

CCARDESA

Centre for Coordination of Agricultural Research and Development for Southern Africa



Environmental and Social Sustainability Framework for the Comprehensive Africa Agriculture Development Programme Ex-Pillar 4 (CAADP-XP4)



CAADP



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EXECUTIVE SUMMARY

The Comprehensive Africa Agriculture Development Programme (CAADP) ex-Pillar 4 is a five-year project funded by the European Union (EU) and managed by the International Fund for Agricultural Development (IFAD). The program aims to strengthen the capacity of regional and sub-regional agricultural research and extension organizations in Africa to contribute effectively to food and nutrition security, economic development, and climate mitigation. For the southern Africa region, the program is implemented by the Centre for Coordination of Agricultural Research & Development for Southern Africa (CCARDESA). CCARDESA is a regional organization that brings together national agricultural research and development (ARD) systems in all Southern African Development Community (SADC) countries.

CCARDESA has developed this Environmental and Social Sustainability Framework (ESSF) to ensure that the CAADP-XP4 program's activities are implemented in an environmentally and socially sustainable manner. The environmental and social sustainability framework for the CAADP-XP4 program is guided by the Sustainable Development Goals (SDGs) and its primary goals are to: (i) promote the conservation of biodiversity and the sustainable management of natural resources, including land, water, and forests, (ii) promote resource efficiency and pollution prevention and management, including the use of sustainable agricultural practices, (iii) address the impacts of climate change and reduce disaster risks, including the development of climate-resilient agricultural practices, (iv) promote decent work, including the creation of jobs and the improvement of working conditions in the agricultural sector, (v) promote community health, safety, and security, including the prevention of occupational hazards and the provision of health services to program beneficiaries, (vi) promote gender equality and prevent gender-based violence, including the empowerment of women and youth in the agricultural sector, (vii) address land tenure issues, including the proper resettlement of people who are displaced by program activities, and (viii) support the respect and protection of cultural heritage, including the preservation of traditional knowledge and practices.

The environmental and social sustainability framework of the CAADP-XP4 program will be implemented through a variety of mechanisms, including environmental and social impact assessments, environmental and social management plans, social safeguards monitoring and grievance mechanisms and capacity building for environmental and social management.

Some of the benefits of implementing this Environmental and Social Sustainability Framework include improved environmental and social performance, increased community support for CCADP-XP4 projects, reduced risk of project failure and improved accountability, which can help to build trust with stakeholders and ensure that the program is responsive to their concerns.

ACRONYMS AND ABBREVIATIONS

AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa
CAADP-XP4	Comprehensive Africa Agriculture Development Programme ex Pillar 4
CCARDESA	Centre for Coordination of Agricultural Research and Development in Southern Africa
CGIAR	Consortium of International Agricultural Research Centers
ESIA	Environmental and Social Impact Assessments
ESSF	Environmental and Social Sustainability Framework
FAO	Food and Agriculture Organization of the United Nations
FSRP	Food Systems Reliance Program
GCCA+	Global Climate Change Alliance Plus
GIIP	Global International Industry Practice
M&E	Monitoring and Evaluation
MTOP	Medium Term Operational Plan
RAP	Regional Agricultural Policy
RISDP	Regional Indicative Strategic Development Plan
SADC	Southern African Development Community
SDG	Sustainable Development Goal
SEMP	Social and Environmental Management Plan
UNEP	United Nations Environment Programme

INTRODUCTION

The Centre for Coordination of Agricultural Research & Development for Southern Africa (CCARDESA) was established in 2010 by Southern Africa Development Community (SADC) Member States as a subsidiary organisation of SADC with a mandate of coordinating agricultural research in Southern Africa. As part of its mandate, CCARDESA is implementing the Comprehensive Africa Agriculture Development Programme EX Pillar 4 (CAADP-XP4) Programme on Agricultural Research and Innovation under the support of the European Union's (EU) "Development Smart Innovation through Research in Agriculture" (DeSIRA) initiative. CCARDESA is implementing this programme in partnership with other Ex-CAADP Pillar 4 Africa institutions comprising; African Forum for Agricultural Advisory Services (AFAAS), the Forum for Agricultural Research in Africa (FARA), the West and Central African Council for Agricultural Research and Development (CORAF) and the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA). The CAADP-XP4 Project is financed through the International Fund for Agricultural Development (IFAD) for a period of four (5) years 2019 - 2024. Its implementation focus is in 7 SADC target countries (i.e., Botswana, Eswatini, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe).

The CAADP-XP4 programme supports a science-led and climate-relevant agricultural transformation in Africa. It aims at strengthening the capacities of CCARDESA to deliver on their Agricultural Research for Development (AR4D) mandate and to collectively support African countries implement relevant programmes through: inclusive regional and international partnerships; production and exchange of climate relevant agricultural knowledge; effective communication, monitoring and evaluation; promotion of systemic and effective use of science, knowledge and innovation; and representation of the Sub Regional and National Organizations at Continental level.

The overall objective of the CAADP-XP4 programme is to enable agricultural research and innovation, including extension services, to contribute effectively to food and nutrition security; economic development and climate mitigation in Africa. This will be achieved by improving the capacity, effectiveness and positioning of the Regional and Sub regional Agriculture research and

extension organizations as well as National-Agriculture-Research-Systems, and by promoting collaboration and knowledge sharing among the organizations. To achieve these, the programme focuses on five main outputs, and these are: Capacity Strengthening, Multi-stakeholder Partnerships for innovation established and in Operation, Policy, cross country market access and improved investment, Knowledge Management and Effective Planning, Coordination, Partnership, Monitoring, Evaluation Learning (MEL) and Reporting.

The CAADP-XP4 programme went through a mid-term evaluation, and it was recommended that an Environmental and Social Sustainability Framework (ESSF) is required for the programme. The framework will ensure that the implementation of all CAADP-XP4 activities considers and mainstreams the important cross-cutting issues of gender, health and nutrition, poverty, climate change and the environment. Observance of environmental and social safeguards are a mandatory requirement in the execution of all CCARDESA research and development projects. It is on this background that this Environmental and Social Sustainability Framework was developed.

Rationale for developing the environmental and social sustainability framework.

The Environmental and Social Sustainability Framework of the CAADP-XP4 Program has several benefits, including:

- **Improved environmental and social performance:** The ESSF helps to ensure that the CAADP-XP4 Program's activities are implemented in an environmentally and socially sustainable manner. This can help to protect biodiversity, conserve natural resources, reduce pollution, and mitigate the impacts of climate change.
- **Increased community support:** The ESSF helps to build community support for the CAADP-XP4 Program by ensuring that the program's activities are designed to benefit local communities and address their concerns. This can help to reduce conflict and ensure that the program is sustainable in the long term.
- **Reduced risk of project failure:** The ESSF helps to reduce the risk of project failure by identifying and addressing potential environmental and social risks. This can help to ensure that the CAADP-XP4 Program is implemented successfully and it achieves its objectives.

- **Improved accountability:** The ESSF helps to improve accountability by ensuring that the CAADP-XP4 Program is transparent in its environmental and social management practices. This can help to build trust with stakeholders and ensure that the program is responsive to their concerns.

Operational definitions of key terms

For the purposes of this framework, the following definitions shall apply:

Sustainability:

“Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.” (UN World Commission on Environment and Development)

Environmental Sustainability:

“a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity” (Morelli, 2011)

Social sustainability:

“the ability of a community to develop processes and structures which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community.” (Business Dictionary)

Environmental and social impact:

“any change, potential or actual, to the physical, natural, or cultural environment, and related impacts on surrounding communities and workers, resulting from a project or program, including direct, indirect, cumulative and transboundary impacts and the impacts of associated facilities, and including both adverse and beneficial impacts” (GEF, 2019)

Environmental and social safeguards:

“policies, standards, and operational procedures designed to identify, avoid, mitigate, and minimize adverse environmental and social impacts that may arise from the implementation of development projects. ESS also

have a pro-active dimension to try to increase chances that development projects deliver better outcomes for people and the environment.” (WWF, 2022)

Environmental and social risk:

“a combination of the probability of a certain hazard occurrence and the severity of impacts resulting from such an occurrence” (GEF, 2019)

Environmental and social impact assessment:

“an assessment of the project or program’s potential environmental and social impacts and risks that is appropriate to the nature and scale of the potential impacts, including comprehensive environmental and social impact assessments for projects with significant risks, strategic or regional impact assessments for programs, and more limited assessments for projects of limited scope and potential impact” (GEF, 2019)

Biodiversity:

“the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (WFP, 2021)

Impact Mitigation:

“the process of planning for disasters and having a way to lessen negative impacts” (Lutkevich, 2023)

Safeguard Standards:

“a defined and measurable level of performance that must be achieved in relation to a particular criterion” (FCMC).

The CAADP-XP4 programme’s vision for Environmental and Social Sustainability

The CAADP-XP4 Program envisions a future where agricultural development is implemented in an environmentally and socially sustainable manner. This vision is based on the following principles:

- **Sustainability:** The CAADP-XP4 Program will contribute to the sustainable development of Southern Africa by protecting the environment, building community support, reducing the risk of project failure, and improving accountability.

- **Equity:** The CAADP-XP4 Program will ensure that its agricultural development initiatives are implemented in a non-discriminatory manner and the benefits thereof are shared equitably, regardless of gender, race, ethnicity, or social status.
- **Inclusion:** The CAADP-XP4 Program will involve all relevant stakeholders in the planning, implementation, and evaluation of its activities.
- **Transparency:** The CAADP-XP4 Program will be transparent in its environmental and social management practices.
- **Accountability:** The CAADP-XP4 Program will be accountable to its stakeholders for its environmental and social performance.

CARDESA is committed to working with all stakeholders to achieve its vision for environmental and social sustainability. By working together, it is possible to create a more sustainable future for agriculture in Southern Africa.

Objectives of CCARDESA’s Environmental and Social Sustainability Framework

The CAADP-XP4 Programme has the following environmental and social sustainability objectives:

- **Conservation of biodiversity:** The program will promote the conservation of biodiversity and the sustainable management of natural resources, including land, water, and forests.
- **Resource efficiency and pollution prevention and management:** The program will promote resource efficiency and pollution prevention and management, including the use of sustainable agricultural practices.
- **Climate change and disaster risk reduction:** The program will address the impacts of climate change and seek to reduce disaster risks, including the development of climate-resilient agricultural practices.
- **Decent work:** The program will promote decent work, including the creation of jobs and the improvement of working conditions in the agricultural sector.

- **Community health, safety, and security:** The program will promote community health, safety, and security, including the prevention of occupational hazards and the provision of health services to program beneficiaries.
- **Gender equality and prevention of gender-based violence:** The program will promote gender equality and the prevention of gender-based violence, including the empowerment of women and youth in the agricultural sector.
- **Land tenure, displacement, and resettlement:** The program will address land tenure issues, including the fair resettlement of people who are displaced (where necessary) by program activities.
- **Cultural heritage:** The program will respect and protect cultural heritage, including the preservation of traditional knowledge and practices.

GUIDING PRINCIPLES

The CAADP-XP4's Environmental and Social Sustainability Framework is guided by the UN Sustainable Development Goals (SDGs), specifically SDGs 1 (end poverty), 2 (end hunger), 3 (human health and wellbeing), 5 (gender equality), 7 (affordable and clean energy), 8 (decent work and economic growth), 9 (industry, innovation and infrastructure), 12 (responsible consumption and production), 13 (climate action), 14 (life below water), and 15 (life on land).

CCARDESA's commitment towards these SDG goals are as follows:

SDG 1: End poverty and SDG 2 end hunger

Hunger and food nutrition insecurity are related to poverty, thus addressing both SDG 1 and SDG 2 go hand in hand. By promoting sustainable agricultural practices, improving access to markets, empowering women and youth, and building the capacity of local communities, the program can help to reduce poverty and end hunger, and create a more sustainable future for agriculture.

SDG 3: Human health and wellbeing

CCARDESA can contribute to improving the health and well-being of the people and the environment in Southern Africa, while also advancing its own mission and vision. This can be

achieved through incorporating health and nutrition aspects into its agricultural innovations, such as improving crop varieties, enhancing soil fertility, and reducing post-harvest losses. Another approach would be to strengthen the capacity of farmers and other stakeholders to prevent and manage pests and diseases that affect crops, livestock, and human health. Finally, supporting the empowerment of women and youth in agriculture, who often face greater challenges and vulnerabilities in accessing resources, services, and opportunities, and who play a vital role in ensuring household food security and nutrition, can also ensure human health and wellbeing.

SDG 5: Gender equality

The ESSF seeks to promote gender equality in agriculture by ensuring that women and youth have equal access to land, water, credit, and other agricultural resources. By providing training and capacity building to women and youth farmers, the programme can help them improve their agricultural productivity. The program can also empower women and youth in agriculture by supporting women and youth-led agricultural organizations and businesses. Additionally, the program can address the root causes of gender inequality by working to change attitudes and behaviors that discriminate against women. The program can also support the creation of a more supportive environment for women and youth in agriculture, such as by providing childcare facilities and flexible work arrangements.

SDG 7: Affordable and clean energy

CCARDESA can support the adoption of renewable energy sources and technologies in the agricultural sector, such as solar irrigation, biogas digesters, and biomass briquettes. These can reduce greenhouse gas emissions, enhance energy security, and lower energy costs for farmers and rural communities. CCARDESA can also facilitate knowledge sharing and capacity building on best practices and innovations in renewable energy among its member states and stakeholders. CCARDESA can promote the integration of energy efficiency and conservation measures in its research and development projects. This can involve conducting energy audits, implementing energy management systems, and applying energy-saving techniques and equipment. By doing so, CCARDESA can minimize its environmental footprint, optimize its resource use, and demonstrate leadership and accountability in environmental and social sustainability.

SDG 8: Decent work

This goal seeks to promote inclusive and sustainable economic growth, employment, and decent work for all. The project will support the development of policies and programs that promote gender equality and youth empowerment in agriculture. These policies and programs will help to ensure that women and youth are able to participate fully in the agricultural sector, and that they benefit from the economic opportunities it offers. The project will also support the training of women and youth in agricultural skills and technologies. This will help to increase their productivity and income, and to improve their access to markets.

SDG 9: Industry, innovation, and infrastructure

SDG 9, which focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation, is another useful principle to guide CCARDESA's environmental and social sustainability. Some ways for CCARDESA to contribute to SDG 9 include developing and implementing green technologies and practices that reduce greenhouse gas emissions, enhance resource efficiency, and minimize waste and pollution in the agricultural sector, and supporting smallholder farmers and rural communities to access affordable, reliable, and sustainable energy sources, such as solar, wind and biogas, that can improve their productivity and livelihoods.

SDG 12: Sustainable consumption and production

Sustainable consumption and production are about doing more and better with less. The SDG is also about decoupling economic growth from environmental degradation, increasing resource efficiency, and promoting sustainable lifestyles. The environmental and social sustainability framework of CAADP-XP4 is a significant step forward in the fight against unsustainable consumption and production. The project has the potential to make a real difference in the way that agriculture is practiced in Africa, and to help the continent achieve SDG 12. This can be achieved through supporting the development of sustainability standards for agricultural products. These standards will help to ensure that agricultural production is done in a sustainable manner, and that the environmental and social impacts of agriculture are minimized. Promoting public awareness of the importance of sustainable consumption and production can help to change consumer behavior, and to encourage people to make more sustainable choices.

Furthermore, supporting research on sustainable agriculture will help to identify new ways to produce food more sustainably, and to reduce the environmental footprint of agriculture.

SDG 13: Climate action

It is important to ensure that all CAADP-XP4 programmes contribute to the effort to mitigate the impacts of climate change rather than exacerbate the situation. One way to achieve this is through reducing greenhouse gas emissions from the agricultural sector, e.g., using climate-smart agricultural practices, such as no-till farming, cover cropping, and integrated pest management. These practices help to reduce the amount of carbon dioxide and other greenhouse gases released into the atmosphere. Another approach is reducing pollution from agricultural activities such as pesticides, fertilizers, and animal waste. The programme can also enhance biodiversity through promoting the use of agroforestry, integrated pest management, and other practices that support the conservation of natural habitats.

SDG 14: Life below water

This goal seeks to protect marine life and ecosystems and use their resources sustainably. This can be achieved in numerous ways including reducing the use of pesticides, which can pollute water and soil, enhancing the resilience of coastal communities, and promoting sustainable aquaculture.

SDG 15: Life on land

Agriculture is a major driver of deforestation and land degradation, as it requires land for crop production and livestock grazing. These impacts lead to the loss of biodiversity. The ESSF for CAADP-XP4 seeks to protect and restore biodiversity. This will be achieved through numerous approaches including reducing deforestation, protecting, and restoring forests, conserving, and managing wetlands, enhancing the resilience of agricultural systems and promoting sustainable land use.

SCOPE

The framework applies to all CAADP-XP4 projects, implementing partners, executing agencies, contractors and any other stakeholders that may be involved in project implementation under the CAADP-XP4 programme. The framework must be read along with all other relevant strategies

and policies of CCARDESA, including its Environmental and Social Sustainability Framework. Furthermore, the framework should adhere to all applicable SADC regional and national environmental legislation and the Handbook on Environmental Assessment Legislation in the SADC Region (Walmsley & Tshipala, 2007), provides a detailed account of such. Should the implementation of the framework turn out to be insufficient, the CAADP-XP4 secretariat shall endeavor to liaise with the executing agency or contractor to address any shortcomings.

HOW THE FRAMEWORK WAS DEVELOPED

The framework was developed by a group of 10 experts from diverse fields including agriculture, natural sciences, natural resources management, and environmental science during a 5-day workshop that was organized by CCARDESA. The workshop was held in Johannesburg, South Africa from 15 -19 May 2023. The experts came from South Africa, Botswana, Eswatini, Lesotho, and Zambia. A list of these experts and their affiliations is provided in Annex 1.

Determination of the applicable environmental and social safeguards

To determine the environmental and social safeguards that are relevant to CAADP-XP4 program of work, a review of its program document was conducted. The review involved identifying the key thematic areas of CAADP-XP4, their strategic objectives and all their associated strategic activities. The key areas of focus of the CAADP-XP4 programme are summarized in figure 1 below. Thereafter, the potential environmental and social risks associated with all its activities were enumerated through group exercises that involved brainstorming sessions and report backs and discussions with the whole group.

CAADP-XP4 KEY FOCAL AREAS

- Strengthening the capacity of African regional and sub-regional agricultural research organizations to perform their individual mandates and to better work together
- Establishing and operationalizing multistakeholder partnerships for innovation
- Policy, cross country market access and improved investment
- Knowledge Management
- Effective Planning, Coordination, Partnership, Monitoring, Evaluation Learning (MEL) and Reporting

Figure 1: Key areas of focus of the CAADP-XP4 programme.

Categorization of potential environmental and social impacts and risks

The experts adopted the FAO (2022) risk categorization framework, which places risks into three broad categories: High risk, Medium Risk and Low Risk (Figure 2). These categories are informed by the nature, probability, extent and significance of the risk. The criteria for each risk category were also adopted from the FAO framework.

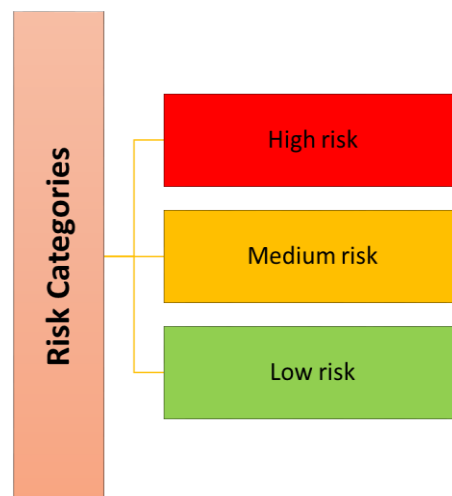


Figure 2: The three categories of risk for environmental and social impacts

Assessment requirements for projects under the three risk categories

Based on established principles of best practice, the following shall apply for programmes and projects that fall into the different risk categories.

High risk

For programmes that fall under the high-risk category, a full environmental and social impact assessment (ESIA) shall be conducted. This shall include impacts on biodiversity, climate, ecosystems, human health and livelihoods, etc. A comprehensive impact mitigation plan shall be prepared along with clear budgets and timelines for implementation. Independent experts and/or environmental audits shall be engaged to monitor projects for compliance with the mitigation plan(s).

Medium risk

For projects of medium risk, CCARDESA shall require a limited environmental and social impact assessment. Clear measures to minimize, mitigate and monitor the identified impacts and risks associated with the program shall be clearly indicated and adhered to.

Low risk

Environmental and social impact assessments will not be required for low-risk programmes save for adherence to standard good practices to avoid adverse effects on the environment.

The environmental and social safeguards standards

The identified potential impacts and risks associated with the CAADP-XP4 programme's activities were matched to the corresponding environmental and social safeguards of the FAO framework for environmental and social management as well as that of the GEF policy on environmental and social safeguards (GEF, 2019). Thus, the experts determined that the following environmental and social safeguard standards are relevant to the CAADP-XP4 programme:

- Biodiversity conservation, and sustainable management of natural resources
- Resource efficiency and pollution prevention and management
- Climate change and disaster risk reduction
- Decent work

- Community health, safety and security
- Gender equality and prevention of gender-based violence
- Land tenure, displacement, and resettlement
- Cultural heritage

Mitigation of potential environmental and social impacts of CCARDESA activities

To determine appropriate mitigation measures for the environmental and social impacts and risks associated with each of the activities of the CAADP-XP4 programme, the mitigation hierarchy (Figure 3), which is based on best practice, was adopted. This is also the recommended approach for all projects that shall be undertaken under the CAADP-XP4 programme.

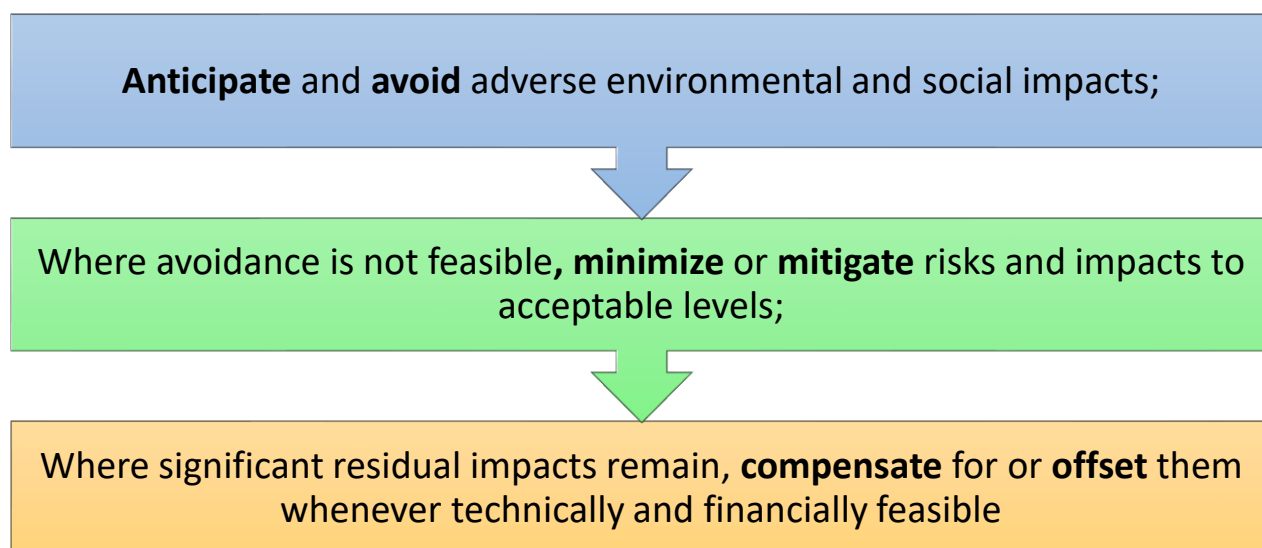


Figure 3: established hierarchy for mitigation of environmental risks (adapted from FAO, 2022)

ENVIRONMENTAL AND SOCIAL SAFEGUARD STANDARDS OF THE FRAMEWORK AND THEIR REQUIREMENTS

Biodiversity conservation, and sustainable management of natural resources

Introduction

Biodiversity conservation is the protection, management, and sustainable use of biodiversity to derive benefits for present and future generations. Sustainable management of natural resources, on the other hand, is the use of natural resources in a way that ensures their long-term availability and productivity. The CAADP-XP4 programme recognizes that increasing agricultural

productivity and commercialization may result in biodiversity loss and land degradation if there are no proper mitigation strategies in place. Therefore, biodiversity conservation and sustainable management of natural resources should be an integral component of all CAADP-XP4 programmes, projects, and activities. This means that these activities should be designed and implemented in a way that minimizes their impact on biodiversity and natural resources.

Objectives

The ESSF of the CAADP-XP4 programme aims to ensure the conservation of biological diversity, the sustainable use of its components and other natural resources, and the fair and equitable sharing of the benefits arising out of the utilization of genetic and other natural resources.

Requirements

To achieve biodiversity conservation and sustainable management of natural resources the CAADP-XP4 programme shall achieve environmental and social sustainability through the following:

1. Increasing access to information on appropriate technologies to conserve and protect biodiversity e.g., through empowerment, capacity building programmes and technology transfer.
2. Supporting educational and curriculum reforms that enhance biodiversity conservation and the sustainable management of natural resources.
3. Strengthening public-private (and community) partnerships to enhance collaborative efforts for protection of biodiversity and sustainable management of natural resources.
4. Minimizing genetic contamination of local varieties and breeds through dissemination of relevant information on the appropriate control measures including legislative and policy instruments.
5. Improving access to and appropriate use of technologies through empowerment, capacity building programmes and technology transfer.
6. Adoption of alternatives and less energy and resource intensive technologies and practices.

7. Avoiding and minimizing air, land and water pollution through the use of ecologically sound alternatives while conducting CAADP-XP4 activities.

Resource efficiency and pollution prevention and management

Introduction

Organizational activities can contribute to an increased carbon footprint. This is because they often involve the use of resources that can pollute the environment and generate waste. For example, the use of fossil fuels for transportation and electricity generation from burning of coal can release greenhouse gases into the atmosphere. The production of goods and services can also generate pollution, such as air and water pollution. The CAADP-XP4 programme's ESSF recognizes that alternative methods with low environmental impacts exist. These methods include efficient and effective resource use, pollution prevention, and greenhouse gas (GHG) emission avoidance and mitigation technologies and practices. These methods are the new normal, and they are essential for reducing the environmental impact of organizational activities. Consequently, this sustainability framework sets out the requirements to address resource efficiency and pollution prevention and management in all its programmes and activities.

Objectives

The CAADP-XP4 programme will consider ambient conditions and apply technically and financially feasible resource efficiency and pollution prevention measures in accordance with the mitigation hierarchy. The measures will be proportional to the risks and impacts associated with the programme activities and consistent with GIIP.

Requirements

This ESSF will improve resource efficiency and pollution prevention management through the following means:

1. Promoting the sustainable use of resources, including energy, water, and raw materials.
2. Avoiding adverse impacts on human health and the environment by minimizing pollution from all programme activities.
3. Avoiding and minimizing activity-related emissions of short- and long-lived pollutants that could lead to climate change.
4. Minimizing waste generation and where waste is unavoidable, adopting sustainable waste management practices such as recycling, reusing, and repurposing of materials.

Climate change and disaster risk reduction

Introduction

Climate change is already making natural disasters more frequent and intense, and this trend is expected to continue. This is because climate change is causing changes in the Earth's atmosphere and oceans, which are leading to more extreme weather events. For example, hurricanes are becoming more powerful, floods are becoming more widespread, and droughts are becoming more severe. Natural disasters can cause widespread damage, loss of life, and economic disruption. They can also displace people from their homes and communities, and they can have a lasting impact on the environment. Climate change is also a threat to human health, as it can lead to the spread of diseases, the emergence of new diseases, and the intensification of heat waves. Therefore, addressing climate change and disaster risk reduction are crucial for building resilience and promoting sustainable development.

Objectives

The objectives of this ESSF are to reduce carbon footprint of CAADP-XP4 programmes and activities, to minimise GHG emissions and to Climate-proof CAADP-XP4 programmes and activities.

Requirements

The CAADP-XP4 programme will reduce the carbon footprint of its programs and activities in three ways as follows:

1. By using green technologies and low-carbon alternatives. This includes things like using solar power to generate electricity, using electric vehicles for transportation, and using recycled materials in all its activities.
2. By building the capacity of farmers on minimizing greenhouse gas (GHG) emissions through climate-smart agricultural practices and emissions reduction strategies. This includes things like planting trees, using cover crops, and reducing tillage.
3. By climate-proofing its programs and activities. This means making them more resilient to the impacts of climate change, such as droughts, floods, and extreme weather events. This will include developing early warning systems, building infrastructure that can withstand extreme weather events, and promoting climate-resilient activities.

Decent work

Introduction

One of the key activities of the CAADP-XP4 programme is to map out existing climate relevant initiatives at national, regional, and continental levels. These data are essential in helping farmers to be up to date with climate change adaptation and mitigation strategies. The agriculture sector requires such data from different time periods to monitor and compare progress. Data is also essential for scaling up project activities. Modern technology enables data dissemination to a broader community. Access to climate related agricultural data can contribute to decent work in several ways. First, it can help farmers and workers plan and adapt to changing weather patterns, reducing the risks of crop failures, income losses and food insecurity. Second, it can enable more efficient use of resources, such as water, energy and fertilizers, lowering the environmental footprint and the costs of production. Third, it can foster innovation and knowledge sharing among different actors in the agricultural sector, creating new opportunities for employment, learning and collaboration. Therefore, climate related agricultural data is an asset for promoting decent work and sustainable development.

However, a challenge is that some data collectors often do not share their data with other sectoral players. This results in unnecessary duplication of efforts. One way to avert this challenge would be for the CAADP-XP4 project to ensure that the data on existing climate related initiatives is collected and stored in a central database that is accessible to all stakeholders. It is also important to document the stakeholders who are involved in any research projects that generate such data. This can help to ensure continuity and preserve institutional memory. Stakeholder engagement is crucial for integrating activities.

Objectives

The ESSF seeks to ensure that the CAADP-XP4 programme reduces the digital and technological gap among the actors involved in the collecting, dissemination, and use of data on climate related agricultural initiatives by encouraging them to share the data they collect and generate. To achieve this goal, the project will foster collaboration, motivation and alignment among the stakeholders through regular and impactful communication strategies.

Requirements

To achieve its objectives for decent work, the CAADP-XP4 programme shall:

1. Minimize unwillingness to share data by offering incentives, such as access to more data or recognition.
2. Bridge the digital divide between data generators and end users by ensuring that everyone has the necessary digital skills and tools to use climate related agricultural data.
3. Avoid and minimize institutional memory loss by retaining the same participants throughout the project and/or developing and implementing strategies for documenting and transferring knowledge effectively.
4. Minimize loss of interest or focus by communicating frequently and clearly with stakeholders, highlighting the progress and benefits of the project, and soliciting feedback and input from stakeholders.
5. Minimize the lack of cooperation or engagement from the private sector by communicating frequently and clearly with the private sector, demonstrating the value and impact of the project and building trust and rapport with the private sector.

Community health, safety and security

Introduction

The Community health, safety and security standard aims to protect communities from the possible negative effects of the programme's activities. For example, the process of developing and applying new technologies, or creating and sharing climate-related knowledge products and tools, may pose health and safety hazards or other adverse impacts to the communities, especially if they lack the necessary technical skills to use the technologies properly. The standard requires that all CAADP-XP4 projects and activities should prevent, or if not possible, reduce and remedy any health and safety-related risks and impacts that may occur during their implementation.

Objectives

The ESSF's goal is to empower the people and groups who are involved in any CAADP-XP4 project to help them overcome the gap between those who have and those who do not have the required technical and digital skills and tools to apply agricultural technologies. It also seeks to help them secure more funding and influence policy decisions that affect them. To do this, the CAADP-XP4 programme will use various strategies such as raising awareness, educating, and persuading the relevant authorities.

Requirements

To ensure Community health, safety, and security, the CAADP-XP4 programme shall:

1. Seek more funding from local, regional and international organizations to provide training and equipment to reduce the gap between those who have and do not have access to digital technology.
2. Persuade and influence decision-makers to support the CAADP-XP4 programme activities.
3. Align the CAADP-XP4's legal frameworks with international standards and best practices to ensure the health, safety and security of all stakeholders.

Gender equality and prevention of gender-based violence

Introduction

Gender inequality affects agricultural development in many ways, such as limiting women's access to land. Land is essential for adopting new technologies and practices that promote sustainable agriculture. Therefore, to ensure environmental and social sustainability, the CAADP-XP4 programme must address this issue by implementing measures that ensure equal opportunities for men, women and youth. To achieve this goal, it is important to analyze how gender roles and relations influence the distribution of resources and power in the agricultural sector.

Objectives

The ESSF aims to increase agricultural output by involving women and youths, who often lack access to land, in the adoption and execution of various farming practices.

Requirements

The CAADP-XP4 programme will achieve its objectives through:

1. Working with communities to challenge the idea that men are superior to women, and that women are only good for domestic work. This can be done through education and awareness-raising campaigns.

2. Supporting women and youth's leadership in all spheres of society, including agriculture, by providing training and mentorship opportunities for women and youth, and by advocating for policies that support their participation in leadership roles.
3. Advocating for the enforcement of child protection laws to eliminate the engagement of child labor in agricultural production.
4. Working to ensure that women and youth have equal access to education, healthcare, land, credit, and other resources. This will be done through advocacy, policy work, and direct service provision.
5. Working to change the attitudes and behaviors that lead to gender-based violence, such as the idea that men have the right to control women's bodies. This can be done through education and awareness-raising campaigns.
6. Working to hold perpetrators of gender-based violence accountable, both through the criminal justice system and through social sanctions.
7. Minimizing disruption of the social fabric that leads to resistance of agricultural interventions uptake by engaging men and assuring them of their household headship role.

Land tenure, displacement, and resettlement

Introduction

Land tenure refers to the relationship between people and land. It encompasses the rights, responsibilities, and interests that people have in land. Secure land tenure is essential for sustainable agriculture because it provides farmers with the incentive to invest in their land and to manage it sustainably. Agricultural programmes and projects, by their nature, involve extensive use of land resources. Subsequently, such programmes and projects involve the acquisition of land and/or restrictions on land use, as well as effects on land tenure. Such interventions can lead to significant adverse impacts on individuals and communities if they are implemented inconsiderately or irresponsibly.

Displacement occurs when people are forced to leave their homes and land. This can happen due to a variety of factors, including natural disasters, development projects, and conflict. Displacement can have a devastating impact on people's lives, including their livelihoods, food security, and access to healthcare.

Resettlement is the process of resettling people who have been displaced. It can be a complex and challenging process, and it is important to ensure that the needs of the displaced people are met. Resettlement can be a positive opportunity for sustainable agriculture if it is done in a way that respects the rights of the displaced people and that promotes sustainable land management practices.

Overall, secure land tenure can encourage farmers to adopt sustainable practices, such as using less water and pesticides. Displacement can be an opportunity to resettle people in areas where they can practice sustainable agriculture. And resettlement can be used to create new agricultural communities that are more resilient to climate change and other environmental challenges.

However, it is important to note that land tenure, displacement, and resettlement can also have negative impacts on the environment and society. For example, insecure land tenure can lead to overgrazing and deforestation. Displacement can lead to social unrest and conflict. And resettlement can disrupt traditional cultures and ways of life. Therefore, it is important to carefully consider the potential environmental and social impacts of land tenure, displacement, and resettlement before implementing these measures. By carefully planning and implementing these measures, it is possible to use them to achieve environmental and social sustainability in agriculture. Hence, CCARDESA aims ensure that involuntary resettlement in projects or programmes that it supports or implements are avoided wherever possible. Where resettlement and/or displacement leads to significant adverse impacts, CCARDESA will ensure that appropriate compensation is provided.

Objectives

Through the framework, CCARDESA aims to ensure that the livelihoods and living standards of people are not negatively impacted by its programmes through ensuring secure land tenure, minimizing the displacement of people and ensuring appropriate resettlement, where absolutely necessary.

Requirements

Ccardesa will achieve its objectives through:

1. Ensuing that all forms of tenure on land and natural resources are recognized and respected including informal or customary land tenure rights.

2. Avoiding displacement and resettlement activities and where such are unavoidable, ensure that these are planned and implemented collaboratively with the meaningful and informed participation of those affected.
3. Avoiding and minimizing the negative effects of CCARDESA's programmes and activities on the livelihoods and living standards of persons belonging to marginalized, disadvantaged and vulnerable groups, during land expropriation, consolidation, investment, rural development programmes and land reforms.
4. Avoiding infringing on tenurial rights of others, particularly vulnerable and marginalized groups and populations including those that may not be currently protected by law (e.g. indigenous peoples tenure rights, women and children rights to land, customary tenure), when recognizing or allocating tenure rights to land and other natural resources.

Cultural heritage

Introduction

Cultural heritage is what people value, believe, know, and pass on from generation to generation. It can be seen or felt, and it connects the past, present, and future. It helps people protect their livelihoods and deal with food insecurity. It also gives scientific and historical insights, economic and social benefits, and cultural identity and practices. However, cultural heritage is often damaged by development activities, which harms individuals and communities. Cultural heritage has a huge role to play in ensuring the environmental and social sustainability of any programme. Hence, this framework aims to preserve cultural heritage in all the programmes and activities of the CAADP-XP4.

Objectives

The ESSF acknowledges and values the role of culture in shaping agricultural practices and outcomes. IT also recognizes that some cultural norms and customs may promote gender inequalities such as the prevention of women and youth from fully participating in agricultural production. Thus, the ESSF aims to create a culture of gender inclusivity, where diverse roles and perspectives are respected and appreciated, and where harmful stereotypes and expectations are challenged and changed.

Requirements

The CAADP-XP4 programme will achieve its goals by:

1. Addressing cultural norms and practices that promote child labour through awareness raising and capacity building.
2. Promoting equal access to resources, opportunities, decision-making and benefits for all genders.
3. Recognizing and valuing the diversity of roles and perspectives that contribute to agricultural development.
4. Challenging harmful stereotypes and expectations that limit the potential and agency of different genders and fostering a culture of respect and appreciation for their contributions to food security, poverty reduction and environmental conservation.

OPERATIONALIZATION OF THE FRAMEWORK

This framework provides the principles and standards for the environmental and social sustainability of the CAADP-XP4 programme and all its projects. Before starting any project, project implementers will identify and assess its potential environmental and social impacts and risks. They will classify the impacts as high, medium, or low risk, using the criteria presented in this framework. Based on the risk classification of projects, the appropriate environmental and social impact assessments as specified in this framework will be conducted. They will define, budget, and implement clear mitigation plans for all the risks and impacts. Third parties will be engaged to audit all CAADP-XP4 projects and check if they follow the prescribed mitigation plans. These steps are summarized in figure 4, below.

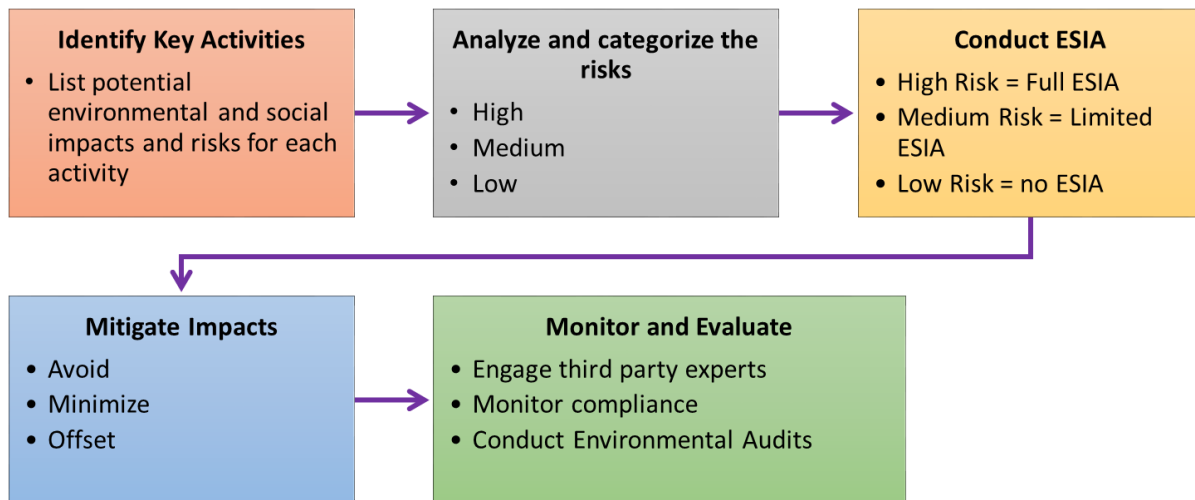


Figure 4: schematic presentation of processes involved in operationalization of the environmental and social sustainability framework for CAADP-XP4 projects

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ANNEXES

Annex 1: List of contributing experts and their affiliations

Name of Expert	Key Areas of Expertise	Affiliation	Country
Prof. Absalom M. Manyatsi	Agricultural and Biosystems Engineering, Land and Water Management	University of Eswatini	Eswatini
Prof. Cliff S. Dlamini	Agriculture, Forestry, Environmental Law, Sustainable Development, Climate change Adaptation	CCARDESA	Botswana
Dr. Gillian Kabwe	Agroforestry, livelihoods, Small-scale Farming	Copperbelt University	Zambia
Dr. Meshack. N. Dluđu	Plant Systematics, Ecology, Conservation of Plant Genetic Resources	University of Eswatini	Eswatini
Dr. Relebohile J. Lepheana	Veterinary Science, Disease Surveillance and Epidemiology	Ministry of Agriculture, Marketing and Food Security	Lesotho
Dr. Wisdom M. Dlamini	Climate Change, Geoinformatics, Environmental Science, Ecology	University of Eswatini	Eswatini
Mr. Innocent L. Magole	Environmental Management, Wildlife Management	Private Environmental Consulting	Botswana
Mr. Kaala B. Moombe	Environmental Science, Forestry	Center for International Forestry Research	Zambia
Ms. Shiluva C. Nkanyani	Agricultural Economics, Agricultural Development	FANRPAN	South Africa
Mr. Sivumelwano A. Nyembe	Environmental Education	AMADI university College	Eswatini