

Annex 8: Social and Environmental Screening Procedure (SESP)

Project Information

Project Information	
1. Project Title	Realising the potential of native microbes in the agricultural and medical sectors, in accordance with the Nagoya Protocol
2. Project Number	UNDP-GEF PIMS No. 5979
3. Country	Panama

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 support the Government of Panama for the realisation of the potential of native microorganisms to contribute to the medical and agricultural sectors while generating global environmental benefits, in accordance with the provisions of the Nagoya Protocol (NP). The project will ensure respect of the rights of the populations who live in areas from which microbes of use for the medical and agricultural sectors are derived, and who have traditionally managed the source ecosystems in a sustainable manner, to receive adequate and appropriate benefits from their any commercial uses that are made of them, in accordance with the provisions of the NP on Access and Benefit Sharing (ABS). The income potentially shared among community members through the ABS schemes will contribute to their abilities to improve their living and nutritional conditions; and the promotion by the project of biological crop protection measures will help to ensure that local people are able to live in environmental conditions free from exposure to harmful agricultural chemicals. The project design includes a Stakeholder Engagement Plan that incorporates a communication and information management plan and a management of complaints and grievances mechanism that will allow to maintain fluid communication with the stakeholders and to effectively to respond to any legitimate concern, complaint, or grievance that may arise related to the project activities and executing entities. The project will respect the human rights of all project participants regardless of their race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status.

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

According to the UNDP Gender Marker Rating, the project is categorized as GEN2: gender equality as a significant objective. Gender equity will be furthered by facilitating consultations and analyses in order to ensure all ABS agreements that are entered into provide for the equitable sharing of benefits from biodiversity use between men and women. The project design includes a gender analysis focusing on the two protected areas and their buffer zones where microbes are collected and a Gender Action Plan to ensure that considerations of gender equity are adequately provided for in the project strategy, and identifies opportunities for the active promotion of women's social and economic status. The project design also includes defining gender-sensitive indicators of project success for use in the monitoring and evaluation system of the project. A gender specialist will be contracted on a regular basis to facilitate improvements to gender equality and women's empowerment and to update the Gender Action Plan.

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

Environmental sustainability will be promoted by: a) increasing the availability of biological crop protection agents as alternatives to agricultural chemicals, by supporting their research and development and the strengthening of value chains; b) increasing knowledge of local stakeholders, including coffee producers, on the potential of biological crop protection measures (including "conservation-based" measures) and how to apply them; and c) reducing pressures on La Amistad National Park and Volcán Barú National Park, including the raising of awareness among local stakeholders regarding the importance and value of biodiversity and genetic resources.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks?	QUESTION 3: What is the level of significance of the potential social and environmental risks?			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)?
<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
1. There is a risk that duty-bearers do not have the capacity to meet their obligations in the Project (Principle 1: q5)	I = 3 P = 2	Moderate	If ABS mechanisms do not function properly, there is a risk that the users of biodiversity fail to compensate local communities in an adequate and just manner, and that Government authorities fail in their duty to oversee benefit distribution mechanisms. The probability of occurrence is limited by the fact that a national ABS policy already exists and has been tested in previous benefit-sharing agreements in Panama.	This risk will be managed through Component 3, Output 5.1, by provide training to strengthen the capacities of relevant institutions to fulfill their duties in relation to ensuring the equitable distribution of benefits through ABS agreements, in accordance with the provisions of the NP and related national legislation.
2. There is a risk that rights-holders do not have the capacity to claim their rights	I = 3 P = 2	Moderate	If capacity development is inadequate or ineffective, local stakeholders may not be able to negotiate fair distribution of benefits	This risk will be managed through Component 3, Output 5.1, by provide training to strengthen the capacities of local stakeholders, including coffee farmers, to claim their rights in relation to the

(Principle 1: q6)			from the exploitation and commercialization of their biodiversity resources. The probability of occurrence is limited by the fact that a national ABS policy already exists and has been tested in previous benefit-sharing agreements in Panama.	equitable distribution of benefits through ABS agreements, in accordance with the provisions of the NP and related national legislation.
3. There is a likelihood that the project would have adverse impacts on gender equality and/or the situation of women and girls, reproduce discriminations against women based on gender, and limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services (Principle 2: q1, q2, and q4)	I = 3 P = 3	Moderate	If ABS mechanisms do not function properly, there is a risk that they result in the benefits derived from the use and commercialization being distributed in an inequitable manner between men and women, that women are unable to participate in an equitable and effective manner in negotiation of the conditions of ABS agreements, and are marginalized from opportunities to obtain benefits in an equitable manner arising from the use and commercialization of microbes.	This risk will be managed through the Gender Action Plan developed during the PPG following a gender analysis for the two protected areas and their buffer zones where genetic resources will be collected. In addition, the Project Results Framework includes gender-based indicators that will be updated periodically by a project gender expert. Project benefits are focused in improving research, production, training, and decision-making opportunities for women.
4. Poorly designed or executed project activities may have a negative impact on critical habitats and/or environmentally sensitive areas, including legally protected areas (i.e., national parks). (Standard 1: 1.2)	I = 1 P = 5	Low	Microbes will be collected from La Amistad National Park and the Volcán Barú National Park, and their derivatives analyzed and potentially commercialized, and these protected areas will be strengthened by reducing pressures in their buffer zones and by raising awareness of the local population about the native biodiversity and genetic resources present in these areas.	
5. The Project involves the utilization of genetic resources, which can	I = 1 P = 5	Low	The fundamental premise of the project is the promotion of ABS mechanisms based on the exploration, collection, analysis,	

potentially have a negative impact on native microbes (Standard 1: 1.9)			processing and commercialization of native microbes and their derivatives. The focus of the project on the use of ABS mechanisms, in accordance with the provisions of the NP, will ensure that the collection and utilization of genetic resources avoids negative environmental impacts and in fact generates positive benefits.	
6. Project activities and outcomes may be vulnerable to the potential impacts of climate change. (Standard 2: 2.2; Standard 3: 3.5)	I = 2 P = 2	Low	Panama is vulnerable to climate change impacts, including intense and prolonged rainfalls, windstorms, floods, and droughts. This risk is considered low as climate change may only affect a limited number of coffee farms involved with the project.	
7. Workers on coffee farms might be exposed to hazards common to this activity, including to formulations of selected endophytic fungi in coffee crops. (Standard 3: 3.7; Standard 7: 7.4)	I = 3 P = 3	Moderate	Field trials of at least four formulations of selected endophytic fungi in coffee crops, which may be developed into a commercial crop protection product in accordance with the provisions of the NP and related national legislation, will be conducted on five coffee farms (the medium of application will be by spraying).	This risk will be managed through development of technical data sheets for the handling and application of the organic crop protection product in the field (Output 6.1). In addition, a safety manual for the use of the product will be also developed (Output 6.2), which will contain technical data sheets and safety data sheets for the product under U.S. Environmental Protection Agency guidelines (environmental and social safeguards). The manual will be printed and disseminated amongst farmers and extension agents who will participate in the scaling-up of the product in the field, and coffee farmers will be trained in the use of the crop-protection product developed.
8. There may be indigenous peoples working in the five private coffee farms where the organic crop-protection product will be tested. They could be exposed to the organic crop-protection product applied by the project scientists in the five coffee farms.	I = 3 P = 3	Moderate	Indigenous peoples (particularly the Ngäbe Buglé) may work on privately owned coffee farms during the growing and harvesting seasons in the five coffee farms of the project where the organic crop-protection product will be tested.	This risk will be managed through development of technical data sheets for the handling and application of the organic crop-protection product in five coffee farms (Output 6.1). In addition, a safety manual for the use of the product will be also developed (Output 6.2), which will contain technical data sheets and safety data sheets for the product under U.S. Environmental Protection Agency guidelines (environmental and social safeguards). The manual will be printed and disseminated amongst farmers and extension agents. If the organic crop-protection product achieves the desired results, then its application will be scaled-up to a number of coffee farms to be determined during project implementation, and coffee farmers will be

(Standard 6: 6.1)				trained in the use of the organic crop-protection product developed.
QUESTION 4: What is the overall Project risk categorization?				
Select one (see SESP for guidance)			Comments	
<i>Low Risk</i>			<input type="checkbox"/>	
<i>Moderate Risk</i>			<input checked="" type="checkbox"/>	The project activities are designed ensuring minimal or no risks of adverse social or environmental impacts. The risk assessment and risk mitigation measures considered during the final project design, includes the adoption of project approaches that allow for greater localization of programmed actions, i.e. greater involvement of researchers and a selected number of coffee farmers (Including women) in facilitating access, benefit-sharing and biodiversity conservation based on the development of a product for the crop protection industry, and supporting research of active compounds for the medical sector. Risks are fully incorporated into UNDP's Risk Log and risk monitoring mechanisms and dedicated project personnel will be assigned to monitor and manage associated safeguards
<i>High Risk</i>			<input type="checkbox"/>	
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?				
Check all that apply			Comments	
<i>Principle 1: Human Rights</i>			<input checked="" type="checkbox"/>	See comment on risks 1 and 2.
<i>Principle 2: Gender Equality and Women's Empowerment</i>			<input checked="" type="checkbox"/>	See comment on risk 3.
<i>1. Biodiversity Conservation and Natural Resource Management</i>			<input checked="" type="checkbox"/>	See comment on risks 4 and 5.
<i>2. Climate Change Mitigation and Adaptation</i>			<input checked="" type="checkbox"/>	See comment on risk 6.

	3. Community Health, Safety and Working Conditions	X	See comment on risk 7.
	4. Cultural Heritage	<input type="checkbox"/>	
	5. Displacement and Resettlement	<input type="checkbox"/>	
	6. Indigenous Peoples	X	See comment on risk 8.
	7. Pollution Prevention and Resource Efficiency	X	See comment on risk 7.

Final Sign Off

Signature	Date	Description
 QA Assessor - Jessica Young Programme Officer		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
 QA Approver - Aleida Ferreyra Deputy Resident Representative		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
 PAC Chair - Linda Maguire Resident Representative		UNDP chair of the PAC. In some cases, PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.