 3 and 6 ha, with wide dominance (working manual means, using few external inputs) with yields generally very low. However, there in family farms, a gradual introduction of cash crops (cotton, vegetables, fruit) and a combination of income-generating activities. Food crop production is mainly for meeting the food needs. Cereals are the basic food of people. However, malnutrition affecting mainly rural and peri-urban populations remains a real phenomenon in Burkina Faso. Among the risk factors for loss of production, we must remember the case of attack crops and agro-climatic risks due mainly to droughts pockets, flooding and the damage caused by wildlife.

Also, changes in weather conditions favor the occurrence of pests and diseases that attack crops and livestock. The results of the 2010 RGA showed that nationally, approximately 25.8% of households were affected by floods, 26, 8% of drought, pests 7.7%, 20.2% and livestock diseases 13.4% of serious diseases. These factors of considerable production losses may adversely play on the household food situation.

Appendix 5: List of generic mitigation measures

activity	Negative impacts	Measures mitigation
Construction (stations observation and hydro-meteorological, emergency operations centers) and equipment installation	Contamination of soil and water with of construction aste	Ensure collection and disposal of waste to an authorized site
	Social conflicts with the occupation of farmland	Prohibit installation on agricultural land
	Loss of crops, agricultural land and habitat	Campaigning for information / awareness of people with goods on construction sites (targeted meetings, etc.)
		Pr éparer a Resettlement Plan that allows a just and fair compensation / compensation in case revenue sources losses incurred by the work
	Reduction of vegetation cover	Involving Forestry Services in the choice of construction sites
		Provide compensatory afforestation in case of éboisement (two replacement trees for a felled tree)
	Loss of biodiversity	Avoid sites with species endemic ecies
		Avoid removing animals and habitats outside the influence of the work
		Restore or r éhabiliter sites
	Water pollution and soil	Establish f UTS for the collection of waste oils in view of their possible recycling
		Proc Eder in the solid waste collection and disposal to authorized sites
		.Carry out appropriate health facilities in the base camps
	Erosion of land with the movement of construction machinery	Privil Egier handicrafts (searches)
	Loss of land, for agricultural or socio economic activities	Campaigning for information / awareness of people with properties on the construction site (targeted meetings, etc.)
		Pr éparer a Resettlement Plan that allows a just and fair compensation / compensation in case revenue sources losses incurred by the work
	Conflicts for land acquisition	Campaigning for information / awareness of people

		with goods on construction sites (targeted meetings, etc.)
	Pollution by dust eras from the work	Ask the b ASKS on scaffolding
	Noise nuisance due to noise and vibration gear	Require the port of individual protection equipment (PPE) for all site personnel
	Work accidents with vehicles	Establish a gear of the traffic plan Awareness of vehicle drivers Develop a kit for first aid for the yard
		Educate field staff about the risks of work
	No use of the hand of local work	priorize recruitment of local labor on site (laborers, guards, stevedores).
	Potential risk of spread of STI / HIV-AIDS	Inform and educate the work of staff and local residents about the risks related to STI / HIV / AIDS
		Provide free preservatifs the work of staff
	domestic infrastructure demolition	Campaigning for information / awareness of people with goods on construction sites (targeted meetings, etc.)
		Prepare Resettlement Plan that allows a just and fair compensation / compensation in case revenue sources losses incurred by the work
	Disruption and customs	Educate the work of staff
	Disruption of riparian activity	Campaigning for information / awareness of people with properties on the construction site (targeted meetings, etc.)
	Anarchic discharges of solid wastes and cuttings	Ensure collection and disposal of waste to an authorized site
	Traffic disruption	Set up a traffic plan and of Deviation

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- Serge A. Pieyns: Africa Hydromet September: Strengthening Climate Resilience Program in Sub-Saharan Africa: Phase I; Burkina Faso Country Project Feasibility Study, 2016

Legal texts (laws, decrees and orders)

- Orientation Law on prevention and risk management, humanitarian crises and disasters (No. 012-2014 / year April 22, 2014;
- Act No. 034-2012 / AN of 2 July 2012 concerning Agrarian and Land Reform in Burkina Faso;
- The orientation law No. 002-2001 / AN of 8 February 2001 on the management of water;
- Act No. 006-2013 / AN of 2 April 2013 on the code of the environment in Burkina Faso;
- Act No. 003/2011 / AN of April 5, 2011 on the Forest Code in Burkina Faso;
- Law No. 014-99 / ADP of 15 April 1999 regulating cooperative societies and groups in Burkina Faso;
- Law No. 020-96 / ADP of 10 July 1996 on the establishment of an enjoyment tax for the occupation and enjoyment of land of national land belonging to the State;
- Act No. 055-2004 / AN of 21 December 2004 establishing the general code of local authorities in Burkina Faso;

- Orientation Law No. 034-2002 / AN of 14 November 2002 on pastoralism in Burkina Faso
- Decree No. 2015- 1187 / PRES TRANS / PM / MOEHR / MATD / MS / MS / MARHASA / MRA / MICA / MHU / MIDT / MCT October 22, 2015 concerning conditions and procedures for implementation and validation of the strategic environmental assessment (SEA), study and environmental and social impact statement;
- Decree No. 97-054 / PRES / PM / MEF of 6 February 1997 concerning the terms and conditions of application of the law on Agrarian and Land Reform in Burkina Faso;
- Decree on establishment of ORSEC planes (No. 2010- 567 / PRES / PM / MATD / MASSN of 21 Sep 2010);
- Decree N ° 2007-610 / PRES / PM / 4/10/2007 MAHRH of adopting the national policy s e curisation fonci è re in rural areas ;
- Decree N ° 2015 1203 / PRES TRANS / PM / MOEHR / MATD / MJDHPC of 28 October 2015 concerning modalities of organization and conducting of the environmental inspection ;
- Joint decree MATDS / MASSN relating to Tripping, setting out an ORSEC PLAN (n ° 2011-010 / MATD / MASSN March 28, 2011
- Joint decree MATDS / MASSN on the organization of emergency rations (n ° 2011-011 / MATD / MASSN of 28 March 2011);
- Joint decree on the composition of the committee of crisis, the entities of support groups and operational national ORSEC (n ° 2012-043 / PM / CAB of 20 December 2012);
- Interdepartmental decree n ° 2015-0223 / MATD / MS / MICA / MHU / MOEHR of 31/12/2015 concerning establishment of an Internal Operation Plan (POI) in institutions of significant risks ;
- Joint decree n ° 2016-0123 / MATDSI / MUH of 15/03/2016 approving the resettlement of people in safety areas relating to the protection against the ' burning of buildings by dwelling
- Joint decree n ° 2016-0124 / MATDSI / MUH of 03/15/2016 approving the resettlement in safety in high buildings and protection against the risk of fire and panic.
- Joint decreen ° 2016-0124 / MATDSI / MUH of 03/15/2016 approving the safety resettlement in high- buildings and protection against the risk of fire and panic.

Appendix 7: Resource Persons in Ouagadougou

No	Last name and first names	Structure and contacts	mail address
1	YE Bagassi Dominique	Ministry of Women, National Solidarity and Family National Council for Emergency Relief and Rehabilitation (SP / CONASUR) Tel: 78988366/ 76072332	
2	Colonel COULIBALI Sibiri	Ministry of Territorial Administration, Decentralization and Homeland Security General Directorate of Civil Protection - DGPC Tel: 70 20 61 18	coulibalysibiri2003@yahoo.fr
3	OUEDRAOGO Ernest	Ministry of transport, urban mobility and road safety Directorate General of Meteorology (DGM) Tel: 70 02 42 00	ernest_ok@yahoo.com
3	Dr. NIKIEMA Michel	Ministry of transport, urban mobility and road safety General Directorate of Meteorology (DGM) Focal Point CREWS (DGM) Tel: 78 90 19 52	michel78us@yahoo.com
4	NAKOHOUN Lokou Pascal	Ministry of Water and SanitationDirectorate General of Water Resources (DGRE): Director of Studies and the Water Information (DEIE) Tel: 70 29 57 92	locoupascal@yahoo.fr
5	MILLOGO Firmin	Ministry of Agriculture and Water Resources Early Warning System - SAP Tel: 70 75 66 10	millogofirmin@yahoo.fr
6	HONADIA Mamoudou	Designated National Authority 70 24 02 40	m60honadia@gmail.com

Personnes rencontrées dans les régions du Centre Ouest, du Plateau Central et du Centre

Noms et Prénoms	**Fonctions**	**Références**
SOME Z Séverin	Secrétaire Général de la région du Plateau Central	70 44 96 44
COMPAORE Pascal	Maire de Ziniaré	25 30 97 51
BATIONO E Sébastien	Chef de service EES du BUNEE	70 33 35 79
SAWADOGO Alizeta	Secrétaire Général de la région du Centre	70 28 71 08
THIOMBIANO Karim	Secrétaire particulier du SG/Centre	70 46 08 11
Maurice Moctar ZONGO	Maire de Koudougou	70 24 83 98
Sibiri de Issa OUEDRAOGO	Secrétaire Général de la région du Centre Ouest	70 12 11 44
Manman YONLI	Secrétaire Général de la Mairie de Bogodogo	

Personnes rencontrées dans les régions de l'Est (Gnagna) et du Centre Nord (Sanmatenga)

Consultations publiques dans le cadre de l'élaboration du CGES du PHM
- Région de l'Est
- Province de la Gnagna

LISTE DE PRESENCE DE PIELA

Noms	Prenoms	sexe	Village	03/05/2017 Emmargement (J1)	04/05/2017 Emmargement (J2)
DAMIBA	Namoussa	M	Kongaye		
LANKOANDE	Kirissi	M	Kongaye		
DAMIBA	Talana	F	Kongaye		
DORI	Suzanne	F	Kongaye		
DORI	Toni	F	Kongaye		
BOURGOU	Lanba	M	Kongaye		
HARO	yemboado	M	Guimboari		
HARO	Namoussa	M	Guimboari		
HARO	Tiban	M	Guimboari		
TIABONDOU	Dapoa	F	Guimboari		
LANKOANDE	DaLandi	M	Guimboari		
HARO	Podieri	F	Guimboari		
NADINGA	Bamanou	F	Guimboari		
TAMBONGOU	Diandi	M	Doyana		
LANKOANDE	Diambendi	M	Doyana		
DAMIBA	Kokoro	M	Doyana		
DAYAMBA	Toudie	M	Doyana		
HARO	Serimani	F	Doyana		
KOBORI	Kimsa	M	Doyana		
GAYERI	Manou	F	Doyana		
BANGA	Pofolga	F	Noali		
DAMIBA	Marie	F	Noali		
LALGOU	Nakou	M	Noali		
MANO	Diambougou	M	Noali		
LALLOGO	Bilanga	M	Noali		

Suite (province de la Gnagna)

LISTE DE PRESENCE DE BOGANDE

	Noms	Prenoms	sexe	Village	03/05/2017 Emmargement (j1)	04/05/2017 Emmargement (j2)
1	YARGA	Goandou	M	Dapili		
	DABOURGOU	Moussa	M	Dapili		
	DABOURGOU	Djingri	M	Dapili		
	DABOURGOU	Falgodmadjoa	M	Dapili		
	YARGA	Diahouri	M	Dapili		
2	GUETANGA	Sibidibouga	M	Kierguin		
	TENDANO	Kokoro	M	Kierguin		
	NIADENGA	Djineribouga	M	Kierguin		
	DIANIBENA	Hahadou	M	Kierguin		
	GUETANGA	Sibidi	F	Kierguin		
3	LANKOANDÉ	Moussa	M	Kossougoudou		
	DORI	Djineribouga	M	Kossougoudou		
	LANKOANDÉ	Gafari	M	Kossougoudou		
	LANKOANDÉ	Diabadou	M	Kossougoudou		
	LANKOANDÉ	Hantina	M	Kossougoudou		
4	LANKOANDÉ	Daouda	M	komboassi		
	TENDANO	Mimaye	M	komboassi		
	TENDANO	Nombo	M	Komboassi		
	TENDANO	Djingri Daniel	M	komboassi		
5	YARGA	Poiyoudou	F	Kohoura		
	GADOU	Larba	M	Kohoura		
	TIABOANDOU	Bandiba	F	Kohoura		

Consultations publiques dans le cadre de l'élaboration du GGES du PHM-Burkina
- Region du centre Nord | Province du Namentenga 5 au 6 mai 2017

11	Ouédraogo Issouf	M	Dembarka 1	Secrétaire CVD/ Leader	71642430	[signature]
12	Ouédraogo Ousségné	M	Dembarka 1	Président CVD	73925422	[signature]
13	Ouédraogo Damanguepinda	M	Dembarka 2	Président CVD	70899622	[signature]
14	Sawadogo Kolmesom	M	Dembarka 2	Producteur leader	70537773	[signature]
15	Sawadogo Penguesima	M	Dembarka 2	Producteur leader	70787477	[signature]
16	Pafadnam Ouelbo	M	Nomdé	Leader	70995272	[signature]
17	Ouédraogo Salamata	F	Nomdé	Chargée de l'information CAP	51891581	[fingerprint]
18	Pafadnam ~~Salamata~~ Zalissa	F	Nomdé	Présidente adjointe CAP	72 60 965	[fingerprint]
19	Sawadogo Sidyida	M	Nomdé	Président CVD	72377715	[fingerprint]
20	Sawadogo Nabonswendé	M	Nomdé	Président CAP	72907353	[fingerprint]
21	Bonkoungou Rimnea	M	Bouroum Centre	Président CVD	71032595	[signature]
22	Zéri Pathgbamba	M	Bouroum Centre	Leader	72250551	[signature]
23	Belgo Koudoua Blaise	M	Bouroum Centre	Leader	72596499	[signature]
24	Sawadogo R. Elisabeth	F	Bouroum Centre	Représentante Responsable des femmes/CVD	63035172	[signature]

- Province du Namentenga
- Region du Centre Nord (Suite)

Tenue à Bouroum du 5 au 6 Mai 2017

N°	Nom et Prénom (s)	Sexe	Village	Structure/Fonction	Tél	Emargement jour 2
01	Sebgo Hamado	M	Birgum	Président CAP	78377846	
02	Zabré Mariam	F	Birgum	Trésorière CAP	71477536	
03	Ouédraogo Boukaré	M	Birgum	Secrétaire CVD	73169647	
04	Sebgo Mamoudou	M	Birgum	Leader	60396067	
05	Ouédraogo Pakindnimba	M	Birgum	Chargé à l'information CAP	78755560	
06	Zoré Habibou	F	Ibangfo	Trésorière CAP	51739039	
07	Singbeogo Kendaogo	M	Ibangfo	Président CVD	70775163	
08	Koudougou Laogmegnogo	M	Ibangfo	Leader	51053136	
09	Bonkoungou Poko	F	Ibangfo	Présidente CAP	78805367	
10	Koudougou Nabiembila	M	Ibangfo	Président adjoint CAP	78657147	

Region du Centre Nord | Namentenga 08-09 | mai 2017

VILLAGES		NOMS & PRENOMS	JOUR1	JOUR2
Nitenga	1	LALLOGO Ipala		
"	2	SAWADOGO Porinyalma		
"	3	DABILGOU Guinguiraogo		
"	4	LALLOGO Tomnaba		
"	5	KIBAKOE Aloye		
Zeguedeguin	6	DABILGOU O. Salam		
"	7	DABILOUGOU Idressa		
"	8	KABORE Amado		
"	9	DABILGOU T. Joseph		
"	10	DABILOUGOU Bunta		
Kogoneré	11	DAMIBA Bangba		
"	12	DAMIBA Tangandé		
"	13	LANKOANDE Wennegouda		
"	14	DAMIBA Namanegueba		
"	15	DAMIBA Foubla		
Boumtenga	16	NAKO Madi		
"	17	LALLOGO Boukaré		

Région du Centre Nord / Province du Namentenga (5-6 mai 2017) Suite

VILLAGES	NOMS & PRENOMS	JOUR1	JOUR2
Kario	1 SIOGO Issa		
Kario	2 YAMEOGO Samandé		
Kario	3 YAMEOGO Zande		
Kario	4 BAGUYAN Tibangue		
Kario	5 SIOGO Pogoniondou		
Goengo	6 SEBGO Bengdo		
Goengo	7 OUEDA Bagayamba		
Goengo	8 TINDANO Tibeaboaba		
Goengo	9 ZORE Kirsyamba		
Goengo	10 SIEGO Guetirindé		
Nongfaîré	11 SAMPALGOU Tihamri		
Nongfaîré	12 FOURKANGA Soangri		
Nongfaîré	13 SIOGO Pobyenou		
Nongfaîré	14 KORGA Arzouma		
Boulmanga	15 TINDANO Moutri Salfo		
Boulmanga	16 YAMEOGO Moutri		
Boulmanga	17 KOUDOUGOU Nelawinde		

Annexe 8 : Field mission pictures


Hydrological Stations DGRE


Observation Stations at DGM (Ouagadougou Headquarters)


Overview of EWS (SAP) files at the documentation centre (Data collecting files)

Annex 9 : Minutes of Public Consultations

MISSION REPORT

PUBLIC CONSULTATIONS IN THE CONTEXT OF THE DEVELOPMENT OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF) OF THE AFRICA HYDROMETEOROLOGICAL PROGRAM: Strengthening Climate Resilience in Sub-Saharan Africa, Project Burkina Faso

May 2017

Introduction

In order to develop the Environmental and Social Management Framework (ESMF) of the Africa Hydrometeorological Program: "Strengthening Climate Resilience in Sub-Saharan Africa, Burkina Faso Country Project" a series of public consultations was conducted in a participatory manner. These consultations took place in two stages:

- During the collection and analysis of data for the preparation of the ESMF report ;
- During the period of publication of the ESMF report in the thirteen (13) regions of the country.

1. Public consultations during the data collection and analysis phase

The public consultations were conducted from mid-November to December 22, 2016 throughout the development of the ESMF through interviews with the project implementation entities (DGRE, DGM, SP-CONASUR, DGPC and SAP).

The meetings brought together the focal points of each structure and a core of experts involved in the project. The objectives and activities of the project, in terms of economic, socio-cultural and environmental issues, as well as anticipated impacts and mitigation measures, were presented and discussed with a view to collect feedback, concerns, suggestions and recommendations.

An important step in these public consultations was the December 23 rd 2016 session of the Technical Committee on Environmental Assessment (COTEVE) validation of the interim report of the ESMF. This session, held in the meeting room of the Liptako Gourma Authority (ALG) in Ouagadougou, examined the report and made recommendations for its finalization.

It is evident from the preoccupations expressed that the project is rather very well accepted by the various partners. The overall assessment is that the project has low environmental and social negative impacts and high environmental and social positive impacts. The validation session organized by the Technical Committee on Environmental Assessments (COTEVE), in addition to its statutory evaluation, also constituted a wide debate on the opportunities and constraints of this Project.

Workshop to validate the interim report by COTEVE in Ouagadougou

The main recommendations from all these interviews / consultations are:

Project planning / preparation (actions to be prioritized):

- construction of infrastructures and equipment;
- capacity building;
- awareness of the risks associated with the project and arrangements to be made;
- prevention and early warning system.

Implementation of the project :

- Consultation, collaboration and synergy with other local projects;
- Protection of sensitive ecological zones and protected species;
- Capacity building for communities and populations;
- Involvement of all stakeholders;
- Monitoring and follow-up measures;
- Maintenance and maintenance of infrastructure;
- Development of a strategic communication plan for warning modalities and mandatory responses;
- Education, sensitization and training of the populations to these new tools.

The synthesis of the consultations is recorded in the following table, by category of actors met.

Synthesis of Public Consultation Results

Entities / Institutions	**Issues discussed and information collected**
DGPC	• Standards for the construction of infrastructure (barracks) in the short, medium and long term • Construction sites offered by local authorities • Equipment (vehicles and means of rescue) • ORSEC Rescue Plan • Good knowledge of fire studies, risk studies • Capacity building / training on environmental and social management • Maintenance and maintenance of infrastructures and equipment
DGM / ANAM	• Existence of conventional stations (10) with a tendency for automatic stations • Compliance with the standard of installation of automatic stations (at least 20m of the dwellings) • Participatory selection of the installation site • Capacity building / training on environmental and social management • Investments: observation station; Meteorological equipment) • Development of weather products • Maintenance and maintenance of infrastructures and equipment
DGRE	• Site selection criteria • Installation of Equipment in the Easement Bands of Watercourses • Management and recovery of used batteries • Monitoring of stations (daily monitoring of the level of watercourses and piezometers) • Modernization of equipment for monitoring; database ; etc. • Capacity building / training on environmental and social management
SAP	• Field data collection with prioritization of mobile collection that reduces the environmental impact, contrary to the traditional file system • Coordination of early warning data • Capacity building / training on environmental and social management
CONASUR	• Criteria for the choice of sites for the construction of storage infrastructures • Coordination / facilitation of sector interventions in the RCMP • Store Management Manual • Capacity building / training on environmental and social management
BUNEE	• Existence of an environmental code, which regulates ESIA / NIEs and implementing legislation • BUNEE is a key player in this project (screening, validation of ESIA / NIES, monitoring of implementation) • Schedule a validation session for the ESMF • Monitoring and follow-up measures • Protocol of collaboration to be signed with the project for the follow-up of the implementation of the ESMF

2. Public consultations during the period of publication of the ESMF report in the thirteen (13) regions of the country

At the regional level, several stakeholders in the project areas were consulted during May 2017 in the following regions: Central, Central Plateau, Central West, North, North-Central and Eastern.

The first group of stakeholders was consulted from 03 to 09 May 2017. It consists of one hundred and five (105) agricultural producers in the Eastern, Northern and Central North regions (see attendance list). The themes discussed during the meetings focused on knowledge of project issues, control of potential impacts and participation in the implementation of mitigation measures.

From these meetings, it is clear that producers in the regions concerned have a good understanding of the project's stakes and of the negative and positive impacts that will occur during the implementation phase. They called for the implementation of capacity building actions to better integrate climate risks into their daily actions. They said they were committed to the project during the implementation phase because they were the first beneficiaries on the ground.

The second group of stakeholders at the regional level was consulted from 19 to 24 May 2017 in the Central (Ouagadougou), Central West (Koudougou) and Central Plateau (Ziniaré) regions. This consultation follows the public release of the ESMF report by the Ministry of Transport, Urban Mobility and Road Safety and the World Bank for consultation with a view to obtaining opinions and concerns.

Copies of ESMF reports have been made available to the public at the following locations:

- The headquarters of the beneficiary structures of the project (ANAM, DGPC, DGRE, SAP, CONASUR);
- The headquarters of the 13 Governorates of the regions of Burkina Faso;
- The National Bureau of Environmental Assessments (BUNEE);
- The World Bank office in Ouagadougou;
- The General Secretariat of the Ministry of Transport, Urban Mobility and Road Safety in Ouagadougou.

This stage was necessary to conduct fact-finding visits and interviews at the level of the governorates and town halls of the above-mentioned cities, and the persons met were the general secretaries of the regions, the mayors and the secretaries-generals of the town halls.
The exchanges with the Secretaries-General of the governorates of Ouagadougou de Koudougou and Ziniaré aimed to ensure that:

- The reports had been well received and made available to the public from an accessible place;
- The reports are consulted by the persons concerned;
- A register has been made available for the registration of different opinions and concerns.

The interviews focused on:

- The knowledge of the project by the municipal authorities;
- The positive and negative impacts of the project;
- The capacity of town councils to get involved in the implementation of the project;
- The issues and concerns.

From the interviews with the stakeholders cited, it emerges:

- **At the level of the governorates:**

- The ESMF reports are effectively made available to the public;
- A register is made available for the recording of any opinions, concerns and suggestions;
- No record was made in the register at the time of the mission.

- **At the level of Town Halls:**

- The municipal authorities are informed about the program and its components, but wish to know more about the benefits for their municipalities;
- There is an acceptability of the program because of its positive social and economic impacts;
- The need to better inform the actors of the commune on the African hydrometeorological program for more involvement and appropriation.

Synthesis of exchanges at the level of the Governorates

Entities / institutions	Items discussed	Place and time	Comments	Suggestions et recommandations
Gouvernorates : - Ouagadougou - Koudougou - Ziniaré **Targets :** - Les Secrétaires Généraux des régions	- The reports are well received and available; - The reports are consulted by the persons concerned; - A register available for recording different opinions and concerns is available to collect difficulties and suggestions	- Ouagadougou (19 May 2017),	- Presence of the report, made available to the public on 07 May 2017; - The report is available at the General Secretariat; - Provision of a register; - No consultation (as of 19 May 2017); - Display of the press release on a table.	- Prolonger la date butoir du 31 mai 2017 pour permettre plus de consultation ; - Prendre en compte plusieurs radios locales dans l'information du public ; - Afficher l'information à plusieurs endroits ; - Mettre à la disposition des gouvernorats des frais de communication pour assurer l'information du public ; - Etendre les lieux de dépôts des rapports aux mairies, aux Hauts Commissariats et aux préfectures ; - Mettre les rapports à la disposition des conseils régionaux pour l'information des différents conseillers régionaux.
		- Koudougou (22 May 2017) ;	- Report received on 10 May 2017; - The report is available at the gatehouse for consultations;	
		- Ziniaré (23 May 2017)	- Report received on 09 May 2017 and made available to the public (as of May 11, 2017);	
		- BUNEE (24 May 2017)	- Report recived and made available to the public on May 15, 2017;	

Synthèse des échanges au niveau des Mairies

Acteurs/institutions	Points discutés	Constats	Atouts	Préoccupations et craintes	Suggestions et recommandations
Mairies de : - Ouagadougou (19 mai 2017), - Koudougou (22 mai 2017) ; - Ziniaré (23 mai 2017) **Cible :** - Maires, - Les Secrétaires Généraux des mairies	- la connaissance du projet par les autorités municipales ; - les impacts positifs et négatifs du projet ; - les capacités des mairies à s'impliquer dans la mise en œuvre du projet ; - les enjeux et préoccupations ; - les suggestions	- connaissance peu approfondie du projet par les autorités municipales. - faible connaissances des impacts ; - présence de caserne de sapeurs-pompiers à Ouagadougou et à Koudougou - absence de caserne de sapeurs-pompiers à Ziniaré à cause de la proximité avec Ouagadougou.	- projet bien apprécié par les autorités municipales. - disponibilité foncière en milieu urbain pour la réalisation des sous- projets du programme hydrométéorologique africain ; - disponibilité des autorités municipales pour accompagner la mise en œuvre du programme.	- large information préalable sur les modalités d'acquisition de terre en milieu rural ; - risques de conflits fonciers et de dégradation du climat social, mais jugés minimes ; - destruction d'arbres et autres nuisances pendant la réalisation des activités	- informer davantage les autorités municipales sur le programme et ses composantes ; - mettre le rapport ESMF à la disposition des mairies ;

Entretien avec la Secrétaire Général de la région du Centre (SAWADOGO Alizeta)

➢ BANGOURA/ILBOUDO Claudine; Administrateur Civil, mle, 23 660 Chargée d'étude

➢ BADALO Kaka, Secrétaire Administratif, mle 28 168 J, Chargé d'étude.

Service de l'Enregistrement et du Suivi des Associations :

➢ KAFANDO Laëtitia, Administrateur Civil, mle 212 079 N (Chef du Service);
➢ OUEDRAOGO/KONE Alima, Secrétaire Administratif, mle 68 737 ;
➢ NAOULE/NADIE A. Tanta, Adjoint Administratif, mle 68 198 Y.

Service des Archives et de la Documentation :

➢ HONDONOU Lossomi, Adjoint Administratif, mle 116 980 G (Chef du Service);

11/5/17 Nouveau

MINISTERE DES TRANSPORTS
DE LA MOBILITE URBAINE ET
DE LA SECURITE ROUTIERE

SECRETARIAT GENERAL

BURKINA FASO
Unité - Progrès - Justice

Ouagadougou, le 03 MAI 2017

N° 2017-014/MTMUSR/SG

AVIS D'INFORMATION DU PUBLIC

Le Gouvernement du Burkina-Faso avec l'appui de la Banque Mondiale, sollicite auprès du **"Fonds Vert pour le Climat"** un financement sous forme de don pour la mise en œuvre du ***"Programme hydrométéorologique africain : renforcer la résilience climatique en Afrique sub-saharienne phase1, Projet Burkina Faso"***.

L'objectif général du Projet est d'accroître la résilience du pays face aux risques climatiques et aux catastrophes, à travers un renforcement des institutions nationales responsables de la météorologie, de l'hydrologie et de l'alerte (l'Agence Nationale de la Météorologie (ANAM), la Direction Générale des Ressources en Eau (DGRE), la Direction Générale de la Protection Civile (DGPC), le Système d'Alerte Précoce (SAP) et le Conseil National de Secours d'Urgence et de Réhabilitation (CONASUR)).

Afin d'assurer la conformité dudit Projet avec la législation nationale et les politiques opérationnelles de sauvegarde environnementale et sociale de la Banque Mondiale, une étude environnementale et sociale a été réalisée. Il s'agit du **Cadre de Gestion Environnementale et Sociale (CGES)** dont l'objectif est de fournir un ensemble de mesures techniques, opérationnelles, organisationnelles, permettant de prévenir et de gérer les risques environnementaux et sociaux potentiels du Projet pendant sa mise en œuvre.

A cet effet, le Secrétaire Général du Ministère des Transports, de la Mobilité Urbaine et de la Sécurité Routière, informe la population, les Organisations Non Gouvernementales (ONG), les Associations de la Société Civile, les Collectivités Territoriales que le rapport de l'étude est disponible et est mis à la disposition du public pour consultation.

La période de consultation va du 10 au 31 mai 2017 aux lieux suivants :

- sièges des structures bénéficiaires du Projet (ANAM, DGRE, DGPC, SAP, CONASUR) à Ouagadougou ;
- sièges des treize (13) Gouvernorats des Régions du Burkina Faso ;
- siège de la Direction Générale du Bureau National des Evaluations Environnementales à Ouagadougou ;
- siège de la Mission Résidente de la Banque Mondiale à Ouagadougou ;
- Secrétariat Général du Ministère des Transports, de la Mobilité Urbaine et de la Sécurité Routière à Ouagadougou.

Les avis, suggestions et réclamations sont recevables durant cette période auprès des Secrétariats des structures susmentionnées.

Le Secrétaire Général

Issiaka SIGUE
Officier de l'Ordre National

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Affiche (avis d'information du public) au Gouvernorat de la région du Centre

Entretien avec le Maire de Koudougou (Maurice Moctar ZONGO)

Entretien avec le Secrétaire Général de la région du Plateau central (SOME Z Séverin)

Annex 10: Terms of Reference of the study

1. CONTEXT AND JUSTIFICATION

The World Bank is seeking to green climate fund financed on a grant to the Government of Burkina Faso to implement a project in the African Hydrometeorological Program - Strengthening Climate Resilience Sub-Saharan Africa.
In this context, the General Directorate of Meteorology (DGM), the General Directorate of Water Resources (DGRE), the General Directorate of Civil Protection (DGPC), the Early Warning System (EWS) and the National Council of Aid for relief and Rehabilitation (CONASUR) are the key institutions responsible for meteorology, hydrology, climate, and management of disaster risk in Burkina Faso.
However, previous and recent estimates, confirmed by direct technical discussions with these institutions, constitute severe obstacles in the provision of hydrometeorological services to potential users, public and private sectors and in communities.
These barriers include:

- For Meteorology and Hydrology:
    - Shortage of qualified staff and lack of personnel policy and continuing education;
    - Weak institutional capacities including partnerships and service delivery procedures;
    - Poor overall state of the main observation infrastructure;
    - unreliable and slow communication systems, particularly to reach the sparsely populated regions;
    - Storage capacities and management of limited data;
    - Low capacity in terms of meteorological and hydrological forecasting;
- For SAP:
    - Low consideration of urban and suburban areas;
    - inadequate information collection and management systems;
    - Communication Impairments early warnings and direct action with affected populations.
- For DGPC and CONASUR:
    - The tools currently available to the CONASUR and DGPC does not allow effective implementation of its coordination mandate, promotion and facilitation interventions in key sectors involved in managing disaster risk, particularly in connection with the warning flood / flood;
    - Insufficient capacity for emergency response and coordination of prevention among different sectors of activities.

Because of this, the use of weather and climate information is currently minimal in Burkina Faso.

2. PROJECT objective

The overall objective of the Project is to increase the resilience of Burkina Faso to climate risks and disasters, through strengthening national institutions responsible for meteorology, hydrology and alert.
The expected results are: (i) improving early warning capacities for food security and nutrition, (ii) capacity building related to early warning for extreme events (eg heavy rain, urban flooding, winds etc.), (iii) ownership, improvement and operationalization of the contingency plans and emergency response plans.
The project components are:

- **Component A :** Institutional Capacity of the DGM, the DGRE, SAP, DGPC and CONASUR. It will finance the following activities:
    - **Activity 1 :** Training of staff and experts in various disciplines to ensure sustainability of project results, with university education (Master) and technical training on the installation, operation and maintenance of hydro-meteorological networks;
    - **Activity 2 :** Strengthening the institutional and legislative framework, particularly through the development of specific operating procedures for the prevention, anticipation and emergency response to extreme hydro-meteorological events (fluvial flooding, rainwater flooding, storms, droughts , lightning, forest fires, etc.).
    - **Activity 3 :** Support for integration, coordination and detailed technical specification of activities

The expected result through the A component is the institutional capacity (including key personnel of these structures) and interdepartmental coordination.

- **Component B :** Modernization of observation infrastructure, forecasting, warning and response. It will finance equipment and infrastructure to improve:
    - **Activity 1 :** data collection networks
    - **Activity 2 :** The physical and software infrastructure for data analysis and decision support
    - **Activity 3 :** Response ways to improve civil protection, food security and nutrition

The expected result through the B component is the modernization and sustainable operation of the data collection infrastructure and management and access to information systems in the four targeted institutions

- **Component C**, with the objective of improving the provision of services to end users, will fund the following activities:
    - **Activity 1 :** Establishment and operational implementation of the National Framework for Climatological Services (CNSC), defining user requirements across different sectors and detailed planning to respond
    - **Activity 2 :** Improvement of forecasts and warnings relating to droughts and floods, and to develop new products for the specific needs of sectors such as agriculture, health, energy, water resources, management of disaster risk
    - **Activity 3 :** Enhancing connectivity to enable an understanding and effective use of information, and (v) community awareness and establishing effective feedback procedures for those at risk

The expected result is the optimum use of hydrometeorological services, reducing the risk of disasters and food security by users of different sectors across all existing distribution channels and

dissemination in Burkina Faso (traditional, newsletters, internet, television, radio, SMS) and through all available devices (agricultural cooperatives, municipal committees, suppliers, etc.).
The project will be implemented by a management and coordination unit that will coordinate field operations through accountability of existing structures.

3. **OBJECTIVES OF THE ESMF**

The overall objective of the study is to provide a set of technical, operational, organizational, etc. within a framework of environmental and social management (ESMF) to prevent and manage potential environmental and social risks of the project during its implementation. It will specifically:

- to identify the major environmental and social issues in project implementation area;
- environmental and social risks and impacts associated with the various project interventions;
- identify strengths and weaknesses in the institutional and legal environment, among key project implementation actors
- propose concrete measures of risk management and impacts;
- to propose institutional arrangements for the implementation of the Environmental and Social Management Framework (ESMF).

4. **EXPECTED** results

The main expected outcomes of the study are:

- Environmental and social issues in project intervention areas are analyzed and characterized;
- The strengths and weaknesses of the legal framework for environmental and social management are highlighted for their consideration in formulating the ESMF's recommendations;
- the different types of risks and environmental and social impacts associated with the project interventions are identified and analyzed by project component, and synthetically reflected in a matrix highlighting the types of activities that could cause these negative impacts and sites that could potentially be affected;
- an Environmental and Social Management Framework (ESMF), including estimated costs, is prepared in accordance with known standards, including:
    - management measures (sorting mechanism and achieving specific ESIA and / or PER, record single ESMP Environmental and Social prescription card site, direct measurements of impact management) risks and impacts defined and the implementation cost of each is estimated; such measures are categorized into technical, institutional, organizational, regulatory, economic, etc .;
    - roles and responsibilities for the implementation of these measures are set out, in terms of legislation and the institutional framework in the field and the requirements of the World Bank in this area;
    - an environmental monitoring mechanism including the arrangements for monitoring and reporting of the implementation of the ESMF measures;
    - the building needs of the implementation unit of the project and capacity of key players involved in the successful implementation of the ESMF; budget relating thereto is estimated.

5. **TASKS OF THE CONSULTANT**

Based on existing literature, field visits and meetings with key stakeholders the consultant will perform the following tasks:

- Describe the receiving environment of the project focusing on the major environmental and social issues known (type of pollution, nuisance or critical degradation, ecosystem services threatened, endangered species, etc.) and how the project could increase the criticality;

- Describe the institutional and legal framework for environmental management of the project (state level, decentralized level; here a place will be clear to the elements of the legal and institutional framework for the project;

- Identify and evaluate the potential significance of potential direct and indirect positive and negative impacts and the environmental and social risks in project intervention areas by category / type of sub - proposed project;

- Submit annex an indicative list reference (checklist) types impacts and corrective measures corresponding to each impact by type of sub-project or planned investment in the project;

- Describe the mechanism and institutional arrangements implementing ESMF by clarifying roles and responsibilities of all stakeholders (central, regional / local, municipal and district / town) involved in its implementation;

- Describe the process, mechanism and the circumstances in which specific environmental and social assessments (ie, limited or extensive evaluation) are conducted for each sub project. This is especially the decision to conduct the ESIA for each sub-project where the screening will be classified in category A, B or C; Sub-Category A projects are not financed under Category B projects

- Propose an environmental monitoring frame (*indicators , frequence of collection / calculation / estimation, responsibility , etc.*), preferably participatorily;

- Assess the capacity of national institutions responsible and involved in the implementation of the ESMP, and propose measures to strengthen their capacities.

- Prepare a summary budget for all actions and activities proposed in the ESMP.

- ESMF submit for review to the World Bank;

- Present the ESMF at a validation workshop at the National Bureau of Environmental Assessments (Bunee);

- Make revisions to the final version of the ESMF.

During the execution of the mission, the consultant will adopt a process of consultation and maintenance will ensure dialogue and participation of all stakeholders.

6. ORGANIZATION CONSULTANCY

6.1. Methodological approach

To achieve the objectives, the consultant will:

- Characterize the legal and regulatory framework for the management of environmental impacts and make the comparison with the policies of the World Bank;

- Identify by under the proposed project, the positive and negative impacts generic socio-economic environment, including local residents, as well as the biophysical potential sites for implementation of the various sub-projects / activities;
- Propose generic measures of management of potential negative impacts, as well as upgrading and improvement measures positive impacts;
- Propose procedures and explicit methodologies for social and environmental planning as well as for the evaluation, approval and participatory implementation of activities related to the operations to be financed under the project;
- Clarify roles and ad hoc institutional responsibilities for the implementation of the ESMP, and sketch the mandatory reporting procedures for managing and monitoring environmental and social concerns related to these activities;
- Identify needs for capacity building and other technical assistance for the proper implementation of the provisions of ESMF both nationally (Frames involved) and local;
- Estimate the amount of funding to be filled by the project to implement the activities proposed by the ESMF. The consultant will work to assess and internalize the costs of ESIA and ESMP specific subprojects and those of the implementation of mitigation and compensation measures proposed on the basis of similar experiences (similar projects in areas neighbors) and;
- Provide the information idoines means adapted to sustainably implement the recommendations of the ESMF.
- Submit ESMF the different stakeholders involved in its validation and adoption.

The ESMF will include an analysis procedure and sorting will determine, for each proposed subproject: the operational guidelines of the World Bank that could be applied and levels / types of environmental analyzes are required (eg an environmental assessment and full social (ESIA) including an environmental and social management Plan (ESMP), an ESMP only, or a simple application of good practices of construction and operations. the ESMF also define the content type of each instrument and describe the terms of its preparation, review, approval, and monitoring of its implementation.

2. **C ontent and Structure**

As a framework document, the report ESMF shall so far as possible, concise. It therefore deal only with significant environmental and social impacts. It will focus on the findings, conclusions and recommendations for future actions in light of the data collected or other references used in the study. Any details will be developed in appendix.
The report ESMF will be structured as follows:

- List of acronyms;
- Summary;
- Analytic summary in French and English;
- Short description of the project and potential sites including the mechanism that will be applied for preparing the approval and execution of investments ;
- Environmental situation reference (biophysical and current social issues) in the area of ' project intervention;
- Political, administrative and legal matter of environment / and of environmental assessment with applicable environmental safeguard policies, as well as ' an analysis of the requirements of the diff e policies annuities;
- Identification and summary assessment of risk / environmental and social impacts and management measures;
- ESMPs featuring the following elements :
- The environmental and social criteria of eligibility

- Environmental screening process under the projects to define the level of' environmental and social analysis required by the rules ;
- The process of environmental analysis and validation of projects under screening;
- The environmental monitoring framework including some key indicators, institutional arrangements, the and responsibility, a monitoring and schedule, evaluation and the parties responsible for the implementation;
- Program for a detailed report for building capacity ;
- An implementation budget out of the ESMP ;
- summary (highlights discussions and responses to participants) public consultations ESMF ;
- appendices :

- Detailed ESMF consultations, including locations, dates, lists of participants, issues raised, and answers;
- A form of environmental and social review (Screening);
- A sheet kind of environmental and social impacts by generic type of sub-project;
- A checklist of generic mitigation measures by type of appropriate mitigation measures subproject;
- References.

3. **The responsible of the study**

The study will be conducted under the supervision of Denis Toé, consultant in environmental and social safeguards. The estimated work effort is 25 man / day (HJ). The calendar time between the actual start and the final report will not exceed 1 month.

7. **QUALIFICATION REQUIREMENTS AND EXPERTISE**

The consultant will be sought to postgraduate level (Master, PHD Doctorate) in Environmental Science (Ecology, Biology, Agriculture, Geography, Sociology, etc.). He / she must have additional training in environmental assessment and proven experience in conducting environmental and social studies, 5 of which at least for projects funded by the World Bank.

8. **REPORTS**

The consultant will provide his report in French with an abstract in English and French in the final version, in Word electronic format. It will incorporate the comments and suggestions from all stakeholders in the final document including the relevant observations made during the validation by the competent national body.