



# Safeguard Risk Identification Form (SRIF)

## Section 1: Project Overview

Identification	<i>Insert Project ID# from Programme Framework Table</i> AF-20160000016 (CTCN 2022000003)
Project Title	<i>Insert title (adding words 'project preparation proposal for' before title)</i> Soil erosion valuation using advanced laboratory measurement methods to support climate resilient agriculture and food security.
Managing Division	UNEP -Industry and Economic Division – CTCN
Type/Location	<i>[Global/Normative; Regional; National]</i> National
Region	<i>(Africa/ Europe/ North America/ Asia Pacific/ Latin America Caribbean/ West Asia)</i> Africa
List Countries	<i>Enter country name(s)</i> Sudan
Project Description	<p>The Sudanese Natural Resources General Directorate of Ministry of Agriculture and Natural Resources (NRGD) with the support from Climate Technology Centre and Network (CTCN) seeks to evaluate the soil erosion using advanced atomic absorption to support climate resilient agriculture and food security in Sudan. This method is expected to provide a basis over which new or different methods of development of soil and climate-based systems can be compared and objectively evaluated.</p> <p>Earth Observation based monitoring systems complement the qualitative and quantitative analysis of micronutrients in the soil, enhancing the overall understanding of erosion. EO-based monitoring systems could play a significant role in improving soil information system and crop production assessments by validating soil analysis assessments identified through field soil surveys within a targeted area.</p> <p>The technical assistance shall contribute to enhance technological capacities by filling information gaps, providing physical and human capacities and demonstrating the application Earth Observation technologies. Besides, this technical assistance will support technology transfer mechanism in using atomic absorption and Earth Observation tools including the use of UAVs in monitoring the climate change variables on soil and their impacts on agricultural productivity, thereby strengthening soil monitoring systems and raising the resilience of the vulnerability of the agricultural sector.</p>
Relevant Subprogrammes	/



<b>Estimated duration of project</b>	<i>Provide the estimate in months from project kickoff to completion. Do not include time spent on concept or design.</i> 18 months
<b>Estimated cost of the project</b>	<i>Provide the estimated cost for entire project in USD.</i> 250,030.00 USD
<b>Name of the UNEP project manager responsible</b>	Rajiv Garg
<b>Funding Source(s)</b>	AFCIA
<b>Executing/Implementing partner(s)</b>	CTCN
<b>SRIF submission version</b>	<i>If it is not the first time, mark the time of your previous submission</i> Concept Review [ ] During Project development [ ] PRC [ ] Other _____ Version 1
<b>Safeguard-related reports prepared so far</b>  <i>(Please attach the documents or provide the hyperlinks)</i>	<ul style="list-style-type: none"> <li>• Feasibility report [ ]</li> <li>• Gender Action Plan [ ]</li> <li>• Stakeholder Engagement Plan [ ]</li> <li>• Safeguard risk assessment or impact assessment [ ]</li> <li>• ES Management Plan or Framework [ ]</li> <li>• Indigenous Peoples Plan [ ]</li> <li>• Cultural Heritage Plan [ ]</li> <li>• Others _____</li> </ul>

## Section 2: Safeguards Risk Summary

### A. Summary of the Safeguards Risk Triggered

Safeguard Standards Triggered by the Project	Impact of Risk <sup>1</sup> (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H)  <i>Please refer to the matrix below</i>
SS 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management	1	1	L
SS 2: Climate Change and Disaster Risks	2	2	L
SS 3: Pollution Prevention and Resource Efficiency	1	1	L
SS 4: Community Health, Safety and Security	1	1	L
SS 5: Cultural Heritage	1	1	L
SS 6: Displacement and Involuntary Resettlement	1	1	L
SS 7: Indigenous Peoples	2	2	L
SS 8: Labor and working conditions	1	1	L

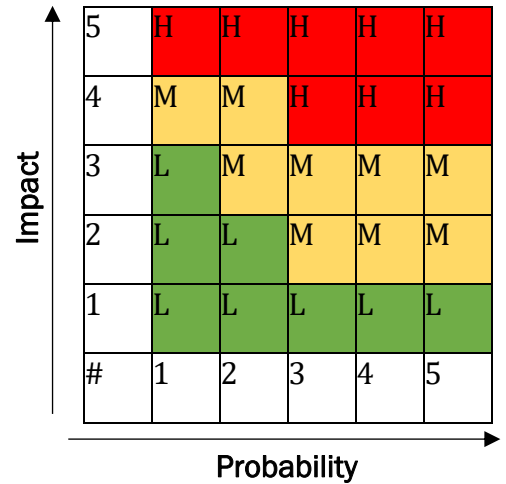
<sup>1</sup> Refer to UNEP Environmental and Social Sustainability Framework (ESSF): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).



### B. ESS Risk Level<sup>2</sup> -

Refer to the UNEP ESSF (Chapter IV) and the UNEP’s ESSF Guidelines.

- Low risk
- Moderate risk
- High risk
- Additional information required



### C. Development of SRIF and Screening Decision

#### Prepared by

Name: \_\_\_\_\_ Rajiv Garg \_\_\_\_\_ Date: \_\_\_\_02 June 2022\_\_\_\_

#### Screening review by

Name: Polycarp Odiedo Date: 17/10/2023

Cleared<sup>3</sup>

### D. Safeguard Review Summary (by the safeguard team)

This is a low-risk project. However, UNEP ESSF guiding principles - resilience and sustainability; human rights, gender equality and women empowerment, accountability and leave no one behind – as outlined in section 3 are still applicable for low-risk projects.

### A. Safeguard Recommendations (by the safeguard team)

- No specific safeguard action required

<sup>2</sup> **Low risk:** Negative impacts minimal or negligible: no further study or impact management required.

**Moderate risk:** Potential negative impacts, but limited in scale, not unprecedented or irreversible and generally limited to programme/project area; impacts amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop an Environmental and Social Management Plan (ESMP). Straightforward application of good practice may be sufficient without additional study.

**High risk:** Potential for significant negative impacts (e.g., irreversible, unprecedented, cumulative, significant stakeholder concerns); Environmental and Social Impact Assessment (ESIA) (or Strategic Environmental and Social Assessment (SESA)) including a full impact assessment may be required, followed by an effective comprehensive safeguard management plan.

<sup>3</sup> This is signed only for the full projects latest by the PRC time.



- Take Good Practice approach<sup>4</sup>
- Carry out further assessments (e.g., site visits, experts' inputs, consult affected communities, etc.)
- Carry out impact assessments (by relevant experts) in the risk areas and develop management framework/plan
- Consult Safeguards Advisor early during the full project development phase
- Other \_\_\_\_\_

### Section 3: Safeguard Risk Checklist

Screening checklist	Y/N/ Maybe	Justification for the response (please provide answers to each question)
<b>Guiding Principles</b> (these questions should be considered during the project development phase)		
GP1 Has the project analyzed and stated those who are interested and may be affected positively or negatively around the project activities, approaches or results?	Y	The project has analyzed and has identified stakeholders who are going to be positively or negatively impacted by the project implementation in consultation with the Ministry of Agriculture and Natural Resources of Sudan. The participation of women and youth will be proactively ensured throughout the implementation as per UN/CTCN rules. Local communities and governmental entities have been informed of the technical assistance through the Ministry of Agriculture and Natural Resources of Sudan.
GP2 Has the project identified and engaged vulnerable, marginalized people, including disabled people, through the informed, inclusive, transparent and equal manner on potential positive or negative implication of the proposed approach and their roles in the project implementation?		The project has identified the vulnerable groups, including small scale farmers and will ensure gender and youth participation during the implementation phase through trainings and stakeholder 's consultation process. The mapping of the stakeholders will be revised at the very beginning of the project and an inception meeting will be planned to inform the stakeholders of the start of the initiative, one month after the

<sup>4</sup> Good practice approach: For most low-moderate risk projects, good practice approach may be sufficient. In that case, no separate management plan is necessary. Instead, the project document demonstrates safeguard management approach in the project activities, budget, risks management, stakeholder engagement or/and monitoring segments of the project document to avoid or minimize the identified potential risks without preparing a separate safeguard management plan.



		signature of the contract between UNEP and the implementer.
<p>GP3 Have local communities or individuals raised human rights or gender equality concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?</p>		<p>No. During the formulation of the proposal no concerns were raised by local communities on human rights. On the contrary, the stakeholders are pushing to have the TA implemented to enhance their technological capacities by filling information gaps and providing physical and human capacities and demonstration of application Earth Observation technologies.</p>
<p>GP4 Does the proposed project consider gender-balanced representation in the design and implementation?</p>		<p>Yes. Gender representative participation has been considered in the design and implementation. The CTCN has developed a gender policy and an action plan that was approved by the AB. The gender policy applies a two-pronged approach to promote gender equality including (i) gender-specific initiatives meaning “addressing gender inequitable issues” and (ii) gender mainstreaming in the sense “mainstreaming gender as a way of implementing interventions in a human rights-based approach”, so both men and women can enjoy the benefits equally. In other words, the first part would address the fact that women are underserved when it comes to technologies and capacity development, so historical imbalances need to be corrected, and the second part would provide equal/equitable opportunity to men and women.</p> <p>The AB of the CTCN includes a gender constituency and all CTCN Technical Assistances are implemented in the presence of at least one gender expert as a mandatory requirement.</p>
<p>GP5 Did the proposed project analyze relevant gender issues and develop a gender responsive project approach?</p>		<p>Yes, gender has been considered in the design of all the activities of the project proposal. The project team consists of one gender expert out of a team of 5 experts. The stakeholders will be mapped at the very beginning of the project with gender representative participation. An inception meeting will be organized one month after the signature of the contract between UNEP and the implementer. This inception meeting will be the opportunity to able to identify the needs, concerns, ideas, opportunities, roles in the implementation of each stakeholder.</p>



GP6	Does the project include a project-specific grievance redress mechanism? If yes, state the specific location of such information.		Specific grievance redress mechanism is in place. <sup>5</sup>
GP7	Will or did the project disclose project information, including the safeguard documents? If yes, please list all the webpages where the information is (or will be) disclosed.		<a href="#">CTC-N webpage</a> and <a href="http://www.open.unep.org">www.open.unep.org</a> Safeguards documents will be uploaded after approval.
GP8	Were the stakeholders (including affected communities) informed of the projects and grievance redress mechanism? If yes, describe how they were informed.		Yes, the stakeholders were informed about the project and the grievance redress mechanism through the Ministry of Agriculture and Natural Resources of Sudan. The Response Plan of the project provides the name of the focal point along with its contact details. The Response plan is public and can easily be accessed from the CTCN webpage. (Please refer to the link provided in GP7). Stakeholders will be engaged during the implementation of the project through stakeholder consultations and capacity building that have been planned at all stages of the implementation.
GP9	Does the project consider potential negative impacts from short-term net gain to the local communities or countries at the risk of generating long-term social or economic burden? <sup>6</sup>		No, the project is a soil erosion valuation using advanced laboratory measurement methods to support climate resilient agriculture and food security. There are no negative impacts foreseen, on the contrary the country is hopeful that this technical assistance will support technology transfer mechanism in using atomic absorption and Earth Observation tools including the use of UAVs in monitoring the climate change variables on soil and their impacts on agricultural productivity, thereby strengthening soil monitoring systems and raising the resilience of the vulnerability of the agricultural sector.
GP10	Does the project consider potential partial economic benefits while excluding marginalized or vulnerable groups, including women in poverty?		No. The project is expected to have direct impact to end hunger, achieve food security and improved nutrition, while also contributing to adaptation efforts in the face of climate change. Please, refer to section 12, Contribution to the SDGs of the <a href="#">Response Plan</a> .
<b>Safeguard Standard 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management</b>			
<i>Would the project potentially involve or lead to:</i>			

<sup>5</sup>

[https://wedocs.unep.org/bitstream/handle/20.500.11822/32023/ESSFRM.pdf?sequence=13#:~:text=UNEP's%20Stakeholder%20Response%20Mechanism%20\(SRM,submit%20complaints%20directly%20to%20UNEP.](https://wedocs.unep.org/bitstream/handle/20.500.11822/32023/ESSFRM.pdf?sequence=13#:~:text=UNEP's%20Stakeholder%20Response%20Mechanism%20(SRM,submit%20complaints%20directly%20to%20UNEP.)

<sup>6</sup>For example, a project may consider investing in a commercial shrimp farm by clearing the nearby mangrove forest to improve the livelihood of the coastal community. However, long term economic benefit from the shrimp farm may be significantly lower than the mangroves if we consider full costs factoring safety from storms, soil protection, water quality, biodiversity and so on.



1.1	conversion or degradation of habitats (including modified habitat, natural habitat and critical natural habitat), or losses and threats to biodiversity and/or ecosystems and ecosystem services?	No. There are no conversion or degradation of habitats, neither are losses or threats to biodiversity and/or ecosystems and ecosystem services.
1.2	adverse impacts specifically to habitats that are legally protected, officially proposed for protection, or recognized as protected by traditional local communities and/or authoritative sources (e.g., National Park, Nature Conservancy, Indigenous Community Conserved Area, (ICCA); etc.)?	No, the technical assistance aims to evaluate soil erosion using advanced atomic absorption to support climate resilient agriculture and food security in Sudan. This should not negatively impact local habitats and their traditional local communities but should enable a better use of land and resources for sustainable agriculture practices.
1.3	conversion or degradation of habitats that are identified by authoritative sources for their high conservation and biodiversity value?	No, the project is not implemented in an area identified by authoritative sources for their high conservation and biodiversity value.
1.4	activities that are not legally permitted or are inconsistent with any officially recognized management plans for the area?	No, the project will not be in an area where activities are not legally permitted.
1.5	risks to endangered species (e.g., reduction, encroachment on habitat)?	No, the project is expected to evaluate soil erosion using advanced atomic absorption to support climate resilient agriculture and food security in Sudan
1.6	activities that may result in soil erosion, deterioration and/or land degradation?	No, the project is expected to evaluate soil erosion using advanced atomic absorption to support climate resilient agriculture and food security in Sudan
1.7	reduced quality or quantity of ground water or water in rivers, ponds, lakes, other wetlands?	No, the project will have no impact on both the quality and quantity of ground water
1.8	reforestation, plantation development and/or forest harvesting?	No, the project is not planning any reforestation, plantation development and/or forest harvesting.
1.9	support for agricultural production, animal/fish production and harvesting	Yes, the project is expected to support climate resilient agricultural production by evaluating soil erosion using advanced atomic absorption for food security in Sudan
1.10	introduction or utilization of any invasive alien species of flora and fauna, whether accidental or intentional?	No.
1.11	handling or utilization of genetically modified organisms?	No.
1.12	collection and utilization of genetic resources?	No.
<b>Safeguard Standard 2: Climate Change and Disaster Risks</b>		
<i>Would the project potentially involve or lead to:</i>		
2.1	improving resilience against potential climate change impact beyond the project intervention period?	Yes, the project, will lead to increased resilience against potential climate change impacts beyond the project intervention period. This will be because, Sudanese nationals now understand better agricultural practices that are climate resilient and to avoid soil erosion.
2.2	areas that are now or are projected to be subject to natural hazards such as extreme temperatures, earthquakes, extreme precipitation and flooding,	Sudan is vulnerable to climate changes, being systematically affected by extreme events such as floods, cyclones, and



	landslides, droughts, severe winds, sea level rise, storm surges, tsunamis or volcanic eruptions in the next 30 years?		droughts. These events have a direct impact on agriculture. Considering that Sudan is struggling to feed its population, which in most cases is related to the inefficient agricultural practices.
2.3	outputs and outcomes sensitive or vulnerable to potential impacts of climate change (e.g., changes in precipitation, temperature, salinity, extreme events)?		No.
2.4	local communities vulnerable to the impacts of climate change and disaster risks (e.g., considering level of exposure and adaptive capacity)?		Yes, agriculture is a major sector of Sudan. Therefore, Soil erosion valuation using advanced laboratory measurement methods will contribute to their integration into the energy-water-food nexus by supporting climate resilient agriculture and food security.
2.5	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?		No.
2.6	Carbon sequestration and reduction of greenhouse emissions, resource-efficient and low carbon development, other measures for mitigating climate change		This is an adaptation project and will have no impact of emissions.
<b>Safeguard Standard 3: Pollution Prevention and Resource Efficiency</b>			
<i>Would the project potentially involve or lead to:</i>			
3.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?		No.
3.2	the generation of waste (both hazardous and non-hazardous)?		No.
3.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?		No.
3.4	the use of chemicals or materials subject to international bans or phase-outs? (e.g. DDT, PCBs and other chemicals listed in international conventions such as the <a href="#">Montreal Protocol</a> , <a href="#">Minamata Convention</a> , <a href="#">Basel Convention</a> , <a href="#">Rotterdam Convention</a> , <a href="#">Stockholm Convention</a> )		No.
3.5	the application of pesticides or fertilizers that may have a negative effect on the environment (including non-target species) or human health?		No.
3.6	significant consumption of energy, water, or other material inputs?		No.
<b>Safeguard Standard 4: Community Health, Safety and Security</b>			
<i>Would the project potentially involve or lead to:</i>			
4.1	the design, construction, operation and/or decommissioning of structural elements such as new buildings or structures (including those accessed by the public)?		No.
4.2	air pollution, noise, vibration, traffic, physical hazards, water runoff?		No.
4.3	exposure to water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable or noncommunicable diseases?		No.





4.4	adverse impacts on natural resources and/or ecosystem services relevant to the communities' health and safety (e.g., food, surface water purification, natural buffers from flooding)?		No negative impacts on the contrary, positive impacts are foreseen.
4.5	transport, storage use and/or disposal of hazardous or dangerous materials (e.g., fuel, explosives, other chemicals that may cause an emergency event)?		No.
4.6	engagement of security personnel to support project activities (e.g., protection of property or personnel, patrolling of protected areas)?		No.
4.7	an influx of workers to the project area or security personnel (e.g., police, military, other)?		No.
<b>Safeguard Standard 5: Cultural Heritage</b>			
<i>Would the project potentially involve or lead to:</i>			
5.1	activities adjacent to or within a Cultural Heritage site?		No.
5.2	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or to intangible forms of cultural heritage (e.g., knowledge, innovations, practices)?		No.
5.3	utilization of Cultural Heritage for commercial or other purposes (e.g., use of objects, practices, traditional knowledge, tourism)?		No.
5.4	alterations to landscapes and natural features with cultural significance?		No.
5.5	significant land clearing, demolitions, excavations, flooding?		No.
5.6	identification and protection of cultural heritage sites or intangible forms of cultural heritage?		No.
<b>Safeguard Standard 6: Displacement and Involuntary Resettlement</b>			
<i>Would the project potentially involve or lead to:</i>			
6.1	full or partial physical displacement or relocation of people (whether temporary or permanent)?		No.
6.2	economic displacement (e.g., loss of assets or access to assets affecting for example crops, businesses, income generation sources)?		No.
6.2	involuntary restrictions on land/water use that deny a community the use of resources to which they have traditional or recognizable use rights?		No.
6.3	risk of forced evictions?		No.
6.4	changes in land tenure arrangements, including communal and/or customary/traditional land tenure patterns (including temporary/permanent loss of land)?		No.
<b>Safeguard Standard 7: Indigenous Peoples</b>			
<i>Would the project potentially involve or lead to:</i>			
7.1	areas where indigenous peoples are present, or uncontacted or isolated indigenous peoples inhabit or where it is believed these peoples may inhabit?		Minority groups include Fur, Beja, Nuba and Fallata who make up 30% of the total population. The rating of the safeguards has been scored as level 2 as the location(s) of the piloting and testing of technology have not been defined yet and will depend on the results of the pre-assessment planned as part of the technical assistance.



7.2	activities located on lands and territories claimed by indigenous peoples?		The Technical assistance will be implemented at national level. The Safeguard has been rated as risk level 2.
7.3	impacts to the human rights of indigenous peoples or to the lands, territories and resources claimed by them?		No, the project is a Soil erosion valuation with advanced laboratory measurement methods and will not have impacts on human rights of indigenous peoples or to the lands.
7.4	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?		No, the project will focus on existing cultivations.
7.5	adverse effects on the development priorities, decision making mechanisms, and forms of self-government of indigenous peoples as defined by them?		No.
7.6	risks to the traditional livelihoods, physical and cultural survival of indigenous peoples?		No.
7.7	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?		No.
<b>Safeguard Standard 8: Labor and working conditions</b>			
8.1	Will the proposed project involve hiring or contracting project staff ?		Yes. The implementer will be a network member selected through the bidding process under UNGM and will be mandated to respect the UN code of conduct rules and will meet all the requisites.
	<i>If the answer to 8.1 is yes, would the project potentially involve or lead to:</i>		
8.2	working conditions that do not meet national labour laws or international commitments (e.g., ILO conventions)?		No.
8.3	the use of forced labor and child labor?		No.
8.4	occupational health and safety risks (including violence and harassment)?		No.
8.5	the increase of local or regional unemployment?		No.
8.6	suppliers of goods and services who may have high risk of significant safety issues related to their own workers?		No.
8.7	unequal working opportunities and conditions for women and men		No.