Annex H: UNDP Social and Environmental and Safeguards screening procedure (SESP) and Environmental and Social Assessment Report (ESAR)

UNDP Social and Environmental and Safeguards Screening Procedure

Project Information

Project Information	
1. Project Title	Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia
2. Project Number	00094354
3. Location (Global/Region/Country)	Georgia

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

The project will ensure social equity and equality. Entire project serves to reduce the vulnerability of Georgian population and increase resilience of people, institutions, systems to climate-induced disasters. Particular focus is made on increasing resilience of 100 most vulnerable communities to climate-induced natural hazards and risks. All components and activities and in particular, components and activities directly affecting/targeting rural communities will be implemented with active engagement of all stakeholders, including disadvantaged persons in line with Stakeholder Engagement Plan Annexed to the Project Document

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

Gender mainstreaming will be a key aspect of the GCF project and in particular, CBCRM process. In engaging with the communities, the project will pay particular attention to inclusion of vulnerable groups and particularly, women to ensure that gender issues are considered. As outlined in the Gender Assessment and Gender Action Plan (Annex J), there are considerable differences in vulnerability to disasters between the genders in Georgia, in line with traditional gender roles. Men are 25% more likely than women to be employed, self-employed or engaged in contract work. In general, male-headed households have higher incomes than female-headed households and overall there is a considerable difference in the income of male-headed households, which emphasizes the increased vulnerability of female-headed households. Pregnant and nursing mothers are particularly vulnerable because of their increased need for food and water and their decreased mobility. As the primary caretakers of their homes, women attend to the needs of children, elderly and the disabled. This increases their workload and reduces their mobility in cases where quick evacuations are required or where they live a long distance to water supply facilities. For effective climate and disaster risk management, the project will ensure that women are primary stakeholders and will therefore need to be involved in decisions on the types of solutions that are implemented in particular, during planning and implementation of non-structural community resilience measures as part of CBCRM process. Gender mainstreaming actions (e.g. ensuring representative women participation in project boards/advisory panels, two-tier GRM, consultations, meetings, networking events, etc.), capacity building (trainings, re-trainings, ToTs, etc.), awareness campaigns and tools (e.g. gender-sensitive vulnerability assessment and mapping) will be applied at various institutional levels (central government agencies, local government, community level), in particular, through the Activities 2.1, 2.2, 2.3, 2.4, 3.1, 3.2 and 3.3. Gender differentiated indicators will be used to monitor the projects performance in achieving the right gender balance. Gender Advisor will be hired throughout the project to ensure implementation of Gender Action Plan, including its monitoring and to provide proper advice to the project and broader stakeholder on gender issues. Please refer to the Gender Analysis and Action Plan (Annex J) for the description of gender mainstreaming actions to be supported through the project.

Briefly describe in the space below how the Project mainstreams environmental sustainability

The project will increase the resilience of vulnerable people, properties, infrastructure and economic sectors. Further the project will enhance the resilience of forest ecosystems, including protected areas and land resources as well as will protect streams and lakes from siltation and thus, aquatic fauna from increased turbidity. The project is addressing climate risks by introducing CRM and CCA measures. Specific environmental benefits include improved eco system functions through better spatial planning and the introduction of agro-forestry which will improve the natural functions of the floodplains and watersheds within which they are implemented. Other environmental benefits include reduction in soil erosion and land degradation through the zoning of activities away from high risk areas as well as improved management. Improved agricultural practices that the project will

catalyse, will also provide environmental enhancements. In the long-run the project will bring about significant environmental benefits by increasing the country's resilience to climate-induced natural disasters and thus, enabling its population to better protect national assets, including environmental assets (land, forest and land resources).

For social and environmental risks associated with implementation of structural risk reduction measures in 13 locations of Georgia, ESAR was developed together with ESMP, based on which the project is expected to have spatially and temporally restricted moderate negative environmental and social impacts, including sediment movement, silting of water courses, temporary damage to local landscape, injuries during transportation of crew and materials as well as during construction activities, etc. Management Plans have been developed to avoid, and where not possible, to mitigate negative environmental and social impacts, including the development and implementation of an Erosion, Drainage and Sediment Control Plan (EDSCP). Concerning positive impacts, during construction phase temporary jobs for locals can be created as a short-term positive impact. However, the long-term sustainable positive social and environmental impacts of the project and in particular, flood defence structures will be avoided losses in human lives, assets, agricultural lands and ecosystems. In total, 1.7 million people will benefit from the initiative, of which 52% are women.

Negative environmental impacts associated with operations phase are solely related to proper O/M of the structures. The lifetime of the structures is about 20 years and during this time span such measures, as cleaning canals from vegetation/weeds and sediments or conducting minor repairs may become necessary annually or within reasonable intervals. In case these structures are damaged/scoured/dilapidated as a result of improper aftercare, then damming the canals and flooding downstream areas can happen. Thus, it is necessary to follow O/M plan, developed during project feasibility phase. Importantly, the technical solutions for structural risk reduction interventions have been tested through a prototype EWS and flood risk management project in Rioni basin and there is evidence of positive impact on local environment over the medium to long term, thereby offsetting the short-term environmental impacts.

The non-structural community resilience measures, including agroforestry and floodplain/watershed restoration will have limited environmental and social impact. The project will carefully assess and select plant species during project design phase in terms of their conservation and economic values that are of local provenance and have high survival rate, etc. Moreover, during reforestation/afforestation activities, small scale sediment movement may happen and measures have to be taken to control erosion through the development and implementation of an EDSCP, including installing silt curtains to restrict sediment movement during implementation of structural and non-structural community resilience measures. Overall, community resilience measures will create temporary jobs for local community members, including women that can be considered as a short-term positive social impact. Moreover, if high economic value crops/plant species are selected, they may bring additional revenues for local and improve their livelihoods.

Thus, the non-structural interventions combined with expansion of existing hydrometeorological network are unlikely to have medium risk impacts. The project will ensure that all the equipment purchased meets international environmental, safety and technical standards. Efforts will be also made to minimize environmental footprint of project activities, by introducing internal paper-reduction, re-use, water and energy conservation/saving policies.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5 below before proceeding to Question 6*	**QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?**

Risk Description	***Impact and Probability (1-5)***	***Significance (Low, moderate, High)***	***Comments***	***Description of assessment and management measures as reflected in the Project design.***
Risk 1: Sediment movement during riverbank works	I = 3 P = 3	**Moderate**		There is the likelihood for sediment movement during the construction of hard infrastructure. To ensure that the sediment is not mobilised that will result in environmental impacts,

Risk Description	*Impact and Probability (1-5)*	*Significance (Low, moderate, High)*	*Comments*	*Description of assessment and management measures as reflected in the Project design.*
				it will be necessary to prepare an Erosion, Drainage and Sediment Control Plan (EDSCP) and install silt curtains to restrict sediment movement from the site. Further, any earthworks should be undertaken during the dry season and compacted sufficiently to reduce sediment movement. The EDSCP should contain aspects including but not limited to the installation of sediment curtains to reduce sediment movement and the quick placement of footing material. These impacts will be spatially and temporally restricted to works periods.
Risk 2: Sediment movement during ecosystem revegetation works	I = 2 P = 2	**Low**		There is the potential for sediment movement during planting and reforestation. To ensure that the sediment is not mobilised through either wind or more specifically water movement, it will be necessary to prepare an EDSCP and install silt curtains to restrict sediment movement and the covering of sediment where practicable.
Risk 3: Contamination of existing water sources	I = 2 P = 2	**Moderate**		To ensure contaminants do not enter waterways and groundwater systems, a water quality monitoring plan will be developed to ensure chemicals are not released. This will involve testing sediment prior to movement and planning so that the works are not undertaken during rain events. Where rainfall is anticipated, appropriate material should be placed under the sediment prior to excavation to ensure there is no seepage into groundwater systems. The water quality monitoring for the sources will be designed to identify potential impacts so that management measures can be proactively rather than reactively enacted upon.
Risk 4: Sediment movement during installation of hydrometric equipment and equipment for CBEWs	I = 2 P = 2	**Low**		When undertaking the installation of weather stations, the ESAR and EDSCP will be followed to ensure runoff does not flow into riverine systems
Risk 5: Construction noise	I = 2 P = 2	**Low**		The construction contractor should consider any sensitive receptors including communities. Noise will be limited to excavators removing

Risk Description	*Impact and Probability (1-5)*	*Significance (Low, moderate, High)*	*Comments*	*Description of assessment and management measures as reflected in the Project design.*
				sediment from the water course. It is likely that more noise will be generated through the use of excavators and trucks moving sediment. Where necessary, noise shields should be constructed to reduce the potential for noise to reach these communities if an impact occurs. The noise will have very limited temporal scales.
Risk 6. Locating infrastructure that is socially detrimental	I = 2 P = 2	**Low**		Stakeholder consultation will be undertaken prior to the selection of infrastructure sites to ensure no impacts. No interventions will be undertaken on private land.
Risk 7. Impact of agroforestry activities on local pasturelands	I = 2 P = 2	**Low**		Stakeholder consultation will be undertaken prior to the selection of agroforestry sites to ensure no conflicts. Economic benefits from protecting housing, infrastructure and agricultural land are expected to be higher than opportunity costs related to planting on grazing land. Planting of economically feasible tree species (fruits, nuts) are part of the bioengineering measures.
Risk 8. Physical and Economic Displacement related to intervention construction	I = 2 P = 2	**Low**		It may be necessary to utilise areas of land adjacent to where the structural interventions will be undertaken so as to access water courses (e.g. Khodasheniskhevi and Milari, etc.). The land is currently under agricultural production. Where access is required, the land will be returned in the same condition as it was prior to any access. Access to this land will only be undertaken through voluntary agreements with landholders. Where a voluntary agreement cannot be established, the land will not be used.
Risk 9. Impacts on indigenous peoples and/or ethnic groups and/or internally displaced peoples	I = 2 P = 2	**Low**		Prior to undertaking any intervention, additional stakeholder engagement will be conducted to ensure that any indigenous peoples and/or ethnic groups and/or internally displaced peoples are fully consulted to ensure the project will not impact on them and/or their cultures/traditions. If any people are found to be located within the area, the project will comply with the UNDP Social and Environment Standard and the

Risk Description	*Impact and Probability (1-5)*	*Significance (Low, moderate, High)*	*Comments*	*Description of assessment and management measures as reflected in the Project design.*
				project will develop a social inclusion plan.
Risk 10. Hydrometeorological and/or flood defence infrastructure are destroyed due to various natural hazards	I=4 P=3	**Medium**		The project will develop and implement emergency management/contingency plan in line with UNDP CO's crisis management requirements. During the design and constructing of relevant infrastructure disaster risks will be taken into consideration or in other words, climate proofing will be carried out. These activities will reduce the level of impact and probability that the infrastructure will be destroyed to minimum level

	QUESTION 4: What is the overall Project risk categorization?		
	Select one (see SESP for guidance)		**Comments**
	Low Risk	☐	
	Moderate Risk	**X**	There will be no long term environmental and social impacts associated with the project. Any environmental impacts will be spatially and temporally restricted during construction/rehabilitation of flood defense structures, community level resilience measures, including agroforestry
	High Risk	☐	

	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
	Check all that apply		**Comments**
	Principle 1: Human Rights	☐	Not Applicable
	Principle 2: Gender Equality and Women's Empowerment	**X**	The participation of women and youth in project activities/interventions is a focus of the project. This is to ensure that they are also empowered to make decisions and also benefit as a result of project interventions.
	1. Biodiversity Conservation and Natural Resource Management	**X**	The project will have an overall benefit on natural resources and ecosystems in the future given they will be better protected from climate-induced natural hazards
	2. Climate Change Mitigation and Adaptation	**X**	The project is designed to reduce vulnerability and increase resilience of Georgian population, institutions and systems to climate-induced natural hazards and risks

Risk Description	*Impact and Probability (1-5)*	*Significance (Low, moderate, High)*	*Comments*	*Description of assessment and management measures as reflected in the Project design.*
	3. Community Health, Safety and Working Conditions		☐	Not Applicable
	4. Cultural Heritage		☐	Not Applicable
	5. Displacement and Resettlement		☐	Not Applicable
	6. Indigenous Peoples		☐	Not Applicable
	7. Pollution Prevention and Resource Efficiency		☐	Not Applicable

H2. Environmental and Social Assessment Report

Link: http://www.ge.undp.org/content/georgia/en/home/library/environment_energy/environment-and-social-assessment-report/