





"Increasing adaptive capacity of local communities, ecosystems and hydroelectric systems in the Río Blanco upper watershed (Toachi-Pilatón watershed) with a focus on Ecosystem and Community Based Adaptation and Integrated Adaptive Watershed Management."

#### Annex 7:

- A. Compliance with the Adaptation Fund's Environmental and Social Policy and Gender Policy
  - B. Environmental and social mitigation program (ESMP)

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# A. COMPLIANCE WITH THE ADAPTATION FUND'S ENVIRONMENTAL AND SOCIAL POLICY AND GENDER POLICY

#### INTRODUCTION

The Environmental and Social Policy (ESP) of the Adaptation Fund requires that all projects be screened against the 15 principles and in all the components and activities planned. This policy ensures that projects supported by the Fund promote positive environmental and social benefits, and mitigate or avoid adverse environmental and social risks and impacts.

This document, present a detailed risk identification, categorization and Environmental. ESP has been prepared in support of the project titled: "Increasing adaptive capacity of local communities, ecosystems and hydroelectric systems in the Río Blanco upper watershed (Toachi-Pilatón watershed) with a focus on Ecosystem and Community Based Adaptation and Integrated Adaptive Watershed Management".

The project consists of 3 components, 4 Outcome, 9 Output, of identifies identified for activities to perform the identification of impacts all clearly identified. Despite this, there are some unidentified sub projects (USP) consisting in some details of the activities related with the final designs of mitigation works and precise locations. To cope with this, and following the advice of the AF reviewer, a comprehensive mechanism was developed for those USP activities described above to identify risks during the implementation phase. Implementing Entity would also be following specific final arrangement with the AF to cope and fulfill the environmental and social risk identification process and measures for this USP.

Along with it, implementation arrangements has been plan for the whole project activities and processes. The roles and responsibilities between the implementing entity (EI) and the executing entity (EE), have been accurate develop including the roles of government and the technical staff of the project. All these aspects materializing the Environmental and Social Management Plan.

The ESMP was developed in a collaborative manner by the implementing entity (IE) and the executing entity (EE), including a systematic monitoring and evaluation arrangement during implementation phase.

The screening and preliminary analysis found that certain project activities could generate a number of limited adverse social and environmental impacts. The screening resulted in an overall social and environmental risk categorization of "Type B". The ESMP is designed to avoid, and where avoidance is not possible, mitigate and manage these limited potential impacts.

The document is composed of the following sections: 1. Overview of the project including the project activities and 2. Risk identification and categorization.

## 1. Overview of the Project

The main objective of the project is to strengthen the adaptive capacity of vulnerable populations in the Río Blanco upper watershed and develop a model of adaptation to climate change that can be replicated in similar context in the country and in the region. The project focuses on key drivers that will create adverse impacts from climate change or generate opportunities that concern the most vulnerable populations. The expected mid-term impacts are improved enabling conditions to sustain

forest cover and sustainable small-scale farming in the area, with a gender perspective. In the long-term, it is expected that the project's activities will result in improved adaptive capacity of the target farmers, ecosystems and hydroelectric systems. The farmers, as well as their communities, are understood as co-executors of the project and its key target.

The critical aspects in this area, which affect the ecosystems and populations of the parishes of the Municipalities of Sigchos and Mejía, which will have limitations regarding access to water quantity and quality are:

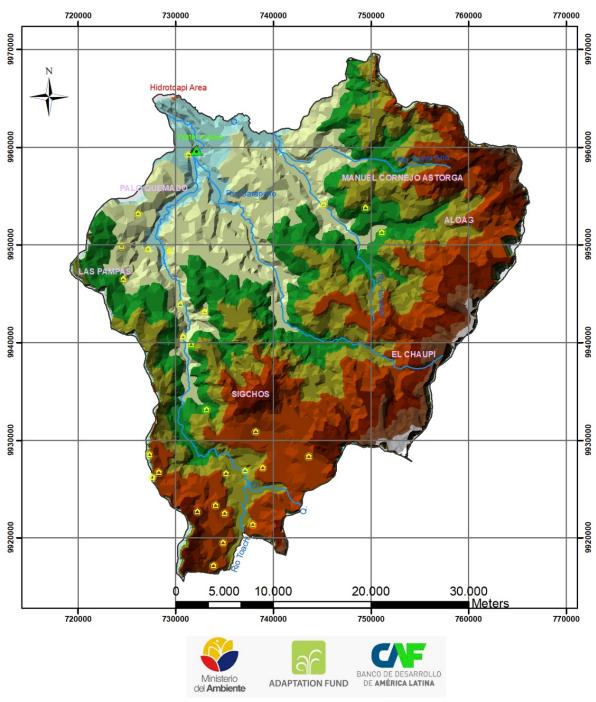
- a) Poor monitoring capacity in watersheds. The Toachi watershed has the worst monitoring system (few meteorological stations, minimum gauging stations and no sediment stations). Therefore, it is not possible to track the flow and sediment accurately, much less make a prediction that allows events to be anticipated with certainty.
- b) Unsustainable agricultural and livestock practices in the watershed increase deforestation, erosion and degradation of water quality. An example is the extensive use of firewood for panela [raw sugar cake] production. Most farmers have small areas of no more than 20 ha where they apply inappropriate farming practices and obtain very poor yields.
- c) Difficulty obtaining credit for sustainable productive activities. Farmers have little access to financing to improve their living conditions and thus carry out unsustainable activities that affect ecosystems and the quantity and quality of water in the watershed, reducing the resilience to climate change.
- d) Lack of awareness by the local population of climate-related impacts. Interviews with local stakeholders revealed that there is no clear understanding of the likely impacts of climate change, so communities do not insist that local authorities take adaptation measures as priority issues.
- e) Local development plans do not include measures for adapting to climate change. Local development plans (i.e. parishes and municipalities) mention climate change as a matter of concern, but do not have specific actions for mitigating or reducing the agents of deforestation, erosion, invasion of riverbanks, land use changes, and others. Generally, these plans do not have a gender perspective, and leave women more exposed to climate change.

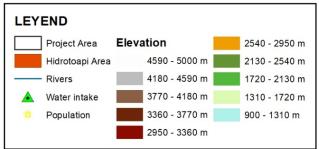
The Project will contribute to breaking down the barriers that limit adaptation capacity in the lower basin of the Toachi and Pilatón rivers by strengthening local communities through the following actions:

- a) Conservation of the forest surface to maintain the hydrological cycle and to prevent a reduction of rainfall and avoid erosion on the slopes of the mountains;
- b) Introduction of sustainable practices to increase production per hectare, concentrate production in smaller spaces and thus reduce the expansion of the agricultural frontier, soil erosion and deforestation;

Mainstreaming of adaptation to climate change in territorial development plans and involvement of the population by increasing their knowledge of the impacts of climate change.

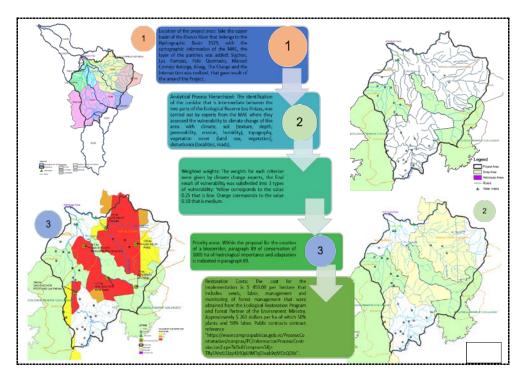
# Maps and diagrams of the project site



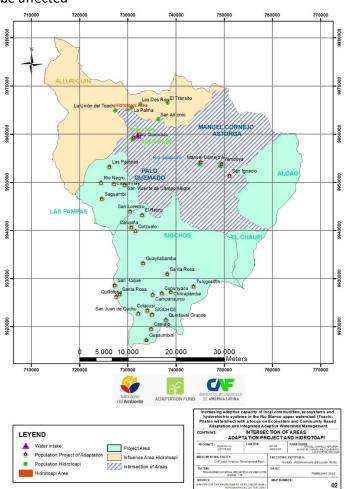


Increasing adaptive capacity of local communities, ecosystems and hydroelectric systems in the Rio Blanco upper watershed (Toachi- Pilatón watershed) with a focus on Ecosystem and Community Based Adaptation and Integrated Adaptive Watershed Management							
CONTAINS: DELIMITATIO	N AREA C	F THE A	DAPTATION PROJECT				
PROVINCE: PICHINCHA COTOP AXI	CANTÓN:	MEJÍA SIGCHOS	PARROQUIA:  MANUEL CORNEJO ASTORGA ALOAG, EL CHAUPI, PALO QUEMPOC LAS PAMPAS, SIGCHO				
IMPLEMENTING ENTITY:  CAF Latin America De-	velopment Bank		G ENTITY/IE S: inistry of Environment of Ecuador (MAE)				
DATUM: TRANSVERSE UNIVERSAL PROJECT WGS 84 - 175	TION OF MERCATOR	DATE:	FEBRUARY 2018				
SOURCE: MINISTRY OF THE ENVIRONMENT OF TOPOGRAPHIC	ECUADOR (MAE) AL LETTER (IGM)	MAP NUM	BER: <b>01</b>				

# Area that will be affected and impacted



# Settlements that will be affected



### Description of existing environmental and social condition

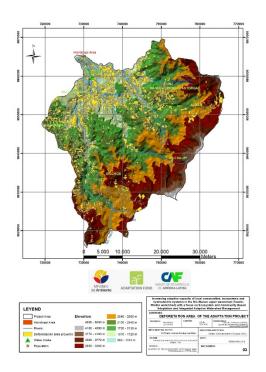
The population has very high levels of poverty in terms of unsatisfied basic needs. Four parishes located in the upper part of the Toachi unit had poverty levels above 98% and highest level of agriculture dependency, according national census 2010:

Parish	Main Activity	Second activity	Poor Index	GINI
Aloag	Agriculture	Manufacture industries	28%	31%
	24,2%	15,2%		
El Chaupi	Agriculture	Manufacture industries	41%	29%
	61,3%	7,3%		
Manuel Cornejo Astorga	Agriculture	11,8% Commerce	64%	27%
(Tandapi)	47,8%			
Sigchos	Agriculture	Manufacture industries	62%	29%
	68,6%	5,9%		
Chugchilán	Agriculture	Teaching 2,0%	83%	26%
	85,7%			
Las Pampas	Agriculture	Manufacture industries	52%	26%
	65,0%	21,7%		
Palo Quemado	Agriculture	Manufacture industries	59%	26%
	46,8%	28,8%		

Table 1: Main activities by locality, based upon data from National Census (2010)

Even parishes with more developed economic activities like Palo Quemado, Manuel Cornejo Astorga and Aloag had poverty levels well above the national average. Poverty is a gender uneven reality, affecting more women than men.

### Maps environmental and condition



# The project has three components:

COMPONENT OUTCOME		OUTPUT
Component 1: Conserve	Outcome 1. At least 230,000 ha of native vegetation is conserved to reduce the impact of climate	Output 1: 1,000 ha of native vegetation is conserved by sustainable forest management and conservation mechanisms.
vegetation cover	change on the hydrological cycle under integrated watershed management	Output 2: Improved management of existing protected forests and private conservation areas (ca. 230,000 ha)
		Output 3. 250 ha of pasture and 250 ha of crops apply sustainable farming practices
Component 2: Adapt farming practices to new climate change	Outcome 2: Sustainable farming practices adjusted to local realities are being introduced and implemented with technical assistance of innovative financing mechanisms for adaptation measures.	Output 4. At least 2 institutions have introduced specific solutions and risk assessment methodology to support the disbursement of credits for adaptation, integrate sustainable and climate smart criteria in their whole operations.
conditions and enable their climate smart financing	Outcome 3. At least 1 long term financing mechanisms has been piloted or introduced	Output 5. One investment fund to promote sustainable development is set up and operational.
		Output 6: at least 6 parishes being trained to take care and use meteorological information generated by meteorological stations currently installed.
Component 3: Strengthen local capacities and share	Outcome 4: Local population and parish governments with increased capacity to implement climate	Output 7: Six development plans of local parishes incorporate measures for ecosystem-based adaptation to climate change.
lessons	change adaptation measures.	Output 8: Strategic plan of communication, education, knowledge transference and scheme of replica
		Output 9: Systematisation of information gathered during the whole project design and implementation using existing informatics platforms

Outputs and activities of this components, as shown in the table below.

In the full proposal document, there are unidentified subprojects (USP) such as the farm plans, activities of the biocorriers that must be analyzed when the Project starts, the characteristics of the document, Adaptation document and which are at the end of the document, the activities that are presented for the execution of the same, the activities of the 9 outputs that are proposed, as they are presented in Table 2. Products and planned activities:

# 2. Project Activities

The proposed project will have the following activities:

**Table 2. Expected Outputs and Activities** 

Table 2. Expected Outputs					
Expected Outputs	Activity				
Project Components: 1.	Conserve vegetation cover				
Output 1: 1,000 ha of native	Prepare Technical, biological studies.				
vegetation is conserved by	2. Prepare zoning file studies.				
sustainable forest	3. Prepare ACUS Management Plan of Conservation Bio-corridor (MPCB).				
management and conservation mechanisms.	4. Prepare studies Financial and Operational Sustainability Strategy according with the investment fund.				
conservation meenamsms.	5. Prepare studies for implementing, monitoring the Biocorredor Management Model.				
	6. Develop the Plans of Decentralized Governments (GAD) with normative, normative and planning instruments for ACUS that include: joint identification (AP and GAD) of key habitats, restrictions and monitoring programs, and agreements for their implementation; inclusion in land-use planning processes of specific standards and procedures for forest protection and integrated watershed management; and municipal ordinances on conservation, land use practices and ACUS.Strengthen incentive systems for set-asides on private and community lands based ACUS.				
	7. Develop the monitoring and support of published municipal PAs, covering 1,000ha, in buffer zones and corridors identified as critical to the hydrological water cycle.				
	8. Develop through workshops the promotion of options and production programs friendly with the habitat and the connection for the reduction of conflicts between humans and wildlife in partnership with the Ministry of Agriculture.				
	9. Apply conservation programs in the field to reduce pressures on forests, with at least 50% of women participating.				
	10. Perform the maintenance of hydrometeorological stations to strengthen the hydrometeorological monitoring system in the basin of the Toachi-Pilaton river.				
Output 2: Improved management of existing	11. Carry out productive activities for the reduction in the use of the forest in the High and Middle Basin of the Toachi and Pilaton rivers				
protected forests and	(Landscape of the Pampa and Palo Quemado), through technological				
private conservation areas (ca. 230,000 ha)	change in the planning process, which includes planning, evaluation and monitoring of the process				
,	12. Installation of ovens to promote efficiency in panela production);				
	13. Conduct the planning and zoning study of the basin with a participatory				
	and inclusive approach. Promote dialogue, coordination and technical				
	support at the local level and improvement of the protective forest.				

- 14. Implementation of the Protective Forest Management Plan, including protection activities for ravines and riverbanks.
- 15. Develop workshops where women are empowered with the planning and zoning of farms.
- 16. React the use, management and monitoring training of the tools for monitoring the effectiveness of management and PGOA
- 17. Install a control point in the Pampas, equipment in coordination with the Police; and monitoring system, newsletter and decentralization of information.

# **Project Components**: 2. Adapt farming practices to new climate change conditions and enable their climate smart financing

# Output 3. 250 ha of pasture and 250 ha of crops apply sustainable farming practices

- 18. Develop the selection of experts in sustainable agricultural management and climate-smart livestock; Incorporation of an industrial technician with technical background to identify improvement options in technology for panela producers.
- 19. Develop field visits by specialists to gather information on the type of crop, microclimate, vulnerabilities and resilience; Define appropriate adaptation measures for agricultural and production areas; Monitoring visits and documentation of the progress of adaptation measures. Identification of problems, subsidies for implementation.
- 20. Develop the selection: Identify, through the procedures and actors defined, the participants for the construction of sustainable farms; The project management committee reviews the profiles of participants who enter vulnerable groups for approval; The subsidy for 150 beneficiaries of vulnerable groups receives 75% of the cost and the implementation of adaptation measures as a subsidy. 25% will put it as counterpart (work); Delivery to qualified suppliers of securities for implementation by transfer or certified check
- 21. Develop the identification of suppliers; Announcement for all suppliers interested in participating in the delivery of inputs for the construction of sustainable farms. Interesting actions, good experience and reputation are an advantage; Visit each of the suppliers to verify the information provided and the prices offered.

# Output 4. At least 2 institutions have introduced specific solutions and risk assessment methodology to support the disbursement of credits for adaptation, integrate sustainable and climate smart criteria in their whole operations.

- 22. Develop the selection of consultants who will work on the development of products 2 and 3. It will require knowledge and good experience in the field of green loan based on software or climate financing; Identification of adequate EbA and other emasures of adaptation for the target clients of the participating financial institutions;
- 23. Develop the ICT solution to collect data automatically and systematically in the field, software to facilitate the identification, qualification, monitoring and reporting of adaptation credits.
- 24. Develop the management of intelligent loans for the climate, for different crops and to be implemented in the loan processes of financial institutions; Development of policies and procedures for climate risk management in the institution; Development of financial products, product design, including loan terms.

# Output 5. One investment fund to promote sustainable

25. Determine the economic incentives for eligible customers that invest in EbA and other adaptation options

development is set up and operational.						
Project Components : 3. St	Project Components: 3. Strengthen local capacities and share lessons					
Output 6: at least 6 parishes being trained to take care and use meteorological information generated by meteorological stations currently installed.	<ul> <li>26. Training 500 families in the use of climate data and their application in activities, such as: agriculture and livestock. This training will be address for 55% percent of women. Including field visits, food and transportation.</li> <li>27. Designing of interactive content and generation of newsletters to training GAD population in the area including women associations, older adults and vulnerable groups.</li> <li>28. Integrating the digital media technologies for communication plan and addressed it to the population in general including women, older adult, youth people and children's.</li> </ul>					
Output 7: Six development plans of local parishes incorporate measures for ecosystem-based adaptation to climate change.	<ol> <li>Conducting a technical study to determinate which climate change adaptation measures that must be added for development and territorial planning plans.</li> <li>Gathering information on climate change adaptation measures to be added like indicators and statistics into the development and territorial planning plans. The indicators should include gender information and vulnerable groups for climate change.</li> <li>Developing new development and territorial planning documents adding climate change statistics and information and also including gender and vulnerable group's climate change issues.</li> <li>Training for population including associations, organizations and other stakeholder of the project about climate change adaptation measures incorporated in the PDOTs.</li> <li>Socialize new PDOTs documents with the population of the project area including associations, organizations and the population in general.</li> </ol>					
Output 8: Strategic plan of communication, education, knowledge transference and scheme of replica	34. Developing a communication plan addressed to stakeholders in the project including specific women associations and organizations.					
Output 9: Systematisation of information gathered during the whole project design and implementation using existing informatics platforms	35. Developing a technological platform to manage knowledge and information about climate change, using disruptive technologies like: big data and cloud computing.					

# 3. Risk identification and categorization

Using Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy; the Social and Environmental Risks Screening Checklist and the Identification and preliminary Management of Social and Environmental Risks were developed.

The process of risk screening for the current project activities developed followed the 15 principles of the ESP. Including Principles 1 (Compliance with the law), 4 (Human rights) and 6 (Core labor rights) which always apply, the other 12 principles were screened in relation to the project outcomes, outputs and activities were screened. Establishing relevance between these principles and project elements was one of the outcomes of the risk identification process.

## 3.1 ESP Risks Identification

Based on the checklist of the AF ESMS procedures, environmental and social risks were identified using the following checklist (Table 3).

The risk identification is developed taking into account the AF's ESP Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy and the steps presented in the Manual of Basic Environmental and Social Management System procedures and functions at National Implementing Entities for the compliance of each principle.

Table 3. Evidence Base Identification will assess all of the components of the project; Component 1: Reducing climate vulnerability and flood risk in coastal urban and semi urban areas in cities in Latin America; Component 2: Strengthen capacities for adaptation and Component 3: ICTs (Information and communications technology) and partnership between coastal cities in Latin America. Table 3 has three columns, column 1 refers to the **Checklist of E&S Principles**, and column 2 refers to the **Questions**, which will help to guides if with different type of actions or documentations to assess if the principle has a risk of no compliance. Column 3 refers to the answer presented by each country differentiated. The answers YES or NO mean if the action, activity, analysis, documentation, etc. was done for the identification of the risk. Column 4, describes which evidence in the Full Proposal document supports the answers of YES or NO of column 3.

After having the Base Identification, Table 4. shows the risk Identification per AF E&SP allowing to determine which principle is vulnerable of not being complied.

**Table 3. Evidence Base Risk Identification** 

		Evidence Base Risk Identification			
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments	
1.Compliance with the law	1.1. Has the project identified all the specific, applicable domestic and international laws, regulations, standards, procedures and permits that apply to any of its activities?	YES	If you identified all the laws and things, you can find Sections D and E; Prg 352 The technical standards that will be applied in the Project are those that are in step 4 of figure 30 that corresponds to Norms for the Sustainable Forest and Technical norms INEN Ecuador, figure 30	The project has been designed to comply with current environmental regulations detailed in figure 30  The project ensures that the activities of each component does not reduce or prevent communities in the area from accessing basic health services, drinking water and sanitation, energy, education, housing, safe work and degradation and land rights, by including the	
	1.2. Does the Project demonstrate any incompliance with any applicable national law?	NO	According to the analysis of the legislation in section D, it does not violate any applicable national law in the project activities.	names of students in the Project, updating their focused PDOTs in the principles of the adaptation fund and ESMP. The project also guarantees equa access to equipment, infrastructure and services, especially taking into account the marginalized	
	1.3. Has the project identified activities that may require prior permission (such as planning permission, environmental permits, construction permits, permits for water extraction, emissions, and use or production or storage of harmful substances)	YES	If it has been identified in component 1, with the creation of the Biocorridor that will be under the regulations of the Organic Environmental Code (COA), while agricultural activities will be based on the standards found in figure 30.	and vulnerable groups, namely women, youth an communities. Gender equity, integration of youth active participation of women and men in equal rights to achieve environmental sustainability.  In the annexes 5 and 6 the participants and social actors that would be involved in the project of th upper basin of Río Blanco are detailed, the participation is of all the communities that are in the study area due to their high social vulnerability	
	1.4. Has the project identified environmental and social safeguarding requirements, other	NO	CAFs IAS (Environmental and Social Inform) and UNDP Risk identification has not identified other or additional safeguarding requirements.		

	E			vidence Base Risk Identification		
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments		
	than those of the AF (e.g. national or of co- financing entities).					
2. Access and Equity	2.1. Has the project identified benefits and its geographical area of effect?	YES	The environmental, social and economic benefits were identified by component in table 17 and the identification of the area can be seen in figure 12 and 13.	The vulnerable and marginalized groups that are in the project area have been identified in the socialization workshops that are in annexes 5 and 6 but there is the possibility that in the meetings held not all those involved have been present, for		
	2.2. Has the project identified any marginalized or vulnerable groups among potential project beneficiaries?	YES	The identification was made based on field workshops, so we have:  Annex 5. Stakeholders, interests and socioeconomic situation 2015  Annex 6. Stakeholders gender and vulnerable pre 2017	the Compliance with the principle establishes that they will have priority access to the activities that were developed in the 3 components, such as biocorridors, climate-smart agricultural techniques, EbA and active participation in the generation of knowledge.		
	2.3. Has the project identified the existing risk to access to the essential services and rights indicated in the principle?	YES	The Project will not prevent access to basic services and rights to each principle was identified in the literal K.			
	2.4. Has the project described the mechanism of allocating and distributing project benefits, and how this process ensures fair and impartial access to benefits?	YES	The Criteria for selecting project activities and beneficiaries is described in Figure 7A, Figure 8-B: Methodology to define beficiaries; Figure 9-C: Methodology to define beneficiaries			

			Evidence Base Risk Id	lentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	2.5. Has the project developed stakeholder and local authorities' consultations?	YES	If you have developed field workshops that can be visualized in:  Annex 4. A. Memoir of inception workshop in 2016  Annex 4. B. Memoir of visits to GADs and workshops 2017 Annex 4. B. Memoir of visits to GADs and workshops 2017	
	2.6. Has the project presented a mechanism to ensure participation of communities, marginalized, vulnerable groups, stakeholder and local authorities'?	NO	With the workshops carried out, vulnerable groups have been pre-identified, but to ensure this principle, at the beginning of the Project, the study must be updated, which is expected to be implemented as part of the Mitigation Plan found in table 11 of Annex 7B, the responsible will be Specialist Management, Monitoring And Evaluation.	
3. Marginalized and Vulnerable Groups	3.1. In the influence area of the project has there been identified the presence of marginalized or vulnerable groups, including but not limited to children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities and people living with HIV/AIDS?	YES	The identification was made based on field workshops, so we have:  Annex 5. Stakeholders, interests and socioeconomic situation 2015  Annex 6. Stakeholders gender and vulnerable pre 2017	The Constitution of the Republic of Ecuador, in the preamble invites us to build: "a society that respects, in all its dimensions, the dignity of people and communities." For this reason, it creates the Sub-secretariat of Democratic Guarantees that contemplates its mission: "to promote and coordinate the design of policies and their implementation that allow the exercise of democratic guarantees". Ecuador has ratified the main international human rights laws. The National Reports of the United States Department of State on Human Rights Practices for 2015 indicate that the main human rights problems in Ecuador are: excessive force and isolated

			Evidence Base Risk Id	lentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	3.2. Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the implementation of the activities of the project?	ON	An update of the study of vulnerable and marginalized groups will be made as detailed in The mitigation plan found in Table 11 of Annex 7B, responsible for the Management, Monitoring and Evaluation Specialist.	illegitimate homicides by the security forces; arbitrary arrest and detention; and delays and denial of due process. Violence and discrimination against women, children, minority groups and the lesbian, gay, bisexual, transgender and intersex (LGBTI) community; traffic of people; and persistent child labor. The activities of the program will not participate in any activity that could lead to the violation of the right of any person during the implementation.
4. Human Rights	4.1. Has the host countries been cited in any Human Rights Council Special Procedures, being on the list of thematic or country mandates?	NO	In special procedures, no, but we adhere to the legislation of:  Thematic mandates of the special procedures of the Human Rights Council  The national mandates of the special procedures of the Human Rights Council  ILO Declaration on Fundamental Principles and Rights at Work	The Constitution of the Republic of Ecuador, in the preamble invites us to build: "a society that respects, in all its dimensions, the dignity of people and communities." For this reason, it creates the Sub-secretariat of Democratic Guarantees that contemplates its mission: "to promote and coordinate the design of policies and their implementation that allow the exercise of democratic guarantees". Ecuador has ratified the
	4.2. Is there a risk that rights-holders do not have the capacity to claim their rights?	NO	In order to safeguard the rights of the actors, in the Management Plan found in Annex 7B, the grievance mechanism presented in the ESMP is detailed.	main international human rights laws. The National Reports of the United States Department of State on Human Rights Practices for 2015 indicate that the main human rights problems in Ecuador are: excessive force and isolated illegitimate homicides by the security forces;
	4.3. Has the project covered human rights issues during stakeholder	YES	The workshops that took place in the field were carried out by addressing human rights as the main axis of all activities, with active participation and	arbitrary arrest and detention; and delays and denial of due process. Violence and discrimination against women, children, minority groups and the

			Evidence Base Risk Identification			
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments		
	consultations during project formulation?		recognition of priorities for marginalized groups, vulnerable women's empowerment. It can be seen in Annex 4A and 4B.	lesbian, gay, bisexual, transgender and intersex (LGBTI) community; traffic of people; and persistent child labor.		
	4.4. Has the project included the findings of the consultations on human rights issues in the project document?	YES	The concerns of the population with the theme of human rights are included and materialized in the adaptation actions that are incorporated in the local development plans (product 7) and the communication and education actions (product 9) take into account the gender and age and the needs of people with disabilities	The activities of the program will not participate in any activity that could lead to the violation of the right of any person during the implementation.		
5. Gender Equity and Women's Empowerment	5.1. Has the project identified activities that are known to exclude or hamper a gender group based on legal, regulatory or customary grounds?	NO	The institutional gender policy (2016 - 2019) establishes that both men and women and opportunities.	Ecuador ranks high in the Global Gender Gap Index. Ecuador has almost complete equality in educational attainment and health and survival, and a high level in economic participation and opportunities, but a major gap in political empowerment (WEF, 2015). The stakeholder		
	5.2. Has the project conduct or consult a gender analysis of the supported area, describing the current situation of the allocation of roles and responsibilities in the area?	YES	The current situation of the population, both male and female, can be found in: Annex 5. Interest groups, interests and socioeconomic situation 2015  Annex 6. Gender and vulnerable interest groups before 2017	analysis (Annex 5,6) found that there is strong women leadership in local organizations and parish governments. Also, women have an important role in businesses like commerce and restaurants. The condition of women in the Río Blanco upper watershed is similar to other Ecuadorian rural areas.  The project will promote women's participation in		
	5.3. Has the project identified elements that maintain or exacerbate gender inequality or the consequences of gender inequality?	NO	Gender inequality in the field occurs for cultural reasons as mentioned in paragraph 418, which will be minimized with the activities proposed in the Project.	project activities. However, it has to be considered that men are increasingly seeking paid jobs in Santo Domingo, the nearest large city. This, in turn, increases the workload for women to tend for the farm and the animals. In rural areas, women tend to work more average weekly hours than men, 82h		

			Evidence Base Risk Identification			
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments		
	5.4. Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the outputs / activities of the project?	NO	The vulnerability for men and women is equally. For this reason this Project is presented to give an alternative of adaptation to climate change of the entire population of the identified area.	and 59h respectively, most of this difference is explained by non-remunerated activities (such as domestic chores and care-taking tasks). Therefore, the project will have to be cautious to implement actions in support of gender equality and women's empowerment, and to prevent overloading women activities (outputs 1, 2 and 4). Also, it will be needed to ensure that the adaptation actions to be mainstreamed into the local development plans (output 7) and the communication and education actions (output 9) are gender and age sensitive and do consider the needs of persons with disabilities. Further assessment will be required to be a part of each activity of the Programme.		
6. Core Labour Rights	6.1. Has the project determined if the host country has ratified the eight ILO core conventions	YES	Ecuador has ratified the eight fundamental labor agreements. The intervention of the project has no incidence whatsoever with the four fundamental principles and rights at work.	Component 1 and 2 will create jobs that allow vulnerable groups, including unemployed youth and women to increase their income. The relevant national labor laws will be followed, guided by ILO labor standards during the		
	6.2. Has the project reviewed the latest ILO assessments of application of the standards in the country?	YES	Ecuador has ratified the eight fundamental labor agreements. The intervention of the project has no incidence whatsoever with the four fundamental principles and rights at work.	implementation of the project.		
	6.3. Has the project identified how the ILO core labour standards are incorporated in the design and the implementation of the	YES	All the procurement process will follow the EE - UNDP Financial Regulations and Rules (2012) as well as a sustainable procurement process including core labour rights. UNDP follow four key principles related with procurement practices: 1. Best value for money;			

			Evidence Base Risk Ic	dentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	outputs / activities' project?		2. Fairness, integrity and transparency; 3. Effective international competition and 4. The interest of UNDP.	
	6.4. Has the project describe the common labour arrangements in the sector(s) in which the project will operate, with particular attention to all forms of child labour and forced labour.	YES	The Project will not involve child labor in any of its activities. The prohibition of child labor will be part of the agreement with the beneficiaries and will be a non-negotiable act.	
7. Indigenous Peoples	7.1. Has the project identified if indigenous peoples are present in the area of influence?	YES	The 2010 censuses of Ecuador have been analyzed, and in the study area there are no people who identify themselves as indigenous, all are considered as mestizos, it is not an area of virgin settlements.	ILO convention 169 is implemented in Ecuador. There is no indigenous population in the project area. As project does not involve any particular
	7.2. Has the project quantify the groups identified of indigenous peoples?	NO	There are no indigenous settlements in the study area.	indigenous group, this aspect does not seem to be of relevance in terms of further assessment for ESP compliance.
	7.3. Has the project determined if there are provisions for a realistic and effective Free, Prior, Informed Consent process, giving a community the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use?	NO	There are no indigenous settlements in the study area	

			Evidence Base Risk Id	dentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	7.4. Has the project provided a summary of any reports, specific cases, or complaints that have been made with respect to the rights of indigenous peoples by the Special Rapporteur on the rights of indigenous peoples and that are relevant to the project?	NO	There are no indigenous settlements in the study area	
8. Involuntary Resettlement	8.1. Has the project determined if it is voluntary or involuntary resettlement?	NO	There will be no involuntary resettlements, because the creation of biocorridors will take place.	The project will focus on land already used to implement component 1 and 2 activities, they already have Access roads and currently used for agricultural
	8.2. Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly?	NO	There will be no involuntary resettlements, because the creation of biocorridors will take place.	purposes. In component 1, the biocorridors that will unite the 2 protected areas found in the study area were created, the subprojects found in these areas are being carried out with the communities that are in the sector, generating employment
	8.3. Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and if this may lead to resettlement and its consequences including indemnification, compensation, etc.	NO	For component 2, the land of the beneficiaries will be occupied.	with line to sustainability environmental, while component 2 works with the land of the beneficiaries applying organic farming. When the Project was initiated by the social security specialist, due process is respected so that the people who are in the areas of the biocorridor are informed of their rights, consulted about their options, and technically offered activities that can be developed within this area. Component 2 the project will improve sustainable production alternatives that reduce

		Evidence Base Risk Identification				
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments		
				pressure on forests, by elaborating a plan of zoning for productive areas.		
9. Protection of Natural Habitats	9.1. Has the project identified all the critical natural habitats in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. noise) and an appreciation of its propagating ability. The habitats to be considered include all those recognized as critical in any way, be it legally (through protection), scientifically or socially.	YES	The reforested areas and the area that connects the Reserve with the Park were identified, so it is proposed to create biocorridors	The project in its activities will have a positive impact on principle 9 of the Adaptation Fund AF, the project seeks to improve the mechanism (furnace and mills) for the production of panela in order to reduce the use of wood as combustible material. Technification (modernization) reduces up to 60% of the wood needs for panela production. This measure helps to reduce the pressure on the remaining forests and the emission of greenhouse gases.  In component 2 in order to ensure the participation of the population in sustainable agricultural and livestock practices, the project will realize the workshops were at least 375 families engaged in sustainable productive activities. And as a result 250 ha of pasture and 250 ha of crops apply sustainable agriculture practices		
	9.2. Has the project identified for each critical natural habitat, the mechanism by which it is particularly vulnerable?	YES	The vulnerable area is identified for the creation of biocorridors, which serve as connectivity.	The poor surveillance capacity in watersheds. The Toachi basin has the worst monitoring system (some meteorological stations, minimum gauging stations and sediment information stations). Therefore, it is not possible to know the		
	9.3. Has the project considered all the activities to identify actual risks for each of the	YES	Yes, the two areas that are going to work, that n the creation of biocorredores that corresponds to component 1 and the plans of farms that is property	occurrence of natural disasters and climate change that can lead to impacts on natural habitats, so it will develop the hydrometeorological monitoring system in the river basin		

			Evidence Base Risk Ic	lentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	natural habitats identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each habitat identified.		of the beneficiaries and that corresponds to component 2	Strengthening of the 7 existing stations located in the area, which at the moment are not working properly.
10. Conservation of Biological Diversity.	identified all the elements of biodiversity interest in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent and an appreciation of its propagating ability. It is important in the identification of the elements of biodiversity interests not to limit this to the species level but to include all elements of biodiversity interest, including landscapes, ecosystem processes, habitats, and hydrological cycles, processes of	YES	The implementation of the project does not represent any risk for the reduction or loss of biological diversity or the introduction of known invasive species.	With planned activities the impact will be positive. Ecuador has signed and ratified the Convention on Biological Diversity and has a recently updated national biodiversity strategy. The project will not intervene areas with high biodiversity value or introduce invasive species. On the contrary, the actions of the project will contribute to conserving forests and vegetation cover.  The project will strengthen the protected areas with the creation of the biocorridors that will allow connectivity, in addition, it will be important to ensure that the role of natural habitats is integrated into the adaptation measures to be integrated into the local development plans (output 7).

		Evidence Base Risk Identification			
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments	
	erosion and sedimentation and interactions between taxa. Include all elements enjoying local or international protection				
	10.2. For each identified biodiversity element, has the project identified the mechanism by which it is particularly vulnerable? (Changes in flow regime or water quality for a seasonal wetland or disruption of migration routes).	YES	The deforested area that is intended to be minimized with a Territorial Plan, which will be carried out at the beginning of the Adaptation Project, has been identified from the vulnerable area.		
	identified the project identified the potential of introducing – intentionally or accidentally – known invasive species?	YES	The implementation of the project does not represent any risk for the reduction or loss of biological diversity or the introduction of known invasive species.		
	10.4. Has the project identified the use of living modified organisms resulting from modern biotechnology?	NO	The implementation of the project does not represent any risk for the reduction or loss of biological diversity or the introduction of known invasive species.		
11. Climate Change	11.1. Has the project determined if it belongs to a sector mentioned in the Guidance document for which a greenhouse	NO	No calculation of greenhouse gas emissions is necessary. It is a project of adaptation to climate change.	The project does not include activities that involve a significant increase in emissions of greenhouse gases or other climate change stressors. On the contrary the implementation of sustainable agriculture practices will reduce green house gas	

		Evidence Base Risk Identification				
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments		
	gasses emission calculation is required?  • Energy, transport, heavy industry, building materials, large-scale agriculture, large-scale forest products, and waste management.  11.2. Has the project carry			emission, contributing to climate change mitigation. Moreover, reducing community vulnerability thanks to agriculture best practices, the project will also contribute to support climate change adaptation for the community.		
	out a qualitative risk identification for each of the following drivers of climate change:  • Emission of carbon dioxide gas from the use of fossil fuel and from changes in land use  • methane and nitrous oxide emissions from agriculture  • emission of hydrofluorocarbons  • perfluorocarbons  • sulphur hexafluoride  • other halocarbons, aerosols, and ozone.	NO	It is not necessary. It is a project of adaptation to climate change.			

			Evidence Base Risk I	dentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	out a qualitative risk identification of any impact on carbon capture and sequestration capacity.	NO	It is not necessary. It is a project of adaptation to climate change.	
12. Pollution Prevention and Resource Efficiency	12.1. Has the project identified activities with preventable waste or pollution production?	NO	There are no activities that generate waste.	The project does not include activities that will use large quantities of energy, water or other natural resources. Nor will it generate large quantities of residues, emissions and discharges.
Lynciency	12.2. Has the project determined the nature and quantity of the waste, as well as those of possible pollutants that may be produced?	NO	There are no activities that generate waste.	Nonetheless, as indicated before, CAF will require that building contractors implement a PAAS to prevent negative impacts during construction works. The project will contribute to improve the efficient use of energy and natural resources.
	12.3. Has the project determined if the concept of minimization of waste and pollution production has been applied in the design phase and if this will be effective during implementation?	NO	There are no activities that generate waste.	
13. Public Health	identified using an appropriate health impact screening tool (check list) potentially significant negative impacts on public health generated?	NO	No evidence of this aspect.	The project does not imply negative impacts on public health. Moreover supporting the use of efficient cooking systems for panela, as well as the promotion of family gardens, the project will contribute to reduce negative health impacts. On the other hand, the implementation of the improved ovens for the production of panela reduces labor force from 6 to 4 hours for the

			Evidence Base Risk Ic	lentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
				production of 580 liters of panela, which reduces possible heath impacts over the population.
14. Physical and Cultural Heritage	14.1. Has the project determined if the host country has ratified the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage?	YES	Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, 16 November 1972. 16 June 1975 – Acceptance.  https://en.unesco.org/countries/Ecuador/conventions	Ecuador is a party of the World Heritage Convention. The project will not affect or intervene physical and cultural heritage.
	14.2. Has the project identified the national and local legal and regulatory framework for recognition and protection of physical and cultural heritage?	YES	If you identified all the laws and things, you can find Sections D and E	
	14.3. Has the project described in the influence zone all the elements of the cultural heritage, their location and their vulnerabilities?  The area considered should be large enough to be credible and be chosen	NO	No evidence of this aspect.	
	in function of the impact generating agent (e.g. vibrations, landscape elements) and an appreciation of its propagating ability.			

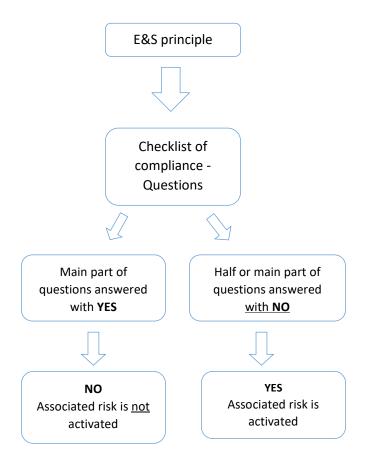
			Evidence Base Risk Io	dentification
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	Include all elements enjoying local or international protection.			
	14.4. Has the project determined if any of the heritage elements included in the List of World Heritage in Danger is in the influence zone?	NO	No evidence of this aspect.	
	14.5. Has the project considered all the activities to identify actual risks for each of the heritage elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each heritage element identified?	YES	No evidence of this aspect.	
15. Lands and Soil Conservation	15.1. Has the project identified the presence of fragile soils within the influence area?	YES	You can visualize in annex 3 the maps of the area of influence.	The project action will contribute to soil conservation.  During project preparation, a detailed stakeholder and gender analysis will be prepared and details
	15.2. Has the project identified activities that could result in the loss of otherwise non-fragile soil?	NO	You can visualize in annex 3 the maps of the area of influence.	on the role of women in the farms and local organizations will be obtained. This will serve to adjust project actions to be gender, age and cultural sensitive.

		Evidence Base Risk Identification		
Checklist of E&S Principles	Questions	Yes / No	Evidence Base Identification	Comments
	identified productive lands and/or lands that provide valuable ecosystem services within the influence area?	NO	You can visualize in annex 3 the maps of the area of influence.	
	15.4. Has the project identified activities that may lead to land degradation?	NO	You can visualize in annex 3 the maps of the area of influence.	

After the previous information and analysis presented in Table 2, in Table 3 Risks Identification per E&S Principles, each AF E&S Principle describes if there is or not a risk associated.

### **Table 4. Risks Identification per E&S Principles**

The following checklist shows the compliance with the economic and social principles in force in this project. Each principle compliance is evaluated by answering with YES or NO the questions identified for each principals. The questions answered with NO indicate a potential risk for the compliance of project principals, which translates into associated risks of the project. Therefore, principals whose questions have been answered with YES, don't present associated risks, on the other hand, principals whose questions have been answered mainly with NO, activate the associated risk indicated in the checklist.



# Project Risk identification

Component 1: Conserve vegetation cover

Component 2: Adapt farming practices to new climate change conditions and enable their sustainable climate smart financing

Checklist of E&S Principles	Questions	Yes / No	Risks Associated	Yes / No	Observations
1.Compliance with the law	<ul><li>15.5. Does the Project demonstrate compliance with any applicable international law?</li><li>Has the project identified all the specific, applicable domestic and international laws, regulations, standards, procedures and permits that apply to any of its activities?</li></ul>	YES	The project could not comply with applicable domestic and international law	NO	
	Has the project identified activities that may require prior permissions (such as planning permission, environmental permits, construction permits, permits for water extraction, emissions, and use or production or storage of harmful substances), which have been identified for the implementation of project activities	YES			Which permissions are needed??
	Does the project take into consideration environmental and social safeguarding requirements, other than those of the AF (e.g. national or of co-financing entities) using the appropriate screening tools, including any threshold lists and sectorial requirements	YES			
	Has the project identified technical or industry standards that apply to any of its activities?	YES			Which technical or industrial standards have been identified??
Access and Equity	Has the project identified benefits and its geographical area of effect?	YES	The beneficiary might have unfair	NO	

	Has the project identified any marginalized or vulnerable groups among potential project beneficiaries? (stakeholder mapping in order to identify the potential beneficiaries, rivals, disputants, marginalized or vulnerable people)  Are the project activities addressing existing inequities with respect to these marginalized or vulnerable groups?	YES	and/or unequitable access to project benefits created.	
	Has the project identified the existing access to the essential services and rights indicated in the principle?	YES	The project might impede an access to	
	Has the project described the mechanism of allocating and distributing project benefits, and how this process ensures fair and impartial access to benefits?	YES	basic health services, clean water and	
	Has the project developed stakeholder and local authorities' consultations?	YES	sanitation, energy, education, housing, safe and decent working conditions, and land rights.  Projects or programs exacerbate existing inequities, particularly with respect to marginalized or vulnerable groups	
Marginalized and Vulnerable Groups	In the influence area of the project has there been identified the presence of marginalized or vulnerable groups, including but not limited to children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities and people living with HIV/AIDS?	NO	The project may YE impose any disproportionate adverse impacts on marginalized and vulnerable groups (including children, women and girls,	ES The project provides a detail report on children women and girls as well as elderly people, but does not take into consideration refugees, disabled people or people living with HIV and AIDS.

	Has the project quantified all the groups identified using accepted methods based, where possible, on disaggregated data?	YES	the elderly, indigenous people, tribal groups,		
	Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the implementation of the activities of the project?	NO	displaced people, refugees, people living with disabilities, and people living with HIV/AIDS).		This description is going to be made throughout implementation phase, once identified all vulnerable groups.
Human Rights	Has the project evidenced if the host country is cited in any Human Rights Council Special Procedures, be they thematic or country mandates?	YES	The project might No not promote and irrespect international human rights.	IO	Although there is no associated risk, human rights is a transversal principle throughout all project activities.
	Has the project provided an overview of the relevant human rights issues that are identified in the Special Procedures?	YES			
	Has the project include human rights issues in stakeholder consultations during project identification and/or formulation?	YES			Yes, during consultations stakeholders were asked about the compliance of their human rights.
	Has the project included the findings of the consultations on human rights issues in the project document?	YES			No human rights issue has been found during consultations.
Gender Equity and Women's Empowerment	Do project activities guarantee the non-existing of local activities that are known to exclude or hamper gender group based on legal, regulatory or customary grounds?	NO	Risk that either YE women or men has disproportionate opportunities to participate.	ES	In Ecuador, although the country has a constitutions that takes into considerations gender equality, on customary grounds many populations don't practice gender equality (e.g. women representation in local governments). The project

	Has the project conduct or consult a gender analysis of the supported sector / area, describing the current situation of the allocation of roles and responsibilities in sector or area?	YES			promotes activities which include gender equality. It is important to mention, although
	Do project activities exclude all elements that maintain or exacerbate gender inequality or the consequences of gender inequality?	NO	women and men receive incomparable social and economic benefits	YES	In Ecuador, although the country has a constitution that takes into considerations gender equality, on customary grounds many populations
	Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the outputs / activities of the project?	NO	Risk that either women or men suffers disproportionate adverse effects during the development process	YES	don't practice gender equality (e.g: women representation in local governments). Project activities are not designed to directly change customs or habits, but to implement a gender equality approach during activities, which may lead to changes in customs.
Core Labour Rights	Has the project determined if the host country has ratified the eight ILO core conventions  Has the project reviewed the latest ILO assessments of	YES	Risk of not meeting the core labour standards as	NO	
	application of the standards in the country?	YES	identified by the		
	Has the project identified any past/present/planned ILO assistance to meet the standards through social dialogue and technical assistance?	YES	International Labour Organization (ILO).		
	Has the project identified information on any ILO Special procedures relevant to the Member nation including details on the triggering representation or complaints	YES			

	Has the project identified how the ILO core labour standards are incorporated in the design and the implementation of the outputs / activities' project?	YES		
	Has the project described the common labour arrangements in the sector(s) in which the project will operate, with particular attention to all forms of child labour and forced labour?	NO		The project will not promote or accept child labor or forced labor. All activities will be based on national law, which does not permit child labor and forced labor.
Indigenous Peoples	Has the project identified if indigenous peoples are present in the area of influence?	YES	Risk of inconsistency NO of the project with	There are no indigenous groups present in the
	Has the project quantify the groups identified of indigenous peoples?	YES	the rights and responsibilities set	project area, therefore there is no risk of
	Has the project determined if there are provisions for a realistic and effective Free, Prior, Informed Consent process, giving a community the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use?	YES	forth in the UN Declaration on the Rights of Indigenous Peoples and other applicable international instruments relating to indigenous peoples.	inconsistency of the project with the rights and responsibilities set forth in the UN Declaration on the Rights of Indigenous Peoples and other applicable international instruments relating to indigenous peoples.
	Has the project provided a summary of any reports, specific cases, or complaints that have been made with respect to the rights of indigenous peoples by the Special Rapporteur on the rights of indigenous peoples and that are relevant to the project?	NO		As there are no indigenous groups present in the area, the project has not seen necessary realize this summary.
Involuntary Resettlement	Has the project identified if physical or economic displacement is required or will occur as a consequence of its implementation?	YES	Risk of not NO minimizing or avoiding the need	The project activities will not require a physical displacement as a
	Has the project determined if it is voluntary or involuntary resettlement?	YES	for involuntary resettlement.	consequence of its activities, however the

					project may promote economic resettlement in order to generate a balance between the population, the productions and conservation using a landscape advancing approach.
	Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly, and if this may lead to resettlement?	NO	producing well- informed rights,	YES	During the implementation there will be realized a social mapping, in order to
	Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and if this may lead to resettlement and its consequences including indemnification, compensation, etc.?	NO	consultation, and offered technically, economically, and socially feasible resettlement alternatives or fair and adequate compensation.		identify stakeholders whose livelihoods may be affected, directly or indirectly by the project and will need economical resettlement, and stakeholders whose assets or access to assets may be affected, directly or indirectly because of economical resettlement activities.
Protection of Natural Habitats	Has the project identified all the critical natural habitats in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. noise) and an appreciation of its propagating ability. The	YES	Risk of involving Nunjustified conversion or degradation of critical natural habitats, including	YES	The Ministry of Environment has realized a vulnerability study for hydroelectric power plants, which includes an analysis of natural habits.
	habitats to be considered include all those recognized as critical in any way, be it legally (through protection), scientifically or socially.		those that are (a) legally protected; (b) officially		

	Has the project identified for each critical natural habitat, the mechanism by which it is particularly vulnerable?  Has the project considered all the activities to identify actual risks for each of the natural habitats identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each habitat identified.	NO NO	proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional or indigenous local communities.		
Conservation of Biological Diversity.	Has the project identified all the elements of biodiversity interest in the region that may be affected?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent and an appreciation of its propagating ability. It is important in the identification of the elements of biodiversity interests not to limit this to the species level but to include all elements of biodiversity interest, including landscapes, ecosystem processes, habitats, and hydrological cycles, processes of erosion and sedimentation and interactions between taxa. Include all elements enjoying local or international protection	NO	Risk of not avoiding any significant or unjustified reduction or loss of biological diversity or the introduction of unknown invasive species	YES	The project has one of his main focuses on this principle, as one of his main activities is the implementation of biological corridors.
	For each identified biodiversity element, has the project identified the mechanism by which it is particularly vulnerable? (Changes in flow regime or water quality for a seasonal wetland or disruption of migration routes).	NO			
	Has the project identified actual risks for each of the biodiversity elements identified taking into account the specific characteristics of the activity (location, dimension,	NO			

	duration etc.) and the vulnerability mechanism(s) of each biodiversity element identified?  Has the project identified the potential of introducing – intentionally or accidentally – known invasive species?	NO			
	Has the project identified the use of living modified organisms resulting from modern biotechnology?	NO			
Climate Change	Has the project determined if it belongs to a sector mentioned in the Guidance document for which a greenhouse gasses emission calculation is required?  Energy, transport, heavy industry, building materials, large-scale agriculture, large-scale forest products, and waste management.	YES	The risk of resulting in significant or unjustified increase in greenhouse gas emissions or other drivers of climate change.	NO	
	Has the project carry out a qualitative risk identification for each of the following drivers of climate change:  Emission of carbon dioxide gas from the use of fossil fuel and from changes in land use methane and nitrous oxide emissions from agriculture emission of hydrofluorocarbons perfluorocarbons sulphur hexafluoride Other halocarbons, aerosols, and ozone.	NO			The country counts with an inventory of greenhouse gases, however this does not include perfluorocarbons, sulphur hexafluoride and other halocarbons, aerosols, and ozone.
	Has the project carry out a qualitative risk identification of any impact on carbon capture and sequestration capacity.	YES			The project is part of the Socio Bosque Program, which has realized a study in carbon capture and sequestration capacity of forests and reforestation.
Pollution Prevention and	Has the project identified activities with preventable waste or pollution production?	NO	Risk of project designed and	NO	

Resource	Has the project determined the nature and quantity of the		implemented in a		
Efficiency	waste, as well as those of possible pollutants that may be	NO	way that does not		
,	produced?		meet applicable		
	Has the project determined if the concept of minimization of		international		
	waste and pollution production has been applied in the design	YES	standards for		
	phase and if this will be effective during implementation?		maximizing energy		
	Has the project determined if applicable local, national and		efficiency and		
	international regulations regarding any waste and pollution	YES	minimizing material		
	generation have been applied and will be complied with?		resource use, the		
	Has the project determined if the concept of minimization of		production of		
	resource use has been applied in the design phase and if this	YES	wastes, and the		
	will be effective during implementation?		release of pollutants		
	Has the project determined where international standards for				
	maximizing energy efficiency and minimizing material	YES			
	resource use may apply?				
Public Health	13.1 Has the project analyzed the need of using an appropriate health impact-screening tool, in order to identify the generation of negative impacts on public health caused by project activities?	YES	Risk of a project designed and implemented in a way that produces potentially significant negative impacts on public health.	NO	The project does not need a health impact screening tool, as it is not implementing activities related to public health including any chemicals (industry or agriculture) or other toxic substances, but activities for conservation and organic agriculture.
Physical and	Has the project determined if the host country has ratified the		The project might	YES	The project activities will
Cultural	1972 UNESCO Convention Concerning the Protection of the	YES	not avoid or		promote the conservation
	March C. R. College March and Discourse 2	1	promote the		of natural and cultural
Heritage	World Cultural and Natural Heritage?		promote		
Heritage	Has the project identified the national and local legal and		alteration, damage,		heritage.
Heritage	Č	YES	· '		

	Has the project described in the influence zone all the elements of the cultural heritage, their location and their vulnerabilities?  The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. vibrations, landscape elements) and an appreciation of its propagating ability. Include all elements enjoying local or international protection.	NO	resources, cultural sites, and sites with unique natural values recognized as such at the community, national or international level. Projects or		
	Has the project determined if the cultural heritage is being accessed by communities?	NO	programs should also not		
	Has the project determined if any of the heritage elements included in the List of World Heritage in Danger is in the influence zone?	NO	permanently interfere with existing access and		
	Has the project considered all the activities to identify actual risks for each of the heritage elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each heritage element identified?	YES	use of such physical and cultural resources.		
Lands and Soil Conservation	Has the project identified the presence of fragile soils within the influence area?	YES	The project might not promote soil conservation and	NO	Ecuador counts with maps of soil degradation and identification of soils.
	Has the project identified activities that could result in the loss of otherwise non-fragile soil, due to non-sustainable activities carried out by the population in the influence zone?	YES	avoid degradation or conversion of productive lands /		
	Has the project identified productive lands and/or lands that provide valuable ecosystem services within the influence area?	YES	land that provides valuable ecosystem services.		
	Has the project identified activities that may lead to land degradation?	YES			

The common elements of the unidentified sub-projects (USP) are screened using the risk identification matrix as part of the compliance with the AF's USP. Also, a USP general mechanism to be follow by the EE during the execution phase and monitoring arrangements are part of this Annex, for a full compliance with the ESP for all the activities of the project.

Table 5. Activity Identified risks in accordance to AF's E&SP and Potential E&S Impacts

		Activity Identified risks in accordance to AF's E&SP and	d Impact
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize
1.	Prepare Technical, biological studies.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.
2.	Prepare zoning file studies.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.
3.	Prepare ACUS Management Plan of Conservation Biocorridor (MPCB).	E & SP 1. There is a risk that the procedure does not exist in the COA	If there are delays in the approval of the COA procedures there will be delays for the declarations.
4.	Prepare studies Financial and Operational Sustainability Strategy according with the investment fund.	E & SP 9. There is a risk that there is no budget in the GADs	If there is no annual budget for the protection of bio-correctors, the population must create economic activities that help sustain them.
5.	Prepare studies for implementing, monitoring the Biocorredor Management Model.	E & SP 1. There is a risk that the procedure does not exist in the COA	If there are delays in the approval of the COA procedures there will be delays for the declarations.
6.	Develop the Plans of Decentralized Governments (GAD) with planning, regulatory and normative instruments for ACUS that includes: the joint identification (PA authorities and GADs) of key habitats, restrictions and monitoring programs, and agreements for their implementation; inclusion in land-use planning processes of specific standards and practices for protecting forest and integrated watershed management; and Municipal ordinances on conservation, land use practices, and ACUS.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.

	Activity Identified risks in accordance to AF's E&SP and Impact				
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize		
7.	Develop a Plan to strengthen the incentive systems for the sieges on private and community lands starting from ACUS	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.		
8.	Develop the monitoring and supporting the Municipal PAs gazetted, covering 1,000ha, in buffer-zones and corridors identified as critical for water hydrological cycle.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.		
9.	Develop through workshops the promotion of habitat and connectivity-friendly production options and programs for reduction of human/wildlife conflicts in association with the Ministry of Agriculture.	E & SP 10. Use of conventional agricultural practices	The lack of interest of the population in the use of new techniques of organic farming.		
10.	Apply conservation programs in the field to reduce pressures on forests, with at least 50% of women participating.	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.		
11.	Perform the maintenance of hydrometeorological stations to strengthen the hydrometeorological monitoring system in the basin of the Toachi-Pilaton river.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.		
12.	Carry out productive activities for the reduction in the use of the forest in the High and Middle Basin of the Toachi and Pilaton rivers (Landscape Las Pampas and Palo Quemado), through technology change in the process of panela production, that includes planning, assessment and monitoring of the process	E & SP 10. The objective is to reduce the use of firewood, but there will be a risk of deforestation.	If there is adequate awareness, the impact of the forests would be internalized and their use improved.		

	Activity Identified risks in accordance to AF's E&SP and Impact					
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize			
13.	Installation of ovens to promote efficiency in panela production	E & SP 13. If there is no education, supervision of the use of new machinery can increase greenhouse gases.	The lack of knowledge of the operation of the equipment can produce greater contamination in air quality.			
14.	Conduct the planning and zoning of the river basin with a participatory and inclusive approach. Promote dialogue, coordination and technical support at the local level and improvement of the protector forest.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.			
15.	Implementation of Management Plan of the protective forest, including ravine and shore protection activities.	E & SP 2 There is a risk that the Plan will not be disseminated to the population.	If it did not spread, you can not create awareness of the effects of climate change.			
16.	Develop workshops where women are empowered with the planning and zoning of farms.	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.			
17.	React the use, management and monitoring training of the tools for monitoring the effectiveness of management and PGOA	E & SP 9. There is a risk that there is no budget in the GADs	If there is no annual budget for the protection of bio-correctors, the population must create economic activities that help sustain them.			
18.	Install a control point in the Pampas, equipment in coordination with the Police; and monitoring system, newsletter and decentralization of information	E & SP 3. That the technician does not involve vulnerable groups.	That the technician does not have the ability to impart his knowledge.			
19.	Develop the selection of experts in sustainable agricultural management and climate-smart livestock; Incorporation of an industrial technician with technical background to identify improvement options in technology for panela producers.	E & SP 2. That there is no access to information.	That the population is not a sea correctly informed of the findings.			

	Activity Identified risks in accordance to AF's E&SP and Impact				
Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize			
20. Develop field visits by specialists to collect information on the type of crop, microclimate, vulnerabilities and resilience; Documentation: Definition of appropriate adaptation measures for farming and production areas; Monitoring visits and documentation of the progress of adaptation measures. Identification of problems, grants for implementation.	E & SP 2. That there is no access to information.	That the population is not a sea correctly informed of the findings.			
21. Develop the selection: Identify, through the defined procedures and actors, the participants for the construction of sustainable farms; The project management board reviews the profiles of participants entering into vulnerable groups for approval Subsidy for 150 beneficiaries of vulnerable groups receive 75% of the cost and implementation of adaptation measures as grant. 25% they will put it as counterpart (labor); Delivery to the qualified suppliers of the values for the implementation by means of transference or certified check	;	That the priority group for the sub-grant is not clearly identified.			
22. Develop the identification Supplier Announcement for all suppliers interested participating for the delivery of inputs for the construction of sustainable farms. Interestir stock, good experience and reputation is plus; Visits each of the suppliers to verify the information provided and the prices offered	n present proposals. e g a	That the providers are not part of the group of beneficiaries.			

	Activity Identified risks in accordance to AF's E&SP and Impact					
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize			
23.	Develop the selection of consultants who will work on the development of output 2 and 3. Knowledge and good experience in the field of software-based green lending or climate financing will be required; Identification of adequate EbA and other adaptation emasures for target customers of participating financial institutions;	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.			
24.	Develop the ICT solution to automatically and systematically collect data in the field, software to facilitate the identification, qualification, monitoring and reporting of adaptation credits.	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.			
25.	Development of climate smart lending management, for different crops and to be implemented in lending processes of financial institutions; Development of policies and procedures of climate risk management in the institution; Development of financial products, product design including loan terms;	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.			
26.	Determine the economic incentives for eligible lending customers that will invest into EbA and other adaptation options	E&SP 2. That not all beneficiaries can access the grant.	That the priority group for the sub-grant is not clearly identified.			
27.	Training 500 families in the use of climate data and their application in activities, such as: agriculture and livestock. This training will be address for 55% percent of women. Including field visits, food and transportation.	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.			

	Activity Identified risks in accordance to AF's E&SP and Impact					
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize			
28.	Designing of interactive content and generation of newsletters to training GAD population in the area including women associations, older adults and vulnerable groups.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.			
29.	Integrating the digital media technologies for communication plan and addressed it to the population in general including women, older adult, youth people and children's.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.			
30.	Conducting a technical study to determinate which climate change adaptation measures that must be added for development and territorial planning plans.	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.			
31.	Gathering information on climate change adaptation measures to be added like indicators and statistics into the development and territorial planning plans. The indicators should include gender information and vulnerable groups for climate change.	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.			
32.	Developing new development and territorial planning documents adding climate change statistics and information and also including gender and vulnerable group's climate change issues.	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.			
33.	Training for population including associations, organizations and other stakeholder of the	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.			

	Activity Identified risks in accordance to AF's E&SP and Impact				
	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize		
	about climate change adaptation is incorporated in the PDOTs.				
populati associati	new PDOTs documents with the on of the project area including ons, organizations and the on in general.		Risk that communication in socialization does not become clear to the beneficiaries.		
to stakeh	ing a communication plan addressed nolders in the project including women associations and tions.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.		
climate o	ing a technological platform to knowledge and information about change, using disruptive technologies data and cloud computing.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.		

Considering the risks identified above in Table 5. Activity Identified risks in accordance to AF's E&SP and Potential E&S Impacts, Table 6 presents the general categorization of the project:

## 3.2 General Categorization

**Table 6. Categorization definition** 

Questions	Component Answer YES / NO		
	1	2	3
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are diverse?	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are widespread?	NO	NO	NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are irreversible?	NO	NO	NO
Does the Project Outputs / Activities have few adverse environmental or social impacts?	YES	YES	NO
Does the Project Outputs / Activities have in small scale / low widespread adverse environmental or social impacts?	YES	YES	NO
Does the Project Outputs / Activities have reversible or easily mitigated adverse environmental or social impacts?	YES	YES	NO
Does the Project Outputs / Activities have no adverse environmental or social impacts?	NO	NO	YES
Categorization	В	В	С

The project presents a categorization B that requires according to the EIAS risks - projects with potential adverse impacts but less in number, scale or that are easily mitigated. Low risk general, which presents only moderate risks and a potential social and environmental risk with great importance. For the risks identified, a plan of measures for environmental safeguards is presented while all the activities proposed in the Adaptation Project are aligned to comply with the 15 principles, taking into consideration the protection of human rights and environmental sustainability. The implementation of energy-efficient furnaces for the production of panela reduces: the CO2 pollution caused by the deforestation of the wood, the loss of natural habitat and the pressure on the remaining primary forests, also allow to guarantee the participation of women during the activities of capacity building, with the objective of reaching a participation of at least 50% of women during all activities. On the other hand, all activities proposed within the framework of the project take into consideration the protection of human rights and environmental sustainability. The implementation of energy efficient furnaces for panela production reduces: the CO2 pollution caused by the deforestation of the wood, the loss of natural habitat and the pressure on the remaining primary forests. In conclusion, many of the activities proposed under the project are additional benefits for risk managers with low social and environmental risks currently.

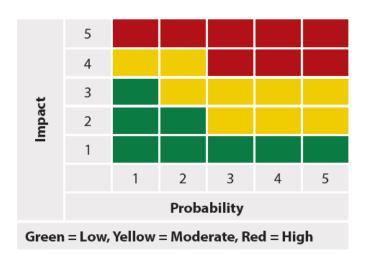


Figure 1. Significance of the risk A.

Table 7. Significance of the Risk.

	Significance of the Risk						
Checklist of E&S Principles	Risks Identified per E&S Principles	Impact and Probability (1-5)	Significance Low, Moderate, High				
2. Access and Equity	Risk (low): local land owners not adequately informed of the proposed use of economic incentives (Socio Bosque, Biocorredor, ACUS). If not adequately informed, the local land owners may believe that the project will affect their land rights.	3/3	Moderate				
3. Marginalized and Vulnerable Groups	There is a risk that the project will have adverse impacts on marginalized and vulnerable groups, including children, women and girls, the elderly, indigenous people, displaced persons, refugees or persons with disabilities, if the nose is adequately studied of marginalized and vulnerable groups that should be updated at the start of the Project	3/3	Moderate				
5. Gender Equity and Women's Empowerment	There is a risk that women or men have unequal opportunities to participate, without taking into account their living, social and economic conditions. This refers to Component 1, Component 2 and Component 3. The probability is high because of the macho culture that exists in the country.  Women with increased work load. No specific factors will impede or limit women's participation. However, some farmers are opting for paid employment in Santo Domingo. This increases the responsibility of tending the farm and rural property to women and other family members.  The communication channels and messages are not gender and age sensitive and do not consider the needs of persons with disabilities.	4/3	Hight				

Significance of the Risk			
Checklist of E&S Principles Risks Identified per E&S Principles		Impact and Probability (1-5)	Significance Low, Moderate, High
9. Protection of Natural Habitats	Ensure that the role of natural habitats is considered while mainstreaming adaptation measures in local development plans (output 6).  The project intervention does not involve unjustified reduction or loss of biological diversity or the introduction of known invasive species. On the contrary, project actions will motivate the conservation of existing vegetation cover. (Positive impact)	2/3	Moderate
10. Conservation of Biological Diversity	As the decision of which species will be used, this Unidentified Sub Project will need to undergo detailed screening, a consultation process, the development of safeguard measures and a strict approval method developed.  For the above there is a risk of not avoiding significant or unjustified reduction or loss of biological diversity or the introduction of unknown invasive species. This is referred to in Component 1.  The project intervention will not intervene areas with high value biodiversity. Project actions will occur in existing farmland, componet 2.	2/3	Moderate

With the risks identification per E&S Principles, the proposed project is categorized as B according to the categories established in the ESP. Category B corresponds to projects with potential adverse impacts with few numbers of risks, small in scale, less widespread, reversible or easily mitigated.

With the previous results, an Environmental and Social Management Plan, Grievance Mechanism and Monitoring, Evaluation and Oversight Program.

## B. ENVIRONMENTAL AND SOCIAL MITIGATION PROGRAM (ESMP)

This plan consists of two stages that will be implemented during project execution:

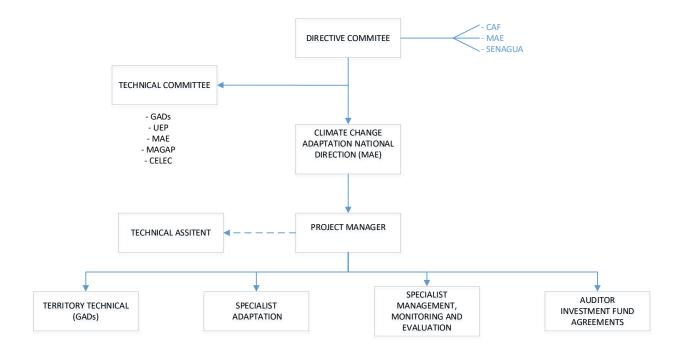
- 1. Environmental and social mitigation program, where specific measures are established to prevent adverse environmental and social impacts.
- 2. Environmental and Social Risk Identification Mechanism for Unidentified sub-projects (USP)
- 3. Monitoring, assessment and oversight program, which details the process of monitoring and evaluating implementation arrangements in compliance with ESP including grievance mechanism.

The development of these two programs is presented in the following sections.

## 1. Environmental and social mitigation program

Throughout the entire project, a comprehensive Environmental and Social Management Plan has been developed that includes specific measures to prevent and mitigate adverse environmental and social risks and impact identified from all project activities. In the following section, planned mitigation measures are presented according to respective risks identified above, with specified information on a body responsible for carrying out and verifying these mitigation measures.

The structure proposed will be reviewed and potentially adjusted in the project's early stage and Operations Manual, detailing roles and responsibilities for the functionality of the Project Boar and Technical Committee, will be developed.



## **Directive Commite and Technical Commite**

Stakeholders	Functions	Project Implementation Role
Ministry of Environment (MAE)	Lead institution of the environment sector. Local staff of the PAs Unit are responsible for planning, management, vigilance and control within PAs.	Project executing agency. Will lead project activities in relation to the formulation of norms and strategies, the clarification of institutional roles for forest and APe management and conservation, support to GADs in processes of territorial land use planning, and support to incentive systems.
Ministry of Agriculture and Livestock (MAG)	Regulation, facilitation, control and evaluation of management of agriculture, livestock, promotion of actions which allow rural development and further the sustainable growth of the production and productivity of the sector.	Provision of training, technical assistance and monitoring of sustainable agriculture and livestock production
National Planning Ministry (SENPLADES)	Coordination of National Decentralized System for Participatory Planning, promotion of integrated development.	Coordination and consultation regarding the project's support to territorial land use planning processes and the GADs.
GADs	Generation of development and land use plans, for environmental management, declaration of parish and municipal protected areas, formulation of local environmental norms and the implementation of sustainable natural resource management projects.	Key targets for strengthening due to their responsibilities for environmental management at parish and municipal levels.  Promote and support the investment fund as constituents
National Police Environmental Unit	Control of compliance with environmental norms in order to avoid its degradation of disappearance.	Guidance on application of legislation: involvement in multi-stakeholder strengthening of governance conditions.
SENAGUA	Water management authority, is an essential partner for the basin committees conformation and the investment fund.	Promoter on the River basin council.
Local communities and associations.	River basin management and zoning plans under an Integrated Watershed Management	River basin planning and implementation of Project activities.
INAMHI	Authority in the climate information generation.	Hydro-meteorological and decentralized monitoring system development.

**Project Manager:** The Project Manager will be responsible for reporting the Project Board every one year, the progress made on implementing these measures. Additionally, during quarterly meetings organized to monitor the progress on the implementation of annual operation plan, the Project Manager will report any possible environmental or social risk that has arisen and was not previously identified during the preparation of the annual operation plan. The Project Manager will be responsible for update of the ESMP every time unforeseen impacts and risks are identified.

**Territory Technical (GADs):** He will be in charge of organizing training workshops on the rights in public policies: gender perspective and work with beneficiaries, help raise awareness of the effects of climate change. Similarly, the perspective of being present, transversally, when the different studies corresponding to output 1 are carried out.

Specialist Adaptation: The technician in charge of carrying out the strategy based on the training of trainers methodology, so that the field technicians in the first instance strengthen their technical capacities from thematic specialists, to be able to subsequently and efficiently train and accompany the producers of the communities that support. Emphasis will be placed on the exchange of knowledge and on learning through the interrelation of theoretical-practical activities. Meetings will be organized that include learning new techniques of organic farming, once the theoretical leveling is achieved, practical learning will be promoted, involving the participants in techniques of adaptation in situ, in the working communities of the different intervention territories. A specific place will be selected to constructively develop, as a practice, and in conjunction with the participants of the training, each of the proposed systems for improving the efficiency of water use, collection, harvest and storage.

Specialist Management, Monitoring And Evaluation: The M & E Specialist has overall responsibility and accountability for monitoring, evaluation, performance management and results reporting activities for the project. Summary of key functions: Development and completion of a dedicated project M & E framework; Implementation and monitoring of the M & E framework; Capacity development for institutional reforms and development; Knowledge management and lessons learned, Under the direct supervision of the DEP Project Manager and working closely with all DEP technical specialists, the M & E Specialist will be responsible for the finalization, implementation, and management of the M & E Framework project. This will include the provision of timely and reliable performance data to project stakeholders, and supporting project reporting and learning. In addition, the M & E Specialist has an important role in providing direct technical assistance to support their development and implementation of performance management / monitoring systems.

**Auditor Investment Fund Agreements:** It will be responsible for the investment fund, its management, monitoring and its sustainability over time.

In general terms, for the entire project, there must be elaborated and approved the Environmental and Social Management Plan, that includes specific measures to prevent correct and/or mitigate adverse environmental and social impacts and risks outlined in Table 8.

Table 8. Mitigation measures

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
Compliance with the Law	The project does not contradict the Constitution of the Republic of Ecuador, the laws, regulations and all the regulations that derive from it. One of the main principles of the Constitution is the recognition of the right of the population to live in a healthy and ecologically balanced environment (Constitution of the Republic of Ecuador, 2008), aligned with the objectives of the project.  The Ecuadorian Legislation protects this first principle in conservation of natural areas, as well as the right to safe and permanent access to healthy food, which will be achieved through the application of good agricultural practices as indicated in article 281 of the Constitution of Ecuador. The Organic Law of agrodiversity, seeds and promotion of sustainable agriculture, dated June 8, 2017, establishes in article 4 the following principles: sustainability, interculturality, prevention, solidarity, participation, control and transparency, national supply, social equity, gender and generational, efficiency and heritage that assure the relevant cultivated and biological diversity of the genetic resources for food and agriculture and the cultivated and biological diversity of relevance for food and agriculture. It is constituted by: (1) plant, animal, microbial and fungal genetic resources; (2) the organisms necessary to sustain key functions of the agroecosystem, its structure and processes, such as the regulation of pests and diseases, and the cycle of pollination and nutrients; and (3) the interactions between abiotic factors, such as the physical landscapes in which agriculture is developed, and the socioeconomic and cultural dimensions, such as local and traditional knowledge.	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	Therefore, the project plans to implement biological corridors to help restore interconnectivity in between ecosystems. As port of the financial infrastructure there will be created an investment fund for the creation and maintenance of the biological corridors in the project This fund requires a specific coordination with the national laws about Protected Areas and Watershed Committees. The responsible for public declaratory (GAD still to be defined) will require a participative process according with the Environmental Ministry, on the other hand the water investment fund will be adapted to the national regulations in coordination with SENAGUA.  This project is designed to comply with the provisions of the Universal Declaration of Human Rights and all the agreements, protocols, declarations, resolutions and agreements that derive from this declaration, promoting equity and the rights of vulnerable groups.	
Access and Equity		During the execution of the project the existing basic services of health, tap water, energy, education and housing will not be affected. Although the first component of the project proposes the conservation of the forest with a bio-corridor, the land rights of the owners will not be harmed  The call to the workshops held in the Toachi and Pilatón basins, allowed the vulnerable groups to be identified. Based on this, it is essential for the project to integrate all the beneficiaries in his activities, due the actual disproportionate access to resources of farmers, mainly of female farmers. Today it is known that the women of each area or village are the ones who will share the knowledge to future generations as they are the main actors of knowledge strengthening in rural areas.  Communicative campaigns will be carried out, in order to reach a greater number of beneficiaries and not harm those interested in

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
		participating actively in the project. The project seeks to guarantee that every beneficiary has access to clear and precise information through workshops and debates among other activities. These activities will help to provide access to new knowledge and the possibility of accessing credits in order to implement adaptation measures and good practices in the rural areas. In addition, the project will provide the necessary guarantees to be implemented under safe conditions for all stakeholders.
Marginalized and Vulnerable Groups		After a detailed analysis of the socio-economic conditions of the sector and the realization workshops, one of the vulnerable groups identified is the group of women, who are mostly the work force in the sector and provide income for their homes. It is a fact that nowadays the women of this area present an illiteracy rate of 21.6%.  One the other hand, the project also seeks to influence other marginalized and vulnerable groups by improving their style and quality of life by employing conservation activities and mechanisms in protected areas such as: conservation of ecological flow, water quality, sustainable agriculture practices and inclusion in processes of participation. The most vulnerable group in the sector of conventional agriculture are the farmers and their families, who are affected by the pesticides or the misuse of them. Guaranteeing access to land through rights to tenure and use of land, as well as equitable and sustainable access to resources (such as water, micro-credit and other agricultural inputs), are essential and a prerequisite for the success of sustainable agricultural practices.
Human Rights	The project will follow a human rights-based approach, ensuring consistency with national and international legislation. Within component 2, the concept of Ecological Agriculture combines modern science and innovation with respect for nature and biodiversity. The concept ensures good agriculture and healthy food, protects soil, water and climate, does not pollute the environment with chemical substances or uses genetically modified	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	crops, and focuses on people and farmers (consumers and producers) more than the companies that currently control the food. Greenpeace's vision of Agriculture and Food defines Ecological Agriculture and describes how it can be summarized in seven independent and global principles, based on a growing body of agro ecological scientific evidence (Altieri, 1995). We perceive this mode of agriculture as a key, but not as the only ingredient of a new, more comprehensive Ecological Food System. It is intrinsically linked to the consumption and waste of food in rural and urban communities, to health and human rights, to equality in the distribution of resources and to many other elements of food production and consumption. All these aspects must be integrated.  Furthermore, to ensure consistency with the human rights principles of participation and inclusion, the project will support capacity building and the creation of an enabling environment for meaningful participation and inclusion. This consists of the definition of roles and responsibilities of stakeholders, including Indigenous peoples and the principles of co-responsibility during the design and implementation of activities. During these workshops, the project will respect all opinions no matter what race, color, sex, language, nationality or social origin the participants belong to.	
Gender Equity and Women's Empowerment		The project seeks to improve gender equality and its activities encourage women's empowerment. Although there is no specific budget line assigned to gender in the proposal. On the contrary it is being addressed in a cross-cutting way within all the activities of the project, as a basic guideline of conduct. This project will, therefore, place particular emphasis on ensuring that women are well represented in project implementation and that the impact of project activities on women will be considered. In each of the project components participatory processes and involvement of women will be promoted. In practice this means, amongst others:

No additional management plan is required for compliance discontinuous d	Management plan necessary to minimize negative impact or ensure positive impact
	<ul> <li>Support to livelihoods and access to credit and other financial instruments proposed by the project will consider women (both young and old, indigenous and mixed race) and facilitate access of women's organizations to these incentives;</li> <li>Further encourage and support participation of women in livelihoods options by selecting them as implementers of pilot projects;</li> <li>Engage women from women's organizations in monitoring and evaluation of pilot projects, and also in dissemination of good practices;</li> <li>Include greater participation and involvement of women in the processes of land use planning;</li> <li>Involve women in capacity building actions by providing conditions consistent to their local realities;</li> <li>Seek equal representation of men and women in the project's seminars, workshops, training-of-trainers and other educational and awareness raising events of the project;</li> <li>Promote the equal participation of women and men in access to property rights and land tenure and natural resources;</li> <li>Promote an equitable distribution between men and women in economic benefits arising from the project.</li> <li>The project will thus contribute to addressing the inequalities that currently exist between men and women with regard to public decision-making,</li> <li>Their access to natural resources and their vulnerability to environmental degradation. Women's involvement is likely to be high as they are more receptive to new concepts and more willing to shift to ecosystem-friendly practices, provided that they generate enough income for a household.</li> <li>It is important to highlight, that Ecuador ranks high in the Global Gender Gap Index. Ecuador has almost complete equality in educational attainment and health and survival, and a high level in economic participation and opportunities, but a major gap in political empowerment (WEF, 2015).</li> </ul>

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
Core Labour Rights	The project is based on the national labor rights, which protect the interests of the employed. Additionally and more important, the project, being developed under the standards and contracting manuals of CAF and UNDP, will comply with the requirements of the management system established by ISO18001.  This project will promote the compliance with labor rights by giving the farmer the tools and knowledge for the implementation of organic farming and the use of local resources, adding value to their products and therefore increasing their sales and income. Also, the project enhances the concept of organic farming throughout its activities. Organic farming is an activity that favors the creation of employment at a local level especially in marginal areas, where agricultural activity no longer stands on its own because it is not competitive in the market. Among its impacts are: the use of local resources, less dependence on inputs, greater job creation and greater added value, the generation of new knowledge, new job opportunities in areas like research, new marketing channels controlled by the producers themselves and new rents derived from landscape management and biodiversity conservation or agro- tourism.  All this chain of good agro-ecological environmental practices will generate employment under healthy working conditions. This Project does not promote child labor and respects the right of children and adolescents.	
Indigenous Peoples	There is no risk or adverse effects. The intervention will not affect the indigenous groups or territories. Nevertheless, Ecuador in its Constitution of 2008 recognizes both indigenous peoples' land rights and livelihoods and the rights of nature. The Constitution's third part titled Rights, Duties, and Guarantees declares collective rights as they pertain to indigenous peoples. Article 84 states that the State shall recognize and guarantee indigenous peoples rights,	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	in conformity with the Constitution, the law, human rights and collective rights.	
Involuntary Resettlement	There is no resettlement of communities in the project area, the proposal of component 1 is the creation of biocorridors that allow the interaction of ecological connectivity, sustainable productive landscapes, the association of biodiversity and landscape.  • Ecological connectivity  • Sustainable productive landscapes  • Associativity	
Protection of Natural Habitats		The project seeks to reduce the main sources of deforestation and degradation, rescuing natural spaces and habitats that previously existed and that are now necessary for the recovery of flora and fauna biodiversity in the sector. It also seeks to protect forests that provide multiple benefits to communities and production sectors. It is recognized that sustainable management, protection, conservation, maintenance and rehabilitation of natural habitats and their biodiversity and associated ecosystem functions are fundamental to UNDP efforts to support developing countries and implement sustainable development pathways.
		On the other hand, by reducing deforestation and the degradation of the ecosystem, the project additionally provides important actions in order to reduce the main sources of greenhouse gas emissions in the country.
		Finally, research is increasingly proving that Organic Farming is the most realistic, promising and economically viable alternative to improve the destructive agrarian model currently used. The benefits for small farmers are that they: a) require few or no external agents, and b) use natural materials available in the region to produce high quality products and promote a complete systemic strategy for

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
		agriculture that is more diverse and resistant to adverse weather conditions, pests and diseases (UNEP and UNCTAD, 2008).
		There is a vast and growing list of examples of agro-ecological systems in developing countries that contributes to the improvement of lifestyle, through food production and natural conservation. Here are some: An exhaustive analysis of 15 examples of organic agriculture in Africa has seen increases in productivity per hectare in food crops, in farmers' incomes, in environmental benefits, in strengthening communities and in improving of human capital. Organic farming can increase their productivity and raise incomes with the appropriate technologies available in the region, at a low cost and without causing environmental damage (UNEP and UNCTAD, 2008).  On the other hand, the project seeks to improve the mechanism (oven and mills) for panela production in order to reduce the use of wood as combustible material. The technification (modernization) reduces up to 60% of the wood needs for the panela production.
Conservation of Biological Diversity		The Project will contribute to overcoming the barriers that limit the adaptation capacity of the lower Río Blanco basin by strengthening local communities through:  a) Conservation of the forest area to maintain the hydrological cycle, prevent rainfall reduction and avoid erosion on the slopes of the mountains;
		b) Introduction of sustainable practices to increase production per hectare, concentrate production in smaller spaces and thus reduce the expansion of the agricultural frontier, soil erosion and deforestation; c) Mainstreaming of adaptation to climate change in territorial development plans and involvement of the population by increasing their knowledge of the impacts of climate change.
Climate Change	Sustainable agricultural practices reduce the emission of greenhouse gases. Small-scale measures include: labor, land use, efficient use of fertilizers, use of deep-rooted crops and conversion	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	of arable land in conservation areas, crop rotation and maintenance of terraces. As affirmed by Smith (Smith, 2007b, SEAE, 2006), organic farming can reduce CO2 emissions significantly as it is a permanent system of sustained production, for the energy saving involved in maintaining soil fertility through inputs internal (rotations, green fertilizers or legume crops), by the absence of the use of phytosanitary and synthetic fertilizers and the low levels of outsourcing in livestock feed due to the intensification and use of local resources. The efficiency of carbon capture in ecological production systems is 4.5 tons of CO2 per hectare, while in conventional production systems it is reduced to 2.3 tons of CO2 per hectare (Smith, 2004).  Additionally, the projects aims to strengthen local capacities in climate change by enforcing local capacities in the use of	
	meteorological information provided by hidro-meteorological stations. The understanding of hidrometeorological information is essential for the development of local risk reduction strategies as for example the formulation and implementation of contingency and emergency plans and early warning systems.	
	Also, one of the project activities seeks to incorporate climate change into local planning tools (PDOTs) by developing EbA measures, which help to guarantee a sustainable local development. Nowadays local governments face incrementing costs because of natural disasters and climate change, because of delays and failures in the implementations of local programs and activities. The inclusion of EbA measures into local planning will provide a better understanding of the possible impacts of climate hazards on program and project activities, and will help to identify key sectors of intervention.	
Pollution Prevention and Resource Efficiency	The project seeks to improve the mechanism (oven and mills) for panela production in order to reduce the emission of greenhouse gases and other noxious gases for human health and vegetation. Nowadays, as a result of the lack of maintenance of the mills	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	motors, which leads to failures in the combustion system, smoke is produced in the production of panela. Also, in the evaporation process realized in the oven, bagasse is used which contributes to higher levels of pollutions and low resource efficiency. Because of the low efficiency of bagasse, people (producers) are forced to include other combustible materials, such as wood, tires and coal in the production process, which have an additional negative impact on the climate, environment and human health.  The production process of panela causes the emissions of CO, SO2, NOx, CO2 and water vapor.	
Public Health	The project does not include affectation to public health.  Moreover supporting the use of efficient cooking systems for panela, as well as the promotion of family gardens, the project will contribute to reduce negative health impacts.	
Physical and Cultural Heritage	In the project area there are no sites that have structures with historical, cultural, artistic, or intangible forms of culture that could be affected in the execution of the project.	
Lands and Soil Conservation	The Project will not cause degradation of the soil or reduce its agricultural suitability, indeed, it will have a positive impact on the preservation of soil and forests, in addition to enrichment with micronutrients due to reforestation and the following organic techniques for agricultural production:	
	<b>Tillage</b> : is based on the consideration that the soil is a living, complex and changing environment. Support activities such as: roots, earthworms, microorganisms, improve the structure, aeration and water retention of the soil; The objective of the tillage is to achieve a soil rich in biological activity with a light and stable structure. <b>Subscriber, vegetable covers and use of crop residues:</b> The soil serves as a physical and chemical support for the animals, plants and microorganisms that grow in it, is composed of organic and	

Checklist of environmental and social principles	No additional management plan is required for compliance	Management plan necessary to minimize negative impact or ensure positive impact
	mineral material, is permeable due to the existence of micro and	
	macropores that allow the existence of an aqueous solution and a	
	gaseous atmosphere (Domínguez et al, 2002). The green fertilizer is intended to increase the microbial activity of the soil so it is little or	
	no lignified materials (the young humus is rapidly evolving).	
	Rotations and alternatives of crop: The rotation is the succession	
	in the time of the cultures on a same plot, thus a plant consuming	
	nitrogen, it must happen another that accumulates it; a consumer	
	of humus, another that produces it; those that leave the compact	
	floor, those that leave it soft; and those with superficial roots, they	
	must follow others of deep roots, its immediate effect is the	
	efficient use of soil nutrients, reduction of chemical fertilization.	
	<b>Association of crops:</b> Cultures mixed in the same plot, two or	
	more plant species that complement each other, so that the	
	interactions that occur between them exert a stimulating effect on	
	them. Land, space and water are always better used in associated crops than in monocultures. (Greater use of light and improves the	
	microclimate, the risks of a poor harvest are reduced).	

Table 9. Mitigation measures for management of environmental and social impacts and risks.

	Activity Identified Mitigation measures for management of environmental and social impacts and risks						
Activity		Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification		
Prepare biological studies.	Technical,	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.	Communication management refers to a systematic plan to implement and monitor the channels and contents of a company's communication, both internally among its members, and externally with other companies or organizations. The technician	Territory Technical (GADs)		

	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
2.	Prepare zoning file studies.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.	should consider these questions: 1. What information? 2. Who needs it? 3. When is the information needed? 4. What is the format of the information? 5. Who will be responsible for transmitting the information?	Territory Technical (GADs)
3.	Prepare ACUS Management Plan of Conservation Bio- corridor (MPCB).	E & SP 1. There is a risk that the procedure does not exist in the COA	If there are delays in the approval of the COA procedures there will be delays for the declarations.	The procedures found in Annex 6 of the Unified Text of Environmental Legislation (TULAS) will be used.	MAE Project Manager
4.	Prepare studies Financial and Operational Sustainability Strategy according with the investment fund.	E & SP 9. There is a risk that there is no budget in the GADs	If there is no annual budget for the protection of bio-correctors, the population must create economic activities that help sustain them.	The investment fund must be sustainable and sustainable, so an investment specialist will be hired.	Auditor Investment Fund Agreements
5.	Prepare studies for implementing, monitoring the Biocorredor Management Model.	E & SP 1. There is a risk that the procedure does not exist in the COA	If there are delays in the approval of the COA procedures there will be delays for the declarations.	The procedures found in Annex 6 of the Unified Text of Environmental Legislation (TULAS) will be used.	MAE Project Manager
6.	Develop the Plans of Decentralized Governments (GAD) with planning, regulatory and normative instruments for ACUS that includes: the joint identification (PA authorities and GADs) of key habitats, restrictions and monitoring programs, and agreements for their implementation; inclusion in land-use planning processes of specific standards and practices for protecting forest and integrated watershed management; and Municipal ordinances on conservation, land use	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.	Communication management refers to a systematic plan to implement and monitor the channels and contents of a company's communication, both internally among its members, and externally with other companies or organizations. The technician should consider these questions: 1. What information?  2. Who needs it?  3. When is the information needed?  4. What is the format of the information?  5. Who will be responsible for transmitting the information?	Territory Technical (GADs)

	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
7.	Develop a Plan to strengthen the incentive systems for the sieges on private and community lands starting from ACUS	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.	The Gender Plan is presented in Figure 37. Monitoring and evaluation concept includes gender keys	Territory Technical (GADs)
8.	Develop the monitoring and supporting the Municipal PAs gazetted, covering 1,000ha, in bufferzones and corridors identified as critical for water hydrological cycle.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and lessons through taylor-made communicational products.  The Communication Plan is presented in Figure 32-A. Communications plan	Territory Technical (GADs)
9.	Develop through workshops the promotion of habitat and connectivity-friendly production options and programs for reduction of human/wildlife conflicts in association with the Ministry of Agriculture.	E & SP 10. Use of conventional agricultural practices	The lack of interest of the population in the use of new techniques of organic farming.	Farm plans will be developed with ecological agricultural practices.	Specialist Adaptation
10.	Apply conservation programs in the field to reduce pressures on	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.	Encourage the creation of community-based committees.	Territory Technical (GADs)

Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
forests, with at least 50% of women participating.			Update the identification and quantification report of marginalized and vulnerable groups and a description of their risk of disproportionate adverse impacts with the help of community-based committees.	
11. Perform the maintenance of hydrometeorological stations to strengthen the hydrometeorological monitoring system in the basin of the Toachi-Pilaton river.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and lessons through taylor-made communicational products.  The Communication Plan is presented in Figure 32-A. Communications plan	Territory Technical (GADs)
12. Carry out productive activities for the reduction in the use of the forest in the High and Middle Basin of the Toachi and Pilaton rivers (Landscape Las Pampas and Palo Quemado), through technology change in the process of panela production, that includes planning, assessment and monitoring of the process	E & SP 10. The objective is to reduce the use of firewood, but there will be a risk of deforestation.	If there is adequate awareness, the impact of the forests would be internalized and their use improved.	With the territorial analysis it will be possible to define the areas that will be destined for the cultivation of wood and its use in the production of panela.	Territory Technical (GADs) Specialist Adaptation

	Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
13.	Installation of ovens to promote efficiency in panela production	E & SP 13. If there is no education, supervision of the use of new machinery can increase greenhouse gases.	The lack of knowledge of the operation of the equipment can produce greater contamination in air quality.	Training workshops for the proper use of the new machinery.	Specialist Management, Monitoring And Evaluation
	Conduct the planning and zoning of the river basin with a participatory and inclusive approach. Promote dialogue, coordination and technical support at the local level and improvement of the protector forest.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.	Communication management refers to a systematic plan to implement and monitor the channels and contents of a company's communication, both internally among its members, and externally with other companies or organizations. The technician should consider these questions: 1. What information?  2. Who needs it?  3. When is the information needed?  4. What is the format of the information?  5. Who will be responsible for transmitting the information?	Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
	Implementation of Management Plan of the protective forest, including ravine and shore protection activities.	E & SP 2 There is a risk that the Plan will not be disseminated to the population.	If it did not spread, you can not create awareness of the effects of climate change.		Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
	Develop workshops where women are empowered with the planning and zoning of farms.	E & SP 5. That women can not participate actively.	Women must empower leadership and decision making.	The active participation of women has been included in all the activities, gender workshops will be developed so that women can empower themselves and take the lead in the proposed actions.	Territory Technical (GADs)
	React the use, management and monitoring training of the tools for monitoring the	E & SP 9. There is a risk that there is no budget in the GADs	If there is no annual budget for the protection of bio-correctors, the population must create economic activities that help sustain them.	Equipment for environmental control mainly forest and wildlife with supporting UPMA; Strengthen Tandapi control point; Install a control point in the Pampas, equipment in coordination with the Police;	Specialist Management, Monitoring And Evaluation

	activity Identified Mitigation	n measures for management of env	ironmental and social impacts and risks	
Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
effectiveness of management and PGOA			and Monitoring system, newsletter and decentralization of information.	
18. Install a control point in the Pampas, equipment in coordination with the Police; and monitoring system, newsletter and decentralization of information	E & SP 3. That the technician does not involve vulnerable groups.	That the technician does not have the ability to impart his knowledge.	Incorporation of an industrial technician with technical background to identify options of improvement in the technology for the panela producers.	Specialist Adaptation
19. Develop the selection of experts in sustainable agricultural management and climate-smart livestock; Incorporation of an industrial technician with technical background to identify improvement options in technology for panela producers.	E & SP 2. That there is no access to information.	That the population is not a sea correctly informed of the findings.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and lessons through taylor-made communicational products.  The Communication Plan is presented in Figure 32-A. Communications plan	Territory Technical (GADs)
20. Develop field visits by specialists to collect information on the type of crop, microclimate, vulnerabilities and resilience; Documentation:	E & SP 2. That there is no access to information.	That the population is not a sea correctly informed of the findings.	Documentation: Definition of appropriate adaptation measures for farming and production areas; Monitoring visits and documentation of the progress of adaptation measures. Identification of problems, grants for implementation.	Specialist Management, Monitoring And Evaluation

A	ctivity Identified Mitigation	n measures for management of envi	ironmental and social impacts and risks	
Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
Definition of appropriate adaptation measures for farming and production areas; Monitoring visits and documentation of the progress of adaptation measures. Identification of problems, grants for implementation.				
21. Develop the selection: Identify, through the defined procedures and actors, the participants for the construction of sustainable farms; The project management board reviews the profiles of participants entering into vulnerable groups for approval; Subsidy for 150 beneficiaries of vulnerable groups receive 75% of the cost and implementation of adaptation measures as grant. 25% they will put it as counterpart (labor); Delivery to the qualified suppliers of	E&SP 2. That not all beneficiaries can access the grant.	That the priority group for the sub-grant is not clearly identified.	The project management board reviews the profiles of participants entering into vulnerable groups for approval; Subsidy for 150 beneficiaries of vulnerable groups receive 75% of the cost and implementation of adaptation measures as grant. 25% they will put it as counterpart (labor); Delivery to the qualified suppliers of the values for the implementation by means of transference or certified check	Specialist Management, Monitoring And Evaluation

	A	ctivity Identified Mitigation		ronmental and social impacts and risks	
A	ctivity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
imple mean	alues for the ementation by as of transference rtified check				
Suppl Anno suppl partic delive the susta Intere exper reput Visits suppl inforr	ification	E&SP 2. Due to lack of knowledge, local actors do not present proposals.	That the providers are not part of the group of beneficiaries.	Visits each of the suppliers to verify the information provided and the prices offered.	Specialist Adaptation
of cor work devel 2 an and g the f based clima be Ident adequ other	opment of output ad 3. Knowledge good experience in field of software- d green lending or te financing will required; ification of uate EbA and	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.	Knowledge and good experience in the field of software-based green lending or climate financing will be required; Identification of adequate EbA and other adaptation emasures for target customers of participating financial institutions.	Auditor Investment Fund Agreements

Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
customers of participating financial institutions;				
24. Develop the ICT solution to automatically and systematically collect data in the field, software to facilitate the identification, qualification, monitoring and reporting of adaptation credits.	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.	Verify the functionality and knowledge of the beneficiary population of the electronic platform. Training workshops were developed.	Territory Technical (GADs)
25. Development of climate smart lending management, for different crops and to be implemented in lending processes of financial institutions; Development of policies and procedures of climate risk management in the institution; Development of financial products, product design including loan terms;	E&SP 3. That technicians do not have patience to deal with vulnerable groups.	Risk that technicians do not have to transfer their knowledge to the population and that they do not have the charisma to deal with people.	Development of policies and procedures of climate risk management in the institution; Development of financial products, product design including loan terms.	Auditor Investment Fund Agreements
26. Determine the economic incentives for eligible lending	E&SP 2. That not all beneficiaries can access the grant.	That the priority group for the sub-grant is not clearly identified.	Communication management refers to a systematic plan to implement and monitor the channels and contents of a company's	Territory Technical (GADs)

Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
customers that will invest into EbA and other adaptation options			communication, both internally among its members, and externally with other companies or organizations. The technician should consider these questions: 1. What information?  2. Who needs it?  3. When is the information needed?  4. What is the format of the information?  5. Who will be responsible for transmitting the information?	Specialist Management, Monitoring And Evaluation
27. Training 500 families in the use of climate data and their application in activities, such as: agriculture and livestock. This training will be address for 55% percent of women. Including field visits, food and transportation.	can not participate actively.	Women must empower leadership and decision making.	The active participation of women has been included in all the activities, gender workshops will be developed so that women can empower themselves and take the lead in the proposed actions.	Territory Technical (GADs)
28. Designing of interactive content and generation of newsletters to training GAD population in the area including women associations, older adults and vulnerable groups.	E & SP 2. There is a risk that the community does not know theoretical issues.	That the population benefits unpaid due to lack of knowledge.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and lessons through taylor-made communicational products.  The Communication Plan is presented in Figure 32-A. Communications plan	Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
29. Integrating the digital media technologies for communication plan and addressed it to the	that the community does not know	That the population benefits unpaid due to lack of knowledge.	Communication management refers to a systematic plan to implement and monitor the channels and contents of a company's communication, both internally among its	Territory Technical (GADs) Specialist Management,

Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
population in general including women, older adult, youth people and children's.  30. Conducting a technical study to determinate which climate change adaptation measures that must be added for development and territorial planning plans.	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.	members, and externally with other companies or organizations.  The technician should consider these questions:  1. What information? 2. Who needs it? 3. When is the information needed? 4. What is the format of the information? 5. Who will be responsible for transmitting the information?	Monitoring And Evaluation  Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
31. Gathering information on climate change adaptation measures to be added like indicators and statistics into the development and territorial planning plans. The indicators should include gender information and vulnerable groups for climate change.	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and	Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
32. Developing new development and territorial planning documents adding climate change statistics and information and also	E & SP 2 Lack of knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.	lessons through taylor-made communicational products. The Communication Plan is presented in Figure 32-A. Communications plan	Territory Technical (GADs) Specialist Management, Monitoring And Evaluation

Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification
including gender and vulnerable group's climate change issues.				
33. Training for population including associations, organizations and other stakeholder of the project about climate change adaptation measures incorporated in the PDOTs.	knowledge of documents and reports that will be created for the benefit of the population, and people do not have access to information.	That the information collected is not sociabilized to all the beneficiaries.		Territory Technical (GADs) Specialist Management, Monitoring And Evaluation
34. Socialize new PDOTs documents with the population of the project area including associations, organizations and the population in general.	vulnerable groups will not be found in socialization.	Risk that communication in socialization does not become clear to the beneficiaries.	Socialization workshops will be held.	Territory Technical (GADs)
35. Developing a communication plan addressed to stakeholders in the project including specific women associations and organizations.	E & SP 2. There is a risk that not all the community will know the studies that are carried out and will not be disseminated.	If the community does not communicate properly or participate in the updating process, their local knowledge has not been recorded.	The backbone is the public communication and education plan that will (i) raise public awareness and engagement, (ii) facilitate communication and collaboration among stakeholders and project partners, and (iii) enable dissemination of information and lessons through taylor-made communicational products.  The Communication Plan is presented in	Territory Technical (GADs)
36. Developing a technological platform to manage knowledge and information about	that not all the community will know	If the community does not communicate properly or participate in the updating	Figure 32-A. Communications plan	Territory Technical (GADs)

Ac	Activity Identified Mitigation measures for management of environmental and social impacts and risks					
Activity	Identified risks in accordance with AF's E&SP	Potential E&S Impacts if risks materialize	Mitigation Measure	Responsible for Verification		
climate change, using disruptive technologies like: big data and cloud computing.	carried out and will not be disseminated.	process, their local knowledge has not been recorded.				

# 37. Environmental and Social Risk Identification Mechanism for Unidentified subprojects (USP)

As mentioned previously in the Proposal, during the formulation of the project, it was not possible to fully define two (2) activities, which refer to the farm plans that must be addressed when the project is developed and the activities that are being carried out. cape. developed. in the biocorridor.

#### 1. Biocorridor

#### 2. Farm plans

There is the possibility of identifying adverse environmental and social risks that were not foreseen during the design of the project during implementation. To anticipate future problems, during the preparation of the annual operation plans, the Project Unit will identify the possible environmental and social risks associated with each of the activities planned for the year and will schedule the mitigation measures accordingly, as well as the budget required for its implementation. This analysis will be carried out applying the same methodology used in this project to identify and the risks of other activities and taking into account the environmental and social principles applicable to this project.

The process for the identification of risk and impact, mitigation measures and implementation is exactly the same as that carried out for the project during the design phase. The activity and the designs will be evaluated in accordance with the ESP and the gender policy of the Adaptation Fund. All risks identified will recognize different mitigation measures and be responsible for compliance. Monitoring and verification of compliance is required for all activities

To be able to establish a time frame for the Environmental and Social Risk Identification Mechanism for Unidentified sub-projects (USP) this timing matrix presented the milestones of the moment where the USP have to be implemented and which study should be developed before the approval of UPS implementation.

**Table 10. Time Frame for USP implementation** 

	Milestones			Percentage	of Execution	1
Componente	Activity	Date Year 1 Ye		Year 2	Year 3	Year 4
			05/01/2019	05/01/2020	05/01/2021	05/01/2022
Project Components : 1. Conserve vegetation cover	Develop the Forest Management Plan:  1. Conduct a forest inventory					
Output 1: 1,000 ha of native vegetation is conserved by sustainable forest management	2. Define the space with which to reforest.	05/01/2019	10%	90%		
and conservation mechanisms.	3. Conduct monitoring of buffer areas.					
Project Components : 1. Conserve vegetation cover	Conduct awareness workshops with the beneficiaries of the biocorridors.					
Output 1: 1,000 ha of native vegetation is conserved by	Define the activities that can be developed as:					
sustainable forest management and conservation mechanisms.	- Ecotourism - Reforestation	05/01/2019	10%	90%		
Output 2: Improved management of existing protected forests and	- Agroecological farms					
private conservation areas (ca. 230,000 ha)	Develop community agreements to reduce the animal burden and the advance of the agricultural frontier.					
Project Components : 2. Adapt farming practices to new climate	The following adaptation measures have been reviewed and identified as potential solutions to be implemented with local	05/01/2019	15%	75%	10%	

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change conditions and enable their	populations in the Río Blanco upper
climate smart financing	watershed. Their selection has been done on
Outrot 2, 250 be of restored	an "a priori" basis and was drawn from the
Output 3. 250 ha of pasture and	UN Environment MEbA project's catalogue
250 ha of crops apply sustainable	of 40 EbA measures as published on the
farming practices	respective website. The measurements can
	be made after carrying out the analysis in the
	land of each one of the beneficiaries.
	Organic Fertilizers
	Soil Conditioning
	Conservation Agriculture
	Agroecology
	Organic Agriculture
	Beekeeping
	Seed Banks
	Windbreaks
	Biodigesters
	Fog Catchers
	Solar Dehydrators
	Crop Diversification
	Drainage Systems
	Ecotourism
	Efficient Biomass Stoves
	Firebreaks
	Solar Hydroponics
	Family Orchards
	Greenhouses
	Vermicompost Sustainable Forest
	Management
	Integrated Nutrient Management
	Integrated Pest Management
	Natural Retaining Walls
	Permaculture
	Aquaculture

•	Filter Dams		
•	Rainwater Reservoirs		
•	Soil Restoration		
•	Drip Irrigation		
•	Crop Rotation		
•	Agrosilvopastoral Systems		
•	Agroforestry Systems		
•	Silvopastoral Systems		
•	Natural Shade		
	Agricultural Terraces		
	Infiltration Pits		
•	Mixed-Plant Nurseries		
	Waru-Warus		
	Contour Trenches		

Taking into account this previous matrix, the Risk identification – Mitigation Measures – Activity Implementation process can be used.

### 2.1 Mechanism for Identification Environmental and Social Risk of an unidentified activity

An unidentified activity or subproject is one that at the time of submission of the proposal cannot identify ESG risks. This may be due to the time elapsed from the evaluation in the field until the Project was approved and started to develop, and other characteristics that determine the ESG risks have not yet been established and have occurred in the implementation through a participatory approach. In any case, these activities or subprojects require a PMAS that includes a framework for identification and risk management strategies.

At the beginning of the project, analyze the possible implementation of new findings in the ESIA and recognize recognizing the possibility of reformulating a PMAS.

The Process developed is:

Step 1. Design of Activities.

Step 2. Risk screening using a risk identification form

Step 3. Evidence to identify compliance (Impact assessment if required)

Step 4. Mitigation Measures

Step 6. Verification for Approval

Step 7. Monitoring of Compliance

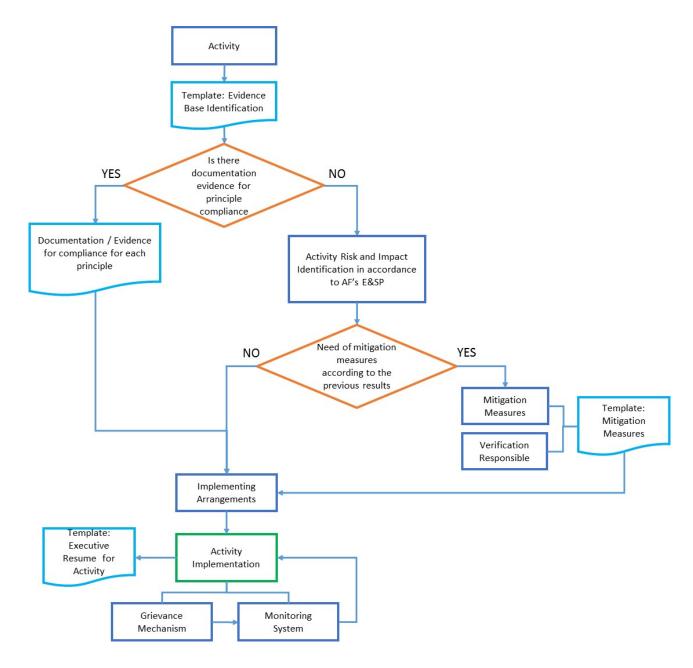


Figure 4. Risk identification – Mitigation Measures – Activity Implementation

### **Templates**

This templates are for risk identification for each adaptation activity technically designed under Component 1 y 2 of the project. After the risk identification and mitigation measures templates are completed and verified by the Project Unit after to socialize the results with the community.

Executive Resume				
NAME OF THE ACTIV	ITY:			
Area on intervention:	Responsible of fulfilling the template - Local Technical Coordinator Check:	Management Coordinator Check:	Project Unit Check:	Date:
Technical General Description of the Activity :				
Fulfillment of the Risk Identification				
Consultation with the community				
Documentation – Evidence Base of Risk Identification				
General / Relevant Mitigation Measures				

Activity			
Checklist of E&S Principles	Questions	YES NO	/
1.Compliance with the law	1.1. Does the Project demonstrate any incompliance with any applicable international law? Has the project identified all the specific, applicable domestic and international laws, regulations, standards, procedures and permits that apply to any of its activities?		
	1.2. Has the project identified activities that may require prior permission (such as planning permission, environmental permits, construction permits, permits for water extraction, emissions, and use or production or storage of harmful substances)		
	1.3. Has the project identified environmental and social safeguarding requirements, other than those of the AF (e.g. national or of co-financing entities). Use the appropriate screening tools, including any threshold lists and sectorial requirements?		
	1.4. Has the project identified technical or industry standards that apply to any of its activities?		
2. Access and	2.1. Has the project identified benefits and its geographical area of effect?		
. Access and Equity	2.2. Has the project identified any marginalized or vulnerable groups among potential project beneficiaries? (stakeholder mapping in order to identify the potential beneficiaries, rivals, disputants, marginalized or vulnerable people)		
	2.3. Has the project identified any existing inequities with respect to these marginalized or vulnerable groups?		
	2.4. Has the project identified the existing access to the essential services and rights indicated in the principle?		
	2.5. Has the project described the mechanism of allocating and distributing project benefits, and how this process ensures fair and impartial access to benefits?		
	2.6. Has the project developed stakeholder and local authorities' consultations?		
3. Marginalize d and	3.1. In the influence area of the project has there been identified the presence of marginalized or vulnerable groups, including but not limited to children, women and girls, the elderly, indigenous people, tribal groups, displaced people, refugees, people living with disabilities and people living with HIV/AIDS?		

Activity		
Checklist of E&S Principles	Questions	YES /
Vulnerable Groups	3.2. Has the project quantified all the groups identified using accepted methods based, where possible, on disaggregated data?	
	3.3. Has the project described the characteristics of any marginalized or vulnerable groups, identifying their particular vulnerabilities that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the implementation of the activities of the project?	
4. Human Rights	4.1. Has the project evidenced if the host country is cited in any Human Rights Council Special Procedures, be they thematic or country mandates?	
Rights	4.2. Has the project provided an overview of the relevant human rights issues that are identified in the Special Procedures?	
	4.3. Has the project include human rights issues in stakeholder consultations during project identification and/or formulation?	
	4.4. Has the project included the findings of the consultations on human rights issues in the project document?	
5. Gender	5.1. Has the project identified activities that are known to exclude or hamper a gender group based on legal, regulatory or customary grounds?	
Equity and Women's Empowerme	5.2. Has the project conduct or consult a gender analysis of the supported sector / area, describing the current situation of the allocation of roles and responsibilities in sector or area?	
nt	5.3. Has the project identified elements that maintain or exacerbate gender inequality or the consequences of gender inequality?	
	5.4. Has the project identified particular vulnerabilities of men and women that would or could make them disproportionately vulnerable to negative environmental or social impacts caused by the outputs / activities of the project?	
6. Core Labour Rights	6.1. Has the project determined if the host country has ratified the eight ILO core conventions	
nigilis	6.2. Has the project reviewed the latest ILO assessments of application of the standards in the country?	
	6.3. Has the project identified any past/present/planned ILO assistance to meet the standards through social dialogue and technical assistance?	

Activity			
Checklist of E&S Principles	Questions	YES NO	/
	6.4. Has the project identified information on any ILO Special procedures relevant to the Member nation including details on the triggering representation or complaints		
	6.5. Has the project identified how the ILO core labour standards are incorporated in the design and the implementation of the outputs / activities' project?		
	6.6. Has the project describe the common labour arrangements in the sector(s) in which the project will operate, with particular attention to all forms of child labour and forced labour.		
7. Indigenous Peoples	7.1. Has the project identified if indigenous peoples are present in the area of influence?		
Γεορίες	7.2. Has the project quantify the groups identified of indigenous peoples?		
	7.3. Has the project determined if there are provisions for a realistic and effective Free, Prior, Informed Consent process, giving a community the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use?		
	7.4. Has the project provided a summary of any reports, specific cases, or complaints that have been made with respect to the rights of indigenous peoples by the Special Rapporteur on the rights of indigenous peoples and that are relevant to the project?		
8. Involuntary Resettlemen	8.1. Has the project identified if physical or economic displacement is required or will occur as a consequence of its implementation?		
t	8.2. Has the project determined if it is voluntary or involuntary resettlement?		
	8.3. Has the project identified stakeholders whose livelihoods may be affected, directly or indirectly, and if this may lead to resettlement?		
	8.4. Has the project identified stakeholders whose assets or access to assets may be affected, directly or indirectly, and if this may lead to resettlement and its consequences including indemnification, compensation, etc.		
9. Protection	9.1. Has the project identified all the critical natural habitats in the region that may be affected?		
of Natural Habitats	The area considered should be large enough to be credible and be chosen in function of the impact generating agent		

Activity			
Checklist of E&S Principles	Questions	YES NO	/
	9.2. Has the project identified for each critical natural habitat, the mechanism by which it is particularly vulnerable?		
	9.3. Has the project considered all the activities to identify actual risks for each of the natural habitats identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each habitat identified.		
10. Conservatio	10.1. Has the project identified all the elements of biodiversity interest in the region that may be affected?		
n of Biological Diversity.	The area considered should be large enough to be credible and be chosen in function of the impact generating agent and an appreciation of its propagating ability. It is important in the identification of the elements of biodiversity interests not to limit this to the species level but to include all elements of biodiversity interest, including landscapes, ecosystem processes, habitats, and hydrological cycles, processes of erosion and sedimentation and interactions between taxa. Include all elements enjoying local or international protection		
	10.2. For each identified biodiversity element, has the project identified the mechanism by which it is particularly vulnerable? (Changes in flow regime or water quality for a seasonal wetland or disruption of migration routes).		
	10.3. Has the project identified actual risks for each of the biodiversity elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each biodiversity element identified?		
	10.4. Has the project identified the potential of introducing – intentionally or accidentally – known invasive species?		
	10.5. Has the project identified the use of living modified organisms resulting from modern biotechnology?		
11. Climate Change	11.1. Has the project determined if it belongs to a sector mentioned in the Guidance document for which a greenhouse gasses emission calculation is required?		
	• Energy, transport, heavy industry, building materials, large-scale agriculture, large-scale forest products, and waste management.		
	11.2. Has the project carry out a qualitative risk identification for each of the following drivers of climate change:		
	Emission of carbon dioxide gas from the use of fossil fuel and from changes in land use		
	<ul> <li>methane and nitrous oxide emissions from agriculture</li> </ul>		

Activity			
Checklist of E&S Principles	Questions	YES NO	/
	<ul> <li>emission of hydrofluorocarbons</li> <li>perfluorocarbons</li> <li>sulphur hexafluoride</li> <li>other halocarbons, aerosols, and ozone.</li> <li>11.3. Has the project carry out a qualitative risk identification of any impact on carbon capture and sequestration capacity.</li> </ul>		
12. Pollution Prevention and Resource Efficiency	<ul> <li>12.1. Has the project identified activities with preventable waste or pollution production?</li> <li>12.2. Has the project determined the nature and quantity of the waste, as well as those of possible pollutants that may be produced?</li> <li>12.3. Has the project determined if the concept of minimization of waste and pollution production has been applied in the design phase and if this will be effective during implementation?</li> <li>12.4. Has the project determined if applicable local, national and international regulations regarding any waste and pollution generation have been applied and will be complied with?</li> <li>12.5. Has the project determined if the concept of minimization of resource use has been applied in the design phase and if this will be effective during implementation?</li> <li>12.6. Has the project determined where international standards for maximizing energy efficiency and minimizing material resource use may apply?</li> </ul>		
13. Public Health	13.1. Has the project identified using an appropriate health impact screening tool (check list) potentially significant negative impacts on public health generated?		
14. Physical and Cultural Heritage	<ul> <li>14.1.Has the project determined if the host country has ratified the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage?</li> <li>14.2.Has the project identified the national and local legal and regulatory framework for recognition and protection of physical and cultural heritage?</li> <li>14.3.Has the project described in the influence zone all the elements of the cultural heritage, their location and their vulnerabilities?</li> </ul>		

Activity			
Checklist of E&S Principles	Questions	YES NO	/
	The area considered should be large enough to be credible and be chosen in function of the impact generating agent (e.g. vibrations, landscape elements) and an appreciation of its propagating ability. Include all elements enjoying local or international protection.		
	14.4. Has the project determined if the cultural heritage is being accessed by communities?		
	14.5. Has the project determined if any of the heritage elements included in the List of World Heritage in Danger is in the influence zone?		
	14.6. Has the project considered all the activities to identify actual risks for each of the heritage elements identified taking into account the specific characteristics of the activity (location, dimension, duration etc.) and the vulnerability mechanism(s) of each heritage element identified?		
15. Lands and	15.1. Has the project identified the presence of fragile soils within the influence area?		
Soil Conservatio	15.2. Has the project identified activities that could result in the loss of otherwise non-fragile soil?		
n	15.3. Has the project identified productive lands and/or lands that provide valuable ecosystem services within the influence area?		
	15.4. Has the project identified activities that may lead to land degradation?		

Categorization of the Activity	
Activity	
Questions	YES / NO
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are diverse?	
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are widespread?	
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are irreversible?	
Does the Project Outputs / Activities have few adverse environmental or social impacts?	
Does the Project Outputs / Activities have in small scale / low widespread adverse environmental or social impacts?	
Does the Project Outputs / Activities have reversible or easily mitigated adverse environmental or social impacts?	
Does the Project Outputs / Activities have no adverse environmental or social impacts?	
Categorization of the Activity	

Mitigation Measures							
Activity:							
Area on intervention:	Responsible of fulfilling the te Technical Coordinator Check:	mplate - Local	Management Coordinator Check:	Project Unit Check:	Date:		
Environmental or social Principle	Environmental or social risk	Mitigation me	l Pasure	Responsible	Verification		
Principle 1. Compliance with the	Risk 1.	Mitigation measure 1.		,			
Law	Risk 2.	Mitigation measure 2.					
		Mitigation measure 3.					
		Mitigation measure 4.					
Principle 2. Access and Equity	Risk 1.	Mitigation me	asure 1.				

#### **Mitigation Measures Activity:** Responsible of fulfilling the template - Local | Management Coordinator Check: Area on intervention: **Project Unit Check:** Date: **Technical Coordinator Check: Environmental or social Principle Environmental or social risk** Mitigation measure Responsible Verification Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 3. Marginalized and Risk 1. Mitigation measure 1. Vulnerable Groups Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 4. Human Rights Risk 1. Mitigation measure 1. Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 5. Gender Equality and Risk 1. Mitigation measure 1. Women's Empowerment Mitigation measure 2. Risk 2. Mitigation measure 3. Mitigation measure 4. Principle 6. Gender Equality and Risk 1. Mitigation measure 1. Women's Empowerment Mitigation measure 2. Risk 2. Mitigation measure 3. Mitigation measure 4. Principle 7. Indigenous Peoples Risk 1. Mitigation measure 1. Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle Involuntary Risk 1. Mitigation measure 1. Risk 2. Mitigation measure 2. Resettlement.

#### **Mitigation Measures Activity:** Responsible of fulfilling the template - Local | Management Coordinator Check: Area on intervention: **Project Unit Check:** Date: **Technical Coordinator Check: Environmental or social Principle Environmental or social risk** Mitigation measure Responsible Verification Mitigation measure 3. Mitigation measure 4. Principle 9. Protection of Natural Risk 1. Mitigation measure 1. Risk 2. Habitats Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 10. Conservation of Risk 1. Mitigation measure 1. **Biological Diversity** Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 11. Climate Change Risk 1. Mitigation measure 1. Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Mitigation measure 1. Principle 12. Pollution Prevention Risk 1. and Resource Efficiency Risk 2. Mitigation measure 2. Mitigation measure 3. Mitigation measure 4. Principle 13. Public Health Risk 1. Mitigation measure 1. Mitigation measure 2. Risk 2. Mitigation measure 3. Mitigation measure 4. Principle 14. Physical and Cultural Risk 1. Mitigation measure 1. Heritage Risk 2. Mitigation measure 2. Mitigation measure 3.

Mitigation Measures					
Activity:					
Area on intervention:	Responsible of fulfilling the t Technical Coordinator Check:	emplate - Local	Management Coordinator Check:	Project Unit Check:	Date:
Environmental or social Principle	Environmental or social risk	Mitigation mea	sure	Responsible	Verification
		Mitigation meas			
Principle 15. Lands and Soil	Risk 1.	Mitigation measure 1.			
Conservation	Risk 2.	Mitigation measure 2.			
	Mitigatio		sure 3.		
		Mitigation meas			

#### 38. Monitoring, evaluation and oversight program<sup>1</sup>

A surveillance program in accordance with the actions identified in the PMAS will report the results in the reports that can be: intermediate, annual and performance terminals. Supervision will ensure that actions are taken in a timely manner and for the determination of whether the measures are mitigating the risks and impacts or whether it is necessary to modify the expected results.

The annual project execution reports should include a section on the state of execution of the ESG risks, as well as the corrective measures considered necessary.

Interim and final reports also included an evaluation of project performance related to ESG.

## **Environmental monitoring plan**

The relevant environmental variables must contain, when appropriate, for each phase of the project or activity the component of the environment that will be subject to measurement and control; the associated environmental impact; the location of the control points; the parameters that will be used to characterize the state and evolution of said component.

The quantitative levels or limits allowed or committed; the duration and frequency of the monitoring plan for each parameter. The method or procedure of measuring each parameter; the deadline and frequency of delivery of monitoring plan reports to the competent agencies; the indication of the competent body that will receive such documentation, and any other relevant aspect.

## **Inspection**

It will correspond to the State organisms that, in use of their legal faculties, participate in the control

Modification of the Action Plan if necessary, depending on the criteria of the auditor

<sup>&</sup>lt;sup>1</sup> Before the implementation of the project, a "Manual of Social and Environmental Safeguards Implementation" will be developed to have protocols with specific indicators, means of verification and responsible for the implementation of the mitigation measures these protocols will be validated with the main partners involved in the project's implementation. Additionally, a training workshop aimed at the members of the project unit and project partners will be carried out for the implementation of this manual. CAF will give technical support for the manual elaboration and the operation of training workshop.

#### **IMPLEMENTATION STAGE**

**During the implementation**, there are several aspects that must be supervised and evaluated, including:

- Application of environmental and social measures
- Preparation of compliance reports at the farm or producer group level
- Preparation of environmental and social monitoring reports for the executive community.

#### **Post-Closing Stage**

- Generation of information at the project level on environmental and social compliance
- Evaluation of lessons learned
- Consideration of positive environmental impacts such as carbon sequestration and the benefits of biodiversity
- Calculation of the economic and financial impact of the subprojects

#### Midterm and final evaluation of the Project

- Prepare an assessment of compliance with environmental and social measures.
- Evaluation of the environmental and social impact (including the economic and financial impact) of the investments, as a whole.

Table 11. Monitoring and Evaluation Plan

		Means of		Moment of	Responsible of
Identified risks/impacts	Planned mitigation measure	support	Indicator	execution	monitoring
racinica risks/ impacts	Training miligation measure	support .	a.ca.ca.	CACCUCION	dimeding
Principle 2. Access and Equity	<ol> <li>Developing a communication plan addressed to stakeholders in the project including specific women associations and organizations.</li> <li>Integrating the digital media for communication plan and addressing it to the population in general including women, older adults, youth people and children's.</li> <li>Sharing lessons learned and experiences with project stakeholders, and replicate knowledge to other similar projects in the country trill demonstrative farms applying sustainable methods for agriculture, livestock and panela production</li> <li>Training modular courses on sustainable agriculture and good agricultural practices, open to associations and selected farmers to participate. 12 modules, 6 theorists, 6 in the field and on-site supervision within 6 months of completing the course. 50% women</li> <li>Training for all Microfinance Institution (MFI) staff participating in climate risk, green credit and climate change issues with a focus on microfinance</li> <li>Certification of organic crops or good agricultural practices for the production of panela, mortiño wine or crops of sugar or naranjilla, of those graduates with better performance in their crops.</li> </ol>	Agreements	Number of people benefited / Number of people in the population * 100	Four year	Specialist Management, Monitoring And Evaluation
Principle 3: Marginalized and Vulnerable Groups	Encourage the creation of community- based committees.	Agreement s	# committees / # parishes * 100	First semester	Specialist

Identified risks/impacts	Planned mitigation measure	Means of support	Indicator	Moment of execution	Responsible of monitoring
	<ol> <li>Update the identification and quantification report of marginalized and vulnerable groups and a description of their risk of disproportionate adverse impacts with the help of community-based committees. The steps of the process:         <ol> <li>In the project area, identify the presence of marginalized or vulnerable groups.</li> <li>Quantify all groups identified using accepted methods on a base, when possible, in the disaggregated data.</li> <li>Describe the characteristics of marginalized or vulnerable groups, the identification of particular vulnerabilities that could make or excessively vulnerable to environmental impacts or negative negatives caused by the project.</li> </ol> </li> <li>Update the vulnerability report of the population that is in the project area</li> </ol>	Report	# of the steps analyzed / # total steps * 100  # analyzed parishes (vulnerability) # total parishes		Management, Monitoring And Evaluation
Principle 5: Gender Equity and Women's Empowerment Either women or men have disproportionate opportunities to participate.  Both women and men receive incomparable social and economic benefits	1. Update the report on the Identification of creation risks or the maintenance of gender inequalities and a description of the risk of disproportionate adverse impacts based on gender. The steps of the process:  a. Identify activities or other elements in the project that are known to exclude or hinder a gender group based on legal, regulatory or customary characteristics.	Report	# of the steps analyzed / # total steps * 100	First semester	Specialist Management, Monitoring And Evaluation

Identified viels /imports	Dlaward witigation wassuus	Means of	Indicator	Moment of	Responsible of
Identified risks/impacts	Planned mitigation measure	support	Indicator	execution	monitoring
Either women or men suffers disproportionate adverse effects during the development process	<ul> <li>b. Conduct or consult a gender analysis of the project sector, which describes the actual situation of the assignment of functions and responsibilities in the project area.</li> <li>c. Identify the project elements that persist or exacerbate gender inequality or the consequences of gender inequality.</li> <li>2. Create a report to implement each activity where gender equality is recorded, without ruling out whether you belong to the vulnerable group.</li> <li>3. Training on gender equality issues where issues such as: equality, breaking barriers, opportunities for all, sexist culture, stereotypes, decision-making will be addressed.</li> </ul>	Report	# of reports where gender equity is involved / # of Project activities # attendees / # of guests * 100		
Principle 9: Protection of Natural Habitats Project activities cause unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected	The concepts of untouchable conservation that corresponds to literal c), in the Adaptation Project there is a paradigm shift that conserves traditional conservation where the population is involved.  1. Study of alternative activities that can be developed in the proposal of the creation of the Biocorridor with the interaction of the communities.  2. Talks with the beneficiaries of the Biocorridor to disseminate knowledge of the destination of the activities and the benefits of adapting to climate change.  3. Meeting with the beneficiaries that are within the area of Biocorredor, determination of agreements and commitment actions of the	Report  Attendance  Engagemen t letters	# viable alternatives / # total alternatives * 100 # attendees / # of guests * 100 # of signed commitment minutes / # total minutes	First year	Specialist Management, Monitoring And Evaluation  Territory Technical  Project Manager

Identified risks/impacts Planned mitigation measure	Means of support	Indicator	Moment of execution	Responsible of monitoring
by traditional or conservation of the Biocorredor vindigenous local sustainable and sustainable activities.	vith			
<ul> <li>Principle 10: Conservation of Biological Diversity. The project is avoiding significant or unjustified reduction or loss of biological diversity or the introduction of unknown invasive species</li> <li>1. Forest technical study of the study area implement the reforestation activity.</li> <li>2. Technical study of adaptation measures to implemented by farms to strengthen orgal farming.</li> <li>3. Training for the beneficiaries of the steps follow for the areas that are reforested.</li> <li>4. Training of farmers on farms for installation of good agricultural practices.</li> </ul>	Report  anic  Attendance	# local nurseries / # total nursery of the parishes # native species adaptive to the microclimate / # native species  # of farms that have adapted adaptability measures to climate change / # total farms * 100  # attendees / # of guests * 100	First year  Monitoring annually	Specialist Management, Monitoring And Evaluation

#### 39. Grievance mechanism

The Complaints and Dispute Resolution Mechanism will be adapted to the existing regulations, the options for presenting complaints are: complains and discrepancy, which are enabled to people who are considered to be affected by possible environmental or social impacts resulting from the implementation of measures and actions of the project.

The Ministry of the Environment MAE does not have the functions of solving problems; indeed they do the follow up on the competent institutions to solve the problem efficiently and effectively. The primary objective of the dispute management mechanism is to protect the rights and obligations among all the actors involved in the implementation of the Project, making sure that the means are clear and effective measures are implemented in case of problems. The processes of claims, disputes and conflicts, will be resolved with local support, has been identified the Mediation Centers as key entity, formality created by the Ecuadorian law (2008) that allow to avoid judicial process-cost.

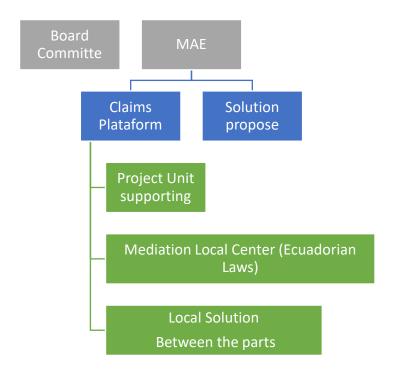
**Response to petitions, complaints and claims:** To respond adequately and effectively to petitions, complaints or claims that may arise at any stage of the project cycle, a mechanism must be designed that allows an effective and rapid response to the needs. The entire population should be informed of this mechanism regarding how to file a petition, claim or complaint, and about the time and manner in which they will receive a response. The planned mechanism must be presented and communicated among the local population with transparency and privacy, if necessary.

Periodically, the results of the treated cases must be disseminated, and this information will also be used as a commentary to improve the practice of the project.

**Main complaints agents:** Beneficiaries, organizations affected by project activities can file a complaint. Claimants do not need to be directly affected by the decision, project action and are not required to identify the applicable rule, regulation or policy that may have been violated.

#### a. Procedure for dispute settlement

At the beginning of the project, commitment letters will be signed by the Project's stakeholders. During the project execution, if there is any disagreement or controversy on any issue, the Unit Project will promote a friendly solution, if necessary, the support of the mediation centers will be solicited. Finally, the intervention of the mediation centers.



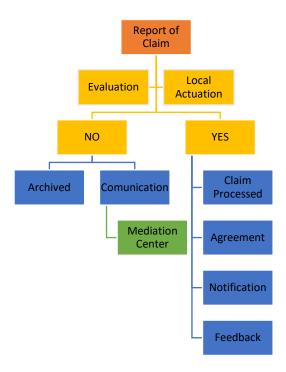
#### b. Procedures for cases of non-compliance

They serve to fulfill the requirements, prevent and address community concerns in order to reduce the risk of social participation and participation of all beneficiaries involved in decision- making. Also, it provides a guarantee of faithful compliance that is a legal backing mechanism intended to protect, compensate or ensure compliance with the obligations assumed by the State.



#### c. Procedure for complaints

A complaints mechanism provides a predictable and clear process and provides results that are considered durable and effective. The objective is to identify the complaint, facilitate corrective actions and a preventive engagement.



The contact information of the Adaptation Fund will also be publicized (i.e. project website, Facebook and mailbox) for the public to directly address concerns regarding the project:

Adaptation Fund Board secretariat Mail stop: MSN P-4-400 1818 H Street NW Washington DC 20433 USA

Tel: 001-202-478-7347

afbsec@adaptation-fund.org

#### d. Use of the stakeholders response mechanism

There must be a commitment from the stakeholders throughout the duration of the Project to promote mutually beneficial, transparent, responsible and positive working relationships.

The commitment of the stakeholders the construction of knowledge and the exchange of information

#### e. Involvement of relevant stakeholders and the disclosure of information

By means of its 3 components the Project has to implement the citizen participation mechanisms established by Law (i.e. public consultations), although the development of these consultations was

verified in this evaluation phase; once the Adaptation Fund approves the proposal, CAF will verify during the execution that the levels of citizen participation are respected and that the results are incorporated into the process; in Component 3 and in a cross-cutting manner, the implementers shall inform CAF in a timely manner about the communication strategy used with the community and the results obtained, such that there is full compliance with the obligations stipulated in the Regulations for the Application of Social Participation Mechanisms specified in the Environmental Management Law, promulgated in Executive Decree 1040 of April 22, 2008, and the Instructions for the Regulations for the Application of social participation mechanisms established in Executive Decree 1040.

The citizen participation component should be managed as a system that permits community involvement in the phases of information and incorporation of criteria, precisely in order to dilute potential expressions of discontent or complaints from the inhabitants of the areas of influence of the program who might feel adversely affected by the Projects.

The Strategic Environmental Assessment process of the Project will also serve to improve public participation in assessing the environmental consequences of the project's initiatives, in order to ensure that they are fully included and correctly communicated during the early decision-making stages, and placed at the level of social and economic considerations.

### C. Annex

## a. Applicable Domestic and International Laws That Apply

Laws	Ecuador
2030 Agenda for Sustainable Development	YES
Article 2 of the UN Framework Convention on Climate Change (UNFCCC)	YES
Cartagena protocol on Biosafety	YES
Convention on Biological Diversity (CBD)	YES
Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)	YES
Guidelines for National Greenhouse Gas Inventories (2006)	YES
Human Rights Council Special Procedures thematic mandates	YES
Human Rights Council Special Procedures country mandates	YES
ILO Declaration of Fundamental Principles and Rights at Work	YES
Intergovernmental Panel on Climate Change (IPCC)	YES
IUCN Red List of Threatened Species	YES
List of World Heritage in Danger	YES
Millennium Development Goals (MDGs)	YES
Ramsar sites inventory	YES
Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya (The situation of indigenous peoples in Chile and Ecuador)	YES
Special Rapporteur on the Rights of Indigenous Peoples (UN)	YES
Status of Ratification Interactive Dashboard (See Ecuador and Chile listing)	YES
Sustainable Development Goals (SDGs)	YES
UN Framework Convention on Climate Change (UNFCCC) (Article 2)	YES
UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 – article 1 and 2. See also: http://whc.unesco.org/en/statesparties/na-Namibia accepted the Convention in 2000. See also: List of World Heritage in Danger – article 11(4) of the Convention	YES
UNESCO Convention on Biological Diversity	YES
UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage – article 1 and 2	YES
UNESCO Man and the Biosphere Programme reserves list (Ecuador - Chile)	YES
Universal Declaration of Human Rights (UDHR)	YES
UN Declaration on the Rights of Indigenous Peoples (UNDRIP 2007)	YES
WHO Determinants of Health	YES
Sendai Framework for Disaster Risk Reduction 2015 – 2030. Hyogo Framework for Action 2005-2015	YES
Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts and article 8 of the Paris Agreement under the United Nations Framework Convention on Climate Change.	YES

Principle 1 that corresponds to the Compliance with the law. The identified process is:

Step 1: Identify specific laws, norms, standards, procedures and national and international permits that apply to the project or program, or to any of its activities.

Basel Convention, Stockholm Convention, Rotterdam Convention, Kyoto Protocol on Climate Change, Basel Convention

Constitution of the Republic of Ecuador (Published in the Official Gazette 449 of October 20, 2008)

Law on Environmental Management (Published in the Official Gazette 245 of July 30, 1999), Codification of the Environmental Management Law Codification 19 Official Registry Supplement 418 of September 10, 2004 Status: Effective, Law of Prevention and Control of Environmental Pollution (Published in the Register Official 418 of September 10, 2004), Law of Water Resources, Uses and Use of Water (Published in the Official Gazette 305 of August 6, 2014), Organic Health Law (Published in the Supplement to the Official Register 423 of December 22, 2006), COA Organic Environmental Code that will enter into force after twelve months have elapsed, counted from its publication in the Official Register. Given by Sole Final Provision No. 0, published in Official Register Supplement 983 of April 12, 2017; Forestry, Conservation of Natural Areas and Wildlife Law Standard: Codification # 17 (Published in the Official Gazette Supplement # 418 of September 10, 2004, Forestry Law, Conservation of Natural Areas and Wildlife - Standard: Codification # 17 ( Published in the Official Gazette Supplement # 418 of September 10, 2004, Executive Decree No. 1040, (Published in Official Gazette No. 332 of May 8, 2008), Agreement No. 061 of the Unified Text, published in the RO No. 316 of May 4, 2015, Ministerial Agreement No. 097-A of Wednesday, November 4, 2015 - Special Edition No. 387 - Official Registry, Organic Code of Comprehensive Criminal Registry Official, in the supplement No.180 dated Monday 10 February 2014, Labor Code (Published in the Official Gazette 167 of December 16, 2005), Codification of the Fire Defense Law Published in Official Gazette No. 815 of April 19, 1979

Step 2: Identify the activities of the project or the program that allows it (planning permission, environmental permits, construction permits, permits for the extraction of water, emissions and use or storage of harmful substances).

•Creation of the biocorridor: According with ministerial agreement No. 083 of August "Procedures for declaration and management of protected areas in Ecuador ", as first phase the project will develop the Management Plan that includes planning, tenure land and zoning of ACUS-Biocorridors and second phase includes in accordance with the Art.13 (agreement 083 AP), the GADs and project will.

Step 3: Identify environmental and social safeguard requirements, other than AFs (for example, national or co-financing entities). Use the appropriate evaluation tools, including threshold lists and sectoral requirements.

- Agreement Ministerial Agreement 018 Ministry of the Environment: http://www.ambiente.gob.ec/wp-content/uploads/downloads/2016/02/Acuerdo-Ministerial-N%C2%B0-018.pdf
- Forest and conservation law for natural areas and wildlife: http://www.ambiente.gob.ec/wp-content/uploads/downloads/2012/09/ley-forestal.pdf
- Regulations for land zoning: http://ecuadorforestal.org/wp-content/uploads/2010/05/Normativa-para-la-zonificaci%C3%B3n-de-tierras-para-forestaci%C3%B3n-y-reforestaci%C3%B3n.pdf
- Agreement No. 502 Minister of Agriculture: http://servicios.agricultura.gob.ec/forestacion/wp-content/uploads/downloads/2013/01/SPF-acuerdo-502-con-reformas-incorporadas.pdf
- •Acuerdo 211. Restauración Agreement 211. Forest Restoration: http://sociobosque.ambiente.gob.ec/files/images/articulos/archivos/amr211.p df

## Step 4: Identify the technical or industrial standards that apply to any of the project or program activities.

- Rules link: http://ecuadorforestal.org/legislacion-forestal/
- •Norms for the Sustainable Forest
- Management of the Humid Forests (Ministerial Agreement N ° 125)
- Procedures for Authorizing the Harvesting and Cutting of Wood (Ministerial Agreement No. 139)
- •Rules for the Management of Andean Forests (Ministerial Agreement No. 128)
- •Standards for Sustainable Forest Management of Dry Forest (Ministerial Agreement No. 244)
- •Standard for the Procedure for the Awarding of Lands of the State Forest Patrimony and Forest and Vegetation Protectors
- •Annex PFE Adjudication Standard Regulations of the Forest Regency System (Ministerial Agreement No. 038)
- Right of Use of Standing Wood (Ministerial Agreement N ° 041)
- Forest Seed Standard (Ministerial Agreement No. 003)
- •Instructive application tax credit payments afforestation program (Ministerial Agreement No. 75)
- •Operational Manual for the Incentive for Sustainable Forest Management (Partner Management) (Ministerial Agreement No. 187)
- •Instructions for granting the economic incentive for reforestation and afforestation with commercial purposes (Ministerial Agreement N ° 035)
- Regulations for the zoning of lands for afforestation and reforestation (Interministerial Agreement No. 002)
- NORMS INEN ECUADOR
- •NTE INEN 221:1997 FERTILIZERS OR FERTILIZERS. REQUIREMENTS LABELED http://www.agrocalidad.gob.ec/wp-content/uploads/2013/11/inen-0221-1997.pdf
- •NTE INEN 330:98 Fertilizers, fertilizers, classification http://www.agrocalidad.gob.ec/wp-content/uploads/2013/11/INEN-330-clasificacion-de-fertilizantes-11-04-2017.pdf
- •NTE INEN ISO 25119-2 TRACTORES Y MAQUINARIA PARA LA AGRICULTURA Y LA SILVICULTURA PARTES DE LOS SISTEMAS DE CONTROL RELACIONADAS CON LA SEGURIDAD http://www.normalizacion.gob.ec/wpcontent/uploads/downloads/2015/07/nte\_inen-iso\_25119-2.pdf
- •NTE INEN 2331 SOLID PANEL. REQUIREMENTS http://www.normalizacion.gob.ec/wp-content/uploads/downloads/2015/07/nte inen 2331-1r.pdf
- •NTE INEN 1761:2012 FRESH VEGETABLES. CHOCLO-MAIZ TIERNO. REQUIREMENTS http://www.normalizacion.gob.ec/wp-content/uploads/downloads/2013/11/nte\_inen\_1761.pdf

### **Applicable legal and institutional frameworks**

The **Constitution of the Republic of Ecuador** (20<sup>th</sup> October 2008) contains a number of important provisions of relevance to this project:

- Right of the population to live in a healthy environment Art. 14, 66.
- Recognition of water as a Human Right: All citizens have the right to have safe water in sufficient quantity and quality. Articles 3, 12, 15, 32, 318, 396 and 413.
- Considers water as a strategic resource: It is the support of food sovereignty and sustainable development of the country. Articles 12, 14, 71, 72, 73, 74, 397, and 411.
- Considers water as the Right of Nature and Source of life. Articles 281 and 282.
- Finally, it recognizes water as a heritage resource: Water cannot be privatized since it is part of the national heritage considered strategic for the development of the country and for public use. Articles 85, 95, 318, 319 and 419.
- The Constitution of the Republic of Ecuador, which establishes in Article 414 that "The State shall adopt appropriate and transversal measures for the mitigation of climate change, by limiting emissions of greenhouse gases, deforestation and air pollution; will take measures for the conservation of forests and vegetation, and will protect the population at risk ".
- In addition, the 2008 constitution is an institutional umbrella under which safeguards are addressed and respected. It provides a context for the implementation of a rights-based approach associated with REDD + UNFCCC safeguards and incorporates environmental variables into production activities, ecosystem management, citizen participation in environmental discussions and climate change adaptation (Policies 2, 3 and 5).

The **National Development Plan**, (named during the present period of the Government "the National Plan Lifetime 2017-2021) establishes policies and strategic guidelines related to climate change, such as:

- Objective 3: Guarantee the rights of nature for current and future generations. Policy 3.3: Promote good environmental practices that contribute to the reduction of pollution, to conservation, to mitigation and adaptation to the effects of climate change, and promote them at the global level.
- Proposed Goals for indicator homologation and construction of information: Reduce the Vulnerability Index from high to means, population, livelihoods and ecosystems, in the face of climate change and natural disasters.
- Objective 5: Promoting Productivity and Competitiveness for Sustainable Economic Growth in a Redistributive and Solidarity way indicates that the rural population must strengthen the capacities of social interaction that strengthens cooperation and networks collaborative as well as the resistance capacities, which respond to adverse scenarios caused by natural effects and climate change.
- Territorial guidelines for territorial cohesion with environmental sustainability and risk management.
   Second. Habitat management for sustainability environmental and integral management risks in b.2.
   Promote integral and co-responsible management of water heritage to protect its quality, availability and proper use, with recovery actions, conservation and protection of water sources, recharge zones, aquifers and groundwater, considering the equitable access of water for consumption, irrigation and production

The Ministry of the Environment of Ecuador also considers a specific policy for the management of climate change in its "Policy 3: Management of adaptation and mitigation to Climate Change to reduce social, economic and environmental vulnerability".

The Organic Environmental Code (COA) is an advanced law, articulated to our Constitution, which recognizes nature as subject of rights, responds to current needs. He is optimistic, that is, he looks with pleasure on the use of natural rights in an intelligent rational and responsible way. Not the environmentalist look of the 70s or 80s where there was talk of preserving what it was not to touch. Today we say to the communities that live in the paramos, mangroves, fragile ecosystems, that we want them there to be our partners, conserving those beautiful ecosystems that serve all Ecuadorians. The COA deals with the ownership and possession of community lands within the National System of Protected Areas; of the conservation, use and sustainable management of biodiversity and natural resources; of the protection, maintenance and development of collective knowledge associated with biodiversity; and of the practical knowledge, ancestral and cultural traditions contemplated in the 282 articles of the COA.

The National Law on water resources, uses and exploitation 2014 (Water Law), aims to develop the human right to water, as well as regulating the authorization, management, preservation, conservation, use and use of water, included within the national territory in its different phases, forms and physical states, in order to guarantee Sumak Kawsay or good living. In this sense, the management through hydrographic basins is regulated:

- Articles 2, 7 and 17, recognizes the strategic nature of water, the participatory and community nature of
  its management, as well as the consideration of ecological flows in all forms of use and exploitation to
  achieve sustainable development.
- Articles 12 and 65, the protection and conservation of sources is the responsibility of the State, the Single
  Water Authority, the decentralized autonomous governments, users, communes, communities, peoples,
  nationalities, peasants and property owners where water sources are located, they will be responsible for
  sustainable and Integrated management, as well as for the protection and conservation of said sources,
  considering the integrated management approach of resources as cross-cutting.
- Article 64, proposes strategies for the conservation of resources in their sources, catchment areas, regulation, recharge, outcrop and natural water channels, in particular, snow-capped mountains, glaciers, paramos, wetlands and mangroves.
- Article 83, promotes the adoption and promotion of measures regarding adaptation and mitigation to climate change to protect the population at risk, the development of mechanisms to encourage and encourage the efficient use and exploitation of water through the application of appropriate technologies in irrigation systems

The national development plan (SENPLADES, 2013) states in its general objective 7 that climate change is a multi-sector problem of national scope that should be approached with programmatic actions which generate results in the short and medium term. Specific objective 7.10 focus on implementing measures to mitigate and adapt to climate change to reduce the economic and environmental vulnerability with emphasis on priority groups.

In addition, specific objective 7.6 focus on managing water resources in a sustainable and participatory manner, with a focus on watersheds and ecological flows to ensure the human right to water. The project is in line with the National Climate Change Strategy (MAE, 2012), in particular with specific objectives 2 and 4. The first, focus on initiate action so that the performance levels of productive and strategic sectors and the country's infrastructure are not affected by the effects of change climate. Also 5, 6, and 8 the national strategy covers the period 2012 – 2025. It defines eight priority sectors for climate change adaptation. The present project is in line with the specific objectives of the adaptation line of work:

- Specific objective 2. The performance levels of the productive and strategic sectors and the country's infrastructure are not affected by the effects of climate change:
  - Action 1. Strengthen and consolidate the development of projects in the productive, strategic and infrastructure sectors with criteria of adaptation to climate change.
  - Action 2. Consolidate the actions that increase the resilience of the infrastructure in the face of extreme climate events attributed to climate change.
- Specific objective 4. To manage the water heritage with a comprehensive and integrated approach by the
  Hydrographic Unit, to guarantee the availability, sustainable use and quality of the water resource for
  different human and natural uses, in the face of the impacts of climate change:
  - Action 1. Consolidate the integral management of the water heritage, ensuring its availability, sustainable use and quality for the various human and natural uses in the face of the impacts of climate change.
- Specific objective 5. Conserve and sustainably manage the natural heritage and its terrestrial and marine ecosystems in order to contribute with its capacity to respond to the impacts of climate change:
  - Action 1. Consolidate and strengthen the implementation of measures that increase the capacity of species and ecosystems to respond to the impacts of climate change.
  - Action 2. Ensure that the Heritage of Natural Areas of Ecuador contributes to the response capacity of species and ecosystems in the face of the impacts of climate change
- Specific objective 6. Take measures to ensure access of priority attention groups and priority attention to the resources of the response to the impacts of climate change:
  - Action 1. Promote timely access to health, nutrition and infrastructure resources for the population, especially for groups defined as vulnerable and priority attention, which contribute to the response capacity of these groups in the face of the impacts on the population attributed to the change climate.

- Specific objective 8. Implement measures to increase the response capacity of human settlements to deal with the impacts of climate change. Within this objective, the project will contribute to three key actions:
  - Action 2. Promote public participation and social organization to facilitate the implementation of response measures to deal with extreme climate events related to climate change.
  - Action 3. Promote the generation of specific information and its access to the GAD on possible impacts of extreme weather events under possible climate change scenarios.