



Investing in rural people

**Environmental and Social Management Framework  
(ESMF)**

**AF Central Africa Republic**

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**Map of Project Area:**



## Introduction

1. The overall objective of PRAPAM is to contribute in a sustainable manner to poverty reduction, improvement of food and nutritional security of poor households in rural areas and the economic integration and empowerment of rural women and young people. Its development objective is to strengthen the resilience of rural populations and improve their access to market opportunities in regions 1, 2 and 3 of the Central African Republic. It aims to create the conditions needed for increased plant and animal production and to open the way for better marketing of products in the intervention areas through quality infrastructure.
2. This objective contributes to the strategic objectives of COSOP 2020 - 2024 for CAR: (i) SO1: Increase agricultural production and productivity to build resilience among small producers and (ii) SO2: Sustainable increase in producer incomes through strengthening of post-harvest activities. The project also contributes to the indicators of the COSOP results management framework in terms of increasing the income of supervised households, improving the diet, reducing infant and acute malnutrition, reducing the rate of post-harvest losses, increasing the quantities of products sold, creating permanent jobs benefiting women and young people along the value chains and developing connection roads.
3. The objective is aligned with national strategies and plans for rural sector development as well as those of the United Nations Development Framework for Development Assistance (UNDAF +) for the period 2018 - 2020 and the IFAD strategic framework. It will contribute to the achievement of the Sustainable Development Goals (SDGs) 1, 2, 5, 8, 10 and 13.

## Rationale and Objectives of the ESMF

4. During the design phase it was established that the Environment and Social Risk Category of the project is 'A' (i.e the project will invest in rural infrastructure which has triggered the A categorization), while the Climate Risk Category is high. As a result, the project requires the development of an environment and social management framework (ESMF) at this initial stage and will require either an ESIA or activity specific ESMF as the case may be. This report will include an environment and social management plan (ESMP), which is usually developed when full information about the proposed activity specific location is not available. This also means that this report can only provide a somewhat general overview of likely environmental and social impacts for the targeted region. Nevertheless, where existing data was available or identified through stakeholder consultations, the report does provide a more detailed analysis of key characteristics and likely environmental and social impacts and mitigation measures per state.

The main objectives of the ESMF as per the terms of reference of this study are to:

- Identify potential impacts of the project and to prepare a generic Environmental and Social Management Plan for the direct and indirect impacts, as well as incremental impacts as they relate to land use changes, soil erosion, dust emissions, noise pollution, loss of trees, biodiversity, liquid and solid wastes from the activities, land acquisition leading to the physical movement of people, and / or loss of homes and / or loss of income sources, and / or loss of restrictions on access to economic resources as well as social relations, benefits sharing and settling of grievances among others;
- To formulate an Environmental and Social Management Framework (ESMF) including any standards and procedures, specifying how unidentified subprojects whose location are unknown will systematically address environmental and social issues in the screening for environmental and social impacts and categorization, site selection criteria, mitigation measures, design, implementation and operational phases as well as maintenance of the subproject lifecycle;

- For infrastructure related projects, to formulate Environmental and Social guidelines for construction firms to be recruited as contractors. These guidelines shall be recommended for incorporation in contractor's bids and contract documents.

### **Approach, Scope and Methodology Used for the ESMF**

5. This ESMF report builds on the findings of the Social, Environmental and Climate Assessment Procedure (SECAP) review, which was part of the initial project design phase. These findings were complemented by a desk review of relevant documents on the environmental and social context of Central Africa Republic. In addition, the ESMF is the result of an assessment and determination of impacts, including impact identification, prediction, evaluation and interpretation, based on field studies and consultations in 2017 and 2018. As part of the ESMF, a general ESMP was developed for potential general project impacts, including mitigation measures, capacity and awareness building requirements to mitigate those measures, and monitoring.
6. In terms of the technical scope, the ESMF reviewed environmental, climate and social impacts, focusing on areas that have been impacted by oil operations, unsustainable agricultural practices and climate change. More specifically, the ESMF reviewed earlier reports and studies on ground and water contamination, CO2 emissions, aquatic pollution, potential impacts of oil pollutants on public health, soil degradation, impact of illegal refining operations, as well as the institutional and legal structures in the targeted areas.
7. The ESMF team held consultations with different stakeholders in all countries and targets regions see SECAP design PDR. This ESMF report was developed in accordance with IFAD's Social Environment and Climate Assessment Procedures (SECAP) as well as IFAD's Environment and Natural Resources Management Policy, the Gender Equality and Women's Empowerment, and Targeting policies. The report also considered relevant environmental and social laws, policies and guidelines of CIV.

### **Stakeholder Consultations**

8. Consultations were held with the Ministry of Agriculture, the National Environmental Standards and Regulations Enforcement Agency, Ministry of Environment and agencies, Ministry of Women and social affairs and other sector ministries. At local level, a wide range of consultations were held with local communities and beneficiaries, CBOs, NGOs , private actors and religious chiefs

### **Disclosure of ESMF**

9. IFAD's Policy on the Disclosure of Documents (2010) requires full disclosure to the public, and includes information notes on projects being developed for Board presentation, agreements for approved loans and grants, and project/program design documents. This ESMF will therefore be disclosed on IFAD's official website (<https://ifad.org>). In addition, the ESMF is be disclosed on ministries official website, IFAD website, so that all stakeholders are able to access the document.

### **Report Outline**

10. This is complemented by a proposed screening approach (and relevant screening forms) for the eventual sub-projects. The report concludes with a plan for monitoring of environmental, climate and social impacts (chapter 9) as well as some suggestions for capacity building and training (chapter 10).



## Description of the Proposed Project

### Project Area and Target Group

11. The intervention area of PRAPAM is the same as that of PADECAS and PREPAS. This area corresponds to the Nana Mamberé prefecture in the region 2, Ouam Pendé prefecture in region 3, and Lobaye and Ombella Mpoko prefectures in region 1. They are part of the COSOP 2020- 2024 targeting strategy on selected areas and beneficiaries based on the level of poverty, vulnerability, agro pastoral productive opportunities and security criteria. Youth and women groups, the displaced and returnees, and people living with disabilities will be given priority.
12. The population of the Central African Republic has almost quadrupled since independence. In 1960, the population was 1,232,000; as of a 2018 UN estimate, it is approximately 4,666,368. The United Nations estimates that approximately 4% of the population aged between 15 and 49 is HIV positive. Only 3% of the country has antiretroviral therapy available, compared to a 17% coverage in the neighboring countries of Chad and the Republic of the Congo. The nation is divided into over 80 ethnic groups, each having its own language. The largest ethnic groups are the Baggara Arabs, Baka, Banda, Bayaka, Fula, Gbaya, Kara, Kresh, Mbaka, Mandja, Ngbandi, Sara, Vidiri, Wodaabe, Yakoma, Yulu, Zande, with others including Europeans of mostly French descent<sup>1</sup>.
13. The area offers significant potential for agro pastoral production and marketing due to its proximity to Bangui, the main capital city of the country, and many other economic and commercial centers. The export of crop and livestock products may occur depending on opportunities in Cameroun, Congo (Brazzaville) and DRC.
14. The climate of the Central African Republic is generally tropical, with a wet season that lasts from June to September in the northern regions of the country, and from May to October in the south.
15. This area was selected on the basis of several criteria, including understood: (i) good potential in cultivable, irrigable and rainfed land; (ii) areas of excellence for the development of pastoral and fish farming activities; (iii) high population density and job seekers; (iv) start to structure farmer organizations; (v) strong potential for the development of agricultural entrepreneurship; (vi) complementarity with others agricultural development initiatives and programs, and (vii) severe degradation of agricultural infrastructure production and marketing.
16. By promoting the value chain approach, the project will aim to reach all the actors involved in the different segments of the three targeted sectors. These are: (i) small producers and their organizations; (ii) actors downstream of the sectors including processors, traders and consumers; (iii) actors carrying out related activities and trades including suppliers inputs, suppliers and repairers of agricultural materials and equipment, transporters; (iv) private sector actors who will foster profitable, inclusive and fair in terms of value chains. Rural women and rural youth (15-35 years) who represent a significant ratio at the level of the three sectors, will constitute privileged sub-groups because of the difficulties they encounter in accessing factors of production and the market, but also opportunities that the three sectors offer to increase their income and create jobs to the different segments of the value chain

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<sup>1</sup> [https://en.wikipedia.org/wiki/Central\\_African\\_Republic#Prefectures\\_and\\_sub-prefectures](https://en.wikipedia.org/wiki/Central_African_Republic#Prefectures_and_sub-prefectures)



**Box1: Youth Targeting Criteria**

- a. Expression of interest to be endorsed by a community institution: as an investment project, screening and selection of applicants, will be handled by a competent and credible service provider, with the involvement of community institution, youth in agriculture organization, women group, government representative and CSO
- b. Persons between the age of 18 and 35 years,
- c. Clarity in the enterprise of applicants choice/interest
- d. Comfort Letter from 2 credible guarantors in the community
- e. Undertaken to keep to the code of conduct of the incubation model, which include (i) no side-selling of produce – all sales to go through an out-growers model; (ii) no fighting on the job, and (iii)no stealing/pilfering
- f. Based on the level of social risk and opportunities available to them as appear in the Table 2, Beneficiaries selection will be in the proportion of 60 percent male youth and 40 percent female youth

**Table 2.2: Level of Risk, Challenges and Opportunities facing young males and females**

Social Group	Women			Men		
	Risks	Challenges	Opportunities	Risks	Challenges	Opportunities
Individual	Victimization, Migration, Low level crime	Unemployment, Social Exclusion, Land access, Limited skills	Apprenticeship, Access to land and finance, Service jobs	Migration, Criminality, Militancy	Unemployment, Land access, Limited skills	Apprenticeship, Access to land and finance, Service jobs
Household Leader	Victimization	Underemployment, Limited skills, Limited free time	Service jobs, Access to finance	Migration, Criminality, Militancy	Underemployment, Limited skills	Service jobs, Access to finance
Graduate	Migration, Low level crime	Unemployment, Underemployment, Access to resources	Roles as incubators, Access to growth markets, land and finance	Migration, Criminality, Militancy	Unemployment, Underemployment, Access to resources	Roles as incubators, Access to growth markets, land and finance
Non-Graduate	Victimization, Migration, Low level crime	Unemployment, Social Exclusion, Limited skills, Access to resources	Apprenticeship, Access to land and finance, Service jobs	Migration, Criminality, Militancy	Unemployment, Limited skills, Access to resources	Apprenticeship, Access to land and finance, Service jobs

**17. Gender Strategy:** For effective women inclusion, this program targeting strategy will promote women favourable enterprises such as vegetable, fish, poultry, honey production, processing and marketing for income that also support household food security and nutrition as described in IFAD baseline investments. There will also be provision to expand the commodities supported in each state to include opportunity commodity/enterprises, which fall within the range of women friendly enterprises. Strategies to realize this will include: (i) events appropriate to women's time and venue constraints; (ii) self-targeting of women's only groups; (iii) provision of 50.7 percent slot for women in benefiting community; (iv) ensuring that women hold at least 30 percent of leadership positions in commodity associations; (v) engagement of a minimum of 30 percent of women in the project management team, among others. The project will also adopt and promote the use of Gender

Action Learning System (GALS) that has been successfully used by the RUFIN programme. Finally, nutrition activities on homestead vegetable production or related commodity will target women groups.

### **Goal, Objectives and Impact Indicators**

18. The **overall goal** of this project is to reduce the direct effects of climate change on 17,000 households and indirectly 119,000 beneficiaries. .

### **Project Implementation Structure**

19. This program will be implemented through a national PMU. The project will be coordinated by the Ministry of Agriculture and the Ministry of Environment. IFAD is providing support to the implementation of baseline investments. AFDB will act as Executing entities providing technical advisory support to the PMU and other local partners

### **Lessons on Social and Environmental Management**

20. Experience from previous IFAD-supported projects in CAR indicates that sound technical backstopping is critical for results in natural resource management and climate change adaptation. Most of IFAD supported projects were designed to address climate change and environmental issues because the region is highly prone to drought, flooding, high humidity induced pests and diseases, pollution and retardation of agricultural productivity. However, due to lack of technical depth in the management team to incorporate climate change resilience and environmental degradation mitigation measures and in a fragmented way, this project will mainstream climate change adaptation and environmental mitigation measures to promote climate change smart agribusiness for the beneficiaries.

### **Environmental and Social Category**

21. Based on IFAD Social, Environmental and Climate Assessment Procedures (SECAP), the overall Environment and Social risk category for is 'A' and high for climate risks. The baseline investments are natural resources-based value chain enterprise development projects, which will mainly consist of small-holder agricultural production and will include the development of market infrastructure (such as construction/rehabilitation of rural feeder roads, small scale agro-processing facilities, irrigation facilities etc. The environmental impacts will be substantially place-based and commodity-specific across enterprise clusters and communities around the project and most of them can be readily remedied by appropriate preventive actions and/or mitigation measures. However, the exact locations for enterprise development are not yet unknown and full disclosure of the environmental and social risks and remediation actions through place based and context-specific environmental and impact assessment (ESIA) are not possible at this time. Therefore, environmental and social screening will be conducted for each enterprise cluster location and, where required, a full ESIA or ESMF will be required to guide project implementation on a pro rata basis.

### **Institutional Framework**

22. The National Recovery Plan and Peacebuilding 2017-2021 is until now the main instrument of CAR planning and mobilizing resources for the restoration of peace and the socio-economic recovery country and served reference document at the international donors' conference, held in Brussels in 2016.
23. The National Environmental Action Program (PNAE), adopted, 1999 includes strategic axes that integrate the participation of local communities in forest conservation actions, the protection of

priority sites said to have fragile ecology, support for local development and the realization impact studies.

## Environmental Legislation

24. The history of environmental management in CAR goes back 30 years after the decree was issued.89/043 of February 1989 establishing the National Committee for the Environment and Ordinance 90/003 of June 9, 1990, the integration of environmental issues into development planning. RCA Environmental Policies comes under the competence of the Ministry of the Environment and Ecology whose role is to develop and implement national policies relating to environmental protection, rational management of natural resources and improvement of the environment and quality of life. At the regional level, the mission of the environment administration is carried out by the prefectural inspections of the environment and ecology. The Directorate-General for the Environment is the structure responsible for monitoring ESIA procedure to ensure effective implementation.

## National Legal Framework

25. The Constitution Central African Republic under Law No. 04/392 of December 2004 puts the environment in its preamble and guarantees rigorous management and transparent environment as an unshakeable condition for sustainable development. In this environmental framework, local communities as well as all citizens have the latitude to ensure the protection of the nation. The idea of transparency, which reflects on good environmental governance and integration of the principle of citizen participation as indicated in the Code of the environment of Law No. 07/018 of December 28, 2007. The legal and regulatory framework for the management of natural resources and environment in the Central African Republic is therefore supplemented by the texts of following reference:

- Law NO. 07/018 of December 28, 2007 Bearing the Environmental Code in its section7 specifies that “regulatory texts set out the content, methodology and procedure for impact studies, as well as the conditions under which these studies are made public and the modalities by which the Minister in charge of the environment may request or be asked for an opinion on any impact study environmental”.
- Order No. C5 / MEEDD / DIRCAB of January 21, 2014 defines the different categories of operations whose completion is subject to the obligation of environmental and social impact study in CAR. Article 3 of the decree stipulates in addition to hydro-agricultural projects of 1000 ha and any water withdrawal (water from surface or groundwater) of more than 30 m<sup>3</sup> / h are subject to completion of the environmental impact study.
- Order No. C5 / MEEDD / DIRCAB of January 21, 2014 sets the different categories. Operations whose completion is subject to the obligation of an impact study environmental and social in the CAR. Article 3 of the decree further indicates that the 1000 ha hydro-agricultural development projects and any water withdrawal (water from surface or underground) of more than 30 m<sup>3</sup> / h are subject to a study impact.
- Law No. 06/001 of April 12, 2006 on the Water Code, it focuses on the water management resources, development and hydraulic structures (use, protection, etc.).
- Law No. 06/001 of April 12, 2006 on the Water Code, whose titles III focus on the management of water resources, hydraulic installations and structures (use; protection; etc.).o Law No. 08/022 of October 17, 2008 on the Forest Code determines who must define the rules of forest resource management and the conditions of intervention in classified forests

- Law No. 09/004 of January 29, 2009 on the Labour Code governs relations professional between workers and employers.
- Law No. 63/441 of January 9, 1964, relating to the national domain of the CAR, which recognizes access to land for people and state-owned land. The land code determines the national expropriation procedures and compensation.

26. At the institutional level, environmental management in CAR has made considerable progress over the past three decades. At first, part of the environmental unit was within the Ministry of Water and Forests in the late years 1980, this responsibility currently lies with the Ministry of the Environment and Ecology (MEE) created in 2009. The day-to-day management of environmental studies are carried out by the Directorate General of the Environment (DGE), responsible for supervising the national procedure in this domain, and analysis and validation of the environmental reports. The CEO has an environmental analysis service at its disposal, by employing agents trained in the matter. NGOs, consultants and national evaluation associations, environmental professionals exist and participate in these studies. The institutions mainly involved in the implementation of this project are; The Ministry of Environment and Ecology (MEE), Environmental and Social Impact Studies (ESIA), fall under the competence of the Directorate General of the Environment (DGE). Its role is to identify, coordinate and follow-up with sectoral environmental management strategies. The CEO is concerned by this project because it will have to ensure the strict implementation of the Management Plans Environmental and Social (ESMP). The Ministry of Agriculture and Rural Development (MADR) Agriculture and rural development in the Central African Republic is guided by national strategic guidance documents that are;

- Guidelines for the implementation of the Global Development Program of African Agriculture (PDAA) of the Malabo Declaration,
- To the Strategy Paper on Rural Development, Agriculture and food security (SDRASA) (2011-2025) validated in 2011;
- The National Program for Agricultural Investment, Food Security and nutrition (PNIASAN), October 2013 and
- Strategy document for the reconstruction and consolidation of peace in Central Africa (RCPCA) / 2017-2021.

27. The realization of these strategic plans extends to other ministries. The objective is to support peace, resilience and security, renew social cohesion between the State and population and ensure economic recovery and the revival of productive sectors. In the under this project, the Ministry of Agriculture and Rural Development (MADR) intervene by providing technical support and research information. Minister in charge of Water Resources and Energy. The Ministry responsible for the intervention of Water and Energy in this project concerns the water extraction rights. The water for this irrigation system will come from the M'Poko River and the Ngola River. It should be noted that these rivers have other uses and for this Because of this, WHH will have to obtain the mining right from this department for the project

#### CAR International Commitments

28. The Central African Republic has ratified a number of legal instruments international and regional environmental issues, among which are:
1. The Convention on Biodiversity adopted in Rio in 1992, ratified on March 15, 1995;
  2. The United Nations Framework Convention on Climate Change, ratified on March 15, 1995;
  3. The United Nations Convention to Combat Desertification and drought, ratified in September 1996

4. The Stockholm Convention on Persistent Organic Pollutants ratified by the No. 08,003 of 01/01/2008;
  5. Convention on International Trade in Species of Fauna and Flora Savages of March 03, 1973;
  6. Convention on the Conservation of Migratory Species belonging to wildlife (Bonn Convention) of 23 June 1979;
  7. The Ramsar Convention of February 02, 1971, amended in 1982, 1987 and 2005 on wetlands of international importance, particularly as waterbird habitats signed in 2005.
  8. The International Convention on the Elimination of All Forms of discrimination against women - June 21, 1991;
  9. The United Nations Convention on the Rights of the Child - April 23, 1992
  10. The Central African Forests Commission (COMIFAC) and signatory of the “Yaoundé Declaration” on the aspect of biodiversity conservation and sustainable management of forest ecosystems in Central Africa.
29. The Lake Chad Basin Commission (LCBC) and the International Commission of Congo-Oubangui-Sangha (CICOS) for the sustainable management of water resources shared by Central African countries

### **Intended Nationally Determined Contribution (2015)**

30. The project will comply with CAR’s **Intended Nationally Determined Contribution (INDC)** to the Paris Agreement that consists of plans for mitigating and adapting to climate change through the protection of water resources, cultivation of climate change-resistant crops, developing agroforestry, protecting soil fertility, and supporting sustainable fisheries and livestock practices.
31. In CAR, the Ministry in Charge of the Environment (MEFCPE) has the mandate to administer the National Adaptation Plan of Action, adopted in 2008. CAR is a member of the Comité National de Pilotage de la Convention sur les Changements Climatiques and the Central African Forest Commission (COMIFAC), a treaty organization established to harmonize regional policies on forestry and biodiversity conservation.
32. CAR’s Intended Nationally Determined Contribution (INDC) stated a goal of reducing GHG emissions by 5 percent by 2030 compared to a business-as-usual scenario, and CAR ratified the Paris Agreement in 2016. CAR has two laws on the books related to climate change mitigation and adaptation: Law No. 08-18 regarding biofuels, and Law No. 08.222 establishing the Forestry Code. (13)

### **IFAD Guidelines**

#### **IFAD Safeguard Policies**

33. The IFAD’S ten Environmental and Social Values and Principles are relevant to the this project as well as the AF<sup>2</sup> These social values and principles are:
- Address the vulnerability and adaptation needs for the rural poor
  - Promote the sustainable use of natural resources and protection of key ecosystems.
  - Focus on partnership-oriented initiatives for improved social and environmental quality.
  - Address environmental and social impact assessments of agricultural and non-agricultural activities in an integrated manner.
  - Incorporate externalities and minimize social costs.
  - Implement participatory approaches, with special emphasis on the role of women.
  - Promote the development of Indigenous Peoples and other marginalized groups (pastoralists, hunters and gatherers).
  - Promote environmentally sound agricultural and manufacturing processes.

<sup>2</sup> <https://www.ifad.org/documents/10180/a5e3ffcc-0ed7-4bc6-b523-39c25dc1edd8>

- Ensure systematic environmental and social monitoring.
- Undertake Strategic Environmental Assessments

### **IFAD SECAP Procedure<sup>3</sup>**

34. The objectives of the Environment and Social Impact Assessment Study in the IFAD's SECAP procedure are to:

- identify key linkages between rural poverty and environmental management and assess the potential environmental and social impacts of the proposed project on the natural resource base and livelihoods of communities in the target areas;
- explore and identify key options for advancing environmental and social sustainability; and
- recommend key opportunities to influence IFAD support towards environmental sustainability and climate smart development.

This ESMF is intended to provide options that would inform and thus improve decision making of the project design. The key environmental, climate change and social issues to be addressed include: (i) challenges faced to meet its rural development and food security goals; (ii) the major environmental, climate change and social issues that have a bearing on IFAD operations in the country; (iii) the direct impact and multiplier effect the mentioned issues have on the resilience of ecosystems and productivity of land and crops, natural resource management and rural livelihoods; (iv) the scale of volatility and risks resulting from climate variability and change; and (v) regulatory frameworks which are related to rural development and environmental issues.

35. The results of the ESMF and subprojects ESIA are: (i) an assessment of the environmental (and social/economic/institutional) issues particularly in the agricultural and rural development sector; (ii) the identification of links with relevant ongoing initiatives; (iii) the provision of specific measures, recommendations including opportunities to optimize adaptation, environmental management and resource use; in the project area. These results will shed light on the important opportunities available to build resilience and adaptive capacity in the program/project under development.

The Key Principles to guide the ESMF and the subproject ESIA are to:

- Look beyond the traditional 'do no harm' safeguards approach to mitigating environmental, climate change and social risks towards 'doing good' through greater focus on sustainability and management of environmental (rehabilitating degraded lands, seizing adaptation/mitigation opportunities and transforming the underlying inequalities that undermine inclusive development, etc.) and social impacts and risks;
- Begin the ESIA with a scoping exercise with the objectives of identifying as much as possible the relevant social, environmental, and climate change issues, so that baseline data collection and impact assessment can focus on them.
- Place strong emphasis on identifying opportunities and develop an appropriate management plan to enhance results and impact;
- Identify and compare alternative scenarios to recommend realistic proposals for design mission consideration;
- Identify capacity needs required to effectively implement the environmental and social management plan;
- Produce a realistic monitoring plan, including appropriate change management processes.
- Engage affected communities and other interested stakeholders throughout the ESIA process, from scoping to review and comment on the final draft report prior to decision-making.

### **The IFAD Climate Change Strategy (2010)<sup>4</sup>**

36. The IFAD's climate change strategy calls for the IFAD to more systematically respond to increasing demands from clients for technical support and innovation to better respond to climate change. This means analyzing and addressing climate change challenges during the early stages of

<sup>3</sup> <https://www.ifad.org/documents/10180/a36f992c-5e31-4fac-8771-404bea02796b>

<sup>4</sup> [https://www.ifad.org/topic/tags/climate\\_change/2154532](https://www.ifad.org/topic/tags/climate_change/2154532)

program and project design to build resilience and adaptive capacity. The strategy goal and purpose are to:

- To support innovative approaches to helping smallholder farmers build their resilience to climate change
- To help smallholder farmers take advantage of available mitigation incentives and funding
- To inform a more coherent dialogue on climate change, rural development agriculture and food security

37. The main strategy output is a more 'climate-smart' IFAD, where climate change – alongside other risks, opportunities and themes – is systematically integrated into core programmes, policies and activities:

- On operations, climate change can be – and in many cases already is – factored into IFAD's operating model. This means incorporating it into our toolkit for the early stages of country programme and project design and for implementation.
- On knowledge, innovation and advocacy- IFAD will explore new arrangements for sourcing climate-related expertise, share ground-level experiences to ensure their application throughout IFAD-supported programmes, and continue our work to shape the global dialogue on climate change for smallholders.
- On resource mobilization, the focus is to make IFAD's expanding overall portfolio climate-smart. Increased supplementary climate funds will continue to be sought to deepen the integration of climate change into IFAD's core programmes and to cover the increased cost this implies.
- On internal organization, IFAD will make greater use of existing in-house skills and people, and will implement a new organizational structure that brings together and increases its staff capacity on climate and the environment. It will also continue to demonstrate the values of environmental awareness internally.

#### **The IFAD Environment and Natural Resource Management (ENRM, 2011) Policy<sup>5</sup>**

38. Sustainable environment and natural resource management (ENRM) lies at the heart of delivering poverty reduction for rural people. Poor rural people face a series of interconnected natural resource management challenges. They are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded; their access to suitable agricultural land is declining in both quantity and quality; their forest resources are increasingly restricted and degraded; they produce on typically marginal rain fed land, with increased water scarcity; energy and agricultural input prices are on a rising long-term trend; and declining fish and marine resources threaten essential sources of income and nutrition.

39. Environmentally damaging agricultural practices are a major driver of these challenges. There is growing concern over inappropriate approaches that drive excessive use of fertilizers and pesticides, pollution of waterways and aquifers, build-up of salt in the soil, water scarcity in major river basins, declining levels of groundwater and loss of crop biodiversity. Large parts of Sahel rely on rainfed agriculture with little or non-existent use of organic or inorganic fertilizers, soil erosion and poor access to seed varieties. Weak governance, damaging policies and changing consumption patterns lie at the heart of this environmental degradation: poor rural people, including smallholders, are often disempowered and thus unable to sustainably manage natural resources; a lack of clear land access and tenure rights removes incentives to maintain natural assets; distorting trade policies and fossil fuel and other subsidies are key drivers. The response requires an 'evergreen revolution', powered by sustainable agriculture that balances crop/livestock, fisheries and agroforestry systems, so that surplus inputs are avoided and soil fertility and ecosystem services are not compromised, while production and income are increased. Building on a growing body of evidence of the success of sustainable agriculture investments, there is a huge opportunity to further scale up multiple-benefit.

40. IFAD's ENRM stresses that project designs present new opportunities to improve systematic integration and scaling up of ENRM of the portfolio. Such integration can help IFAD to engage in

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<sup>5</sup> [https://www.ifad.org/topic/resource/tags/climate\\_change/2096936](https://www.ifad.org/topic/resource/tags/climate_change/2096936)

new and strengthened partnerships with specialized entities for enhanced and effective responses to issues associated with natural resources and, climate variability and change. ENRM is at the core of delivering IFAD's poverty reduction and sustainable agriculture mandate because its target groups rely directly on the environment and natural resources for their livelihoods, and client demand for support for ENRM is increasing.

## **Country Background**

### **General economic situation.**

41. The Central African Republic, a landlocked country with a population of close to 4.9 million, embarked on a long recovery process, following a major security crisis in 2013 that unravelled its social fabric and displaced over 25% of its population. Elections in 2016 brought an end to three years of political transition and turmoil. Since 2016, the Central African Republic has been governed by President Faustin-Archange Touadéra and Prime Minister Simplicie Sarandji. The next presidential elections are scheduled to be held between December 2020 and March 2021.
42. On February 6, 2019, the Government of the Central African Republic signed an African Union-mediated peace agreement with 14 armed groups. This agreement has been endorsed by the international community. The African Union and the Economic Community of Central African States (ECCAS) serve as guarantors of the agreement, while the UN peacekeeping force (MINUSCA) plays a critical support role in the background.

### **Economic Overview**

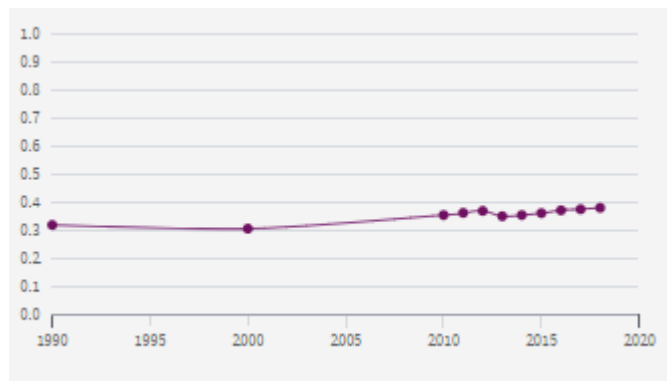
43. Economic growth in the Central African Republic slowed to 3.7% in 2018, as renewed insecurity inhibited economic activity by disrupting agricultural, forestry and mining production, and delaying investment projects. However, since 2015, economic growth in the country has outpaced the CEMAC average and is projected to reach 4.8% in 2019.
44. The Central African Republic would benefit from maintaining its fiscal discipline, because it remains at high risk of debt distress. The government's efforts continue to yield positive outcomes, with a debt-to-GDP ratio that declined to 49%. Debt indicators are expected to steadily improve over the medium term. The overall deficit is estimated to rise to 2.7% of GDP in 2019, up from 1.6% in 2017. At 9% of GDP in 2018, the Central African Republic still has one of the lowest domestic revenue-to-GDP ratios in Sub-Saharan Africa. Public spending increased to 16.3% of GDP in 2018, in tandem with a rise in expenditure on goods and services. Grants remain high at 7.8% of GDP in 2018 and are projected to reach 11% in 2019, thanks to support from the development partners for the peace agreement.
45. If the security situation does not deteriorate, the medium-term outlook for the country is positive. The expected steady improvement in security, the gradual re-establishment of public services in the provinces, the uptick in public and private investments, and reform implementation are projected to push growth to 4.8% in 2019.
46. Poverty remains high and projections suggest that roughly 71% of the population was living below the international poverty line (\$1.90 per day, in terms of PPP) in 2018. Approximately 643,000 people remain internally displaced while 575,000 Central African refugees sought shelter in neighboring countries. It is expected that in 2019, 2.9 million Central Africans—more than half of the country's population—will need humanitarian assistance, with 1.6 million people in acute need. In order to meet humanitarian needs, on January 7, 2019 the Government of the Central



African Republic and the Office for the Coordination of Human Affairs (OCHA) officially launched the \$430.7 million Humanitarian Response Plan for the year.

47. The Central African Republic remains one of the poorest countries in the world and is grappling with numerous human capital challenges. It ranks near the very bottom of the UN Human Development Index (188 out of 189 countries in December 2018), which could present devastating consequences for its future generation. While the most recent estimates show that more than 71% of the population is poor, there have been improvements in the provision of key public services in the country's South-western region.
48. Maternal mortality is among the world's highest (882 per 100,000 live births), while the extremely high under-five child mortality rate (179 per 1,000) highlights the severity of the health situation.
49. The Central African Republic has some of the lowest education and gender equality indicators in the world. The poor quality of primary education, the lack of secondary school education for girls, and violence against women and girls, with 11,000 reported incidents each year (2016), 74% of which involve children, remain pressing challenges for the country.
50. Average life expectancy is 53 years. High levels of malnutrition exist, with 41% of the population suffering from chronic malnutrition (stunting). The fertility rate is high at 6.2 children per woman.

Graph 1: Evolution of the HDI from 1990 to 2020<sup>6</sup>



### Situation of the agricultural sector and rural poverty

51. Agricultural output is dominated by subsistence crops. Agriculture (including forestry and fisheries) accounted for 54% of GDP in 2001, and it employed about 74% of the labor force. The FAO estimates that about 2,020,000 hectares (4,991,000 acres, or 3.2% of the total land area) are arable or under permanent crops, and 3,000,000 hectares (7,400,000 acres, or 4.8% of total land area) are in permanent pasture. The CAR is nearly self-sufficient in food production and has potential as an exporter.
52. Food production index (1999-2001 = 100) in Central African Republic was reported at 120 in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Food production index (1999-2001 = 100) - actual values, historical data, forecasts and projections were sourced from the [World Bank](http://data.worldbank.org) on July of 2020.

<sup>6</sup> <http://hdr.undp.org/en/countries/profiles/CAF>

53. Manioc, the basic food crop, is raised on about 200,000 hectares (494,000 acres); output was about 579,000 tons in 1999. Bananas are the second major food crop. Production was 115,000 tons in 1999, while plantain production was 82,000 tons. Other food crops in 1999 included 95,000 tons of corn, 12,000 tons of millet, and 29,000 tons of sorghum. Some tropical fruits are produced in small quantities, including 22,000 tons of oranges and 2,000 tons of lemons and limes in 1999. An oil-palm plantation covering 2,500 hectares (6,200 acres) opened in 1986 at Bossongo, 35 km (22 mi) sw of Bangui. In 1999, production of palm oil totaled 7,000 tons.
54. The first commercial cotton production in French Equatorial Africa began in Ubangi-Shari in 1924. Cotton is grown in the Bamingui and Gribingui river valleys. In 1969–70, 58,000 tons of seed cotton were produced, a national high, but production quickly slumped: in 1999, it totaled 35,000 tons. Another important cash crop is high-quality coffee, which is cultivated on the plateaus along with sisal and tobacco; coffee production was 9,900 tons in 2001/2002; coffee exports were valued at \$2.8 million in 2001. Production of peanuts, which are cultivated in conjunction with cotton, was an estimated 110,000 tons in 1999.<sup>7</sup>
55. **Aquaculture production.** Aquaculture production (metric tons) in Central African Republic was reported at 190 in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Aquaculture production (metric tons) - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.
56. **Rural poverty.** <sup>8</sup>GINI index in Central African Republic was reported at 56.2 in 2008, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - GINI index - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.
57. Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus, a Gini index of zero represents perfect equality, while an index of 100 implies perfect inequality.
58. **Food and nutritional security.** Despite the assistance provided, the food security situation remains worrisome and continues to be of serious concern. The December 2018 National Food Security Assessment (ENSA in French) results indicate some 2.1 million people, nearly half of the 4.5 million people living in the Central African Republic, are food insecure, showing an increase from the 1.9 million of the IPC data in September 2018. Compared to 2017, the overall food insecurity increased by 5 percent points, from 45 per cent in 2017 to 50 percent in 2018.
59. Vulnerable populations have inadequate, poorly diversified and insufficient food consumption. This vulnerability is accentuated by the economic situation of these households as well as the stagnation of households' income. This is deeply concerning as about half of Central African families spend the majority of their income on food, and even up to 75 per cent in some areas. Support to households' agricultural activities and value chain rehabilitation are key activities for the reduction of food insecurity, the generation of socio-economic development, resilience and peace.<sup>9</sup>
60. **Gender Equality.** Gender equality in Central African Republic was reported at 0.33333 in 2019, according to the World Bank collection of development indicators, compiled from officially

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<sup>7</sup> <https://www.nationsencyclopedia.com/Africa/Central-African-Republic-AGRICULTURE.html#ixzz6TfcLpeTZ>

<sup>8</sup> <https://tradingeconomics.com/central-african-republic/gini-index-wb-data.html>

<sup>9</sup> <https://reliefweb.int/sites/reliefweb.int/files/resources/HNO-Light-26032019-%28001%29.pdf>

recognized sources. Central African Republic - Gender equality - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

## **Environmental challenges and their effects on agricultural development and rural poverty**

### **Imbalance of soil nutrients**

61. Soil is the foundation of agricultural production. Its fertility can directly affect crop growth with changes in soil carbon (C), nitrogen (N) and microbial activities, which are likely to change with climate change, temperature and variations in precipitation. As the material basis for plant growth, the soil is also an important medium for the accumulation and decomposition of pollutants. The rapid increase in population has resulted in an increased demand for agricultural land. This, in turn, has led to a reduction in the size of farms per household. As a result, fallow periods are either shortened or nonexistent, resulting in an overwhelming tendency to deplete nutrients from the soil. In addition, the irrational application of chemical essences, herbicides and pesticides means that the soil environment is increasingly polluted and degraded.

### **<sup>10</sup>Evolution of plant cover and forest resources**

62. Bird species, threatened in Central African Republic was reported at 16 in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Bird species, threatened - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

63. **CO2 Emissions.** CO2 emissions (kt) in Central African Republic was reported at 301 in 2014, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - CO2 emissions (kt) - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

64. **Forest rents.** Forest rents (% of GDP) in Central African Republic was reported at 13.49 % in 2017, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Forest rents (% of GDP) - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

65. **Mammal Species, Threatened.** Mammal species, threatened in Central African Republic was reported at 16 in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Mammal species, threatened - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

66. **Plant Species (higher), Threatened.** Plant species (higher), threatened in Central African Republic was reported at 26 in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Plant species (higher), threatened - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

67. **Terrestrial and Marine Protected Areas.** Terrestrial and marine protected areas (% of total territorial area) in Central African Republic was reported at 18.06 % in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. Central African Republic - Terrestrial and marine protected areas (% of total territorial area) - actual values, historical data, forecasts and projections were sourced from the [World Bank](#) on July of 2020.

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<sup>10</sup> <https://tradingeconomics.com/central-african-republic/indicators-wb-data.html?g=environment>

68. The Central African Republic had one of the lowest total deforestation rates among tropical countries between 1990 and 2005 when just 1.9 percent of its forests were lost. However, the country's forest degradation rate was considerably higher due to logging.

Today about 16.6 percent of the Central African Republic is under some form of protection, though institutional support for protected areas has historically been weak, and hunters and loggers have continued to operate in national parks. The Central African Republic is home to about 3,600 species of plants, 663 birds, 131 mammals, 187 reptiles, and 29 amphibians<sup>11</sup>.

### Post-harvest activities

69. The risks identified are i) poor management of waste and wastewater from processing units; (ii) the use of conventional energies (wood, charcoal) for the operation of storage, processing or marketing units instead of green energies by entrepreneurs due to a cost to dissuasive investment or their unavailability on the market; (iii) poor implementation of infrastructure leading to watercourse pollution or weakening of the environment.

### Characteristics of the Climate

70. The Program intervention area falls in a tropical climate, with abundant rainfall of about 178 cm (70 in) annually in the south, decreasing to about 86 cm (30 in) in the extreme northeast. There is one rainy season (December– March) and one long, hot, dry season (April–November). Floods are common. Temperatures at Bangui have an average minimum and maximum range from 21° C (70° F) to 34° C (93° F)<sup>12</sup>.

71. **Reduction in rainfall.** Precipitation in Central African Republic decreased to 9.61 mm in December from 30.19 mm in November of 2015<sup>13</sup>.

### Climate change

72. The country is very susceptible to climate change shocks. CAR's Climate Change Vulnerability Index is the highest in the world, ranking the country 191 out of 191<sup>14</sup>. The climate of the CAR varies according to the ecological zones; in the equatorial zone to the south, the climate is tropical and humid (average temperature 25°C); in the western part, it rains almost all year round and the dry season does not last often only two (2) months. It receives more than 1200 mm of precipitation per year.- in the intertropical zone in the center, the rainy season lasts six (6) months (average temperature 26 ° C in the southernmost part).- towards the North, the dry season lasts five (5) to six (6) months. She also receives more than 1200 mm of precipitation per year.- in the sub-Saharan zone north around Birao, the climate is tropical dry: rain low of less than 1200 mm and large temperature variations.- within each hydrographic basin, sub-climates are defined generally depending on the precipitation regime and the length of the rains.

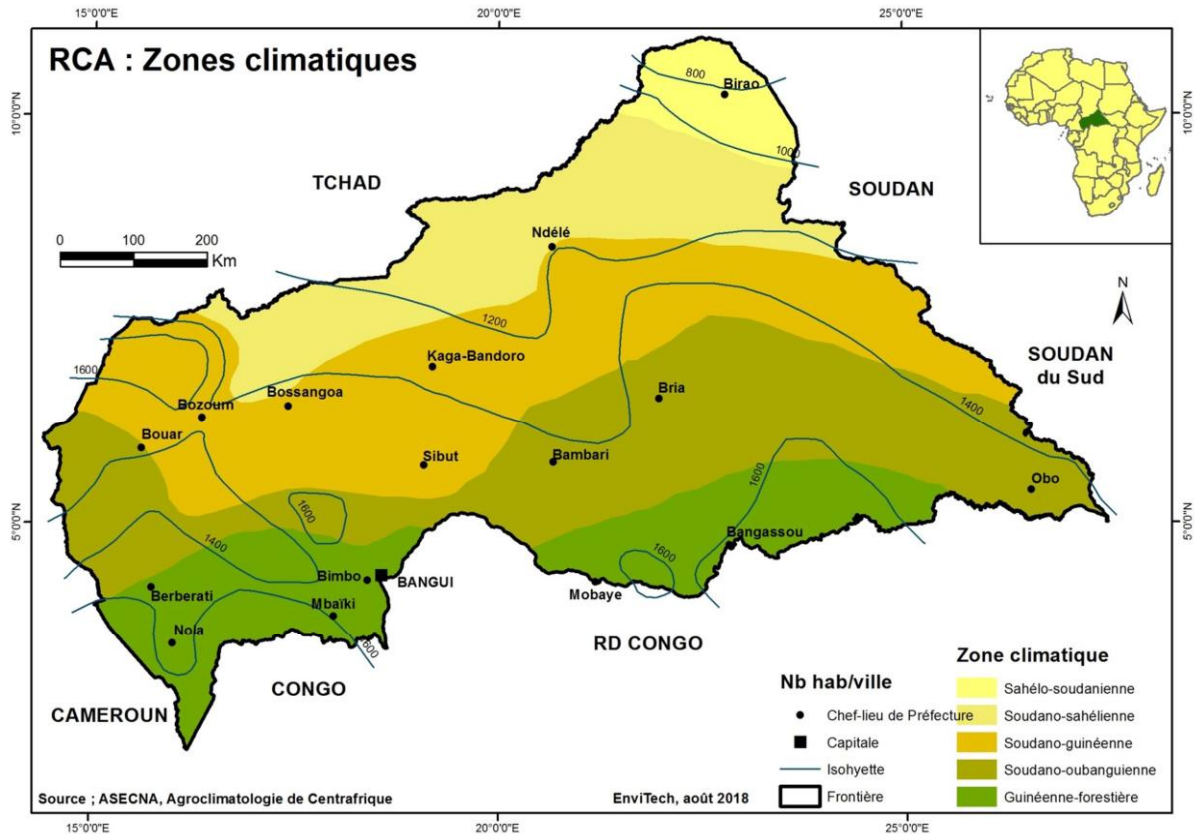
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<sup>11</sup> <https://rainforests.mongabay.com/20car.htm>

<sup>12</sup> <https://www.nationsencyclopedia.com/Africa/Central-African-Republic-CLIMATE.html#ixzz6TgJHJ6GR>

<sup>13</sup> <https://tradingeconomics.com/central-african-republic/precipitation>

<sup>14</sup> <https://reliefweb.int/sites/reliefweb.int/files/resources/verisk%20index.pdf>



73. Relief: The Central African Republic is a relatively low-lying, undulating plateau dominated in the NorthWest by the Yadé massif which extends the Adamaoua and to the North-East, by the Bongo massif. The Ubanguian ridge connects these two (2) massifs by hills and flat-bottomed valleys from which rise the Kagas, domes and granite peaks. The Carnot-Berberati plateaus in the Southdu Yadé, and Mouka-Ouadda to the south-west of the Bongo, are made up of ancient rocks covered by sandstone formations with permeable and sandy soils from which the diamond. Crystalline landforms emerge from a vast plateau, near the western borders (Yadé mountains, 1,420 m) and eastern (Bongo mountains, 1,400 m)

## Natural Resources and NRM

### Natural environment

74. Much of the country consists of flat or rolling plateau savanna approximately 500 metres (1,640 ft) above sea level. Most of the northern half lies within the World Wildlife Fund's East Sudanian savanna ecoregion. In addition to the Fertit Hills in the northeast of the CAR, there are scattered hills in the southwest regions. In the northwest is the Yade Massif, a granite plateau with an altitude of 348 metres (1,143 ft).

75. At 622,984 square kilometres (240,535 sq mi), the Central African Republic is the world's 44th-largest country. It is comparable in size to Ukraine, as the Ukraine is 603,500 square kilometres (233,000 sq mi) in area, according to List of countries and dependencies by area.

76. Much of the southern border is formed by tributaries of the Congo River; the Mbomou River in the east merges with the Uele River to form the Ubangi River, which also comprises portions of the southern border. The Sangha River flows through some of the western regions of the country, while the eastern border lies along the edge of the Nile River watershed.[66]

77. It has been estimated that up to 8% of the country is covered by forest, with the densest parts generally located in the southern regions. The forests are highly diverse and include commercially important species of Ayous, Sapelli and Sipo.[67] The deforestation rate is about 0.4% per annum, and lumber poaching is commonplace. In 2008, Central African Republic was the world's least light pollution affected country. The Central African Republic is the focal point of the Bangui Magnetic Anomaly, one of the largest magnetic anomalies on Earth.

#### Water resources

78. The CAR is Chad's water tower thanks to the Logone and Chari, which take their source there and flow into Lake Chad. Two (2) large mountainous areas condition the network hydrographic survey of the CAR. The country is drained by two (2) main basins; to the south, the Oubangui hydrographic basin, a stream formed by the junction of the Mbomou and Uélé with a series of tributaries on the right (Ouaka, Kémo, Ombelle, Mpoko, Lobaye, Nana, Mambéré and Kadéï constitute the Sangha). Only the Ubangi, tributary of the Congo, is navigable to Bangui when the waters are high; - in the North, the watershed of the Chari-Logoneque cross their Bahr tributaries Aouk, Bamingui, Gribingui, Ouham, Pendé and Mbéré.

#### Vegetation

79. The CAR overflows to the southwest on the great equatorial forest and extends mainly in the savannah area. From South to North, we can distinguish the dense, humid equatorial forest, evergreen, the shrub savannah, area of abundant fauna, the steppe of bushes thorny scattered. The country is characterized by a very diverse flora and fauna, in particular a population African forest elephants, visible in herds of several dozen members, especially in the salt works (Bayanga). This situation remains very fragile due to poaching for ivory and the significant consumption of bush meat, but represents a high potential for hunting and ecotourism. Tourism remains still in the embryo, as much was due to the weakness of the reception and transport infrastructure and insecurity that reigns in the country.

#### Wildlife

80. In the southwest, the Dzanga-Sangha National Park is located in a rain forest area. The country is noted for its population of forest elephants and western lowland gorillas. In the north, the Manovo-Gounda St Floris National Park is well-populated with wildlife, including leopards, lions, cheetahs and rhinos, and the Bamingui-Bangoran National Park is located in the northeast of CAR. The parks have been seriously affected by the activities of poachers, particularly those from Sudan, over the past two decades.

#### Biodiversity

81. Protected Areas<sup>15</sup>: The Central African Republic, up until 1989, had a network of 14 protected areas covering a total surface of 72,230 km<sup>2</sup> or about 11% of the total area of the country. These protected areas consisted of one Integral Reserve, three National Parks, seven Wildlife Reserves, two Biosphere Reserves, and one Presidential Park with special status. The creation of protected areas started only in 1930. The first national park was the Manovo-Gounda-St Floris National Park created in 1933; it was followed in 1936 by the Bamingui-Bangoran National Park.
82. With the creation of the Dzanga-Sangha Special Dense Forest Reserve and the Dzanga-Ndoki National Park, the Central African Republic now has a network of 16 protected areas, and the total surface area now protected is 76,610 km. This increase is testimony to the will of the Central African Republic to preserve more natural ecosystems for the needs of present and future generations. In fact, by creating the Dzanga-Sangha Special Reserve, the Central African Republic has opted for a new conservation strategy, one of integrated conservation and development. The Dzanga-Sangha Project has as a primary objective the protection of the dense forest of the southwest of

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<sup>15</sup> [http://www.umich.edu/~infosrn/PDF\\_FILES/ENGLISH\\_PDF/SEC\\_4/NGATOUA.PDF](http://www.umich.edu/~infosrn/PDF_FILES/ENGLISH_PDF/SEC_4/NGATOUA.PDF)

the Central African Republic, which incorporates a portion of the trinational conservation area under discussion in this volume.

Country/area	Land area	Forest area 2000					Area change 1990-2000 (total forest)		Volume and above-ground biomass (total forest)		Forest under management plan	
		Natural forest	Forest plantation	Total forest		000 ha/year	%	m <sup>3</sup> /ha	t/ha	000 ha	%	
				000 ha	%							
000 ha	000 ha	000 ha	000 ha	%	ha/capita	000 ha/year	%	m <sup>3</sup> /ha	t/ha	000 ha	%	
Central African Republic	62 297	22 903	4	22 907	36.8	6.5	-30	-0.1	85	113	269*	n.ap

Central Africa: Forest resources and Management<sup>16</sup>

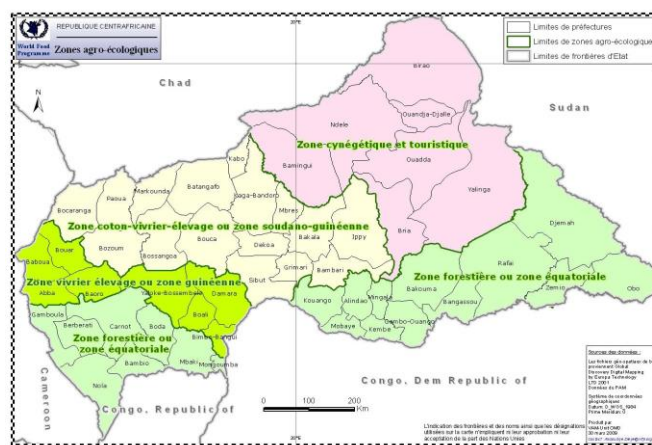
83. This biodiversity is however in danger. According to the IUCN Red List<sup>17</sup>, the critically endangered species are listed below;

scientific_name	common_name	taxonid	category
Neoschumannia kamerunensis		39478	CR
Cyclanorbis elegans	Nubian Flapshell Turtle	6004	CR

#### Agro-ecological zones<sup>18</sup>

84. The country includes five agro-ecological zones: Forest or equatorial zone; Cereals and livestock or Guinean Zone; Sudano-Guinean zone; Hunting and Tourism zone.

Map of Agro-Ecological Zones in the CAR

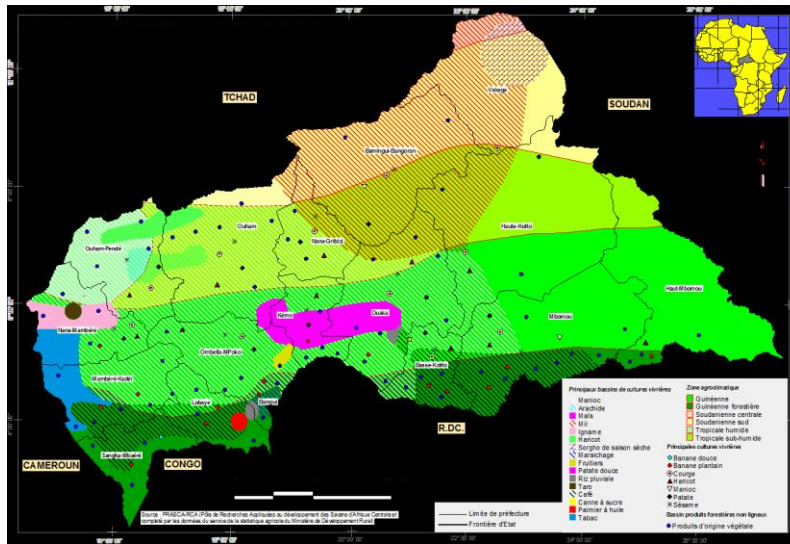


Note : *Zone forestière ou zone équatoriale* = Forest or equatorial zone ; *Zone vivrier élevage ou zone guinéenne* = Cereals and livestock or Guinean Zone ; *Zone coton-vivrier-élevage ou zone soudano-guinéenne* = Cotton-cereals-livestock zone or Sudano-Guinean zone ; *Zone cynégétique et touristique* = Hunting and Tourism zone.

<sup>16</sup> <http://www.fao.org/3/y1997e/y1997e0k.htm>

<sup>17</sup> [https://rainforests.mongabay.com/biodiversity/en/central\\_african\\_republic/CR.html](https://rainforests.mongabay.com/biodiversity/en/central_african_republic/CR.html)

<sup>18</sup> Ministère de l'Agriculture, Plan Quinquennal de développement de l'Agriculture, version finale, avril 2013



Note: Manioc = manioc/cassava; arachide = peanut/groundnut; maïs = maize; mil = millet; igname = yams; haricot = bean; sorgho de saison sèche = dry-season sorghum; maraîchage = market gardening ; fruitiers = fruit trees/orchards; patate douce = sweet potato; riz pluvial = rainfed rice; taro = taro; café = coffee; canne à sucre = sugarcane; palmier à huile = palm oil; tabac = tobacco; banane douce = sweet banana; banane plantain = plantain; courge = squash/gourds; patate = potato; sesame = sesame.

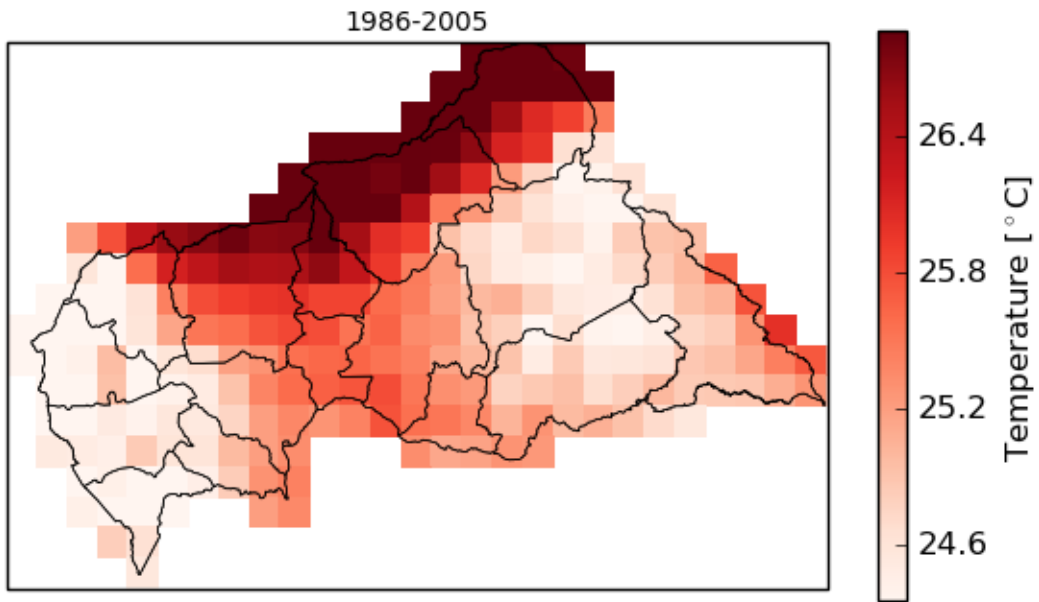
### Weather in Bangui

85. The table below displays average monthly climate indicators in Bangui based on 8 years of historical weather readings. Temperature in **Centigrade, Bangui 4 40 N, 18 51 E, 1200 feet (366 meters)** above sea level.

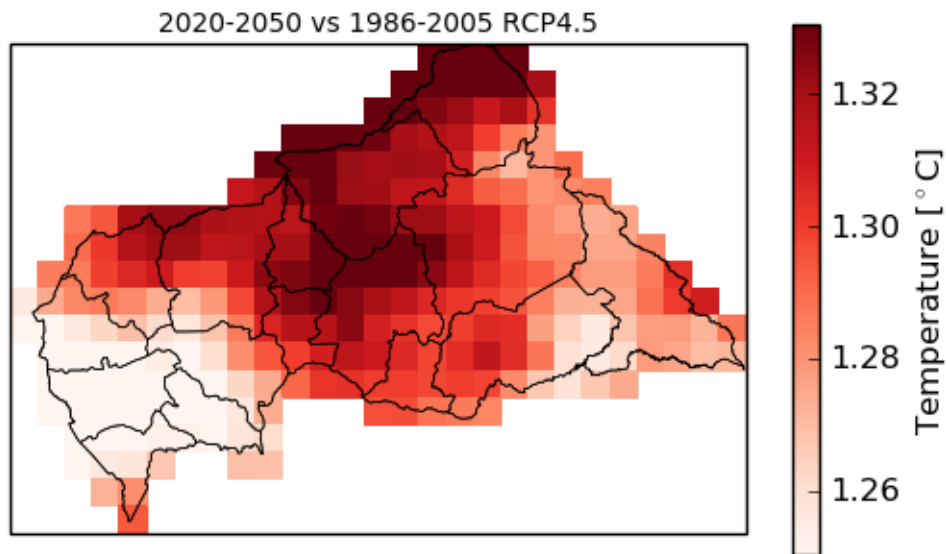
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temperature	25	26	27	26	26	25	24	25	25	24	25	24
Avg. Max Temperature	32	35	34	32	32	30	29	30	30	30	31	32
Avg. Min Temperature	18	19	22	22	22	21	21	21	20	20	20	18
Avg. Rain Days	0	0	3	4	4	5	7	7	6	7	2	0
Avg. Snow Days	0	0	0	0	0	0	0	0	0	0	0	0

Temperature average over the reference period 1986-2005. This map is based on the EWEMBI dataset.

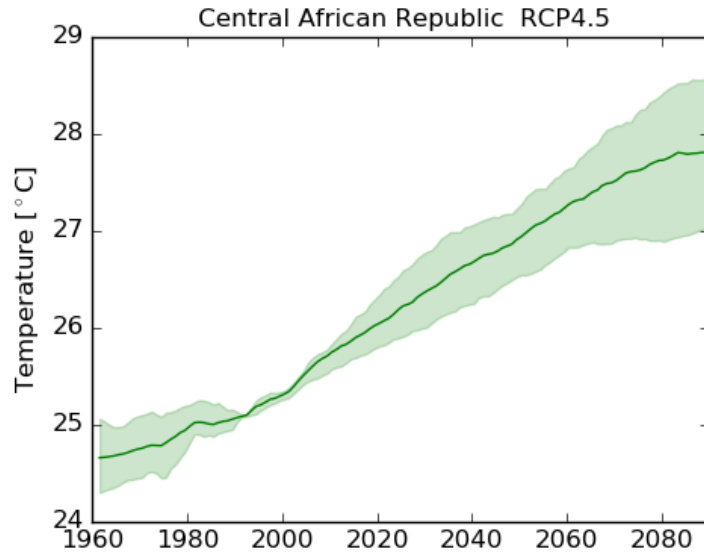




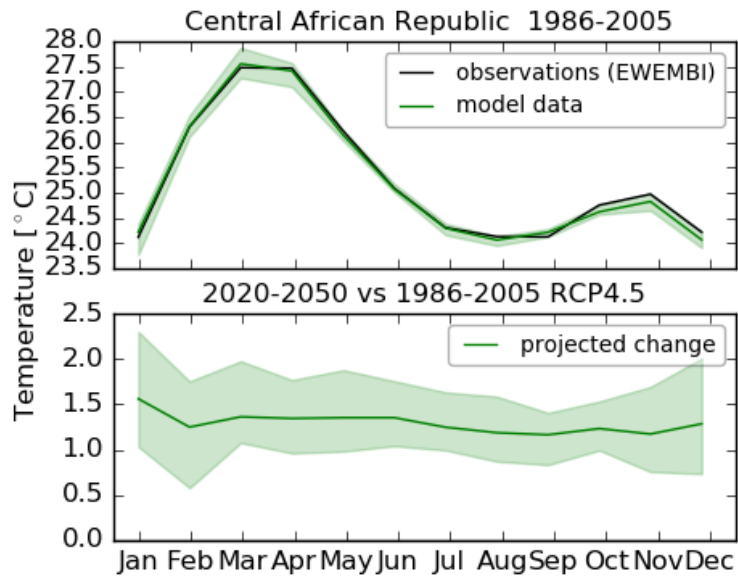
Projected change in temperature for 2020-2050 compared to the reference period 1986-2005. Here the ensemble mean of regional climate model projections is displayed. Grid-cells for which a model-disagreement is found are colored in gray. The projections are based on the emission scenario RCP4.5.



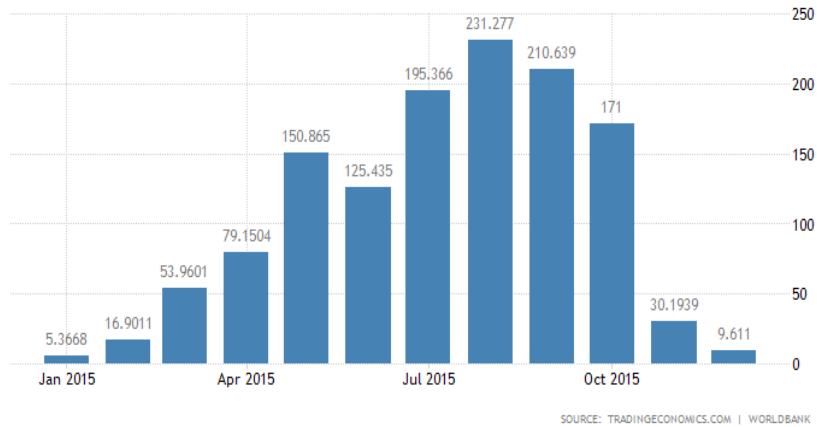
Regional climate model projections for temperature displayed as 20 year running mean. The line represents the ensemble mean while the shaded area represents the model spread. The projections are based on the emission scenario RCP4.5.



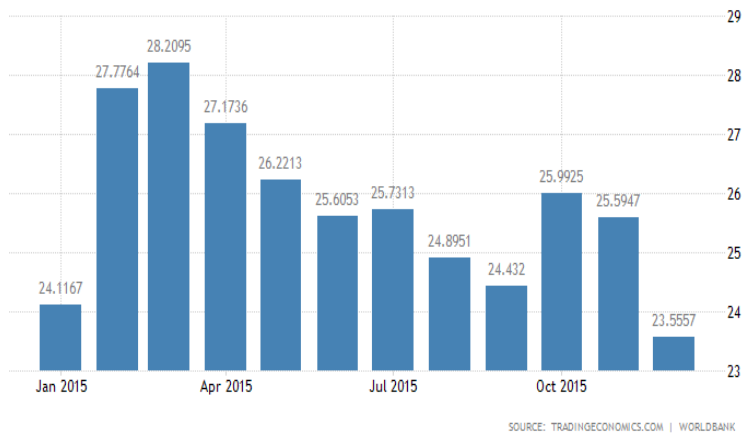
Annual cycle of temperature for the period 1986-2005. Bottom: Changes in annual cycle projected for 2020-2050 compared to the reference period 1986-2005. EWEMBI data is shown in black, regional climate model simulations in green. The green line represents the ensemble mean while the shaded area represents the model spread. The projections are based on the emission scenario RCP4.5.



### CAR Average Precipitation, 2015

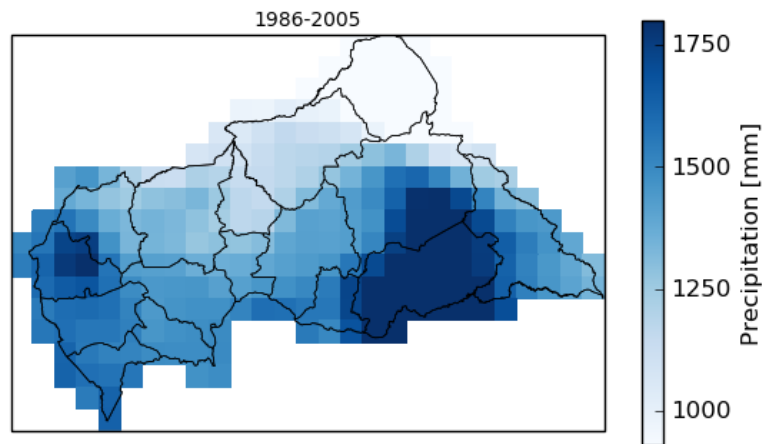


### CAR Average Temperature

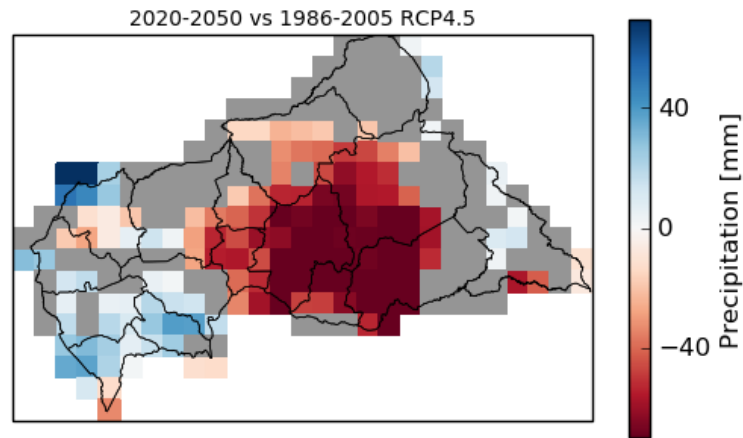


### Precipitation

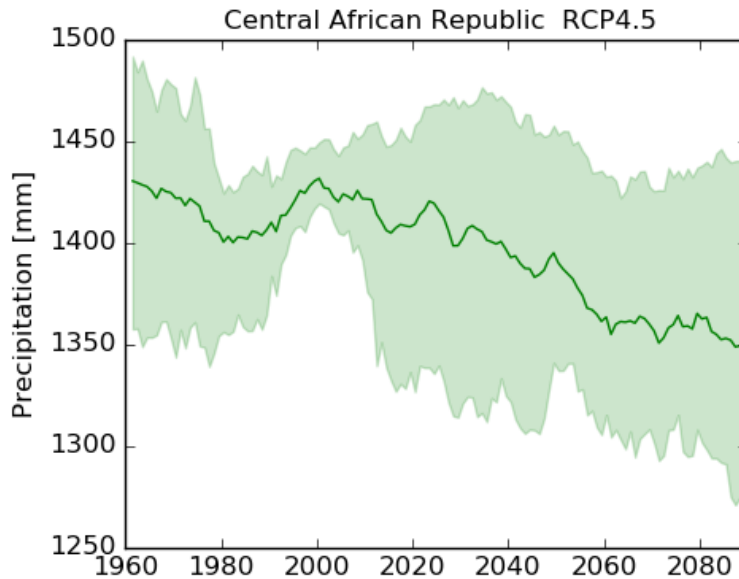
Precipitation sum over the reference period 1986-2005. This map is based on the EWEMBI dataset.



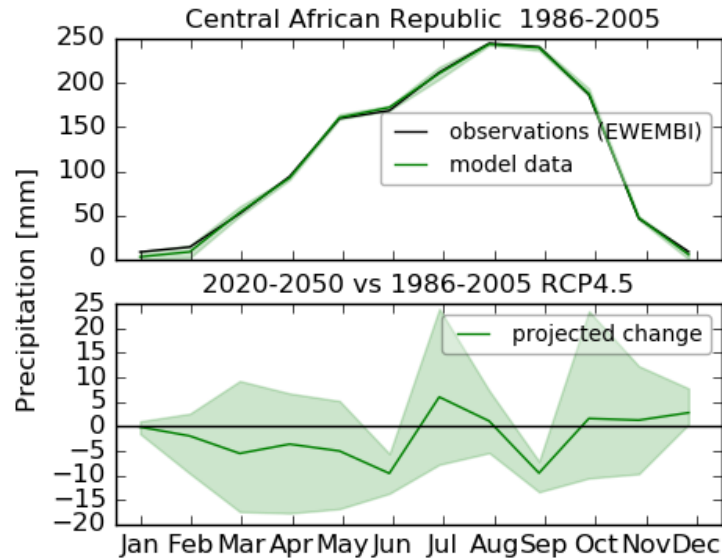
Projected change in precipitation for 2020-2050 compared to the reference period 1986-2005. Here the ensemble mean of regional climate model projections is displayed. Grid-cells for which a model-disagreement is found are colored in gray. The projections are based on the emission scenario RCP4.5.



Regional climate model projections for precipitation displayed as 20 year running mean. The line represents the ensemble mean while the shaded area represents the model spread. The projections are based on the emission scenario RCP4.5.



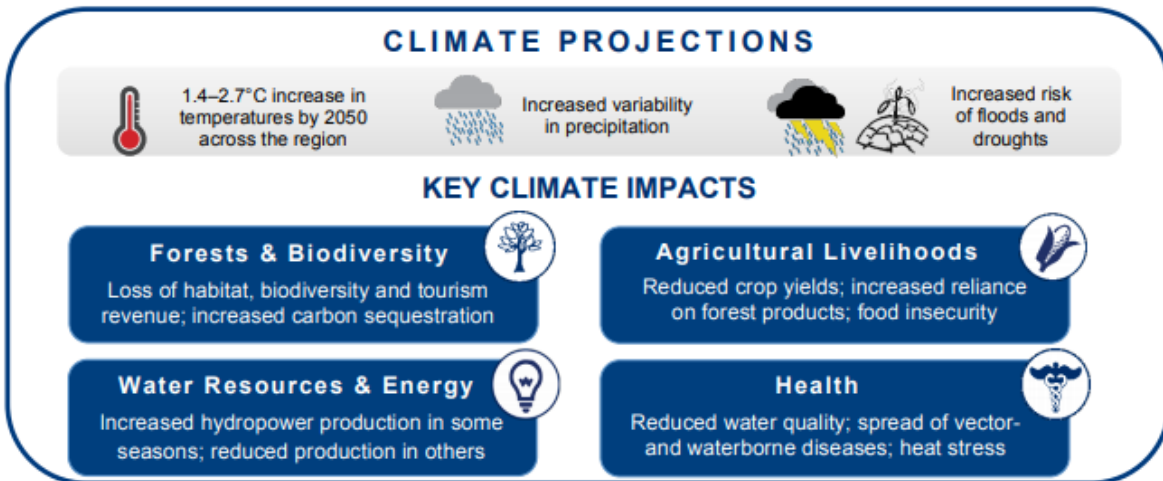
Annual cycle of precipitation for the period 1986-2005. Bottom: Changes in annual cycle projected for 2020-2050 compared to the reference period 1986-2005. EWEMBI data is shown in black, regional climate model simulations in green. The green line represents the ensemble mean while the shaded area represents the model spread. The projections are based on the emission scenario RCP4.5.



### Climate projections for 2050

86. According to IPCC report<sup>19</sup>, temperatures in sub-Saharan Africa have evolved a little faster than the world average, with increases ranging from 0.5 to 0.8°C since the late 1970s. It is very likely that temperatures in Africa will increase during the 21st century by 3 to 4°C on average, 1.5 times more than the global average.

87. In CAR, different climatic scenarios show an increase in the average annual temperature from 1.4 to 2.7°C across the region by 2050<sup>20</sup>. The USAID report also indicates the increased variability in precipitation and increased risk of floods and droughts as shown in the figures below.





<sup>19</sup> Ministère de l'Environnement et de la Pêche, Stratégie Nationale de lutte contre les Changements Climatiques au Tchad (SNCC), draft 1<sup>er</sup> mars 2017

<sup>20</sup> [https://www.climatelinks.org/sites/default/files/asset/document/20180604\\_USAID-ATLAS\\_ClimateRiskProfile\\_CARPE.pdf](https://www.climatelinks.org/sites/default/files/asset/document/20180604_USAID-ATLAS_ClimateRiskProfile_CARPE.pdf)

## Key Climate Trends and Projections in DRC, ROC and CAR

Sources: World Bank Climate Change Knowledge Portal

	Observed trends	Climate projections
<b>Temperature</b> 	<b>DRC:</b> Warm extremes increased (e.g., warmest day increased by about 0.25°C per decade) <b>ROC:</b> Mean annual temperature increased 0.6°C between 1951–1999 <b>CAR:</b> Mean annual temperature has increased at a rate of 0.3°C per decade since 1978, with faster increases in northeastern parts of the country	<b>DRC:</b> Rise in minimum temperatures will exceed rise in maximum temperatures; increase in average daily temperatures <b>ROC:</b> 1°C increase in mean annual temperature by 2050; increases in heat wave durations by 2046–2065, particularly in northern and northeastern ROC <b>CAR:</b> 0.7–3°C increase in mean annual temperatures by 2080
<b>Rainfall</b> 	<b>DRC:</b> Increased frequency of intense rainfall events <b>ROC:</b> Average annual rainfall decreased between 1950s and 1980s <b>CAR:</b> Decrease in precipitation over the period 1978–2009, with more interannual variability	<b>DRC:</b> Continued increase in frequency of intense rainfall events <b>ROC:</b> Increase in mean annual rainfall by 2046–2065; increase in rainfall intensity <b>CAR:</b> Increase in mean annual rainfall; rainfall becomes more erratic

88. This evolution of the climate will have foreseeable consequences on the living conditions of rural populations. According to the IPCC, “climate change could have significant short and long term impacts in rural areas by influencing the availability and supply of water, food security and agricultural incomes, notably by causing movement of food and non-food crop production areas around the world (high level of confidence) ”<sup>21</sup>.

89. It is therefore recommended to develop new adaptation measures for agriculture, water, forestry and biodiversity through policies that take into account rural decision-making contexts. In summary, the IPCC has summarized in the table below the main risks, problems and prospects for adaptation for the African continent.




Facteurs déterminants des incidences liées au climat							Degré de risque et possibilités d'adaptation						
Tendance au réchauffement	Température extrême	Tendance à l'assèchement	Précipitations extrêmes	Précipitations	Enneigement	Cyclones destructeurs	Niveau de la mer	Acidification des océans	Fertilisation par le dioxyde de carbone	Possibilités supplémentaires d'adaptation pour réduire le risque			
										Degré de risque compte tenu d'un degré élevé d'adaptation		Degré de risque compte tenu du degré d'adaptation actuel	
Afrique													
Risques principaux	Problèmes et perspectives d'adaptation					Facteurs climatiques	Échéancier		Risques et possibilités d'adaptation				
Aggravation des pressions exercées sur les ressources hydriques déjà lourdement sollicitées par la surexploitation et la dégradation, et qui feront face à l'avenir à une demande accrue. Stress dû à la sécheresse exacerbé dans les régions africaines déjà exposées à ce fléau (degré de confiance élevé) [22.3–4]	<ul style="list-style-type: none"> <li>• Réduction des facteurs de perturbation non climatiques des ressources hydriques</li> <li>• Renforcement des capacités institutionnelles pour la gestion de la demande, évaluation des ressources en eau souterraine, planification intégrée de l'eau et des eaux usées, et gouvernance intégrée des terres et de l'eau</li> <li>• Développement urbain durable</li> </ul>						Moment présent Court terme (2030–2040) Long terme 2°C (2080–2100) 4°C		Très faibles    Modérés    Très élevés				
Baisse de la productivité des cultures due à la chaleur et à la sécheresse — dont les conséquences sur les moyens de subsistance et la sécurité alimentaire des pays, des régions et des ménages pourraient être graves — ainsi qu'aux dommages causés par les ravageurs, les maladies et les inondations sur l'infrastructure des systèmes alimentaires (degré de confiance élevé) [22.3–4]	<ul style="list-style-type: none"> <li>• Adaptations technologiques (variétés végétales tolérantes au stress, irrigation, systèmes d'observation perfectionnés, etc.)</li> <li>• Amélioration de l'accès des petits producteurs au crédit et à d'autres facteurs de production essentiels; diversification des modes de subsistance</li> <li>• Renforcement des institutions à l'échelle locale, nationale et régionale pour appuyer l'agriculture (y compris par l'établissement de systèmes d'alerte précoce) et politiques favorables à l'égalité des sexes</li> <li>• Adaptations agronomiques (agroforesterie, agriculture de conservation)</li> </ul>						Moment présent Court terme (2030–2040) Long terme 2°C (2080–2100) 4°C		Très faibles    Modérés    Très élevés				
Variations de l'incidence et de l'extension géographique des maladies à transmission vectorielle ou d'origine hydrique dues à l'évolution des températures et des précipitations moyennes et de leur variabilité, en particulier aux limites de leurs aires de répartition (degré de confiance moyen) [22.3]	<ul style="list-style-type: none"> <li>• Réalisation des objectifs de développement, et notamment amélioration de l'accès à l'eau potable et des systèmes d'assainissement, et renforcement des fonctions liées à la santé publique telles que la surveillance</li> <li>• Cartographie de la vulnérabilité et systèmes d'alerte précoce</li> <li>• Coordination intersectorielle</li> <li>• Développement urbain durable</li> </ul>						Moment présent Court terme (2030–2040) Long terme 2°C (2080–2100) 4°C		Très faibles    Modérés    Très élevés				

Table 2: determinants of climate-related impacts-Africa

<sup>21</sup> GIEC 2014, Changements climatiques 2014 - Incidences, adaptation et vulnérabilité, 5<sup>ème</sup> rapport d'évaluation

### National priorities in terms of adaptation to climate change

90. The INDC has synthesized CAR's priorities for adaptation to climate change by 2030 as shown in the table below :

Adaptation Objectives	Sectors of Priority Activities	Adaptation options
Agriculture <sup>1</sup> and food security, health, basic infrastructure and sustainable management of natural resources, with the aim of maintaining an annual rate of growth of agricultural activities of 6% and stabilisation of the rate of food insecurity at 15%. Vulnerability profile: Extreme hazards (torrential rains, floods and drought), most vulnerable areas (south, north and northeast) and most vulnerable populations (women, children, indigenous peoples and the aged, i.e. around 75%).	Agriculture and food security, forestry, energy, public health, water resources and land-use planning.	Adjustment of the policy framework, improved knowledge of resilience to climate change, sustainable management of the agricultural, forestry and animal husbandry systems, land-use Intended Nationally Determined Contribution of the Central African Republic – INDC.  Planning, improvement and development of basic infrastructures, guarantee of energy security, improvement of public health systems, improvement of waste management and sustainable management of water resources

Table 3: Priorities for adaptation to climate change<sup>22</sup>

### Components/outcomes and activities

The project is articulated around two technical components and one management component. All activities planned put special lens on gender and youth issues.

#### Component 1. Development of Crop and Animal Production

91. The aim of this component is to enhance the production and productivity of the strategic crops (cassava, maize, rice, bean) and livestock. This component will introduce technologies to improve the productivity, processing, and storage of agriculture products. Focus will be on women and youth in selected activities. The project will provide support for the rehabilitation and management of irrigated perimeters. Livestock farmers will be assisted with the knowledge, skills and material resources to increase livestock productivity and production.

- **Sub-component 1.1. Strengthening the productive capacities of producers**
- **Sub-component 1.2. Creation and rehabilitation of production support infrastructure**
- **Sub-component 1.3. Nutritional education and social inclusion of populations**

#### Component 2. Support for the provision of services and the promotion of products

92. The aim of this component is to enhance value addition of the selected commodities and improve infrastructure for better access to markets. This component will contribute to the establishment of

<sup>22</sup>[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Central%20African%20Republic%20First/INDC\\_R%C3%A9publique%20Centrafricaine\\_EN.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Central%20African%20Republic%20First/INDC_R%C3%A9publique%20Centrafricaine_EN.pdf)

the necessary agricultural and climate resilient rural infrastructure that will allow the opening up of the production areas. Support will be provided for improved management, rehabilitation and construction of new rural roads that will support agricultural production areas. This component will add value to the selected commodities through support for small-scale processing units for youth and women. Processing that improves nutrition outcomes will be prioritised.

- **Sub-component 2.1. Infrastructure for opening up and linking up with the market**
- **Sub-component 2.2. Support for the promotion of products**
- **Sub-component 2.3. Infrastructure support for the functionality of the services**

### **Component 3. Coordination, Management and Political Dialogue**

93. This component aims at ensuring a better management of the intervention and enhancing effective coordination of project investment through project administrative, accounting and financial management, procurement of project goods, works and services, and implementation of the social and environmental management plan, as well as policy dialogue to support project involvement in national and regional discussions on infrastructure development and maintenance. The project will support the Ministries and key stakeholders in coordinating the development and implementation of key policies and strategies needed in the sector with the aim of improving governance and enabling an effective transformation of the rural sector. The project will also build capacity of CSOs and, farmer's organisations in key areas of their skills needed to participate and influence policy development and implementation. These will include among others, the gender strategy, the land management bill and their associated action plans.
94. The project will also facilitate beneficiary engagement to increase transparency and accountability through the third party monitoring system. This will include working closely with Non-State actors and producer's organisations to set up committees, watchdog groups that will monitor the use of allocated resources, ensure transparency in public procurements, the quality of services provided by various service providers such as quality of infrastructure built and used. These groups will also assist the government bodies and implementing partners to propose redress mechanisms to guarantee service satisfaction and avoid elite capture.



### Suggested geographies and sectors for intervention for climate change adaptation

Sector	Adaptation mechanism	Description
Forestry	<i>Establishment and expansion of community natural forests, plantations, national parks and forest parks</i>	As an adaptation measure with mitigation co-benefits, the proposed action should enhance the resilience of forest ecosystems including provisioning functions in support of sustainable livelihood of direct beneficiaries. The activity will empower communities with the legal security, skills and knowledge necessary to rationally utilize their natural resources and conserve the remaining biodiversity.
	<i>Expansion and intensification of agro-forestry and re-forestation activities</i>	This adaptation measure which targets specific areas across the country will enhance the contributions of restored forest ecosystems to forest-based poverty alleviation, and, more broadly, to other national economic goals. The measure is expected to achieve the following:
	<i>Mainstreaming climate change in forest policies and plans</i>	In order to be fully responsive to the challenges of climate change, forestry sector policies and programs need to incorporate the realities of climate change.
Rangelands	<i>Development and implementation of effective policies on integrated natural resources management</i>	The negative impacts of climate change on rangelands can be attenuated through formulation and implementation of effective policies that seek to improve production and also take into consideration the needs of other natural resources-based sectors of the economy.
	<i>Restoration of rangeland landscape</i>	This adaptation option includes the manipulation and monitoring of animal stocking rates, institutionalization of strict grazing controls and management of the vegetation and soils.
	<i>New management strategies</i>	New strategies consist of a combination of measures including active selection of plant species, and stimulation of livestock economy to encourage owners to supply livestock and meat products on local/regional markets. .
Health	<i>Vector control program</i>	Health impacts from malaria will need investment in social mobilization and education, prevention techniques such as mosquito repellents, insecticide treated nets, (ITN) low-cost anti-malarial drugs. Use of ITNs in particular has been shown to reduce malarial morbidity and mortality in the CAR.
	<i>Continuous public health education and awareness creation program</i>	Health education and awareness-raising are conducted at community level to help audiences in their decision-making on thematic issues. Health education and promotion programs should therefore incorporate elements of climate
	<i>Integrated disease surveillance and response</i>	Disease surveillance is a fundamental building block of infectious disease control program. In this regard, there is a clear need to create or improve on the design of health databases, and strengthening of the integrated disease surveillance program of MOH.
	<i>Nutritional support to vulnerable groups</i>	The Ministry for Health with support from the global fund to provide nutritional support to vulnerable groups and their family members
	<i>Public health infrastructure</i>	Proper waste disposal should be promoted to prevent pathogenic and toxic contamination during floods. There are numerous tools and technologies that can be used to reduce the impacts of climate variability on the health of vulnerable human populations. In some communities, these

Sector	Adaptation mechanism	Description
		include promotion of healthy housing environment and enforcement of building regulations. In areas where people depend on untreated water, reliable and safe drinking water as well as the use of simple measures such as proper storage of drinking water in narrow-mouthed vessels, filtering drinking water and use of use of chlorine tablets.
	<i>Vaccination programme</i>	Vaccination campaigns for all possible diseases need to be supported. Yellow fever vaccine is administered at the age of 9 months in all clinics throughout the country. Meningitis vaccine is given only to Muslim pilgrims prior to the annual hajj and when an outbreak of the disease threatens.
<b>Agriculture</b>	Technical adaptation measures	Selection of drought-, pest- disease-, and salinity-resistant, high-yield crop varieties under local conditions. For this purpose the genetic potential of local crop species must be investigated and specimens stored in seed banks;
		Change in planting dates and replacement of long-duration upland and lowland rice varieties with short-duration varieties
		Demonstration, promotion and diffusion of improved post harvest technologies. This will have the long-term effect of reducing extensive cultivation of marginal lands
	Regulatory adaptation measures	Discouraging cultivation on marginal areas
		Cooked food waste reduction
		Diversification of eating habit (change from rice to other cereals)
	Livestock	Increase fodder production from intensive feed gardens
		Promote crop/livestock integration;
		Improve feed conservation techniques and access to supplements
		Engage with other institutions, for example, the International Trypanotolerance Centre (ITC), to explore the potential of intensive livestock production systems in different areas in The Gambia
		Further explore opportunities for selective/cross-breeding of Ndama cows with higher milk-producing breeds
<b>Infrastructures</b>	<b>Road and feeder roads</b>	Climate proofing infrastructures with drainage systems, culverts and using climate resilient infrastructures.

Table 1: Adaptation options by sector (UNEP, 2012).

## **Impact, potential risks and mitigation measures of the Program on the plans, environmental and climate change**

95. The key issues are: i) There are some specific main barriers the project intend to address in order to increase productivity of livestock, maize, beans, rice and cassava value chains in the targeted areas. The barriers hindering better agricultural productivity are:
96. Inadequate climate information services, knowledge and understanding of climate change impact impacts to better plan response in the VCs: climate knowledge, reliable information to better understand the various forms of climate risks in agriculture. Accurate, reliable and timely climate information and robust early warning systems (CIEWS) are crucial for reducing losses and damages resulting from climate-related extreme weather events, increasing the resilience of vulnerable populations and enhancing the capacity of local rural communities to adapt to future changes in climate. The hydro-meteorological infrastructure capacity in CAR is very low, with observation network density (number of stations per 10,000 km sq.) lower than 1.7 in the Ivory Coast compared to 6.2 in Malawi and 45.2 in Rwanda. This prevents decision makers, farmers to inform and select the right adaptation measures in the targeted sectors (livestock, beans, maize, rice, and cassava).
97. Weak and insufficient capacities of farmers to manage climate risks in these value chain. For rural communities in the project area along the value chains to cope with the effects of climate change, this requires preparedness, readiness and specific skills to better manage climate risks. Currently they lack the capacities to identify climate risks and adopt the right adaptation measures.
98. Low adoption of the most appropriate adaptation/ mitigation practices / technologies, water infrastructures to address low agricultural productivity in the VCs: Agricultural productivity is low due to many factors of which climate change. Crops diseases, floods affect crop yields, production and productivity There are proven adaptation technologies and practices that could be used to shift from business as usual toward higher adoption of concrete adaptation measures in cacao, rice and cassava value chains. The project will increase production of climate resilient varieties and species by promoting the adoption of the best climate resilient adaptation activities and rural infrastructures while providing alternative livelihoods such as agricultural production, fish and poultry farming for youth and women along the water basin.
99. Lack of enabling environment for institutional effectiveness and coordination mechanism. There is often limited coordination, information and data sharing between different government and non-governmental entities, each of which serve a key role in the CIEWS value chain and use in selected value chains. Policies to remove barriers to uptake and investments in CIEWS are not in place within national and local governments. Uncoordinated interventions limit the effectiveness of existing adaptation measures in the selected value chains. The third objective is to strengthen the institutional capacities of these agencies to effectively carryout their respective mandates in coordination with other sector ministries particularly the ministry of agriculture, and ministry of environment.

### **Potential impacts and risks**

100. In social terms, the project will directly target approximately target 17,000 new households (estimated to be 50.7% women and 49.3 % men) as beneficiaries through the various activities that will be promoted and will affect approximately 119,000 people based on the average household size in the country (National Population Census – 2005). A strong targeting approach and criteria linked to the Monitoring and Evaluation strategy will be set up during design to allow an adequate census of beneficiaries involved in different activities. Youth within the age range of 15 to 35 years, which account for approximate 30 % of the population will be the focus of attention. These beneficiaries are among the poorest and most disadvantaged small producers engaged in crop and animal production. Targeting activities will be a priority at start-up to ensure coherence and alignment of both PRAPAM and PADECAS and they use the same approach and methodology. The choice of these target groups is

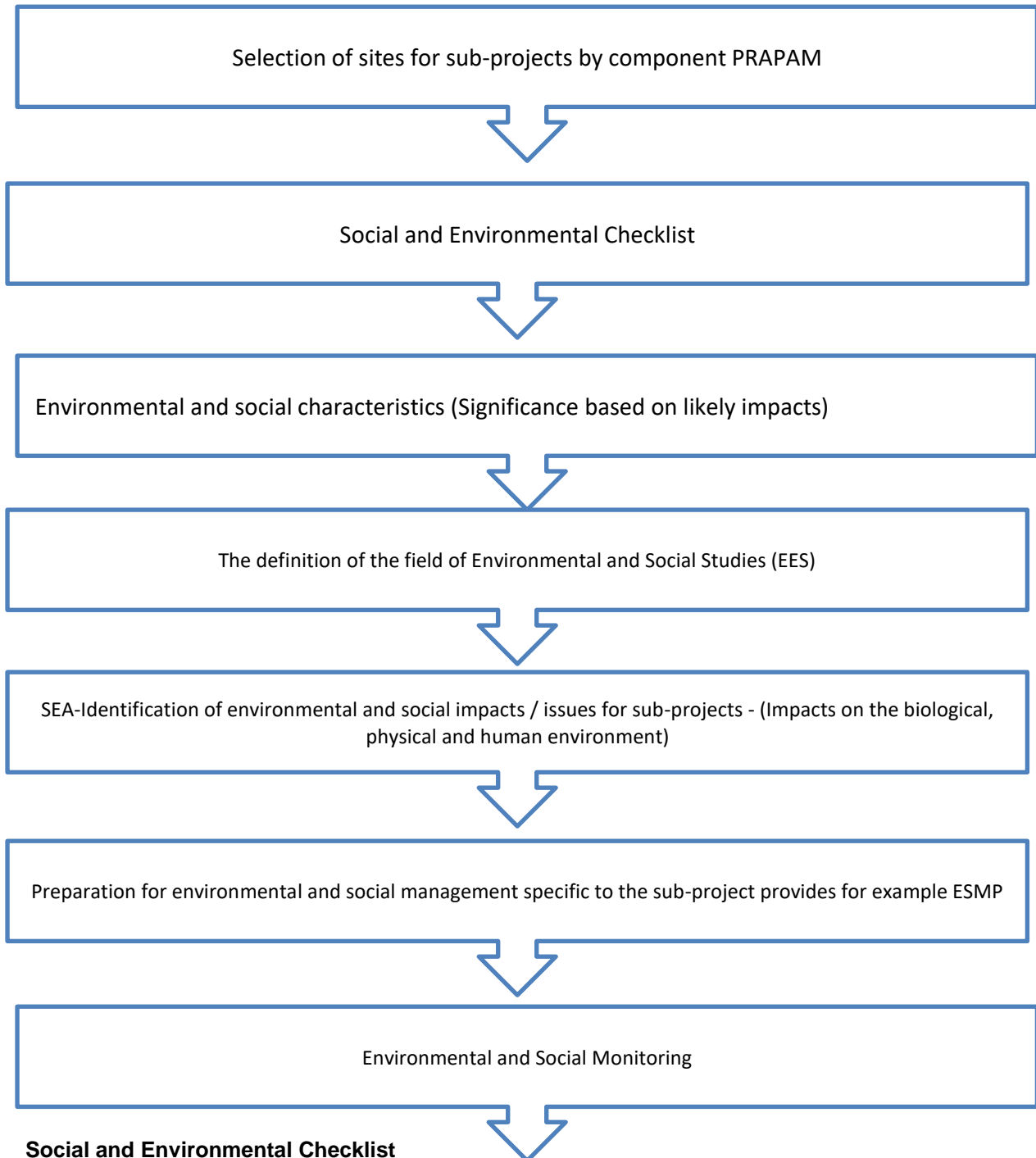
consistent with the IFAD targeting policy and mainstreaming objectives, responds to the principles agreed between CAR and IFAD in the COSOP.

101. At the environmental level, the project aims at the sustainable management of natural resources in general through, in particular, the improvement of the availability and management of water through hydro agricultural developments. In addition, to ensure the best conditions for taking the environment into account in all the productive activities of the project, provision is made for the preparation, from the start of the project, of an Environmental and Social Management Plan (ESMP) and activity specific plans where necessary.
102. With regard to climate risk, this is already taken into account in activities to build capacity for resilience to climate change (role of PIUs in building resilience capacity, search for climate tolerant seeds, water conservation measures and CES floors, etc.). As the project is classified in a "high climate risk" category, it will also be subject to a specific assessment of the climate impact.
103. Particular attention will be paid to potential infrastructure conflicts such as developed lowlands and wetlands, processing, storage and marketing, etc. These infrastructures, through the opportunities they can create, can make the object of capture by the elites, of intergenerational conflicts or between men and women or still be diverted from their primary use. Their management can cause problems related to the erosion of the provisions put in place during the launching of projects (creation of a management, setting up contributions for possible upkeep and maintenance costs) and including difficulties in collecting contributions and maintaining infrastructure regularly in the medium term. Through direct targeting actions, advisory support, information, education and communication, and dissemination of information through different media, ensuring that these constraints are minimized.
104. Positive aspects deserve to be highlighted: (i) the increase in agricultural production induced by market demand and the valuation of agricultural products, the introduction of varieties efficient and resilient to CC, (ii) improving farming techniques, better management of water, use of fertilizers, (iii) recovery of waste and by-products from supply chains. All these activities will improve income levels and living conditions for beneficiaries.
105. Potential effects on **the environmental** at the level of rural infrastructure, processing and marketing include: (i) the potential degradation for soil and biodiversity loss from road construction above 10km; (ii) potential risk of rehabilitating irrigation dams above 15m; (iii) the use of conventional energy sources, in particular wood energy for operation processing units, which could accentuate deforestation in an area already strongly weakened; (iv) near the marketing infrastructure, pollution caused by waste organic, plastic bags and packaging; (v) depletion of wetlands and carbon sequestration sinks: (vi) the rehabilitation of hydro-agricultural facilities and the construction of processing, storage and marketing infrastructures envisaged can generate negative effects on the environment both during the works and during the phase such as: (i) a high risk of degradation of water and soil quality if none measures are not taken for good management of waste and effluents from processing units; (ii) loss of biodiversity and soil degradation due to monoculture (only one variety in crop rotation) and habitat for some species during the works with clearing of sites, creation of possible access tracks, use of wood for the construction.
106. **At the production level:** (i) the intensification of market gardening is accompanied by greater use of plant protection products due to the sensitivity of these crops to diseases and parasites. Misuse could lead to serious water contamination and soils, and at the sanitary level, exposing producers and consumers to products toxic hazardous if strict protocols are not in place; (ii) distribution of inputs and including organic fertilizers. The risk lies in the fact that the availability of biofertilizers does not is not insured, it must be ensured that in accordance with the FAD, biofertilizers are used; (iii) for hydro-agricultural developments, risks of increase in households conducive to development of disease vector organisms (bilharziasis, amoebiasis, malaria, etc.). Against the baseline scenario; key obstacles mentioned above that lead to low productivity, food and nutrition insecurity, exacerbated by climate change and climate variability; the main components , outputs and activities are proposed below :

107. The project proposes the implementation of a set of concrete adaptation options in two targeted and profitable agricultural sector. A set of enabling actions designed to both strengthen national capacities and institutions as well as the CIEWS is interlinked to the concrete adaptation measures which will lead to building the resilience of the proposed value chains in the most vulnerable areas to climate change in CAR. Concrete adaptation measures are direct application of integrated climate resilient production, post-harvest and marketing systems. New technologies and best knowledge aim at promoting the paradigm shift and behavioural change in the production and linkages to markets.
108. **Climate risks** .Climate risks are primarily flood periods, which tend to be destroy livestock and crops with severe impact on the livelihood of the beneficiaries and IFAD investments.
109. **Climate change and adaptation to change**. The Program will take into account climate change issues by proposing various adaptation measures in depending on the problem of the intervention sites. Implemented in an area where resources already degraded, and where the degradation process will continue, the program will strengthen the management of natural resources, which will form the basis of the sectors supported.
110. **Agricultural areas**. Some analysis show that agricultural production remains before all very significantly correlated to the areas thus demonstrating that the variation in production is mainly due to that of the areas exploited.
111. **Water control**. The rehabilitation of dams and reservoirs associated with the use of Californian or drip style irrigation systems will maintain and / or increase food production to high levels. The perception of climate change by the farmers is illustrated by the difficulties of access to water a primordial element in the environment rural; lack of rain in agricultural area seen as part of change climatic. The establishment of an agro-weather information service and the control of tools weather forecast and the Emergency Program will: (i) educate producers on climate change and, (ii) involve leading farmers in the validation and the dissemination of information on new cultural calendars, and (iii) allow wide dissemination agro-meteorological messages through community radios.
112. Vegetable production. The water resource necessary for production represents the point more climate sensitive. To limit the impact on water resources, measures water saving will be promoted by the project, such as typical water supply systems "Californian" and drip as well as solar pumping.
113. Access to resources. The north being a breeding area par excellence, the degradation of climatic conditions will negatively impact production through lack of fodder and water during long periods of drought. Farmers and herders conflicts will be more numerous and more frequent with certainly more dramatic consequences. The fires of bush will be more frequent and destroy pastures and plantations. The activities of protection, conservation of soil fertility, agroforestry and promotion of hedgerows will reduce these risks.
114. Climate change and environmental degradation, if left untreated, will exacerbate poverty and malnutrition. In addition, it will increase the vulnerability of the poorest and marginalized communities such as indigenous peoples, in particular pygmies, and will increase inequalities, especially women and youth. In rural CAR, farmers remain the poorest socio-economic group and represent over 60% of people living below the poverty line. The contribution of the agricultural sector to the creation of wealth and the acceleration of growth remains below the potential of this sector. The low productivity of the agro-pastoral sector, exacerbated by climatic crises and frequent natural disasters (drought, floods, sandstorms and locusts, among others), has worsened the situation of the poorest rural households (women and young people), leave a large part of the population in situations of chronic risk. The economic opportunities of rural women are directly linked to access to land, agricultural production, business activities and energy. Women are largely engaged in unpaid work and their limited mobility is an obstacle to their participation in productive activities, such as selling their products outside the home. Building the capacities of youth and women in nutrition, sustainable and climate-resilient agriculture will be necessary to transform the agricultural sector.

## ENVIRONMENTAL AND SOCIAL MANAGEMENT DURING THE DURATION OF THE PROGRAM

115. The sub-projects will be assessed on the basis of the due diligence process starting with the selection phase. The overall process is described in the flowchart below



### **Social and Environmental Checklist**

116. . Environmental and social characteristics (Significance based on likely impacts)
- The definition of the field of Environmental and Social Studies (EES)
  - SEA-Identification of environmental and social impacts / issues for sub-projects - (Impacts on the biological, physical and human environment)
  - Environmental and Social Monitoring
  - Preparation for environmental and social management specific to the sub-project provides for example ESMP

- The following sections describe what needs to be done in terms of environmental and social management at each stage of the overall life of the project - subproject identification, preparation, appraisal, implementation and completion.

- Identification and preliminary assessment (environmental examination and scoping)

- In collaboration with the IFAD team, the borrower or client selects the environmental and social impacts, including the impacts of climate change, potential adaptation and mitigation measures and the vulnerability of populations and their means of recovery. livelihood to determine the specific type and level of environmental and social assessment. Selection is made in accordance with IFAD's SEA procedures.

Essentially, the environmental and social screening will include screening for categorization of sub-projects, triggering of IFAD ES and specific E&S aspects within each sub-project. The initial environmental and social selection for categorization of sub-projects and operating systems will be made by referring to the checklist available in Annex 2 of IFAD's SECAP procedure document. The selection of IFAD operating systems and IFC performance standards will also be made and whether the necessary recommendation for relevant safeguard instruments will be made. Environmental and social protection verification, i.e. verification of operating systems that have been triggered, should take place during the project preparation phase as soon as the site location is relatively accurate. The steps to follow are as follows:

1. Confirm the presence of environmentally sensitive areas from secondary sources or preliminary observations of the site;

2. Check the extent of the applicability of DRC government and IFAD policies in sub-project activities;

3. Identify potential negative and positive impacts; clarify the issues to be explored in preparation for the environmental and social impact assessment that will be carried out at the design stage.

117. This should facilitate the sequencing of sub-projects and allow time frames, such as those associated with regulatory validation processes, to be taken into account in project implementation. The results of the selection process will help identify the scope of SEAs and the timeframe required to obtain regulatory approvals (if applicable). The formulation of the terms of reference specific to the sub-project should be made on the basis of the selection results, highlighting the environmental and social components that require detailed assessment at the SEA stage.

#### Environmental and Social Assessment Studies (EESA)

118. SEA Studies are the most commonly used tool to ensure that environmental and social aspects are taken into account in decision making - influencing the design to avoid / minimize and inevitably mitigate residual negative impacts and / or improve the positive impacts. They also provide a platform for obtaining the views of stakeholders, including the population directly concerned, in order to improve the design. The general content of each social and environmental impact study under the project should comply with local legislation and meet IFAD requirements. IFAD's SECAP recognizes local legislation and national systems, to the extent possible, to ensure that the assessment conforms to the laws and standards applicable in the local jurisdiction, taking into account the equivalence of standards with those of IFAD.

#### Environmental and Social Management specific for this Program

##### Environmental and social management plans

119. The client is required to take into account the conclusions of the environmental and social assessment process and the results of stakeholder engagement in order to develop and implement an action program to address the environmental impacts and identified and identify performance improvement measures to meet IFAD requirements.

120. Depending on the type of project, the action program may consist of a combination of operational policies, management systems, procedures, plans, practices and documented investments, collectively referred to as environmental and social management plans ("ESMP"). The components of these plans or programs may include, for example, the environmental management plan (EMP), the stakeholder engagement plan and / or other specific plans. These studies can be incorporated into the corresponding environmental and social assessment document (for example, the ESIA or the environmental impact assessment). Alternatively, these plans can be stand-alone documents.

121. Environmental and social management plans are the main tools for structuring projects in a way that respects operating systems, as well as a key instrument for monitoring the environmental and social performance of the project. If no corrective action has been identified in the environmental and social assessment, a PEES would not be necessary.

### **Instruments for environmental and social management**

122. A series of environmental and social instruments (models) have been designed to be used to systematize the environmental and social activities that will be developed along the project cycle, organize the processes and keep records of the process. The management instruments identified for the different stages of the project cycle are as follows: (i) Quarterly reports on environmental and social implementation, (ii) Environmental and Social Monitoring Report (RSES); and (iii) the Final Environmental and Social Report (RFES). These various reports are internal tools to be used in day-to-day operations, while the quarterly implementation reports are external documents to be shared with IFAD.

### **Free, Prior and Informed Consent:**

123. Free and prior consent is necessary because forests and natural resources (water, land) and their exploitation have a high environmental quality and social impact on the lives of forest dwellers. It impacts the availability of resources and changes the way the forest is managed. The aim of FPIC is to ensure that if the project takes place, resources are shared equitably and that resources are managed equitably and sustainably. The process could be done in several stages namely:

- **Strengthen institutional capacities**

The project team in charge of the social component will be crucial to obtain the FPIC. This requires significant investments in human and material resources to carry out its work, especially with the indigenous populations, including the pygmies. It should be fully integrated into the project and fully supported by management. This involves ensuring that basic social aspects are understood and respected by all

- **Develop appropriate communication and information strategies**

This requires research, expertise and patience to find the most effective ways to communicate with the beneficiaries of the project. Awareness should be treated as a two-step dialogue.

- **Create a participatory decision-making process**

Forest dwellers including pygmies must be included in decisions. It is important to create mechanisms to bring the whole community into the process and create a culture of full participation through deliberate social inclusion.

- **Develop functional partnerships**

Beneficiaries should be included in forest management partnerships. To be effective partners, they must receive the necessary training to put them on an equal footing with other partners. Partnerships should have clear self-regulatory procedures.

- **Understand the different consent models**

It is important that both parties understand the concept of the other's consent and that both are respected as much as possible in the relationship.

- **Map the areas of use of local communities:**

It is important that the resource use of all users including indigenous peoples is mapped. This exercise could well be done by accompanying people in the forest and the surroundings to rely on spokespersons. Protect the resources located in their areas of use. This task should be the team in charge of the social component, guided by a team of community members representing the variation in that community (young and old, men and women, all ethnic groups, and indigenous people etc.). It should be made very clear to all the community members that their resources have been protected village by village and constantly monitored and improved.

h. Inform local communities of the possible impacts of deforestation: Forest dwellers need to know all the potential impacts (direct and indirect, positive and negative) of industrial logging on their areas of use and on life, and develop measures to reduce these negative impacts as well as the local communities.

i. Negotiate compensation and benefit sharing with all users of the forest and other natural resources, It is best done on the basis of the trees to be felled in each area of use, village by village and the afforestation mechanism, d Land allocation by local people must be constantly monitored and improved.

j. Build and empower local community associations to manage benefits at village level It is important to bypass elite capture of benefits and encourage transparency.



k. Formalize the consent process: This can be done both legally on paper if necessary, but also through an appropriate procedure. A ceremony to mark that the agreement is of mutual satisfaction.

l. Maintain the relationship of consent: Communication channels between the company and the communities must be kept open at all times, even after the end of operations. The relationship can also be nurtured by constant exchanges

#### 124. FPIC plan and implementation

		When
Produce a socio-cultural, socio-cultural and land assessment including user rights , traditional laws, lifestyles and governance systems and the use of space	PMU, social team, indigenous peoples, local authorities and other actors on the ground	At the start of implementation
Identify decision makers to include them in discussion forums on land tenure and user rights	PMU, social team, indigenous peoples , local authorities and other actors in the field and definition of roles and responsibilities with formalization and customary ceremony, photos and videos	At the start of implementation before activities start
Conduct a consultation on inclusion in the different components of the project ( right to property, land occupation and resource management)	PMU, social team, indigenous peoples , local authorities and other actors in the field, inclusion of women and youth and mapping of resources formalization and customary ceremony , photos and videos	At the start of the implementation of activities
<b>Formalize FPIC (written or in another form) and document in appendix</b>	The different actors of the project and documentation and registration including complaints mechanisms	An opportune moment following negotiations
<b>Budget is included in the CGES budget</b>		

### Environmental, Climate and Social Management Plan

#### Introduction: Key Activities, Responsibilities and Outline

##### Key Activities

125. A number of activities have to be carried out during the various phases of the baseline project to ensure adequate environmental and social impact management. These include, but are not limited, to the following:

##### *Negotiation Phase (September 2020 – end 2021):*

- Agree on final (objective) criteria and community selection
- Develop a non-technical project information document (max 2 – 3 pages) with relevant contact information for each regions
- Agree on the proposed screening criteria and forms for the proposed sub-projects.

##### *Start-up / Inception Phase (early 2021 – mid-2022):*

- Develop a stakeholder engagement plan (or at least a detailed communication/outreach strategy);
- Sensitization of key stakeholders, particularly at community level, about project objectives, scope, target groups, beneficiary selection and grievance mechanism;
- Establish grievance mechanism and train relevant committee members and project staff;
- Conduct detailed studies (on environment, socio-economic/livelihood conditions) for each of the selected communities to establish a baseline for all key indicators;
- Conduct a small-scale land access survey among a sample of farmers and fishermen to find out if men will be willing to release land to women and who are the value chain actors;

- Develop template contracts that incorporate the environmental and social guidelines for contractors presented in Annex 3.

***Implementation Phase (mid-2022 – 2027):***

- Regular sensitization of key stakeholders, particularly at community level of the potential environmental and social impacts of the project and how to implement the recommended mitigation measures.

**Management Responsibilities**

126. In summary, coordination and management of the project will be done in coordination with co-financers and definitions of role and responsibilities.

**Outline of the Management Plans**

127. Tables below present the environmental, climate and social management plans. For each of the potential overall impacts described in chapter 5, the plans indicate a significance rating and (geographical) extent/prevalence of each impact, recommend mitigation measures, identify who is responsible for implementation of the mitigation measures, how implementation can be verified, and how frequently. The plans have been developed with input from a broad range of stakeholders consulted during the ESMF field mission). The recommended mitigation measures mostly apply to all countries; where more information was available they also recommend context-specific measures for relevant states or areas within states. A copy of the environmental and management plans should be made available to all project staff, participating institutions and other key stakeholder representatives as well as used in community sensitization (i.e. awareness-raising and training) activities.

**Environmental (incl. Climate Change) Management Plan**

**1.1.1.1 Table 6.1: Environmental (incl. Climate Change) Management Plan**

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
<b>ENVIRONMENTAL MITIGATION PLAN</b>						
Deforestation (from tree crops especially plantations expansion into natural forest area) and upland crop production	High	All districts	<p>Strongly discourage cropping in and around virgin forest and forest regrowth areas</p> <ul style="list-style-type: none"> <li>▪ Strong emphasis to be placed on rehabilitation of existing and abandoned fallow planting areas</li> <li>▪ Limit approval for plantations to already degraded land/degraded secondary bush areas or deforested areas</li> <li>▪ Strengthen participation in the processing and marketing value chains to create more jobs especially for women</li> <li>▪ Strengthen partnership with the forestry department to train farmers in sustainable agroforestry</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Per cent decline in forest cover</li> <li>▪ Number of people engaged in the processing and marketing value chains</li> <li>▪ MOU with the forestry department</li> <li>▪ Number of Training conducted with farmers on agroforestry techniques</li> </ul>	<p>Reference/baseline , Mid-term, End-Term</p> <p>Mid-Term, End-Term</p> <p>Mid-Term, End-Term</p> <p>Annual</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
Biodiversity loss, Bush Fires/slash and burn agriculture	High	All districts	<ul style="list-style-type: none"> <li>▪ Limit cultivation of rice in the mangrove ecosystem to reduce mangrove forest loss</li> <li>▪ Discourage slash and burn and train farmers on sustainable land preparation and development options</li> <li>▪ Avoidance of areas that infringe on known migration patterns of protected, endangered or rare species and maintain known wildlife migration corridor</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Per cent decline in mangrove forest</li> <li>▪ Number of farmers that received training on sustainable land preparation and management</li> <li>▪ Biodiversity surveys</li> </ul>	<p>Mid-Term, End-Term</p> <p>Quarterly</p> <p>Annual</p>
Land and soil degradation	High	All districts	<ul style="list-style-type: none"> <li>▪ Production of project-specific ESIA by contractors should be required for all feeder roads construction</li> <li>▪ Train farmers and service providers on sustainable land development and preparation methods including zero or minimum tillage.</li> <li>▪ Encourage crop intensification and discourage opening of</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Production of project-specific ESIA for feeder road construction</li> <li>▪ Number of farmers that received training on sustainable land preparation and management</li> <li>▪ Consummated MOUs with Research Institutes and agencies dealing with soil conservation techniques</li> </ul>	<p>Annual</p> <p>Quarterly</p> <p>Mid-Term, End-Term</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			virgin forest for cropping. <ul style="list-style-type: none"> <li>▪ As much as practicable, encourage mixed cropping of target crops with cover crops and anchor crops</li> <li>▪ Involve partners from the Ministry and research institutes in training farmers on soil conservation techniques</li> </ul>			
Water pollution	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Minimize use of inorganic fertilizers and encourage use of biodegradable organic manures (especially in rice, maize and vegetable fields) and agrochemicals usage</li> <li>▪ Consider training youth in sustainable agrochemical application as an enterprise to promote environmental-smart agricultural value chain</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Number of farmers that use organic manure instead of inorganic fertilizer</li> <li>▪ Number of youth engaged in integrated agrochemicals and pesticides application enterprise</li> </ul>	Annual  Annual
Wetland (especially mangrove) degradation and removal	High	All districts	<ul style="list-style-type: none"> <li>▪ Discourage removal and draining of mangroves for rice paddies and vegetable farming</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Per cent decline in wetland</li> </ul>	Reference/baseline , Mid-term, End-Term Mid-term, End-Term

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
Erosion and landslide/mudslide	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Encourage agronomic practices such as contour ploughing, terraces and bunds in erosion and landslide/mudslide prone hill-slope areas</li> <li>▪ Encourage the planting of cover crops and anchor crops with the main crop</li> <li>▪ Encourage buffers along river bank to prevent erosion</li> <li>▪ Design and construction of roads, bridges and culverts to be properly monitored to prevent inappropriate termination that can lead to erosion</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ No of farmers in erosion/landslide/mudslide prone areas adopting sound and sustainable agronomic practices</li> </ul>	Mid-term, End-Term
Flooding (from rivers and possible over flow/collapse of the earthen dam), Water logging, soil salinization and alkalization	High		<ul style="list-style-type: none"> <li>▪ Improve on the design of earthen dams in IVS using hydrological long-term(50-100 years) flood return periods to improve dam resilience</li> <li>▪ Sustaining and improving on the partnership with the Meteorological Agency to improve their capacity to generate forecast of extreme</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Number of rainy season with no dam overflow</li> <li>▪ Improved capacity of the Met Office to generate forecast on extreme events</li> <li>▪ Number of agro-entrepreneurs receiving climate information</li> <li>▪ Number of farmers that signed off unto agric insurance</li> <li>▪ Result from soil analysis</li> </ul>	Annual Quarterly Quarterly Annually Biennial

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			rainfall events and disseminate climate information <ul style="list-style-type: none"> <li>▪ Consider introducing no regret option including crop insurance as part of the farmers and Agri-entrepreneurs' package</li> <li>▪ Production of project-specific ESIA by contractors should be required for all feeder roads construction to prevent obstructing drainage and causing waterlogging of rice fields</li> <li>▪ Analyze soils and monitor changes that potential problems can be managed. Allow for access to channels from maintenance in design</li> <li>▪ Provide water for leaching as a specific operation</li> </ul>			
Agrochemical Waste proliferation	Low	All districts	Consider creating a value chain/service provider in soil testing for fertilizer applications to improve place and context-based fertilizer	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Number of soil testing service providers</li> <li>▪ Number of farmers using improved and resilient local crop varieties</li> </ul>	Annual  Annual

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<p>and agrochemical application Encourage development and use of improved and resilient local crop varieties to reduce pest resistance and use of agro-chemical Training youth in sustainable application of agrochemicals enterprise as part of the value chain Encourage use of organic manures Service providers and agro-chemical input suppliers to follow high standard of security and safety precautions in storage and transport of agrochemicals</p>		<ul style="list-style-type: none"> <li>▪ Number of youth trained and engaged in integrated pesticide and agrochemicals management as part of value chain</li> <li>▪ Number of trained and certified agrochemical suppliers</li> </ul>	Annual
Dry spell and Increase storm and wind activity	Moderate	All districts	<ul style="list-style-type: none"> <li>▪ Sustaining and improve on partnership with the Meteorological Agency to improve their capacity to generate and disseminate agriculture-specific forecasts to farmers in good time through additional weather stations and other</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Number of additional weather station supported/established by PRAPAM</li> <li>▪ Central data processing server and mobility support for the Met Office</li> <li>▪ Regular issuance of agro-climatic forecasts</li> </ul>	Annual  Once  Quarterly  Quarterly



Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<p>appropriate weather data collection tools especially in the rural interiors</p> <ul style="list-style-type: none"> <li>▪ Improve the capacity of the Meteorological Agency to collate and process climate data through appropriate Hardware, Software and mobility support</li> <li>▪ In addition to agric extension officers, engage other means including farmers organization forum, community radios, text messages, transmitter broadcast (in remote areas) to disseminate weather and climate information to farmers (possibly in local languages)</li> <li>▪ Integrate use of traditional forecasting knowledge through regular feedback from farmers</li> <li>▪ Consider introducing no regret option including crop insurance as part of the farmers and Agri-entrepreneurs' package</li> </ul>		<p>issued by the Meteorological Agency</p> <ul style="list-style-type: none"> <li>▪ Number of farmers receiving and using climate information</li> <li>▪ Number of entrepreneurs that signed on to agricultural insurance</li> <li>▪ Number of feedbacks from farmers/farmers organization on climate information</li> </ul>	<p>Annual</p> <p>Quarterly</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> <li>▪ deliver training and agricultural inputs in good time to assist farmers to adjust and adapt their planting and harvesting methods and timing</li> </ul>			
GHG emissions from rice paddies	Moderate	All districts	<ul style="list-style-type: none"> <li>• Discourage opening of new virgin forests and coastal mangrove wetlands</li> <li>• Train farmers on how to drain rice paddies in mid-season to reduce CH4 emission and improvement in nutrient management including the retention of rice residues</li> <li>• Encourage use of clean energy in processing activities</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>▪ Per cent decline in forest and wetland areas</li> <li>▪ Number of farmers trained in sustainable rice paddies management</li> <li>▪ Number of processing units using sustainable energy</li> </ul>	<p>Reference/baseline , Mid-term, End-Term Annual</p> <p>Reference/baseline , Mid-term, End-Term</p>

**Table 6.2: Social Management Plan**

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
<b>SOCIAL MITIGATION PLAN</b>						
Land tenure issues – role of paramount chiefs	High	All districts	<ul style="list-style-type: none"> <li>▪ Advocate for the implementation of the new land policy to guarantee land tenure security for beneficiary farmers</li> <li>▪ Massive sensitization across the districts and chiefdoms on land tenure and access to land for the intended beneficiaries</li> <li>▪ Engage with Paramount Chiefs to secure land for intending beneficiaries with no access to land</li> <li>▪ Make access to land by women and youth one of the preconditions for a community to participate in the project</li> <li>▪ The project (through the NPCU and District MOA) to sign land guarantee and documented lease agreements with land owners for 10-25 years for intending beneficiaries without access to land</li> </ul>	NPCU and District MOA, Service Providers	<p>Number of women and youth participating in THE PROJECT (from the project register)</p> <p>Number of people without access to land participating in THE PROJECT</p> <p>Secure land access and number of land lease agreement signed with land owners</p> <p>Attendance register of sensitization meetings with Paramount chiefs and other stakeholders</p>	<p>Quarterly</p> <p>Quarterly</p> <p>Every six months</p> <p>At every project activity</p>
Gender inequality and targeting	High	All districts	Spend enough time (at least 2-3 months) for mobilization on targeting to reach everybody at community meetings (Do not leave selection of beneficiaries to the paramount Chiefs). Use the local media as well as local trusted NGOs	NPCU and District MOA, Service Providers	<p>Minutes and Attendance register at community meetings</p> <p>Number of women and youth participating in THE</p>	<p>At targeting mobilization meetings</p> <p>Quarterly</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<p>Encourage active participation of women in the project up to 40 per cent</p> <p>Engage women organizations and advocacy and right groups to mobilize women to participate</p> <p>Give some concessions/incentives to women farmers to enable them participate</p> <p>Encourage men through advocacy to support women participation through guarantee of land and other resources required</p>		<p>PROJECT (from the project register)</p> <p>Number of women advocacy groups working with AVPD</p>	<p>Annually</p>
<p>Social exclusion of women and youth due to limited access to land</p>	<p>High</p>	<p>All districts</p>	<ul style="list-style-type: none"> <li>▪ Actively involve women and youth in all components and levels of decision-making within the project;</li> <li>▪ Strive to maintain Project beneficiaries ratio of 40 per cent women and 20 per cent youth (men and women under 35 years old)</li> <li>▪ Encourage the submission of business proposals from women-only groups (incl. cooperatives);</li> <li>▪ Ensure women hold at least 30-40 per cent of leadership posts in the farmer apex organizations and project management team;</li> <li>▪ When organizing meetings or events, ensure they are appropriate to women's time and venue constraints;</li> </ul>	<p>NPCU and District MOA, Service Providers</p>	<p>Attendance lists</p> <p>Lists of approved projects and their beneficiaries</p> <p>Membership and staff lists</p> <p>Attendance lists at sensitization workshops and beneficiary / community feedback during site visits</p> <p>Community agreement on land access for women and youth</p>	<p>At every project activity</p> <p>At business plan approval and every six months thereafter</p> <p>Every six months</p> <p>At every project activity</p> <p>Annual</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> <li>▪ Access to land for women and youth should be a precondition for community selection/participation</li> <li>▪ To avoid obstructionism ('blocking behaviour'), ensure men are included ('carried along') in sensitization activities. Work with locally-trusted CSOs in community sensitization (working towards 'attitudinal change')</li> <li>▪ Make road and dam construction contractors to hire labour from the local communities to increase sense of belonging and participation</li> <li>▪ Consider using local labour for farm tracks construction and rehabilitation instead of machines to increase number of indirect project beneficiaries</li> </ul>		Number of community youth engaged as labour in road and dam construction and farm tracks rehabilitation	
Managing expectations	High	All districts	<ul style="list-style-type: none"> <li>▪ The project targeting and up scaling mechanism should be explicitly and transparently explained in the project implement manual (PIM)</li> <li>▪ Selection criteria, what the project offers and expectations from intended beneficiaries should be explicit and unambiguous (and translated into the local languages so that everybody will be carried along)</li> <li>▪ Carry the community and agro-entrepreneurs representatives</li> </ul>	NPCU and District MOA, Service Providers	<p>Project implementation manual</p> <p>Project selection criteria in local languages</p> <p>Knowledge management and communication material</p>	<p>Before project commencement</p> <p>6months into project</p> <p>Quarterly</p>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<p>along in the project implementation (and possibly the Paramount Chiefs or their representatives) in every stage of project implementation</p> <ul style="list-style-type: none"> <li>▪ Maintain robust knowledge management and information dissemination to keep everybody abreast of happenings</li> </ul>			
Unsafe and non-healthy working conditions	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Incorporate environmental and social guidelines in contracts with service providers and ensure compliance;</li> <li>▪ Sensitize project beneficiaries and their wider communities on health &amp; safety standards, incl. safe use of production, processing and transport machinery, agro-chemicals (pesticides and fertilizer), electrical installations and wiring (in particular in wet areas / during rains;</li> <li>▪ Sensitization of selected communities on child rights and ensure that there is no child labour on selected agri-enterprise projects.</li> </ul>	NPCU and District MOA, Service Providers	<p>Contractor Guidelines</p> <p>Health &amp; Safety flyer or poster</p> <p>Community meeting</p> <p>Community meeting</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Within 6 months of project start and half-yearly review thereafter</li> <li><input type="checkbox"/> Within 6 months of project start, half- yearly thereafter</li> <li><input type="checkbox"/> Within 6 months of project start and half-yearly review thereafter</li> <li><input type="checkbox"/> Within 6 months of project start, half- yearly thereafter</li> </ul>

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
Elite capture	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Detailed screening of business plan proposals on commercial viability, conflicts of interest and corruption. Exclude (use of) service providers owned by/tied to politicians or political parties;</li> <li>▪ Ensure compliance with pre-approved, objective selection criteria and transparent information- sharing and decision-making</li> <li>▪ Sensitize communities on project objectives, target groups, beneficiary selection criteria, and</li> <li>▪ risk of elite capture ('hijack');</li> <li>▪ Agreement with traditional rulers and council of elders on community and beneficiary selection, and adherence to representative and transparent decision-making related to the project (via letter of understanding, MoU or another appropriate format). Involve locally-trusted CSOs.</li> </ul>	NPCU and District MOA, Service Providers	<p>Completed proposal screening forms</p> <p>Review missions</p> <p>Item on steering committee agenda</p> <p>Community meeting</p> <p>Agreement document</p>	<ul style="list-style-type: none"> <li>▪ During half-yearly review missions</li> <li>▪ During half yearly committee meetings</li> <li>▪ Monthly during first months, quarterly thereafter</li> <li>▪ Within 6 months of start of project</li> </ul>
Loss and Disturbance of Cultural Resources such as sacred forest and archeological site	Low	All district	<ul style="list-style-type: none"> <li>▪ Do not approve projects to located in or around sacred forests and community groves and archaeological sites</li> </ul>	NPCU and District MOA, Service Providers	Inventory of cultural resources	Annual

Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
Conflict resurgence	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Maintain robust knowledge management, information dissemination and community engagements to keep everybody informed</li> <li>▪ Develop a clear complaints, grievances redress and dispute resolution framework and make this known to all stakeholders</li> <li>▪ Develop a clear and simple stakeholder engagement plan (SEP) (incl. communication/outreach strategy), particularly on project objectives and staffing (incl. who's responsible for what), criteria for community and beneficiary selection, community – project communication structure / methods, and grievance/conflict management;</li> <li>▪ Keep relevant stakeholders informed about project progress on a regular basis;</li> <li>▪ Involve youth and women leaders as well as respected elders in key project decisions and sensitization activities;</li> <li>▪ Publicly disclose relevant information on contracts and payments;</li> <li>▪ Encourage contractors / service providers to give employment preference to local community members</li> <li>▪ Develop a code of conduct for all stakeholders</li> </ul>	NPCU and District MOA, Service Providers	<ul style="list-style-type: none"> <li>Stakeholder engagement plan (SEP)</li> <li>Stakeholder meeting reports, project flyers</li> <li>Complaints register</li> <li>Meeting records, observation</li> <li>Service provision contract and employment lists</li> <li>Code of conduct</li> <li>Community meeting</li> <li>Knowledge management materials</li> <li>Number of local CSOs in partner with THE PROJECT</li> </ul>	<ul style="list-style-type: none"> <li>Within 2 months of start of project</li> <li>Quarterly</li> <li>Quarterly</li> <li>At every project activity</li> <li>Upon award of contracts and after payments</li> <li>Within 6 months of project start</li> <li>At every project activity during first 6 months, quarterly thereafter</li> <li>Quarterly</li> <li>Annually</li> </ul>



Impact	Significance Rating (likelihood x consequence)	Extent Prevalence	Recommended Mitigation	Responsibility for implementing mitigation	Means of verification	Timing / frequency of verification
			<ul style="list-style-type: none"> <li>▪ Sensitize women and particularly youth on what it is like to be an agri-entrepreneur (give a realistic picture of economic, social and environmental benefits but also challenges and responsibilities).</li> <li>▪ Involve locally-trusted CSOs in community sensitization</li> </ul>			
<b>Health</b>						
Water borne diseases	Medium	All districts, especially in the Inland Valley Swamp	<ul style="list-style-type: none"> <li>▪ Efforts to focus on inland valley swamp to protect farmers from schistosomiasis, a water-borne disease in flooded rice fields, with rice boots and medication</li> </ul>	NPCU and District MOA, Service Providers	Sensitization materials Number of farmers using rice boots	Annual
Dust from road construction	Medium	All districts	<ul style="list-style-type: none"> <li>▪ Road contactors to present an Environments and Social Impact Assessment with Management Plan for managing externalities as part of the bidding processing</li> <li>▪ Consider using the Autoseal technology (a polymer based technology which hardens and can last for 5 years or more) to help tackle the dust inhalation problem</li> </ul>	NPCU and District MOA, Rural Infrastructure Engineer, contractors / Service Providers	Number of ESIA for road rural feeder road projects with more than 10 km	Quarterly

## ESMP for Roads and other infrastructure

**Table 1: Register of the main management and monitoring measures for markets, schools and health posts**

Appearance / Impact	Phase		Management measure / commitment	Monitoring indicators	Responsible for implementation and monitoring
	Cons.	Oper .			
<b>General</b>	✓				
● Noise, traffic, etc. disturbance of residents	✓		● Develop, communicate and implement a conflict management procedure	● Number of conflicts recorded ● Regular noise monitoring	PMU and entrepreneurs
● Impacts on biodiversity	✓		● Prohibit project staff and contractors, as a condition of employment, from participating in the hunting, purchase or trade of wildlife, as well as the collection of timber and non-timber forest products	● Forest change / forest cover ● Regular census of biodiversity to measure changes in the abundance of plant and animal biodiversity	PMU and entrepreneurs
● Local capacity building	✓		● Ensure that contractors hire local staff where possible (for example, for unskilled positions)	● Ratio of local to non-local staff ● Number of local employees trained	PMU and entrepreneurs
● Occupational health and safety	✓		● Develop a health, safety and environment policy and rules for construction sites ● Ensure the use of PPE by construction workers	● Number of preventive health and safety equipment in stock / in use ● Number of slips in terms of health and safety	PMU and entrepreneurs
● Livelihoods of affected rural populations	✓	✓	● Undertake regular representative surveys to monitor improvement or livelihoods	● Status of the livelihoods of rural smallholders	PMU
<b>Preparation / clearing</b>	✓				
● Earth degradation	✓		● Ensure that the works remain within the physical limits of the existing lanes / roads to avoid any disturbance of vegetation, fields, etc.	● Change undergone by the forest / vegetation cover	PMU and entrepreneurs
● Risk of soil erosion	✓		● Plan to work in the dry season ● Install silt fencing down the bare ground to capture all runoff, if applicable (especially near waterways)	● Regular monitoring of water quality	PMU and entrepreneurs

<b>Excavation of materials for construction purposes</b>	✓				
● Disturbance of waterways and borrow pits	✓		● Collect aggregate materials from existing borrow sites	● Regular monitoring of water quality	Entrepreneurs
<b>Heavy machinery and equipment used for construction purposes</b>	✓				
● Risk of soil contamination (spillage of hazardous materials)	✓		● All hazardous materials will be stored appropriately (covered, etc.) with secondary containment of sufficient capacity (> 110% of the volume) ● Use spill prevention material, such as bundles, adsorbent booms, etc.	● Number and volume of hazardous materials stored	Entrepreneurs
● Noise pollution	✓		● Perform work in daylight (when ambient noise levels are higher) ● Advise residents before noisy activities ● Select heavy machinery equipment to ensure that noise levels do not exceed Guinean noise standards	● Regular noise monitoring	Entrepreneurs
● Dust production	✓		● Cover all loads during transport ● Cover all stocks (sand, etc.) during storage	● Regular monitoring of air quality	Entrepreneurs
<b>Waste generation</b>	✓				
● Production of construction waste, including hazardous waste	✓		● Designate a suitable disposal site, at least 200m from drainage lines and residences, preferably in a previously disturbed area	● Number and volume of types of waste stored	PMU and entrepreneurs
<b>Community health and safety</b>	✓	✓			
● Risk of traffic accidents	✓	✓	● Implement road safety measures, including appropriate signage and speed control (bumps in the road, etc.) when deemed necessary	● Number of farmers trained in health and safety ● Number of community members trained in road safety	Entrepreneurs

## Stakeholder Engagement, Community Sensitization and Expectation Management

128. Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into (violent) conflict within and between communities. Therefore, for many of the potential environmental and social impacts, the management plans recommend the development of a stakeholder engagement plan with a clear communication strategy and the organization of community sensitization activities on a regular basis.

A stakeholder engagement plan (SEP) should include at least the following components<sup>23</sup>:

- a) Principles, objectives and scope of engagement
- b) Regulations and (institutional) requirements
- c) Summary of previous stakeholder engagement activities
- d) Stakeholder mapping and analysis
- e) Strategies of engagement
- f) Key messages and communication channels
- g) Grievance mechanism (see also section 9.6 below)
- h) Resources and responsibilities
- i) Monitoring and evaluation

129. Community sensitization (i.e. awareness-raising and training) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women and youth. To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve those civil society organizations that are already active in and trusted by the selected communities.

### 6.5 Grievance Management

130. The project will establish a community engagement process and provide access to information on a regular basis. In order to reduce conflicts, the project will use the grievance mechanism established by IFAD which includes a [Complaints Procedure](#)<sup>24</sup> to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance with AF or IFAD's environmental and social policies as well as the mandatory aspects of the Social, Environmental and Climate Assessment Procedures in the context of IFAD-supported projects. The procedure allows affected complainants to have their concerns resolved in a fair and timely manner through an independent process. Although IFAD normally addresses potential risks primarily through its enhanced QE/QA process and by means of project implementation support, it remains committed to: (i) working proactively with the affected parties to resolve complaints; (ii) ensuring that the complaints procedure is responsive and operates effectively; and (iii) maintaining records of all complaints and their resolutions<sup>25</sup>. Moreover, IFAD's Strategic Framework calls for ensuring that projects and programmes promote the sustainable use of natural resources, build resilience to climate change and are based upon ownership by rural women and men themselves in order to achieve sustainability

131. IFAD-supported projects and programmes including supplementary funds like this Adaptation Fund are designed in a participatory manner, taking into account the concerns of all stakeholders. IFAD requires that projects are carried out in compliance with its policies, standards and safeguards.. It will be the responsibility of the PMU of the project, under the control of IFAD, to ensure that all relevant stakeholders are adequately informed of the

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<sup>23</sup> Adapted from IFC (2007) *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets* (IFC: Washington, D.C.), pp.164-168

<sup>24</sup> <https://www.ifad.org/en/accountability-and-complaints-procedures>

<sup>25</sup> IFAD (2016) *Managing Risks to Create Opportunities. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP)* (IFAD: Rome), p.12

grievance mechanism. This mechanism will be made available at the Governorate of the region and Administrators of the provinces (sectors). Copies of the manual of grievance mechanism will be made available at the villages' level. It will also be posted on the project website and the implementing entity (IFAD) website. The procedures on how to submit the complaint are available on the IFAD

132. The objective of the IFAD Complaints Procedure is to ensure that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP. Complaints must concern environmental, social and climate issues only and should not be accusations of fraudulent or corrupt activities in relation to project implementation – these are dealt with by IFAD's Office of Audit and Oversight.

### **Eligibility criteria according to IFAD's grievance mechanism**

133. To file a complaint for alleged non-compliance with IFAD's social and environmental policies and mandatory aspects of its SECAP, IFAD will consider only complaints meeting the following criteria:

- The complainants claim that IFAD has failed to apply its social and environmental policies and/or the mandatory provisions set out in SECAP and Safeguards of the Adaptation Fund project.
- The complainants claim that they have been or will be adversely affected by IFAD's failure to apply these policies.
- Complaints must be put forward by at least two people who are both nationals of the country concerned and/or living in the project area. Complaints from foreign locations or anonymous complaints will not be taken into account.
- Complaints must concern projects/programmes currently under design or implementation. Complaints concerning closed projects, or those that are more than 95 per cent disbursed, will not be considered.

### **The process according to IFAD's grievance mechanism:**

134. The complainants should first bring the matter to the attention of the government or non-governmental organisation responsible for planning or executing the project or programme (Ministry of Agriculture implementing agency and the Ministry of Economy and finance and The Environmental Protection Agency that have with the responsibility for overseeing the work on the field. If the Implementing Agency does not adequately respond, then the matter may be brought to the attention of IFAD. The issue may be brought straight to IFAD if the complainants feel they might be subject to retaliation if they went to the Lead Agency directly.

135. The Regional Division of IFAD will examine the complaint and, if necessary, will contact the Ministry of agriculture and Ministry of Economy and Finance, The Environmental Protection Agency under the ministry of environment to decide if the complaints are justified. If the complainants request that their identities be protected, IFAD will not disclose this information to the Ministry of Agriculture or anyone else in government. If the complaint is not justified, the Regional Division will inform the complainants in writing. If the Regional Division finds the complaint is justified and there is proof of actual or likely harm through IFAD's failure to follow its policies and procedures, IFAD will take action. This may consist of making changes to the project/programme, or requiring that the government observes its obligations under the Financing Agreement. IFAD's response will focus bringing the project/programme into compliance and no monetary damages will be available or paid in response to such complaints. The complainants will be informed of the outcome of the issue by the Regional Division.

136. In all cases, if the complainants disagree with IFAD's response, they may submit a request to [SECAPcomplaints@ifad.org](mailto:SECAPcomplaints@ifad.org) and request that an impartial review be carried out by

the Office of the Vice-President. The Office of the Vice-President will decide on the steps to be taken to examine such complaints, including, if necessary, contracting external experts to review the matter. The complainants will be informed of the results of the review. IFAD will include in its Annual Report a list of received complaints and a summary of actions taken to address them.

#### **How to submit a complaint:**

137. A complaint relating to non-compliance with IFAD's Social and Environmental Policies and mandatory aspects of its SECAP can be submitted in any of the following ways:

- **Download the complaints form (Word)** through IFAD website : <https://www.ifad.org/en/accountability-and-complaints-procedures>

- **Send an email to [SECAPcomplaints@ifad.org](mailto:SECAPcomplaints@ifad.org)**

138. In addition, PRAPAM will as much as possible utilize every available grievances redress mechanisms including: associations (including farmers' associations/organizations) traditional council (Paramount Chiefs and elders), village square engagement (consisting of representatives of men, women and social groups), village general assembly, the project NCPU, etc.

**Environmental and Social Management Framework (ESMF) for Agricultural Value Chain Stages**

Part in value chain	Key issue affecting the Environment	Potential impact (negative and positive)			Standard mitigation measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic		
<i>Production</i>	<ul style="list-style-type: none"> <li>▪ Land preparation – land clearing, cultivation and other issues</li> <li>▪ Use of earth-moving machines, e.g. tractors for clearing</li> <li>▪ Use of agro-chemicals</li> <li>▪ Use of pesticides</li> </ul>	<ul style="list-style-type: none"> <li>▪ Forest and wetland removal</li> <li>▪ Land &amp; soil degradation</li> <li>▪ Water and soil pollution</li> <li>▪ Flooding</li> <li>▪ Erosion</li> <li>▪ Bush and pipeline fire</li> <li>▪ Biodiversity loss</li> <li>▪ Waste management</li> <li>▪ GHG emission</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased youth employment with possible decrease in youth restiveness</li> <li>▪ Increased youth interaction and cooperation and ability to solve problems and resolve conflicts</li> <li>▪ Increased sense of pride and responsibility by participating youth</li> <li>▪ Inter- and intra-community conflict on land ownership</li> <li>▪ Possible agitation from youth not presently included in the programme</li> <li>▪ Social exclusion, especially lack of access to land by women and youth</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased sales and household income</li> <li>▪ Increased youth employment and social well-being</li> <li>▪ Improved nutrition and food security</li> <li>▪ Increased ability of youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development</li> <li>▪ Increased import substitution</li> <li>▪ But increasing associated environmental and social costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ As much as possible, discourage the opening of virgin forest and wetlands</li> <li>▪ Train farmers in sustainable land management practices to reduce environmental impacts</li> <li>▪ Deliver training and agricultural inputs to farmers on-time to enable them to adjust and adapt their planting and harvesting methods and timing</li> <li>▪ Adopt and enforce health, safety and environment rules at production sites to ensure clean, sustainable and environmentally friendly as well as climate-smart production processes</li> <li>▪ Encourage full exploration of the value chain, e.g. convert poultry and other livestock waste into farm manure</li> <li>▪ Develop a clear and simple Stakeholder Engagement Plan (SEP), incl. grievance mechanism, to manage expectations</li> <li>▪ Actively involve women and youth in all components and levels of decision-making within the project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of farmers that received training on sustainable land preparation</li> <li>▪ Changes in forest and wetland</li> <li>▪ Results from periodic soil analysis</li> <li>▪ Health, safety and environment manual</li> <li>▪ Number of value chain enterprises around waste management and valorization, pesticide and agrochemical management</li> <li>▪ Stakeholder Engagement Plan</li> <li>▪ Conflict resolution committee meetings</li> <li>▪ Lists of approved projects and their beneficiaries</li> <li>▪ Community agreement on land access for women and youth</li> </ul>

<i>Processing</i>	<ul style="list-style-type: none"> <li>▪ Use of processing machines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Waste generation</li> <li>▪ Air, water and land pollution</li> <li>▪ GHG emission from machines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unsafe and non-healthy working conditions</li> <li>▪ Use of child labourers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased sales and household income</li> <li>▪ Increased youth employment and social well-being</li> <li>▪ Improved processing capacity, value additions and value chain development</li> <li>▪ Improved nutrition and food security</li> <li>▪ Increased ability of youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development</li> <li>▪ Increased import substitution</li> <li>▪ But increasing associated environmental and social costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Encourage the use of renewable and low-carbon energy sources during processing operations</li> <li>▪ Adopt health, safety and environment rules at processing sites</li> <li>▪ Train farmers in sustainable agro-processing practices to reduce environmental impacts</li> <li>▪ Step up knowledge management and information dissemination to showcase the achievement of the project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of operators adopting renewable low carbon technologies</li> <li>▪ Number of enterprises established focusing on waste conversion and valorization</li> <li>▪ Number of entrepreneurs adopting sustainable processing operations</li> <li>▪ Knowledge management /communication plans, stakeholder meeting reports, communication project flyers/leaflets</li> </ul>
<i>Marketing</i>	<ul style="list-style-type: none"> <li>▪ <i>Construction of market infrastructure</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ Dust, smoke, noise, ground movement / vibration</li> <li>▪ Deforestation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Better access to market</li> <li>▪ Better access to production and processing sites</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved market penetration</li> <li>▪ Access to market information and market linkage and support services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Use construction equipment with moderate decibel during construction</li> <li>▪ Develop/adopt and enforce health, safety and environment rules at construction sites</li> </ul>	<ul style="list-style-type: none"> <li>▪ Observation of construction equipment for dust, noise, smoke, vibration, etc.</li> </ul>



		<ul style="list-style-type: none"> <li>▪ Water pollution</li> <li>▪ Flooding and erosion from poorly constructed culverts, roads, etc.</li> </ul>	<ul style="list-style-type: none"> <li>by supervisory agencies</li> <li>▪ Improved access to rural communities</li> <li>▪ Conflict over land and demand for compensation where infrastructure is to be constructed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Strengthened market value chain, with more profitable enterprises</li> <li>▪ Improved storage and reduced waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lawful and willing consent of community/or individuals on land site for market infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>▪ Work inspection report on the environmental quality of market infrastructure</li> <li>▪ Health, safety and environment plans</li> <li>▪ Copy of consent of community /individuals on market infrastructure land site</li> </ul>
<i>Transport (and supply)<sup>26</sup></i>	<ul style="list-style-type: none"> <li>• Use of motorized and heavy transportation machines</li> </ul>	<ul style="list-style-type: none"> <li>▪ GHG emission from transportation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Influx of rural migrants to agri-enterprise sites and processing areas</li> <li>▪ Increased number of service providers, which boost the economy</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased ownership of motorized and other transport system</li> <li>▪ Increased number of service providers</li> <li>▪ Increased GDP</li> <li>▪ But increasing associated environmental and social costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Organize transport entrepreneurs into an association for easy management</li> <li>▪ Develop a code of conduct, and health, safety and environment regulation for transport operators</li> </ul>	<ul style="list-style-type: none"> <li>▪ Code of conduct for transport operators</li> <li>▪ Minutes of meetings of transport operators' association</li> </ul>
Financial services	<ul style="list-style-type: none"> <li>Adopt agricultural insurance</li> <li>Green lending products</li> </ul>	<ul style="list-style-type: none"> <li>Un-sustainable production and loss of assets and production</li> </ul>	<ul style="list-style-type: none"> <li>Destocking and migration</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased financial products</li> <li>▪ Set up the agricultural insurance industry</li> </ul>	<ul style="list-style-type: none"> <li>▪ Support private and public actor to develop a mature insurance sector</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public and private partnership</li> </ul>

<sup>26</sup> There are certain activities, such as the supply of materials that are not associated directly with production, processing, marketing or transport, which could have different environmental and socio-economic impacts.

## Analysis of Alternatives

139. The following alternatives will be considered before the commencement of any activity:

- Site: the location of a proposed agri-enterprise will be evaluated to ensure it is not sited on a walking path or in a flood-prone area, and maintains the necessary distance from highways;
- Route: the enterprise will not be sited near powerlines, flow stations, and/or oil and gas pipelines or right of way;
- Commodity: only those crop types and varieties which are drought tolerant, pest resistant and of high yield will be selected;
- Input (e.g. power source, agrochemicals), scale (e.g. small-scale growers, large commercial farms); and design (e.g. building height, screens, colour) of each enterprise will be analyzed before any activity is carried out.

### 7.1 Commodity Analysis of Alternatives

Table below provides a more detailed analysis of alternatives for the different commodity types:

COMMODITY	PREDOMINANT CULTURAL PRACTICES	CLIMATE SMART AGRICULTURE PRACTICES
Cassava and equivalent	<ul style="list-style-type: none"> <li>▪ Use of spent stems</li> <li>▪ Wrong application of soil amendments</li> <li>▪ Use of low-yield varieties</li> <li>▪ Fertilizer spreading</li> <li>▪ Tillage operations</li> <li>▪ Use of inorganic crop protection chemicals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Encourage outgrower schemes</li> <li>▪ Encourage soil sample analysis</li> <li>▪ Encourage the adoption of improved varieties</li> <li>▪ Encourage ring application at 6cm-10cm depth</li> <li>▪ Encourage minimum or zero tillage</li> <li>▪ Encourage the use of organic crop protection solutions like neem oil</li> <li>▪ Encourage carbon sequestration activities</li> </ul>
Rice	<ul style="list-style-type: none"> <li>▪ Recycling of paddy</li> <li>▪ wrong application of soil amendments</li> <li>▪ Use of low yield varieties</li> <li>▪ Fertilizer spreading</li> <li>▪ Tillage operations</li> <li>▪ Use of inorganic crop protection chemicals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Encourage paddy transplanting</li> <li>▪ Encourage soil sample analysis</li> <li>▪ Encourage the adoption of improved varieties</li> <li>▪ Encourage deep application of urea at 6cm-10cm depth</li> <li>▪ Encourage minimum or zero tillage</li> <li>▪ Encourage the use of organic crop protection solutions like Neem oil</li> <li>▪ Encourage carbon sequestration activities</li> </ul>
Livestock	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Tree crops	<ul style="list-style-type: none"> <li>▪ Recycling of seedlings</li> <li>▪ wrong application of soil amendments</li> <li>▪ Use of low yield varieties</li> <li>▪ Fertilizer spreading</li> <li>▪ Tillage operations</li> <li>▪ Use of inorganic crop protection chemicals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adopt outgrower schemes</li> <li>▪ Encourage soil sample analysis</li> <li>▪ Encourage the adoption of improved varieties</li> <li>▪ Encourage minimum or zero tillage</li> <li>▪ Encourage the use of organic crop protection solutions like Neem oil</li> <li>▪ Encourage carbon sequestration activities</li> </ul>

## **Environmental and Social Screening of Sub-Projects**

### **Introduction: Screening and Review**

140. This screening is meant to check for potential environmental and social safeguard issues by assessing potential impacts and, through a new project-specific ESMP, identifying appropriate design mitigation measures. The outcome of the screening process is a review of the final sub-project proposal that will include:

- Compliance with the above-described ESMP and ESMF as well as IFAD's SECAP guidance statements;
- Potential for the project to cause adverse environmental impacts;
- Potential for the project to cause adverse climate impacts;
- Potential for the project to cause adverse social impacts;
- Adequacy and feasibility of the proposed safeguard mitigation measures and monitoring plans, including any local communities plan or process framework for restrictions of inclusion.

141. In the event of sub-projects with medium (and therefore manageable) environmental and social impacts, an environmental and/or social review should be undertaken, based on the IFAD SECAP and the ESMP and ESMF outlined in chapters 6 and 7. Such a review will examine the sub-project's potential negative and positive environmental and social impacts as well as define any measures needed to prevent, minimize or mitigate adverse impacts and improve environmental and social performance. In most cases, this will be a simple review by reference to existing reports and studies (if available), and through discussions with local communities and other stakeholders, if needed.

142. Sub-project proposals with medium (manageable) environmental and social impacts should include the following basic elements in the application and contain in the project-specific ESMP:

- A summary and description of the possible adverse effects that specific sub-project activities may occur;
  - A description of any planned measures to avoid or mitigate adverse impacts, and how and when they will be implemented;
  - A system for monitoring the environmental and social effects of the project;
  - A description of who will be responsible for implementing and monitoring the mitigation measures; and
  - A cost estimate of the mitigation measures, which should be included in the sub-project proposal.
- The scope of any environmental and/or social review and related mitigation measures will be determined by the relevant (environmental/climate change) SPCO staff in consultation with technical experts where needed, via the sub-project screening and approval process.

Sub-project proposals with only minor or no adverse impacts do not need a separate review (or ESMP). The following sections describe the contents of the screening forms.

### **Screening for Eligibility**

143. The Project Design Report (PDR) of each project provides a detailed description of the eligibility criteria. For more information on the eligibility criteria and selection process, see the relevant paragraphs in the section on 'Components and Outcomes' in the chapter 'Project Description' of the PDR of each baseline investment. Annex 1 provides the proposed format for the letter of interest / application form, which should be completed by each intended beneficiary (i.e. incubator or applicant) and will be used as the primary tool for screening of eligibility by the service provider.

The remainder of this chapter will focus on the environmental, climate and social impact screening of likely agri-enterprise and market infrastructure sub-projects.

### **Screening for Environmental and Social Impacts**

144. Based on relevant SECAP guidelines as well as technical experience, two separate environmental and social screening forms have been developed: for agri-enterprise and related

(market) infrastructure subprojects.<sup>27</sup> The screening forms are presented in Annex 2. To be clear: the screening forms presented in Annex 2 should be completed by the environmental/climate SPCO officer, where needed assisted by external technical specialists. The intended beneficiaries (i.e. incubators and apprentices) are only required to complete the intention/application form (see annex 1).

### Screening for Climate Impacts

A separate climate screening form is also presented in Annex 2.

### Impact Significance Rating

145. In order to determine the significance of impacts, the likelihood of an impact occurring is considered against the consequence or magnitude of the impact if it was to occur. Likelihood is defined as the frequency of an impact occurring.

#### Definitions of Consequence

Consequence	Definition
No Impact / No change	<ul style="list-style-type: none"> <li>• No impacts on biophysical and social environments / livelihood / health / gender</li> <li>• No public concerns</li> <li>• No legal issues</li> </ul>
Negligible	<ul style="list-style-type: none"> <li>• Low/minor impact on environment / livelihood / health / gender</li> <li>• Minor social impacts</li> <li>• No legal issues</li> </ul>
Intermediate	<ul style="list-style-type: none"> <li>• Some level of impact on environment / livelihood / health / gender</li> <li>• Social issues apparent</li> <li>• May have legal implications</li> </ul>
Severe	<ul style="list-style-type: none"> <li>• High level impacts on environment / livelihood / health / gender</li> <li>• High public concerns or perceptions</li> <li>• Legal non-compliance</li> </ul>
Unknown	<ul style="list-style-type: none"> <li>• Extent of the impact cannot be determined at this point</li> <li>• Apply precautionary principle</li> </ul>

The chart below can assist to make a quick visual assessment of the significance of particular impacts, as well as the intervention as a whole.

Consequence				
Likelihood	No Impact / No change	Negligible	Intermediate / Moderate	Severe
Unlikely				
Possible / less than annually				
Occasional / at least annually				
Frequent / at least monthly				
Continuous, inevitable, daily irreversible				

Legend:  
 Low significance  
 Medium significance  
 High significance

<sup>27</sup> SECAP (2016), pp.71-194.

146. Regardless of significance, in all cases where an adverse impact may occur, mitigation measures should be proposed. In most cases, it is possible to incorporate mitigation measures into the design, so designs may have to be changed/altered to allow for this. Projects that only have impacts of low significance will probably not need a new ESMP; in that case the standard ESMP and ESMF in this report will suffice. In the case of project with impacts of medium significance, the development of appropriate plans, in addition to the standard ESMP and ESMF may suffice to manage the severity of the impacts. In the case of projects with impacts of high significance, a separate ESIA is almost always required.

## Monitoring of Environmental, Climate and Social Impacts

### Introduction

147. Monitoring is a long-term process, which should begin right from the start and continue throughout the life of the project. Its purpose is to establish benchmarks so that the nature and magnitude of anticipated environmental and social impacts can be continually assessed. Monitoring involves the continuous or periodic review of community and beneficiary sensitization and infrastructure construction/maintenance activities to determine the effectiveness of recommended mitigation measures. Consequently, trends in social management as well as environmental degradation or improvement can be established, and previously unforeseen impacts can be identified or pre-empted and averted. The overall objective of environmental and social monitoring is to ensure that recommended mitigation measures are incorporated, and that activities carried out during sensitization (i.e. training and awareness-raising) and infrastructure construction/maintenance are environmentally and socially acceptable, and therefore sustainable.

### Key Performance Indicators

148. In identifying performance indicators, it is important to select indicators that are simple to monitor, and which will not necessitate the use of highly technical equipment or require specialized training. Performance targets have to be established before performance indicators are identified. For this project, six overall performance targets (focusing mainly on the key beneficiaries) have been put forward:

- Improved food security (addressing length of hungry season, number of meals, food diversity and quality);
- Increase in assets (owned by beneficiaries);
- Job creation (through agri-enterprise establishment, growth and strengthening);
- Enhanced income stability (for enhanced food security and sustainable livelihood);
- Improved production volume and marketing (by beneficiary agri-entrepreneurs);
- Enhanced support and capacity of rural institutions (promoting youth-based agri-enterprises)
- Insurance products and number of farmers insured

See section 2.4 for more detail, including agreed performance targets for each indicator.

Considering the strong focus on youth and women empowerment in conflict-prone areas, we suggest to include one additional performance indicator focusing on social inclusion: increased participation of women and youth in community decision-making.

149. Various project impacts and aspects relate to these overall performance targets. When the activities and indicators are established, the first activity is to collect baseline data which will serve as a benchmark and against which changes in the identified indicators can be measured. The types of parameters that can be monitored may include mitigation measures or design features, or actual impacts. In some cases, such as drainage structures and soil conservation interventions, monitoring is fairly straightforward and can be done as part of routine or periodic maintenance. However, other parameters, particularly those related to social, ecological and climate change issues can only be effectively assessed over a period of 2 to 5 years. The monitoring plan in Table 10.3 below lists the indicators that should be monitored during the course of this project. It describes parameters that can be monitored, and suggests how monitoring should be done, how frequently, and who should be responsible for monitoring and action.

## Baseline Study

### Environmental and Social Monitoring Costs

#### Monitoring Costs (Estimate)

Monitoring Parameter	Total	Year 1/2	Year 2 - 6
Site specific ESIA's for roads per district*	62786	30000	39344
Site specific ESIA's for earthen dams per district	32786	16393	16393
Environmental baseline study	25000	25000	
Environmental monitoring **	160000	60000	100000
Survey climate information access and GHG emissions study -	47214	23607	23607
Social / livelihoods baseline study	49951	49951	0
Livelihoods monitoring	78689	13115	65574
Other social monitoring ***	65574	10929	54645
<b>Total monitoring costs</b>	<b>522000</b>	<b>228995</b>	<b>299563</b>

## **Capacity Building and Training for Environmental and Social Management**

### **Strengthening Capacity and Improving Resilience**

150. A successful implementation of the project requires the strengthening of institutional capacities, in particular on insurance, cooperatives and other relevant farmer organizations. Moreover, there is a strong need for context-specific, in-situ training sessions for farmers, other beneficiaries, for example on climate-smart agriculture and climate change adaptation, to improve their resilience to deal more effectively with climate-related weather events such as flooding, drought and heat waves.

### **Existing Capacity**

151. Stakeholder consultations in revealed that one of the key challenges was the limited technical expertise, practical experience and lack of clear responsibilities of the state environmental officers. As a result, their capacity to practically implement or monitor environmental, social and climate related management was limited. To ensure that environmental, social and climate safeguards are upheld and wholly integrated into the project, there is a need for practical training on a broad range of topics and at different levels.

### **Training Topics**

152. Proposed training topics include, at the very least:

- Community sensitization;
- Requirements of IFAD's SECAP and ERNM as well as the Climate, Land and Disclosure policies;
- ESMF processes, procedures and institutional arrangements to develop and implement required management plans;
- Data gathering and use of tools for data analysis;
- Screening and rating as prescribed in the ESMF;
- Environmental, social and climate impact assessment, and requirements;
- Preparation, implementation and monitoring of ESMPs and ESIAs;
- Reporting and monitoring implementation of ESMPs;
- Commodity-specific training on climate smart agriculture, environmental and social best practices, such as effective use of organic and chemical fertilizers, pest and disease management, water-saving agronomic practices, soil fertility management, low-impact farming methods as well as labour-saving techniques;
- Conflict resolution and grievance management mechanisms;
- Environmental (EMS 14001) and social audit, and report writing



### **Target Audience**

153. The target groups for training should include, at least:

- Project Steering and Technical Committees;
- Regional and state environment/climate officers
- IFAD project staff
- Service providers
- Beneficiaries (i.e. incubators and apprentices)
- Agricultural insurance companies

### **Training Approach**

154. The above-mentioned training topics will be delivered based on the needs of each training target group. Training will in the first instance be provided to the project staff as well as Steering and Technical Committees. The regional environment/climate specialists will then be trained to deliver a training of trainers (ToT) to the state environment/climate specialists and other stakeholders at the local government and community level. This ToT will particularly focus on ESMF process, screening requirements and approvals, including preparation of impact management plans and their implementation. Country project staff will be trained to support the private service providers with on-the-ground implementation of climate smart agriculture, improvement of resilience, implementation of mitigation and management measures, with special attention on water management and agrochemical application, handling, storage and disposal. Independent consultants will be contracted to carry out specific technical trainings. In most trainings, other resource persons from IFAD, academia, civil society and other development agencies will be invited to participate.

### Capacity Building Costs (Estimate)

Activity	Year							Budget (USD)	Remarks
	1	2	3	4	5	6	7		
1. Stakeholder and community sensitization									
2. Community sensitization									
3. ToT training for regional and state environment/climate specialists, project staff and other relevant stakeholders on; <ul style="list-style-type: none"> <li>a. Requirements of IFAD's SECAP and ERNM, Climate, Land and Disclosure Policies;</li> <li>b. ESMF processes, procedures and institutional arrangements to develop and implement required management plans;</li> <li>c. Screening and rating as prescribed in the ESMF;</li> <li>d. Environmental, social and climate impact assessment and mitigation;</li> <li>e. Preparation, implementation, monitoring and reporting of ESMPs and ESIA's.</li> </ul>									
4. Soil testing, and soil analysis for value chains									
5. Data gathering and use of tools for data analysis									
6. Commodity-specific trainings on climate-smart agriculture, environmental and social best practices, including effective use of organic and chemical fertilizer, pest and disease management, water-saving agronomic practices, soil fertility management, low-impact farming methods and labour-saving techniques.									
7. Conflict resolution and grievance management									
8. Environmental (EMS 14001) and social audit and report writing									
<b>Grand Total</b>									

**Annex 1 – Eligibility Screening Form**

**Letter of Interest (Eligibility Screening Form)**

**Please complete all the required spaces in this form**

1. Name: Surname -----Other Names:-----  
-----Maiden name (for married women):-----
2. Sex: (a) Male { } (b) Female { }
3. Date of birth: -----
4. Highest Education Level: (a) No formal education { } (b) Primary School { } (c) Secondary School { } (d) Vocational school (e) Tertiary Education { }
5. Which community do you belong to: -----
6. How long have you lived in this community: -----
7. How do you belong to this community: (a) by birth { } (b) by marriage { } (c) other (specify):-----
8. Local Government Area (LGA): ----- State: -----  
-----
9. What enterprise are you interested in (see list of selected enterprises for the LGA): -----  
-----
10. Do you have any experience in this enterprise: (a) Yes { } (b) No { }. If yes, how many years: -----
11. Do you belong to any youth or women organization: (a) Yes { } (b) No { }. If yes, what is the name: -----  
-----
12. Do you belong to any cooperative society: (a) Yes { } (b) No { }. If yes, what is the name: -----  
-----
13. Do you have access to any land for the enterprise: (a) Yes { } (b) No { }.
14. If yes to question 13, where is the land located-----; and what is the area size of the land? -----
15. What kind of title do you have to the land: (a) Government paper { } (b) Inheritance from parent { } (c) husband or wife's consent { } (d) family allocation { } (e) community's allocation { } (f) Others (specify):-----

**Endorsements:**

**Applicant:** I certify that the information provided here is correct

Name: -----

Signature: -----

Date: -----

**Community/traditional leader:**

Name: -----

Sign: -----

Date: -----

**Verifications:**

**Comments by the Local Government Liaison Office:**-----

-----

-----

-----

Name of Officer: -----

Designation: -----

Sign and date: -----

**Comments by the State Project Coordination Office:**-----

-----

-----  
-----  
Name of Officer: -----  
Designation: -----  
Sign and date: -----

**Screening:**

**Comments by service providers:**-----

-----Categorical comments (a) Applicant Eligible { } (b) Applicant Ineligible { }

## Annex 2 - Environmental and Social Screening Forms

### A: Screening Form for Agri-Enterprise Projects

#### General Information

Project Name:	
Name of incubator / applicant:	
Name of Cooperative: Contact person's details:	
Name of Apex Group: Contact person's details:	
Project Location:	
Project sector (e.g rice farming, cassava processing, etc.)	
Estimated Cost:	
Proposed Date of Commencement:	
Expected Project duration:	
Site (estimated area in ha):	
Any equity/contribution brought into the project:	
Any plan for new construction:	

#### Screening for Environmental and Social Issues

Question	Yes	No	Additional explanation of 'Yes' response
1. Will the sub-project develop any wetlands?			
2. Would the sub-project result in economic displacement <sup>28</sup> (loss of assets or access to resources) or physical resettlement			
3. Would the sub-project result in conversion and/or loss of physical cultural resources?			
4. Will the sub-project have significant social adverse impacts (affecting access to and/use rights to land, access to potable water and water for other uses) on local communities or other project-affected parties?			
5. Will the project trigger unsustainable natural resource management practices (fisheries, forestry, livestock, significant increase in use of agrochemicals) that exceed the carrying capacity?			
6. Does the sub-project include conversion of significant areas (above 50 ha) of natural forests/other wild lands?			
7. Would the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion/ other form of land degradation, fragmentation, hydrological changes)?			
8. Does the proposed project target area include ecologically sensitive areas <sup>29</sup> ; areas of global significance			

<sup>28</sup> Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (see SECAP Procedure Guidance Statement 13)

<sup>29</sup> 'Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

Question	Yes	No	Additional explanation of 'Yes' response
for biodiversity conservation and/or biodiversity-rich area; habitats depended on by endangered species?			
9. Does the project involve fisheries development in situations where little information exists on sustainable yield?			
10. Could the project pose a risk of introducing invasive alien species?			
11. Does the project involve the transfer, handling or use of genetically modified organisms/living modified organisms that may have an adverse effect on threatened biodiversity?			
12. Is the project site close to any oil and gas installation such as flow stations, oil terminal, oil or gas pipeline right of way?			
13. Has oil spill/ or pipeline fire ever been recorded around project site?			
14. Does the project involve land use changes (agricultural intensification and/or expansion of the cropping area) and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?			
15. Will the project result in increased use of agrochemicals which may affect the natural environment/human health?			
16. Does the project include small-scale irrigation and drainage projects, and water impoundment including small dams (except in wetlands)?			
17. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas?			
18. Do the project activities include rangeland and livestock development?	yes		
19. Does the project involve artisanal fisheries where there is information on sustainable yield?			
20. Do the project activities include aquaculture and/or mariculture?			
21. Do the project activities include watershed management or rehabilitation?			
22. Does the project include large-scale soil and water conservation measures?			
23. Does the project include small and micro enterprise development sub-projects?	yes		
24. Does the project involve credit operations through financial service providers, including credit for pesticide/other agrochemicals, livestock purchasing, irrigation, etc.?			
25. Do the project activities include natural resources-based value chain development?			
26. Would any of the project activities have minor adverse impacts on physical cultural resources?			
27. Would the project have low probability to have physical resettlement or economic displacement?			
28. Does the project include development of agro-processing facilities?			
29. Will the project require a migrant workforce during construction?			
30. Will the project require seasonal workers to plant and/or harvest produce?			

Question	Yes	No	Additional explanation of 'Yes' response
31. Will the construction or operation of the project cause an increase in traffic on rural roads?	yes		

**Guidance for sub-project categorization:**

"Yes" response to any of questions 1-13	Sub-project Environmental and social category is A	ESIA is required for subproject
"Yes" response to questions 14-31	Sub-project Environmental and social category is B	Sub-project to adopt the ESMP in the general ESMF
"No" response to almost all questions	Subproject Environmental and social category is C	No further analysis is required

## B: Screening Form for (Market) Infrastructure Sub-Projects

Name of market infrastructure:	
Infrastructure type:	
Location:	
Proposed Date of Commencement:	
Expected Project duration:	
Estimated cost:	
Estimate number of communities to be served:	
Estimated number of entrepreneur to be served:	

### Screening for (Market) Infrastructure Sub-projects

Question	Yes	No
1. Will the project activities include construction/rehabilitation of rural roads or other rural infrastructure in protected/sensitive areas <sup>30</sup> ?		
2. Does the project include construction of roads or other infrastructure that entail the total area being cleared of 50 ha or above?		
3. Does the project include construction of dam (s)/reservoir (between 5-15 m high with a reservoir exceeding 2 million m <sup>3</sup> )?	yes	
4. Does the project involve large-scale irrigation schemes rehabilitation/development (above 100 ha)?	yes	
5. Does the project involve significant extraction of ground water (significantly above recharge capacity)?		
6. Does the project include water-based (ground or surface) development where it is believed that significant depletion due to climate change or overutilization has occurred?		
7. Does the project involve significant extraction, diversion or containment of surface water?		
8. Does the project include drainage or correction of natural water bodies (e.g. river draining)?		
9. Will the project include construction/rehabilitation of rural roads that pass through oil infrastructure locations such as flow stations, tank farms or oil and gas pipelines?		
10. Would any of the project activities have minor adverse impacts on physical cultural resources?		
11. Does the project include development of agro-processing facilities?		
12. Will the project require a migrant workforce during construction?		
13. Will the construction or operation of the project cause an increase in traffic on rural roads?		
14. Has the government or community guaranteed the lease of the land for the (market) infrastructure?		
15. Is there any plan in place for sustainability of the infrastructure during the project life time?		
16. Does the project include specific measures to protect against dust (such as dust masks and water spraying)?		
17. Has arrangement been made to pay adequate compensation for private property that may be affected by the construction of the project?		
18. Will construction equipment with moderate decibels be used and the timing of use be so that people will experience less discomfort?		

<sup>30</sup> 'Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.



19. Will tree and vegetation replanting be carried out to stabilize slopes and re-green road sides?		
---	--	--

**Guidance for categorization:**

"Yes" response to any of questions 1-9	Environmental and social category is A	ESIA is required
"Yes" response to questions 10-13	Environmental and social category is B	Sub-project to adopt the general ESMP in the ESMF
"No" response to almost all questions 1-13 and 'Yes' to questions 14-19	Environmental and social category is C	No further analysis is required

### C: Climate Screening Form for Sub-Projects

To be used with the environmental and social screening forms.

#### Screening for Climate Issues

Question	Yes	No	Additional Explanation of 'Yes' response*
1. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or heat waves?			
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?			
3. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			
4. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?			
5. Is the project located in areas where rural development projects have experienced significant weather- related losses and damages in the past?			
6. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
7. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
8. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries) or the associated incidence of pests and diseases for the project target groups?			
9. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?			
10. Is the project investing in climate-sensitive livelihoods that are diversified?			
11. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
12. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?			

13. Does the project have the potential to become more resilient through the adoption green technologies at a reasonable cost?			
14. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
15. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies/policies?			
16. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved crop variety, capacity building; or including climate risk issues in policy processes)			
17. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage climate risks?			

**Guidance for categorization:**

"Yes" response to any of questions 1-9	Sub-project Climate risk is High	Climate risk Analysis is required for sub-project
"No" response to almost all questions	Sub-project climate risk is moderate	Sub-project to adopt the ESMP in the general ESMF

### **Annex 3 - Environmental and Social Guidelines for contractors<sup>31</sup>** (for reference in contractor agreements/contracts)

Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design including the following:

#### **Site Selection**

Sites should be chosen based on community needs for additional projects, with specific lots chosen based on geographic and topographic characteristics. The site selection process involves site visits and studies to analyze: (i) the site's, sub-urban, or rural characteristics; (ii) national, regional, or municipal regulations affecting the proposed sites; (iii) accessibility and distance from inhabited areas; (iv) land ownership, including verification of absence of squatters and/or other potential legal problems with land acquisition; (v) determination of site vulnerability to natural hazards, (i.e. intensity and frequency of floods, landslides, etc.); (vi) suitability of soils and sub-soils for construction; (vii) site contamination; (viii) flora and fauna characteristics; (ix) presence or absence of natural habitats and/or ecologically important habitats on site or in vicinity (e.g. forests, wetlands, rare or endangered species); and (ix) historic and community characteristics.

The rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

#### **Prohibitions**

The following activities are prohibited on or near the project site:

- Cutting of trees for any reason outside the approved construction area;
- Hunting, fishing, wildlife capture, or plant collection;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms (except by authorized security guards);
- Use of alcohol by workers.

#### **Construction Management Measures**

Solid, sanitation, and hazardous wastes must be properly controlled, through the implementation of the following measures:

##### *Waste Management:*

- Minimize the production of waste that must be treated or eliminated;
- Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal;
- Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each;
- Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). All garbage, metals, used oils, and excess material generated during construction should only be disposed in authorized areas, incorporating recycling systems and the separation of materials.

##### *Maintenance:*

- Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands);

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<sup>31</sup> Adapted from Ministry of Agriculture, Irrigation and Water Development, Republic of Malawi (2015) *Environmental and Social Management Framework for Programme for Rural Irrigation Development in Malawi*, pp.76-80.

- Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems;
- Identify, demarcate and enforce the use of within-site access routes to limit impact on site vegetation;
- Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

#### *Erosion Control*

- Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways;
- Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion, as needed;
- Maintain vehicle speeds at or below 10mph within the work area, 15mph or below within 200m of the site, and abide by the relevant speed limits at all times to / from the work area.

#### *Stockpiles and Borrow Pits*

- Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies;
- Limit extraction of material to approved and demarcated borrow pits.

#### *Site Cleanup*

- Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris.

### **Safety During Construction**

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Carefully and clearly mark pedestrian-safe access routes;
- If school children are in the vicinity, include traffic safety personnel to direct traffic;
- Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction;
- Conduct safety training for construction workers prior to beginning work;
- Provide personal protective equipment (PPE) and clothing (such as goggles, gloves, respirators, dust masks, hard hats, steel-toed and –shanked boots, etc.) for construction workers and enforce their use;
- Post Material Safety Data Sheets for each chemical present on the worksite;
- Require that all workers read, or have read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant;
- Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers;
- During heavy rains or emergencies of any kind, apply construction safeguards guidelines;
- Brace electrical and mechanical equipment to withstand unexpected events during construction.

### **Nuisance and Dust Control**

To control nuisance and dust the Contractor should:

- Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site;
- Maintain all on-site vehicle speeds at or below 10 mph;
- To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90db;
- In sensitive areas (including residential neighborhoods, health centers, schools, etc.) more strict measures may need to be implemented to prevent undesirable noise levels;
- Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people (children, elderly);

- Phase removal of vegetation to prevent large areas from becoming exposed to wind;
- Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas;
- Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material;
- Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

### **Community Relations**

To maintain cordial community relations the Contractor should:

- Following the country and ESMP requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes, as appropriate;
- Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures;
- At least five days in advance of any service interruption (including water, electricity) the community must be advised through clearly visible posters at the project site and at central community locations;
- Where possible, particularly for tasks that can also be performed through low-skilled manual labor (such as digging of shallow trenches, etc), make use of labor from the local community.

### **Chance Find Procedures for Culturally Significant Artifacts**

In case culturally valuable materials (incl. shrines, graves, etc.) are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts;
- Restart construction works only upon the authorization of the relevant authorities.

### **Environmental Supervision during Construction**

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and state regulations governing the environment, public health and safety.

**Annex 4 - Checklist of Environmental and Social Impacts from Construction Works ( Apply national construction standard and regulation )**  
**Annex 5 - Social Inclusion Strategy will be developed and used as leverage for other projects and agricultural initiatives**

## Annex 7 – Outline of FPIC Implementation Plan<sup>32</sup>

If adequate details on the project are not available at the Concept Note stage, the first design mission should identify the requirement for FPIC, and project components and activities that require FPIC by the rural communities. The mission should then develop the FPIC implementation plan indicating the process and time schedule for soliciting FPIC from concerned communities before the project design is completed.

An outline for the FPIC plan would include the following steps in the process and include timeline:

- **Conduct a sociocultural and land tenure assessment**  
*Provide information on the socio-cultural assessment, what has been done during design and what needs to be done during implementation. Provide information on when the sociocultural assessment will be ready*
- **Identify decision-making institutions and representatives**  
*Describe consultations held during the project design (including name of communities, organizations contacts) phase and its outcomes. Describe how decision-making institutions will be identified, representations formalized in order to agree upon the consultation process leading to FPIC of concerned communities. Indicate by when this process will be conducted.*
- **Conduct consultation leading to FPIC on the proposed project/specific component/activities**  
*Describe consultations held during the project design (including name of communities, organizations contacts) phase and its outcomes. Describe the process of consultations to be conducted during implementation phase that will lead to the FPIC by the concerned communities. Indicate aspects of the proposed project that require FPIC. Indicate who will conduct the consultations. Indicate by when this process will be conducted. As part of the consultation process, specify whether participatory mapping will be used as an instrument for the consultation process leading to FPIC.*
- **Formalize the consent agreement**  
*Specify that the consent agreement will be formalized in a written form or in other forms as agreed upon by the communities. Indicate by when the consent agreement will be formalized.*
- **Assess FPIC implementation**  
*Describe how FPIC implementation will be assessed during joint supervision missions*
- **Loan Agreement**  
*Indicate appropriate actions the borrower commits to undertake*
- **Disclosure of documentation related to the FPIC process**  
*Indicate when documentation will be disclosed.*
- **Document FPIC process**  
*Describe how the FPIC process will be documented*

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<sup>32</sup> IFAD.



**Table 6 HTDN ON FPIC: Seeking FPIC at implementation stage**

Conduct sociocultural and land tenure assessment	Identify decision-making institutions and representatives	Conduct consultation leading to FPIC	Formalize consent agreement
From Concept Note through first design mission	During first design mission	From first design mission through appraisal	Before QA (to be annexed to the PDR)
<p><b>Identify:</b></p> <ul style="list-style-type: none"> <li>• Customary laws, informal rules and organizing practices on land ownership</li> <li>• Institutions and governance systems</li> <li>• Types of livelihoods</li> <li>• Mutual support and solidarity mechanisms</li> <li>• Community stakeholders, land users and assess who has the right to give or withhold the consent</li> </ul> <p><b>Assess:</b></p> <ul style="list-style-type: none"> <li>• Consequences from the proposed project that may result in the change of the status of the lands, territories and resources</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct preliminary consultations with the community and explain the nature of the proposed project</li> <li>• Allow time for communities to discuss and decide on their representatives for the consultation process leading to FPIC</li> <li>• Clarify responsibilities of representatives</li> <li>• Agree on the process leading to FPIC</li> <li>• Identify signatory parties for the consent agreement</li> </ul>	<ul style="list-style-type: none"> <li>• Share objective and scope of the project with the representatives identified by the communities and identify project component(s) requiring FPIC</li> <li>• Inform them on the actors financing and implementing the project and their respective responsibilities</li> <li>• Provide clear and transparent information on the benefits and risks of the project</li> <li>• Share the findings of the sociocultural, land tenure and environmental assessment</li> <li>• Formalize consent agreement</li> </ul>	<p><b>Include:</b></p> <ul style="list-style-type: none"> <li>• Respective expectations</li> <li>• Proposed project duration, expected results and activities</li> <li>• Participatory monitoring and verification plan and procedures</li> <li>• Identification of grievances procedures and mechanisms</li> <li>• Terms of withdrawal of consent</li> <li>• Record of process through means and languages accessible to all stakeholders and parties involved</li> </ul>

WHAT?

WHEN?

HOW?

### **Annex 8 – Abbreviated Process for a Resettlement Action Plan (RAP)<sup>33</sup>**

In order to simplify the preparation of a RAP where 10 or less households will be economically or physically affected by the project, the following steps can be followed:

1. Carry out a census survey to identify the potentially affected people, giving the number of people and households affected.
2. Identify any vulnerable persons within this group in order to be able to accord them special consideration.
3. Set a well-defined cut-off date after which claims for eligibility to be included in the resettlement process will not be entertained.
4. Verify, through the relevant local government department, that the identified affected people are eligible to be included in the resettlement process.
5. Document the socio-economic status of the affected people including the value / assessment of their assets and other sources of livelihood that will be affected or lost.
6. Describe the various compensation options to be offered to each person/household to be resettled ('entitlement options'), and document preferred options for each person/household, providing the cost of that option. Involve the whole community and households in the decisions of such agreed upon compensation.
7. Document other resettlement assistance to be provided as requested by the affected persons, including their preferred choices.
8. Displaced people must be resettled within their own communities or villages, so that upheavals caused by resettlement are minimized. If this is not the case, then consult with the host communities for the provision of land and social services for the resettled persons, and provide support to them accordingly.
9. Describe the institutional roles and responsibilities for implementation of the resettlement plan including involvement of local government and NGOs in monitoring the plan.
10. Provide a clear timetable for the resettlement activities and a timeframe for the entire process. The timetable must ensure timely compensation/resettlement.
11. Provide the resettlement/compensation budget

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<sup>33</sup> IFAD.