AFB/PPRC.20-21/6
30 May 2017

Adaptation Fund Board
Project and Programme Review Committee

PROPOSAL FOR (COLOMBIA, ECUADOR)

Background

Regional projects and programmes

1. The strategic priorities, policies and guidelines of the Adaptation Fund (the Fund), as well as its operational policies and guidelines include provisions for funding projects and programmes at the regional, i.e. transnational level.

2. In its twenty-fourth meeting, the Board decided:

> *(a) To initiate steps to launch a pilot programme on regional projects and programmes, not to exceed US$ 30 million;*
>
> *(b) That the pilot programme on regional projects and programmes will be outside of the consideration of the 50 per cent cap on multilateral implementing entities (MIEs) and the country cap;*
>
> *(c) That regional implementing entities (RIEs) and MIEs that partner with national implementing entities (NIEs) or other national institutions would be eligible for this pilot programme, and*
>
> *(d) To request the secretariat to prepare for the consideration of the Board, before the twenty-fifth meeting of the Board or intersessionally, under the guidance of the working group set up under decision B.17/20, a proposal for such a pilot programme based on consultations with contributors, MIEs, RIEs, the Adaptation Committee, the Climate Technology Centre and Network (CTCN), the Least Developed Countries Expert Group (LEG), and other relevant bodies, as appropriate, and in that proposal make a recommendation on possible options on approaches, procedures and priority areas for the implementation of the pilot programme.*
>
> *(Decision B.24/30)*

3. The proposal requested under (d) of the decision above was prepared by the secretariat and submitted to the Board in its twenty-fifth meeting, and the Board decided to:

> *(a) Approve the pilot programme on regional projects and programmes, as contained in document AFB/B.25/6/Rev.2;*
>
> *(b) Set a cap of US$ 30 million for the programme;*
>
> *(c) Request the secretariat to issue a call for regional project and programme proposals for consideration by the Board in its twenty-sixth meeting; and*
>
> *(d) Request the secretariat to continue discussions with the Climate Technology Center and Network (CTCN) towards operationalizing, during the implementation of the pilot programme on regional projects and programmes, the Synergy Option 2 on knowledge management proposed by CTCN and included in Annex III of the document AFB/B.25/6/Rev.2.*
>
> ***(Decision B.25/28)***

4. Based on the Board Decision B.25/28, the first call for regional project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on 5 May 2015.

5. In its twenty-sixth meeting the Board decided *to request the secretariat to inform the Multilateral Implementing Entities and Regional Implementing Entities that the call for proposals under the Pilot Programme for Regional Projects and Programmes is still open and to encourage them to submit proposals to the Board at its 27th meeting, bearing in mind the cap established by Decision B.25/26.*

(Decision B.26/3)

6. In its twenty-seventh meeting the Board decided to:

> *(e) Continue consideration of regional project and programme proposals under the pilot programme, while reminding the implementing entities that the amount set aside for the pilot programme is US$ 30 million;*
>
> *(f) Request the secretariat to prepare for consideration by the Project and Programme Review Committee at its nineteenth meeting, a proposal for prioritization among regional project/programme proposals, including for awarding project formulation grants, and for establishment of a pipeline; and*
>
> *(g) Consider the matter of the pilot programme for regional projects and programmes at its twenty-eighth meeting.*

(Decision B.27/5)

7. The proposal requested in (b) above was presented to the nineteenth meeting of the PPRC as document AFB/PPRC.19/5. The Board subsequently decided:

> *a) With regard to the pilot programme approved by decision B.25/28:*
>
> *(i) To prioritize the four projects and 10 project formulation grants as follows:*
>
> *1. If the proposals recommended to be funded in a given meeting of the PPRC do not exceed the available slots under the pilot programme, all those proposals would be submitted to the Board for funding;*
>
> *2. If the proposals recommended to be funded in a given meeting of the PPRC do exceed the available slots under the pilot programme, the proposals to be funded under the pilot programme would be prioritized so that the total number of projects and project formulation grants (PFGs) under the programme maximizes the total diversity of projects/PFGs. This would be done using a three-tier prioritization system: so that the proposals in relatively less funded sectors would be prioritized as the first level of prioritization. If there are more than one proposal in the same sector: the proposals in relatively less funded regions are prioritized as the second level of prioritization. If there are more than one proposal in the same region, the proposals submitted by relatively less represented implementing entity would be prioritized as the third level of prioritization;*

(ii) To request the secretariat to report on the progress and experiences of the pilot programme to the PPRC at its twenty-third meeting; and

b) With regard to financing regional proposals beyond the pilot programme referred to above:

(i) To continue considering regional proposals for funding, within the two categories originally described in document AFB/B.25/6/Rev.2: ones requesting up to US$ 14 million, and others requesting up to US$ 5 million, subject to review of the regional programme;

(ii) To establish two pipelines for technically cleared regional proposals: one for proposals up to US$ 14 million and the other for proposals up to US$ 5 million, and place any technically cleared regional proposals, in those pipelines, in the order described in decision B.17/19 (their date of recommendation by the PPRC, their submission date, their lower "net" cost); and

(iii) To fund projects from the two pipelines, using funds available for the respective types of implementing entities, so that the maximum number of or maximum total funding for projects and project formulation grants to be approved each fiscal year will be outlined at the time of approving the annual work plan of the Board.

(Decision B.28/1)

Intersessional review process

8. At its twenty-third meeting, the Adaptation Fund Board (the Board) discussed a recommendation made by the Project and Programme Review Committee (PPRC) of the Board, on arranging intersessional review of project and programme proposals. Having considered the comments and recommendation of the PPRC, the Board decided to:

(a) Arrange one intersessional project/programme review cycle annually, during an intersessional period of 24 weeks or more between two consecutive Board meetings, as outlined in document AFB/PPRC.14/13;

(b) While recognizing that any proposal can be submitted to regular meetings of the Board, require that all first submissions of concepts and fully-developed project/programme documents continue to be considered in regular meetings of the PPRC;

(c) Request the secretariat to review, during such intersessional review cycles, resubmissions of project/programme concepts and fully-developed project/programme documents submitted on time by proponents for consideration during such intersessional review cycles;

(d) Request the PPRC to consider intersessionally the technical review of such proposals as prepared by the secretariat and to make intersessional recommendations to the Board;

(e) Consider such intersessionally reviewed proposals for intersessional approval in accordance with the Rules of Procedure;

(f) Inform implementing entities and other stakeholders about the new arrangement by sending a letter to this effect, and make the calendar of upcoming regular and intersessional review cycles available on the Adaptation Fund website and arrange the first such cycle between the twenty-third and twenty-fourth meetings of the Board;

(g) Request the PPRC to defer to the next Board meeting any matters related to the competencies of the Ethics and Finance Committee that may come up during the intersessional review of projects/programmes and to refrain from making a recommendation on such proposals until the relevant matters are addressed; and

(h) Request the secretariat to present, in the fifteenth meeting of the PPRC, and annually following each intersessional review cycle, an analysis of the intersessional review cycle.

(Decision B.23/15)

9. At the twenty-fifth Board meeting, the secretariat had requested to the Board to consider whether the rules in the intersessional project review cycle could be made more accommodating, with a view to speeding up the process. The Board subsequently decided to:

(h) Amend Decision B.23/15 and require that all first submissions of concepts under the two-step approval process and all first submissions of fully-developed project/programme documents under the one-step process continue to be considered in regular meetings of the Project and Programme Review Committee (PPRC);

(i) Request the secretariat to review, during its inter-sessional review cycles:

(i) First submissions of fully-developed project/programme documents for which the concepts had already been considered in regular meetings of the PPRC and subsequently endorsed by the Board;

(ii) Resubmissions of project/programme concepts and resubmissions of fully-developed project/programme documents;

(j) Request the PPRC to consider intersessionally the technical review of such proposals as prepared by the secretariat and to make intersessional recommendations to the Board;

(k) Consider such intersessionally reviewed proposals for intersessional approval in accordance with the Rules of Procedure; and

(l) Inform implementing entities and other stakeholders about the updated arrangement by sending a letter to this effect, and make effective such amendment as of the first day of the review cycle between the twenty-fifth and twenty-sixth meetings of the Board.

(Decision B.25/2)

The project

10. The following fully-developed project document titled "Building adaptive capacity through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area" was submitted by the World Food Programme (WFP), which is a Multilateral Implementing Entity of the Adaptation Fund.

11. This is the fifth submission of the project, using the three-step approval process established for regional projects. It was first submitted as a pre-concept in the twenty-sixth Board meeting and was not endorsed. It was then re-submitted as a pre-concept in the twenty-seventh Board meeting and was endorsed.

12. It was submitted as a concept in the twenty-eighth Board meeting and the Board decided to:

a) Endorse the project concept, as supplemented by the clarification response provided by the World Food Programme (WFP) to the request made by the technical review;

b) Request the secretariat to transmit to WFP the observations in the review sheet annexed to the notification of the Board's decision, as well as the following issues:

(i) During the development of the fully-developed project document, further consultation should be held with binational commissions to better identify their needs and added value to the project;

(ii) Although it is explained that climate information and traditional knowledge that will be gathered during the project will help shape the outputs under component 3, in the fully-developed proposal, activities described under that component should be more specifically linked with current climate threats identified for the region;

(iii) The fully-developed project document should include a description of the relevant projects or initiatives currently undertaken to address non-climatic drivers that could hamper the project's results;

(iv) The fully-developed project document should include a detailed screening of the environmental and social risks that may potentially arise as a consequence of the project and categorize the project accordingly, following the Environmental and Social Policy of the Fund and its related principles;

c) Approve the Project Formulation Grant of US$ 80,000;

d) Request WFP to transmit the observations under item (b) to the Governments of Colombia and Ecuador; and

e) Encourage the Governments of Colombia and Ecuador to submit through WFP a fully-developed project document that would also address the observations under item (b) above.

(Decision B.28/23)

13. It was subsequently submitted as a fully-developed project document in the twenty-ninth meeting of the Board and the Board decided:

> *(a) Not to approve the project document, as supplemented by the clarification response provided by the World Food Programme (WFP) to the request made by the technical review;*
>
> *(b) To suggest that WFP reformulate the proposal taking into account the observations in the review sheet annexed to the notification of the Board's decision, as well as the following issues:*
>
> > *(i) The fully-developed project document needs to acknowledge its inherent environmental and social risks. The risks identification should be compliant with the Environmental and Social Policy of the Fund, and the subsequent categorisation of the project should be justified;*
> >
> > *(ii) An adequate Environmental and Social Management Plan (ESMP) should be provided, including appropriate arrangements for unidentified subprojects (USPs) risk identification and management; and*
>
> *(c) To request WFP to transmit the observations under sub-paragraph (b) to the Governments of Colombia and Ecuador.*
>
> *(Decision B.29/26)*

14. The present submission was received by the secretariat in time to be considered in the intersessional review period between the twenty-ninth and the thirtieth Board meetings. The secretariat carried out a technical review of the project proposal, assigned it the diary number LAC/MIE/Food/2015/1, and completed a review sheet.

15. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with WFP, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

16. The secretariat is submitting to the PPRC (1) the summary of the project and, pursuant to decision B.17/15, (2) the final technical review of the project is presented in the following sections, along with (3) the final submission of the proposal. The proposal is submitted with tracked changes between the initial submission and the revised version.

Project Summary

Colombia, Ecuador – Building adaptive capacity through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area

Implementing Entity: *WFP*
Project/Programme Execution Cost: USD 1,119,400
Total Project/Programme Cost: USD 12,903,200
Implementing Fee: USD 1,096,800
Financing Requested: USD 14,000,000

Project Background and Context:

Afro and indigenous communities living in the border area between Colombia and Ecuador face high levels of malnutrition and insufficient food consumption. Climate change threatens the livelihoods and fragile food and nutrition security situation of these communities. Studies on the long-term impact of climate change in the border areas show threats related to increasing precipitation (13.7 percent increase in Nariño from 2011-2040), increasing temperatures (2-3°C increase in Esmeraldas over the century), rising sea levels, more frequent storm surges and ocean acidification. The proposed project seeks to link food security and livelihood resilience through climate change adaptation with the aims of the Binational Plan for border integration and peace building. Executed by local Afro and indigenous organizations in Carchi, Esmeraldas and Nariño, this project will promote community and ecosystem-based approaches and locally-generated climate change adaptation that develop institutional and community capacities in a culturally and conflict-sensitive manner. Thus, this project presents an important opportunity to integrate climate change adaptation into Afro and indigenous community development plans to promote a lasting peace.

Component 1: Increased community awareness and knowledge on climate change risks and food security and nutrition in two border binational watersheds (USD 1,781,500)

This component seeks to increase community awareness and knowledge on climate change and food and nutrition security related risks across the region. It is expected that this component will help raise community awareness of climate change risks and adaptation opportunities in support of the binational plan, peace building priorities and territorial development plans. Also, regional and binational climate analyses and studies will be conducted to inform planning and implementation of climate actions.

Component 2: Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition (USD 1,681,800)

All activities under this component will enhance scientific knowledge and community understanding of climate change threats and potential adaptation solutions, linking food security and nutrition with an ecosystem perspective. Currently, Afro and Awá territories lack adequate planning information and tools at territorial and regional levels. With increasing climate variability, changes in crop cycles and rainfall patterns and extreme events, communities are facing growing unpredictability, and, thus, vulnerability. Therefore, this component will help build a concrete scientific knowledge base about the binational watersheds as a means to enhance community capacities to respond to climate threats, complementing existing climate scenarios at national levels.

To link traditional and local knowledge with scientific information, these national climate scenarios and new scientific studies will feed into culturally and gender-sensitive EWS in binational communities, with agro-meteorological data enhanced, and vulnerability mapping networks adapted to the micro-watershed level. Threat mitigation recommendations will also be provided, based in traditional and local knowledge.

Component 3: Reduce recurrent climate vulnerabilities through innovative community- and ecosystem-driven adaption measures that reduce food insecurity (USD 8,320,500)

This component will support community identification, planning, and implementation of concrete adaptation actions to enhance resilience to climate and environmental threats. Afro and Awá territories are vulnerable not only to climate change and climate variability, but also to environmental damage from illegal commercial activities and the former conflict. While concrete adaptation activities are a means to improve ecosystem service provision, binational watersheds communities lack the capacity to implement large-scale conservation initiatives in their territories. All concrete adaptation activities will respond to the climate threats identified in component 2 and involve the participation of community youth, women and elders. In line with these climate threats and local priorities, communities will select from a portfolio of feasible concrete adaptation activities, which link scientific and traditional and local knowledge of Afro and Awá populations. These activities will be designed with support from local technical experts, including local universities, scientific research organizations and territorial government entities to ensure high technical capacity.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regional Project

Countries/Region: **Colombia, Ecuador**
Project Title: **Building adaptive capacity through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area**
Thematic focal area: **Food security**
Implementing Entity: **United Nations World Food Programme - WFP**
Executing Entities: **Grand Family Awá, the Network of Southern Pacific, Community Councils (RECOMPAS), the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE)**
AF Project ID: **LAC/MIE/Food/2015/1**
IE Project ID: Requested Financing from Adaptation Fund (US Dollars): **14,000,000**
Reviewer and contact person: **Daouda Ndiaye** Co-reviewer(s): **Dirk Lamberts**
IE Contact Person(s): **Verónica Alvarado, Lauren Wyman**

Review Criteria	Questions	Comments on 26 April 2017	Comments on 18 May 2017
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?	Yes.	
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Yes. Studies on the long-term impact of climate change in the border areas between Colombia and Ecuador show threats related to increasing precipitation (13.7 percent increase in Nariño from 2011-2040), increasing temperatures (2-3°C increase in Esmeraldas over the century), rising sea levels, more frequent storm surges and ocean acidification.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes.	

	2. Does the regional project / programme support concrete adaptation actions to assist the participating countries in addressing the adverse effects of climate change and build in climate resilience, and do so providing added value through the regional approach, compared to implementing similar activities in each country individually?	Yes. The proposed approach is a combination of ecosystem-based and community-based actions to address the climate change threats on food security for a group of vulnerable communities in the border of Colombia and Ecuador. The project aims at combining local, traditional knowledge and scientific information on climate change, to adopt adaptation measures targeted to the Afro-descendant and Awá communities of the region.	
	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes. The combined ecosystem-based and community-based approach is expected to provide economic, social and environmental benefits.	
	4. Is the project / programme cost-effective and does the regional approach support cost-effectiveness?	Yes. EBA and CBA approaches could be considered in this context as cost effective.	

	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments? If applicable, it is also possible to refer to regional plans and strategies where they exist.	Yes. Including at the binational level: - The Binational Plan for Border Integration Ecuador-Colombia 2014-2022; - The Binational Development Plan Colombia-Ecuador; - Life Plan of the Grand Family Awá.	
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes.	
	7. Is there duplication of project / programme with other funding sources?	No. Existing initiatives in the project area have been carefully screened and identified.	
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes.	
	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?	Yes.	
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes.	
	11. Is the project / program aligned with AF's results framework?	Yes.	

	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Yes.	
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	Yes. However, as all the activities of the project (including all the USPs) must be screened for risks according to the 15 principles, the L table should be adjusted to reflect all the risks inherent to the USPs. Findings of absence of a risk are now largely based on eligibity criteria for USPs. However, this is not sufficiently explicit in the ESMP, where eligibility is determined as the outcome of a categorisation process. For example: the conclusion of the absence of risk for the Physical and Cultural Heritage principle is not based on an identification of the presence of physical and cultural heritage in the project or USP location but on generic principles of project implementation. It is thus not evidence-based, which it needs to be. Other problems with the L table include the principle of Marginalized and Vulnerable Groups (identification can only effectively be done at USP formulation stage) for which, furthermore, the risk identified (intellectual property) is not relevant to this principle (please refer to the Guidance document for further suggestions to the correct interpretation of the ESP principles). Other principles for which the findings need to be reconsidered or substantiated are Access and Equity, Indigenous peoples, Involuntary resettlement, Conservation of Biological Diversity and Pollution prevention and resource efficiency. **CR1:** Please revise table L taking into consideration the points made above.	**CR1:** Addressed.
	14. Does the project promote new and innovative solutions to climate change adaptation, such as new approaches, technologies and mechanisms?	Yes. The collection of traditional knowledge combined with scientific information on climate threats, along with the promotion of the first binational Early Warning System between Colombia and Ecuador will constitute an innovative feature of this project.	
Resource	1. Is the requested project /	Yes, the project budget is $US 14,000,000.	

Availability	programme funding within the funding windows of the pilot programme for regional projects/programmes?		
	2. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?	Yes.	
Eligibility of IE	3. Is the project/programme submitted through an eligible Multilateral or Regional Implementing Entity that has been accredited by the Board?	Yes. The World Food Programme is an accredited Multilateral Implementing Entity.	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management at the regional and national level, including coordination arrangements within countries and among them? Has the potential to partner with national institutions, and when possible, national implementing entities (NIEs), been considered, and included in the management arrangements?	Yes.	
	2. Are there measures for financial and project/programme risk management?	Yes.	

	3. Are there measures in place for the management of environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund? Proponents are encouraged to refer to the Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, for details.	Yes. **CR2:** The Environmental and Social Management Plan included as Annex 8 is a good start of an effective ESMP but requires improvements: • Table A1. The risks should be according to the 15 ESP principles and be limited to ESP issues, not to include general project implementation risks • Figure A1 and the screening procedure. The categorisation per se is not relevant since the ESP requires that all risks are considered and impact assessment and management actions are commensurate to the risks identified. Using the screening form and a categorisation method unnecessarily limits the scope of the risk identification. • The impact assessment stage for risks identified is now limited to the Technical Committee formulating a categorisation recommendation. ESP requires impact assessments to be commensurate to the risks, and to identify impacts and subsequent management actions. • The screening form on p. 131 should be updated in line with the revision of the risks identification table of II.L. • Part 6 of that table should contain essential information on which the risks identification is based. • Part 7: positive impacts of project achievements are irrelevant for ESP compliance • Part 7.2 should be expanded to include all the relevant principles, and further to document the ESP process applied to the USP at hand. Supporting documentation of findings should be added or referred to, to the extent possible. • Overall, the screening checklist should be made more prescriptive to ensure that adequate findings are obtained. For example, for the principle of Marginalised and Vulnerable Groups, the first step to be taken should be the identification of any M&V groups in the specific USP area. • The categorisation is irrelevant for ESP compliance • The 3rd step of the process (p. 140): irrespective of government approval, the Implementing Entity remains responsible for ESP compliance. • The attribution of roles and responsibilities in the application of the ESMP could be more explicit and elaborated. The role of the National Coordinator in this is important.	**CR2:** Addressed.

	4. Is a budget on the Implementing Entity Management Fee use included?	Yes.	
	5. Is an explanation and a breakdown of the execution costs included?	Yes.	
	6. Is a detailed budget including budget notes included?	Yes.	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?	Yes.	
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	Yes.	
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Yes, one core outcome indicator is provided.	
	10. Is a disbursement schedule with time-bound milestones included?	Yes.	

Technical Summary	Climate change threatens the livelihoods and fragile food and nutrition security situation of Afro and indigenous communities living in the border area between Colombia and Ecuador, which face high levels of malnutrition and insufficient food consumption. The project aims at reducing climate vulnerabilities of local Afro and indigenous communities and the ecosystems they depend on, promoting food and nutrition security and preventative capacities, thus contributing to the construction of peace; and strengthening the adaptive capacities of local Afro and indigenous institutions to reduce the impact of climate threats. This objective will be achieved through the following 3 components:

	1. Component 1: Increase community awareness and knowledge on climate change risks and food security and nutrition in two border binational watersheds; 2. Component 2: Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition; 3. Component 3: Reduce recurrent climate vulnerabilities through innovative community and ecosystem-driven adaption measures that reduce food insecurity. The initial technical review found that the project's components will help address the identified adaptation issues. However, two clarification requests (CRs) were made, related to compliance with the Environmental and Social Policy (ESP) of the Fund. The proponents subsequently revised the project document and the final technical review finds that the proposal has adequately addressed the requests made by the initial review.
Date:	18 May 2017

WFP Responses to the observations made by the Adaptation Fund Board at its 29th meeting

ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regional Project

Countries/Region: **Colombia, Ecuador**
Project Title: **Building adaptive capacity through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area**
Thematic focal area: **Food security**
Implementing Entity: **United Nations World Food Programme - WFP**
Executing Entities: **Grand Family Awá, the Network of Southern Pacific, Community Councils (RECOMPAS), the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE)**
AF Project ID: **LAC/MIE/Food/2015/1**
IE Project ID: Requested Financing from Adaptation Fund (US Dollars): **14,000,000**
Reviewer and contact person: **Daouda Ndiaye** Co-reviewer(s): **Mikko Ollikainen**
IE Contact Person(s): **Carmen Galarza, Joseph Martinez**

Review Criteria	Questions	Comments on 11 February, 2017	WFP Responses on April 10
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?		-
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?		-
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?		-

	2. Does the regional project / programme support concrete adaptation actions to assist the participating countries in addressing the adverse effects of climate change and build in climate resilience, and do so providing added value through the regional approach, compared to implementing similar activities in each country individually?	CR1: Addressed.	

	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy of the Fund?		
	4. Is the project / programme cost-effective and does the regional approach support cost-effectiveness?	.	
	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments? If applicable, it is also possible to refer to regional plans and strategies where they exist.	-	
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?		
	7. Is there duplication of project / programme with other funding sources?		

	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?		
	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?		
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?		
	11. Is the project / program aligned with AF's results framework?		
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?		
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	CR2: Partially addressed. The conclusion that the project has no ESP risks and therefore would be categorised as C is not well substantiated. Based on the nature of its activities, the overall natural and human environment in which the project will take place and the use of unidentified subprojects, a category B is appropriate. Risk identification needs to be done based on the risks alone, without taking management or mitigation	The project has been reclassified as Category B. Elaborate risk identification has been done and recorded.

		or positive project outcomes into account as is extensively done in the table provided in this section	
	14. Does the project promote new and innovative solutions to climate change adaptation, such as new approaches, technologies and mechanisms?		
Resource Availability	1. Is the requested project / programme funding within the funding windows of the pilot programme for regional projects/programmes?		
	2. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?		
Eligibility of IE	3. Is the project/programme submitted through an eligible Multilateral or Regional Implementing Entity that has been accredited by the Board?		
Implementation Arrangements	1. Is there adequate arrangement for project / programme management at the regional and national level, including coordination arrangements within countries and among them? Has the potential to partner with national institutions, and when possible, national implementing entities (NIEs), been considered, and included in the management arrangements?	CR3: Addressed.	

	2. Are there measures for financial and project/programme risk management?	CR4: Addressed.	
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy of the Fund? Proponents are encouraged to refer to the Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, for details.	CAR: Not addressed. The Environmental and Social Risks and Response Measures presented in Table 10 are contradictory to the claim of being a C category project, and not in line with the 15 principles of the ESP. The project needs to acknowledge its inherent ESP risks and develop a project-wide ESMP dominated by the arrangements for unidentified subprojects (USPs) risk identification and management. On p. 125 of the proposal, Annex 9, the following is stated: 'Additionally, the project will have in place an Environmental and Social Management Plan (ESMP)'. It is unclear if the section 'Environmental and Social management Plan' of Annex 9 is this announced ESMP. It includes elements of an ESMP for a project with USPs but it is overall inadequate. In particular, it lacks a clear allocation of roles and responsibilities ('the project implementation team'), it refers to unspecified screening checklists, maintains that the project will not have risks, conforming to its category C status. An impact assessment commensurate to the risks identified should be done.	Following a general risk screening, a project-wide ESMP has been created to ensure that risks identified are managed (avoided, minimized or mitigated) and that potential risks of unidentified subprojects are identified and managed. Roles and responsibilities to implement the ESMP have also be allocated.

	4. Is a budget on the Implementing Entity Management Fee use included?		
	5. Is an explanation and a breakdown of the execution costs included?		
	6. Is a detailed budget including budget notes included?	CR5: Addressed.	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?		
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?		
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	CR6: Addressed.	.
	10. Is a disbursement schedule with time-bound milestones included?		

OAI-8150

Bogotá, April 7, 2017

THE ADAPTATION FUND BOARD
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for *Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area*

Dear Sirs,

In my capacity as Designated Authority of the Republic of Colombia to the Adaptation Fund I hereby confirm that the above regional project proposal is in accordance with the government's national and bilateral priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the border region between Colombia and Ecuador.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations World Food Programme (WFP) and executed with the Grand Family Awá, the Network of Southern Pacific Community Councils (RECOMPAS) and the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE).

Sincerely,

Firmado por: FANNY SIERRA BONILLA
JEFE ENCARGADA Fecha firma: 07/04/2017 18:55:53 COT

FANNY SIERRA BONILLA
Acting Head of the Office of International Affairs
Ministry of Environment and Sustainable Development

Proyectó: Santiago Uribe Sáenz

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Ministerio del Ambiente

GOBIERNO NACIONAL DE LA REPUBLICA DEL ECUADOR

Oficio Nro. MAE-MAE-2017-0131-O

Quito, D.M., 11 de abril de 2017

Asunto: Endorsement for "Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area".

The Adaptation Fund Board
ADAPTATION FUND BOARD SECRETARIAT

In my capacity as Designated Authority of the Republic of Ecuador to the Adaptation Fund, I hereby, confirm that the above regional project concept is in accordance with the government's national and bilateral priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the border region between Colombia and Ecuador.

Accordingly, I am pleased to endorse the above concept of the project with support from the Adaptation Fund. If approved, the project will be implemented by the United Nations World Food Programme (WFP) and executed with the Grand Family Awá, the Network of Southern Pacific Community Councils (RECOMPAS) and the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE).

Sincerely,

Mgs. Walter Francisco García Cedeño
MINISTRO DEL AMBIENTE

Copia:
Señora Licenciada
Maria Victoria Chiriboga Nielsen
Subsecretaria de Cambio Climático

rg/dg/mc/fcf

ADAPTATION FUND

REGIONAL PROJECT PROPOSAL

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project:	Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area
Countries:	Colombia and Ecuador
Thematic Focal Area:	Food security
Type of Implementing Entity:	Multilateral Implementing Entity (MIE)
Implementing Entity:	United Nations World Food Programme (WFP)
Executing Entities:	Grand Family Awá, the Network of Southern Pacific Community Councils (RECOMPAS), the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE)
Partners and Designated Authorities:	Ministry of Environment and Sustainable Development (Colombia) and Ministry of Environment (Ecuador)
Amount of Financing Requested:	14,000,000 USD

Project Background and Context:

Introduction

Climate variability and shocks exacerbate the fragile food security and nutrition status of vulnerable communities living in the Colombia-Ecuador border area. This region is highly vulnerable to the short- and longer-term impacts of climate change and climate variability, due to its geographical location and rugged topography. The Mira-Mataje and Guaitara-Carchi binational watersheds are located along the Colombia-Ecuador border and are shared by Afro-descendants and Awá populations (See Map 1). This binational territory was selected for the proposed project because populations in these two critical watersheds have been historically marginalized and affected by the prolonged conflict in Colombia, and are particularly affected by environmental degradation which is exacerbated by both short-term and longer-term climate threats. Both Afro-descendants and Awá populations suffer from high levels of food insecurity, micronutrient deficiencies, chronic malnutrition and unsatisfied basic needs, a situation made worse by climate variability and shocks.

The prioritized binational watersheds display a number of diverse ecosystems, from the Pacific coastal mangroves, to dry and tropical humid forests in the higher elevations, and finally cloud forests and scrublands in the high Andes. These ecosystems are sensitive to climate variability and small changes in temperature and water availability, and are considered more likely to face rapid alterations as a result of climate change.[1] Climate variability and shocks compound the extensive environmental degradation of the two watersheds, in particular the over-exploitation of forests, crops planted on lands with high erosion rates in particular illegal monocultures , over-grazing in high altitude areas as well as decreasing access to water for consumption and crop production. In both binational watersheds, the population has expanded rapidly over the last thirty years, leaving many with limited access to basic services like healthcare and new technologies. An overreliance on extractive industries has led to enormous decrease in biodiversity and ecosystem service provision for Afro and Awá communities. Both losses continue to erode the vital ancestral knowledge that has, over the centuries, enabled the Awá and Afro-descendants to ensure their food security and nutrition, and manage their natural resources in harmony with mother earth.

The effects of climate change, including the increased frequency and intensity of extreme events, sea level rise and ocean acidification, combined with environmental degradation, exacerbate food insecurity and malnutrition by reducing access to productive assets and livelihoods. Thus, communities require sound planning and timely and accurate information to adapt to short and longer-term climate threats. Emerging climate threats intensify the challenges of reconstructing physical assets and the social fabric of affected indigenous and Afro communities, for example after natural disasters like the Ecuador earthquake in April 2016.

Faced with common threats, the governments of Colombia and Ecuador developed the Colombia-Ecuador Neighbor and Integration Commission and the Colombia-Ecuador Binational Border Commission (COMBIFRON). These commissions address climate change, environmental degradation, poverty reduction, food security and nutrition and reconciliation in the framework of peacebuilding along the 586 kilometer border.[2] The

[1] Nottingham, A. T., et al. 2015.

[2] These commissions are responsible for formulating, implementing and monitoring binational interest projects and border priority issues through the following binational technical committees: 1. Committee on Border Affairs 2. Infrastructure and Energy Committee 3. Environmental Affairs Committee 4. Committee on Economic and Business Affairs 5. Committee on Social and Cultural Affairs.

commissions target not only rural smallholder farmers but also the most vulnerable communities including Afro-descendants and Awá populations affected by climate shocks. Additionally, COMBIFRON decisions are binding to both countries.

The long-term increases in temperatures and precipitation in the tropical and dry forests are projected to reduce the fragile biodiversity of these ecosystems. As well, climate events, compounded by phenomena like the El Niño-Southern Oscillation (ENSO), will increase water scarcity and the frequency of acute crop losses in the short term and reduce food availability in the medium term. For example, the 2015-2016 El Niño phenomenon resulted in drought and forest fires, limiting water access and reducing crop yields in the border area and severely reducing incomes of communities in the binational watersheds. These negative impacts from reoccurring natural events are exacerbated by poor agriculture, land and fishing practices. In 2014 alone, over 4,000 ha were deforested in Nariño, Colombia; the majority converted for grazing and illicit monocultures. Between 2000 and 2012 the key coastal mangrove buffer areas of Cayapas-Mataje and Mache Chindul in Ecuador lost a combined total of over 80,000 Ha of forest tree cover translating into 12.8 and 7.6 percent respectively of their forest canopies.[3] These impacts are already limiting crop diversity, agricultural productivity and the ability of fragile mangrove and forest ecosystems to absorb and recover from short-term shocks.

Climate change adaptation with the objective of improving food and nutrition security provides an opportunity to reduce vulnerabilities and thus damages from climatic variability, while enhancing the adaptive capacities of women and men living in vulnerable conditions. Such actions also support peace building in Colombia and stability in the border area.[4] The government of Colombia and the Revolutionary Armed Forces of Colombia (FARC) have resolved issues that will now lead to peace building after the 60-year conflict. Afro and Awá populations living on both sides of the border were disproportionately impacted by the conflict, through forced displacements, environmental damage, limited access to productive assets and land, and poor social services. A stable peace is vital for both Colombia, where the former conflict destabilized communities, and Ecuador, where displaced Colombians sought refuge and the conflict spilled over the border. Ecuador currently hosts 60,329 Colombian refugees and 233,049 Colombians seeking refugee status.[5]

The constitutions of Colombia and Ecuador recognize the rights of ethnic minorities to self-governance and protection of their cultural identity, specifically their traditional practices for natural resource management.[6] Afro-descendent and Awá populations in the region have governance structures and coordination mechanisms within their communities and at binational levels (See Annex 3). This project will build local capacities to execute food security and nutrition and food autonomy in local production and consumption and climate change adaptation actions, while enhancing coordination between Afro and Awá governance structures and binational commissions and incorporating a gender sensitive approach. The project will promote food and nutrition security broadly, specifically autonomy in production and consumption as defined by local communities to promote self-sufficiency and adaptability in their food systems. Local capacities will be strengthened to produce and consume nutritious foods according to community values and cultures, with attention paid to the role of women in diversifying production and consumption patterns. The project will

3 Anderson, 2014
4 UNFCC 2014.
5 3 percent are in Carchí and 18 percent in Esmeraldas. Refugee Directory 2016.
6 Constitution of Ecuador, *Article 57*. Constitution of Colombia, *Chapter XI*.

promote the right of communities to develop their own food and agricultural systems through ecologically sound and culturally sensitive methods which reduce the risks associated with climate variability.

As women are involved in field work and can act as agents of change, gender equality and the empowerment of women and girls is key for building resilience to disasters and shocks and addressing the drivers of conflict. In the targeted binational territory, there is an urgent need to prevent violence against women and girls, ensure equitable access to social services and productive inputs and promote the equality of women in conflict resolution and decision-making processes. The increasing loss of forests and land degradation as well as declining quality and quantity of freshwater undermines the food security and livelihoods of women and men, limiting family food consumption and their ability to access alternative livelihood resources and essential services. This can lead to tension and violence within the family and community.

This Adaptation Fund (AF) project will generate local climate change adaptation responses with a focus on both community-based adaptation (CbA) and ecosystem-based adaptation (EbA) approaches to promote food security and nutrition. The strengthening of Awá and Afro institutional and community capacities in a culturally and conflict-sensitive manner, with a focus on gender, are other important expected results of the project. Also, this project presents an important opportunity to integrate climate change adaptation in Afro and indigenous development plans (Life Plans and Local Governance Plans) and binational watershed management plans, contributing to local economic development in historically marginalized areas.[7] This project will integrate and centred upon on local knowledge, abilities and opportunities which can be strengthen to increase local adaptation capacities. Importantly it will promote community ownership and participatory project design. It also explicitly recognizes the concrete relationship between adaptation to climate change and poverty reduction and food insecurity in vulnerable rural communities. Finally, it will support integrated approaches at the local level. An Environmental and Social Risk Management Plan and a gender assessment will facilitate the identification and assessments of risks (See Annex 8). The project will monitor all actions in the project to ensure that all measures support sustainable adaptation. These core elements of the strategy are developed in this project proposal and will be finalized with communities.

Under the framework of the binational working groups for border integration and peace, the proposed project would innovatively strengthen food security and nutrition, livelihood resilience, and climate change adaptation. Supporting binational priorities and capacity building of local organizations, communities and local institutions, the proposed project will be executed by the Grand Family Awá, through its organizational structure that covers both Colombia and Ecuador, and Afro organizations including the Colombian based Network of Southern Pacific Community Councils (RECOMPAS) and its Ecuadorean affiliate the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE). These organizations are permanent autonomous umbrella associations comprised of Afro and indigenous territorial authorities with strong coordination mechanisms between communities in the two countries and within their institutional structures. Selection of participating communities is based on food insecurity, malnutrition and vulnerability criteria applied in the two watersheds, with communities located in Putumayo and Nariño in Colombia, and Sucumbíos, Carchi and Esmeraldas in Ecuador.

[7] As Afro and Awá territories operate independently from the national territory, the Life Plans and local governance plans outline the community development and humanitarian objectives to guide local legal structures.

Importantly, this project proposes to implement climate change adaptation measures in the Mira-Mataje and Guaitara-Carchi binational watersheds along the Colombia-Ecuador border, contributing to strengthening food security and nutrition and, indirectly, confidence in peace, helping to bring stability to the border area. Specifically, the binational project aims to empower Afro and Awá institutions and communities to: 1) rescue traditional and local knowledge in support of adaptation and food security; 2) invest in measures to strengthen climate services in support of food security and nutrition, based on a cost-benefit analysis of adaptation measures; 3) prevent or minimize the impacts of climate events and shocks; 4) adapt to longer-term climate threats through community and institutional capacity strengthening; and 5) restore vital ecosystem services and diversify livelihoods away from resource extraction. All will contribute to reversing the marginalization that these ethnic groups have faced for over 50 years, contributing to food security and nutrition through adaptation to climate change.

MAP 1
Communities by River Subareas

Climate Vulnerability at National Levels

The Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) projected that in Latin America: a) tropical forests in the Amazon would be gradually replaced by savannas; b) semi-arid vegetation would be replaced by arid land vegetation; c) there would be a loss of biodiversity, with extinctions of species; and d) reductions in

agricultural and livestock productivity would occur with adverse consequences for food security and nutrition.[8]

According to the Institute of Hydrology, Meteorology, and Environmental Studies of Colombia (IDEAM), Colombia is highly vulnerable to the environmental effects associated with climate change. Already, multiple departments in the country are experiencing a higher incidence of extreme rainfall events, higher average temperatures and decreased levels of humidity. Glacial retreat is an emerging problem, with glacial areas losing 3 percent to 5 percent of coverage per year. Sea levels have been rising 3.4 millimeters (mm) per year,[9] threatening communities on the Caribbean and Pacific coasts. Approximately 47 percent of coastal mangroves, grasslands, scrublands and lagoons are considered at risk. With sea levels rising as much as 1 meter (m) by the end of the 21st century, 41 percent of the populations along the Pacific Coast will be vulnerable to periodic flooding.

According to the Ecuador's Ministry of the Environment (MAE), the country has experienced sustained increases in temperature, changes in frequency and intensity of extreme events (droughts, floods), changes in the hydrological regime and the retreat of glaciers.[10] Crucial is the variation recorded in the last ten years with intense precipitation in very short periods followed by periods of significant decrease in precipitation. As well, the retreat of glaciers in recent years is significant, with 20 to 30 percent loss of ice mass in the last 30 years. For example, studies show that between 1976 and 2005, the surface covered by glacial ice on the mountain Cotopaxi has decreased by 30 percent.[11]

High mountain agro-ecosystems in Ecuador are exposed to cyclical drought, thus glacier runoff, which is threatened by the retreating glaciers, is critical for providing mountain communities with reliable water sources and sustaining livelihoods. Likewise, coastal and estuarine ecosystems along the Pacific Coast and the Guayas River estuary are particularly exposed to rising sea levels and settlements in the low-lying coastal areas.[12] Over the past few years, increasing social conflicts surrounding water resources and watershed management in Ecuador have led to a growing public debate surrounding the need for policy reform in the water resources sector.[13] In 2014, the Ecuadorian congress passed a Law of Usage and Management of Water Resources which prohibits privatization and commercialization of water, making water subject to administration of public entities and communities.

Climate threats to the border area

The border area between Colombia and Ecuador is one of the most climate sensitive and food-insecure regions in Latin America.[14] The region's climate is heavily influenced by effects from the Inter-Tropical Convergence zone (ITCZ) and by other meteorological and geographic conditions related to solar radiation and wind and precipitation systems as well as recurrent climate change effects from La Niña and El Niño.

These factors influence not only macro- and micro-climates, but also a range of ecosystems within the region, including the coastal mangroves and inland dry and humid forest systems

[8] IPCC 2014. *Climate Change 2014: Synthesis Report*.
[9] NASA Goddard Space Flight Center 2016.
[10] Ecuador's National Environment Policy 2010.
[11] Cáceres, B, et al. 2005
[12] IPCC 2014: *Impacts,Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*. IPCC
[13] *The Water Conflict in Ecuador*. Columbia University. 2010.
[14] Seddon, A.W.R., et al. 2016. *Sensitivity of global terrestrial ecosystems to climate variability. Nature.*

which are prioritized for this project. The proposed project area encompasses more than 915,000 hectares in two binational watersheds – the Guaitara-Carchi and the Mira-Mataje. The Guaitara-Carchi watershed is key to the project owing its importance as an upland area and major tributary to the Mira-Mataje watershed where targeted communities are located. These watersheds pass through Nariño department in Colombia, and Carchi and Esmeraldas provinces in Ecuador. Approximately 54 percent of the combined watersheds area is in Colombia and 46 percent in Ecuador.[15]

Climate and weather patterns in much of the project area are also influenced by the Chiles-Cerro Negro-Cumbal volcano complex which dominates the landscape in the central and eastern part of the target area. These three volcanoes form a triangle with Cerro Negro (4450 m) and Chiles (4729 m) only three kilometers apart from each other straddling the border area, and Cumbal (4723 m) located approximately 20 kilometers further north. The complex's alpine *páramo* ecosystems and glacier meltwaters are the major source waters for both the Mira-Mataje and the Carchi-Guaitara target area watersheds. Within this volcanic triangle in Colombia, the important tributary San Juan River first flows westward to feed the Mira River, also named the Mataje River for its part which flows through Ecuador. The Carchi River, whose headwaters originate just south of the border in Ecuador, initially flows eastward and then turns northward to become the Guaitara River once in Colombia. These watersheds are not only important strategic hydrological systems for both countries, but also keys for biodiversity and food security owing to their flora and fauna.

Environmental conditions in these upper watershed reaches are obviously key to climate-related vulnerabilities in the middle and lower watershed zones, particularly for flooding and landslides. However, biodiversity and local microclimates themselves are also directly affected by the severe deforestation and accompanying erosion which has occurred in the area.[16] Alterations in the intensity of rainfall along with longer and extended periods of drought, are newfound changes in climate patterns noted by local residents. They represent a marked change from the previously dependable and balanced cycle of 6 months of dry and 6 months of wetter weather. These climate shocks and extremes put at risk all aspects of local agricultural production[17] and food security. Further, the longer periods of drought have brought with them a new vulnerability; wildfires. These were relatively unknown a few short decades ago.

Average annual rainfall varies between 2000-9000 mm in the border area. Rainfall patterns are bi-model, with two peak rainy periods between March-June and November-January and a dry period from July - August. The targeted watersheds consist of tropical climates- 0-800 meters above sea level (masl), with temperatures greater than 33° Celsius (C) and temperate climates- 800-1800 masl, with temperatures ranging from 8-24°C.[18]

Over the last three decades, a number of climate trends have become quite evident in the binational watersheds, including increasing rainfall variability, increasing temperatures and frequency of extreme climatic events. In addition there are rising sea levels, more frequent

[15] According to WFP Colombia research team, 2016

[16] See: Burgos Gonzales, Ana Cecilia y Gomes Velandia, Giselle Catalina Avances y retos en la gestión de las cuencas binacionales de Colombia: los casos de las cuencas hidrográficas internacionales colombo-ecuatorianas y colombo-venezolanas. Facultades de Ciencia Política y Gobierno y de Relaciones Internacionales. Centro de Estudios Políticos e Internacionales, Bogotá: Editorial Universidad del Rosario, 2007.

[17] Plan de Desarrollo y Ordenamiento Territorial del Cantón Mra, 2016 – 2019. Gobierno Autónomo Descentralizado del Cantón Mira.

[18] Tropical climates correspond to 71 percent of project area, while temperate climates represent 23 percent of the área.

storms and ocean warming and acidification.[19,20] These trends show extreme fluctuations, ranging from serious precipitation deficits to extensive intense rainfall associated with the southern and quasi-biennial oscillations of the ITCZ and ENSO. These longer-term climate trends threaten the livelihoods and fragile food security and nutrition of communities living in the border region particularly when combined with the negative impacts of deforestation and agricultural expansion. Table 1 shows that both climate vulnerability and agricultural expansion will increase over the century.

In the border region, maximum and minimum temperatures have been increasing – specifically, both days and nights are warmer.[21] According to climate scenarios generated by IDEAM for Colombia,[22] temperatures will increase by up to 2.6°C in the border region by 2100. Similarly, under RCP 4.5 climate scenario for 2100 predict temperature increases by up to 1.5°C in Esmeraldas and Carchi.[23] In western Nariño in Colombia, along the border with Esmeraldas in Ecuador, maximum annual temperature increased by 0.54°C per decade between 1975- 2011; and mean annual temperature increased by 0.05°C over the forty year period.[24] From 1960 – 2006, temperatures along the Ecuadorian coast increased by 0.5 – 0.6°C and temperatures in the Andes increased by 1.5°C.

TABLE 1
Climate Vulnerability and the Agricultural Expansion Index (AEI) [25]

Year	Vulnerabilities	AEI
2009	-17.8	52.2
2020	-48.2	61.9
2050	-53.0	75.5

In the period from 2005 to 2010 over 7722 km2 or 772,200 ha of forest lands in Colombia were converted for agricultural use. In the Andes region conversion into pastures accounted for 80% of the regional total[26]. Further in 2012-2013 over 120,000 Ha of natural forests were lost to deforestation nationally.[27]

According to Ecuador's Second National Communication on Climate Change, climate scenarios for 2090 predict an overall increase in precipitation by 9.78 percent in Carchi and 30.39 percent in Esmeraldas. However, a micro-watershed analysis of precipitation patterns in the Mira and Guaitara watersheds in Colombia predict decreases in precipitation over the century.

[19] IDEAM 2016.
[20] Sierra, R., et al. 2009.
[21] In Ecuador, between 1960- 2006, average annual temperatures increased by 0.8°C, maximum annual temperatures increased by 1.4°C and the minimum annual temperature increased by 1.0 °C. Source: GEF/UNDP/MAE 2011.
[22] For the Third National Communication on Climate Change
[23] CEPAL 2012.
[24] At 3,120 masl, in the Guaitara-Carchi watershed, in the semi-humid cold climate
[25] This study, conducted in Colombia, discovered that vulnerability to climate change will rise significantly by the year 2020 while the agricultural frontier will consistently expand. Source: National Climate Committee 2001.
[26] Nepstad etal, 2013

[27] Ministry of Environment of Colombia, 2015

In the border region, it has been observed that the intensity, frequency and duration of extreme events have increased, especially during ENSO. This phenomenon occurs in five-year cycles and scientists suggest that extreme events like flooding and drought, common during ENSO, are becoming more intense due to climate change.[28] During the 2010-2011 La Niña event, rainfall increased by 33 percent in the Mira-Mataje watershed; in 1988-1989, rainfall increased by 150 percent in the municipality of Barbacoas in Nariño. These extreme rainfall events resulted in landslides which isolated already marginalized communities. More recently, the 2016 El Niño phenomenon, the most severe on record in Latin America, resulted in prolonged drought and forest fires, limiting water access for human and animal consumption and decreasing crop production in the border area.

Within specific thermal micro-climates, these trends become more pronounced. In the hot, humid sub-zone of the Río Mira,[29] with average annual rainfall of 5400 mm, climate change has reduced the average rainfall between 50 and 60 percent over the last two decades. During El Niño events over the past decade there has been a 17 percent decrease in annual rainfall. Taking into account the downward trend it is anticipated that rainfall during future El Niño events will be even lower.

Climate Impacts and the Targeted Ecosystems

Mangroves
In the mangrove ecosystem that links Colombia and Ecuador along the Pacific Coast, rising sea levels, more intense storm surges, coastal flooding and soil saturation threaten mangrove seedling establishment and destroy older stands, thus reducing system resilience and the ability to provide vital ecosystem services to coastal and inland communities. Such services include aquaculture, protection from storm surges and erosion control.[30] Sea levels are estimated to rise by one meter this century. There are 124,173 hectares of mangroves in the Mira watershed (Colombia) and 18,060 hectares in Esmeraldas (Ecuador) potentially affected by climate change.

Loss of mangrove areas due to sea level rise, intense rainfall events and sedimentation negatively affect aquaculture and the production of estuarine species such as shellfish, red crab and sea bass for trade and consumption. In Ecuador, sea level rise will impact 21 percent of mangrove species with economic value by the end of the century.[31] Rising sea-levels and changing tidal and wind patterns impact fish catches, affecting availability for both trade and family consumption. Fishing and shellfish harvesting are affected by distinct climate threats; the expansion of saltwater into coastal groundwater sources and the disturbance of estuary soils by flooding rivers. Additionally, flooding of agricultural lands due to rising sea levels will impact not only fresh-water availability, but also income-generating opportunities like cacao, coconut and green plantain production. Additionally, climate change will exacerbate the expansion of tropical diseases and pests, affecting the balance of this fragile ecosystem.[32]

[28] Trenberth et al., 2003; IPCC Fourth Assessment Report: Climate Change 2007.
[29] Based on IDEAM's Caldas-Lang model for climate classifications.
[30] IDEAM 2014.
[31] CEPAL 2012.
[32] MAE 2011; Sierra, et al. 2009.

Páramos, mountain and forest ecosystems

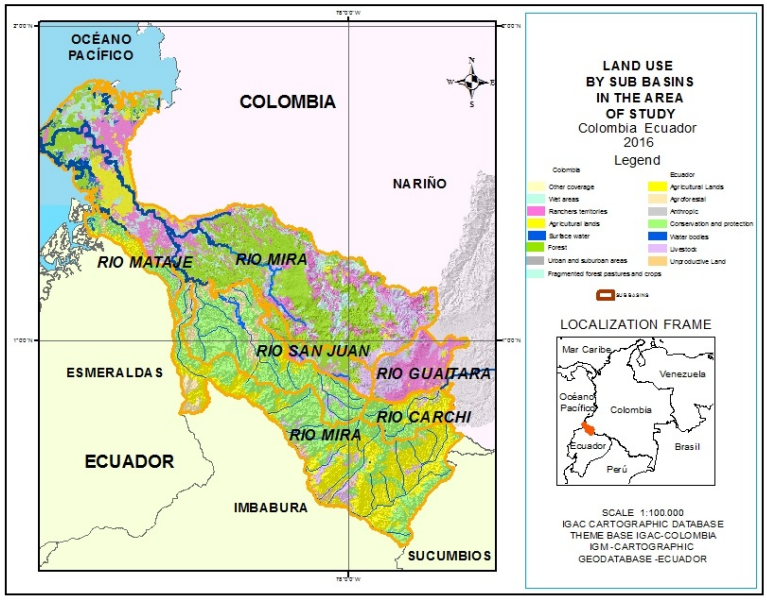
In tropical dry and tropical rainforest ecosystems of the binational watershed, climate change intensifies insect infestations. Long-term increases in temperature and decreases in rainfall in high-mountain ecosystems are projected to reduce the fragile biodiversity of these areas. These ecosystems are also predicted to experience severe water shortages. For example, the Guaitara River which is a critical water source for a range of uses, is expected to see water withdrawals increase by 50 percent due to land use patterns in the border region (See Map 2).

It is also important to note that Colombia has over 60 percent of the total global *páramo* area. These cold high-altitude wetlands generally are below any permanent snowline but above the altitude of continuous forest. In areas near the Equador-Colombia border this translates into between 3100 and 4000 metres in altitude.[33] *Páramos'* unique flora and fauna include giant rosette plants and a broad range of mammals, reptiles, birds, amphibians and insects not found in other ecosystems. Their role in sequestering carbon dioxide, as well as in filtering and purifying water in the upper reaches of watersheds, underlines their importance not only in terms of the hydrologic cycle, but also with respect to biodiversity, ecosystem health, and food security and nutrition.

The Andes in northern Ecuador experienced a temperature increase of 1.5°C from 1960 to 2006, a trend more evident in the mountain regions than along the coast.[34,35] As well, rainfall patterns were highly irregular with many extreme events. The humid plains and high Andean forests are anticipated to experience significant rainfall reductions by the end of the century while other landscapes such as low altitude wet Andean regions may expand.

[33] *http://www.copenhagenconsensus.com/sites/default/files/biodiversity_english_resource.pdf*
[34] UK Department for International Development (DFID) and World Wildlife Foundation (WWF) 2011. *Climate Change in a Living Landscape: Conceptual and Methodological Aspects of a Vulnerability Assessment in the Eastern Cordillera Real of Colombia, Ecuador and Peru.*
[35] Ecuador's National Development Plan (2013-2017) and Sierra et al. 2009

MAP 2
Land Use in Binational watersheds[36]



Marine species and vulnerability to climate change
Changes in temperature, circulation patterns and sea level will alter the availability of commercial marine species for local economies.[37] Specifically, cold water species such as tuna will decrease in abundance or migrate away from the equator, whereas high temperature tolerant species like marine shrimp will increase in abundance. ENSO-driven sea level rise impacts shellfish reproductive cycles and result in larval die-offs, especially during peak periods of reproduction between February and June.[38] Edible fresh-water species, such as cagua, chala and anchenda, have recently disappeared from the Mira watershed.

Crops and vulnerability to climate change
An important cash crop in the two binational watersheds is cacao. It grows best at 1300 masl, with temperatures between 22 and 30°C and average precipitation of 2500 mm. Due to climate variability by 2100, the projected rainfall decrease to 1500 mm/year will severely affect yields and production potential, destroying the livelihoods of smallholder farmers who are completely dependent on cacao sale.

Extreme climate events are also affecting the cultivation of plantain, which is a dietary staple for the Afro descendants on the coast. Plantain requires mean temperatures of 26-27°C and

[36] Map 2 shows the various soil uses in the binational the Guaitara-Carchi and Mira-Mataje.watersheds. Over 40 percent of lands are used for agriculture and livestock activities.
[37] FAO Newsroom. 2008. *Climate change will have strong impact on fisheries.*
[38] SwissAid 2009.

prolonged and regular rainfall. Cultivation is highly vulnerable to pests such as weevil and screw worm; these populations are expected to expand with increases in temperature. During extreme rainfall events, plantain crops can be affected by the sigatoka disease, commonly known as black leaf streak. Climate change is also affecting livestock productivity throughout the border region due to the reduced rainfall, extreme heat, degraded land areas and a shortage of pasture and climate-resistant forage.[39]

Food Security and Nutrition in Binational Watershed Communities

In the two watersheds food security and nutrition is related to production, access, utilization and stability constraints. Climate events negatively impact rain-fed agriculture as described above, as well as access to markets. Poor infrastructure combined with extreme events like heavy rainfalls cause landslides, damage roads and block access points, which increase costs for smallholder farmers making their products uncompetitive. Rising temperatures gradually change ecosystems, as plants and animals are redistributed according to their tolerance to heat, reducing vital ecosystem services. Changing composition in ecosystems has already limited dietary diversity in Awá communities whereas harvest yields in Afro-descendant communities have been reduced by increased climate variability and unpredictability and variability in precipitation and seasonality. This has limited community's abilities to accurately plan crop cultivation. A key contributing factor to community vulnerability in both binational watersheds is a lack of information concerning possible response options for dealing with climate variability, including early warning systems (EWS).

Awá and Afro-descendent peoples share the target area watersheds, which include frontier forests and other ecosystems that have become more susceptible to an influx of newcomers in recent decade where they are competing for fragile resources. The newcomers often engage in informal economic activities that affect the traditional way of life of the Awá and Afro-descendant communities. These activities include unstainable land management practices, overuse of chemicals in mining and illicit crop production, over-exploitation of water resources, expansion of the agriculture frontier and deforestation. In addition, the pressures on social structures are eroding traditional practices and knowledge that have helped to maintain social harmony and respect for nature for centuries. Other negative impacts related to labour practices, new consumer goods and introduction of invasive species have already affected the culture, livelihoods of ethnic communities, and their access to native species in the two targeted watersheds. A decrease in native species, when combined with more intense climate risks, threatens survival of many communities whose sole livelihood depends on these fragile ecosystems. Consequently, adaptation planning and concrete actions that strengthen the livelihoods of Awá and Afro communities is a priority for both Colombia and Ecuador.

Colombians who fled the conflict are particularly vulnerable to food insecurity; 70 percent of recent arrivals to Ecuador are food insecure and 24 percent of displaced children suffer from malnutrition.[40,41] A number of factors contribute to their vulnerability, including: inadequate access to social services, conflict between mining and agriculture, deforestation, the contamination and depletion of aquifers and climate change and variability.

Peace and border stability offers an opportunity for both Colombia and Ecuador to improve community resilience and food security through rehabilitation of degraded lands, investment

[39] CIAT. 2014.
[40] WFP Ecuador. 2015.
[41] Del Castillo, M., et al. 2014.

in agricultural systems and climate services and an increased access to high quality and diverse diets; the latter particularly important during the dry season.[42] In the border area, Afro-descendants and the Awá are dependent on fishing and agriculture and many lack formal employment and access to education due to the remoteness of their territories, exclusionary development policies and the armed conflict. Opportunities for economic advancement and the potential to build more resilient livelihoods are minimal; this greatly impacts food security and nutrition and the potential to adapt to a changing climate.

Nutrition Situation

According to the WFP's 2014 Vulnerability and Mapping Analysis and a national nutrition survey, approximately 43 percent of Colombians consider themselves food insecure due to lack of access to basic staples and nutritious foods.[43] In Ecuador the situation is similar.[44] Afro-descendent and Awá populations living in the border area between Colombia and Ecuador face high levels of malnutrition and insufficient food consumption. Chronic malnutrition in children under five reaches nearly 70 percent in indigenous territories in both countries, compared to 13 percent nationally in Colombia and 25 percent in Ecuador.[45]

Malnutrition in all its forms is worse in rural indigenous and Afro communities in both Colombia and Ecuador. The triple burden – obesity, under-nutrition and micronutrient deficiencies – is an increasing problem in the border region. In the Pacific region of Colombia, 60 percent of Awá children under five suffer from chronic malnutrition and 10 percent suffer from acute malnutrition. In this area, 42 percent of children aged 1-4 register vitamin A deficiencies and 41.2 percent of children under five have anemia. Lack of micronutrients, specifically iron deficiencies, is a principal cause of child death. In the binational watershed municipality of Tumaco, infant mortality rates reach up to 58 percent.[46] Chronic malnutrition is 36.4 percent and the prevalence of obesity in children over five is 3.2 percent in the binational watershed municipality of Barbacoas. In Ricaurte, 60 percent of children aged 10-18 and 36.4 percent of children under two face chronic malnutrition.[47]

Ecuador reports high levels of chronic malnutrition in children under five in the border area, with 17.7 percent in Esmeraldas and 33.2 percent in Carchi. For indigenous populations in Carchi, this rate climbs to 51 percent.[48] While these numbers are astoundingly high, they likely underestimate the prevalence of both chronic malnutrition and obesity in Afro-descendent and Awá populations because the numbers come from departmental health centers. These institutions are typically located far away from communities.

In Nariño, up to 79 percent of families registered poor food consumption and 75 percent lack access to basic services.[49] In 2005, government census data showed that the rate of Unmet Basic Needs reaches up to 90 percent,[50] particularly in rural populations in the Barbacaos municipality in Nariño. In this municipality, 40 percent of children are not breast-fed.[51] In Ecuador, 56.8 percent of families in Esmeraldas and 32.6 percent of families in Carchi

[42] REDD+
[43] Colombian Institute for Family Wellbeing (ICBF). National Nutrition Survey for Colombia (ENSIN). 2005.
[44] Life Condition Survey. 2014.
[45] UNDP
[46] Municipal Food and Nutrition Security Table of Tumaco 2012; *Food and Nutrition Plan for Afro and Indigenous People of the Tumaco Municipality for the Colombian Pacific (2012-2022)*
[47] Departmental Health Institute of Nariño (2015)
[48] https://www.minsalud.gov.co/Documentos%20y%20Publicaciones/An%C3%A1lisis%20de%20situaci%C3%B3n%20de%20salud%20por%20regiones.pdf (2014); Encuesta Nacional de Salud y Nutrición Ecuador
[49] WFP Emergency Food Security Assessment (EFSA) (April 2016)
[50] DANE. 2010.
[51] Departmental Health Institute of Nariño. 2015.

registered poor food consumption in 2014. The rate of Unmet Basic Needs reaches 56.3 percent in Esmeraldas and 24.5 percent in Carchi, but climbs to 60 percent for indigenous communities in these provinces.[52]

Cultural and socio-economic Context of Afro-Descendants

The worldview of Afro descendants derives from slavery experiences and centers around connections between community and land. Traditional knowledge plays an important role on how resources have been historically by the communities in the project area. However, in Colombia and Ecuador today there is not an strong identity with nationality[53].

Along the Pacific Coast, the main economic drivers include: cacao, plantain and coconut production, natural rubber and palm oil production, artisanal fishing and shellfish collection, as well as wood extraction and an emerging tourism industry. In highland territories, the Afro economy centers on small livestock production (pigs and goats) and subsistence agriculture, including the cultivation of beans, maize, sugar cane, avocado, fruits and pepper. Both agriculture and fishing livelihoods are vulnerable to climate change, particularly rising sea levels that impact mangrove ecosystems and subsistence agricultural lands, putting populations at risk of food insecurity. The Pacific coast of the border region has been heavily impacted by deforestation and illegal activities such as illicit monoculture production. In both Colombia and Ecuador, palm oil production has resulted in forest clear-cutting and the expansion of the agricultural frontier**.**

Reconciliation and building confidence in peace will require actions to strengthen Afro cultural identity, territorial and natural resource protection and living in harmony with nature and realization of social rights, all pillars of Afro-descendant society. There are approximately 40,000 Afro-descendent women and 33,000 men in the border municipality of Tumaco who have been victims of the conflict.[54] With the Colombian Government discussing implementation of the peace agreement with FARC, displaced people are gradually returning to their lands and livelihoods.

Cultural and socio-economic context of the Awá

The Awá share a worldview or cosmovision which shapes their relationship with each other, the spiritual world and the environment. The Awá foster an integral relationship between people and their environment, linking the spiritual with the worldly. The Awá consider that their territory ("Katsa su") is structured into four independent worlds: the lower world (Maza Su= Ishkum Awá); the world where they live (Pas Su= Awaruzpa); the world of the dead (Kutña Su=irittuspa) and the world of the gods (Ampara Su= Katsamika). These worlds are spiritually interconnected and shape how they view and manage their environment.

In Awá tradition, the economy is based on reciprocity and solidarity rather than accumulation or monetary remuneration. The indigenous economy is based on the use of diverse skills and knowledge that traditionally have allowed for a sustainable use of available natural resources. Specifically, the Awá tend to engage in limited hunting and fishing for subsistence, gathering of non-timber forest products and agriculture for self-consumption

[52] Life Condition Survey. 2014.

[53] Ordoñez, Angélica. 2001. El futuro en la nación. La identidad Afro desde el Consejo Regional de Palenques. Informe final del concurso: culturas and identidades en América Latina y el Caribe. Programa regional de becas CLACSO.

[54] Departmental Health Institute of Nariño. 2015.

(maize, bananas and yucca). These subsistence activities are mostly carried out at an individual, family or collective level and livelihoods have traditionally not depended on waged labour

The traditional economy of Awá communities depends almost exclusively on traditional and local knowledge, encompassing ecological, environmental and cultural knowledge which in the past was orally transmitted from generation to generation by women in Awápit, the local language. The prohibition of Awápit use by armed forces in the area, have directly threatened intergenerational knowledge transmission and reduced livelihoods opportunities. The challenges present in preserving traditional ways of life are exacerbated by the conflict, mega projects and the introduction of market economies that have resulted in significant social costs for the Awá in particular, weakening their relationship with nature and their traditional systems of reciprocity and previously sustainable living practices.

The advance of extractive activities, especially logging, oil palm plantations, mining and illicit monocultures, have decreased the quality of life of the Awá people, for example their hunting and gathering opportunities. This forces them to develop alternative coping strategies to survive, including cutting forests and planting pastures for grazing cows, or the extensive cultivation of rice, beans, and even illicit monocultures. All put additional pressures on already degraded soils. In extreme situations, such as with the recent intense *El Niño* event, and in times of scarcity of natural resource availability, people have started to migrate to towns in search of paid daily work.

Having been historically marginalized, the Awá have vigorously maintained their political autonomy and defended their territories against threats of violence; including recently against the influx of the extractive sector and illegal activities. In Colombia, there are over 2,400 Awá women and 2,166 men who have been victims of the conflict. In Ecuador, the Awá have been threatened by a range of extractive and intrusive operations (wood, palm oil and mining). These operations in conjunction with recent ENSO-related phenomena have severely restricted access to water, negatively affecting FSN, livelihoods and incomes.

Gender Analysis of Target Population

In both binational watersheds, women face higher levels of vulnerability to climate change than men. Women are more likely to die during and after disasters because they lack access to EWS, knowledge of survival skills and freedom of movement. Additionally, they often cannot access relief services or receive compensation for property losses because they lack property titles. In many indigenous communities residents do not speak Spanish. While women make up the majority of the labor force in mangrove shellfish harvesting and smallholder farming operations, they have limited roles in decision-making. Empowering women and enhancing their role in adapting to climate change will be essential for bettering family food security and nutrition.

In the targeted binational territories, women have lower education levels, less access to credit, and less participation in decision-making mechanisms. In the Pacific region, women die from preventable diseases due to lack of access to adequate health care. Violence impacts women including intimate partner violence, violence from conflict, and femicides, all prevalent in both Awá and Afro societies. Violence was identified as a critical issue by Awá

women in addition to insufficient access to health services and prioritization of gender in government policies.[55]

Gender inequality, as measured by UNDP's Gender Inequality Index (2013), is 46.0 in Colombia and 42.9 in Ecuador; these are both above South America's average of 41.6. The Awá and Afro-descendant peoples are characterized by gender-based inequalities within their cultures and communities. However, the role women play and the constraints they face are quite different in the two communities. While Afro women are very active in the organizational structures of their communities, Awá women have a more discrete level of participation in governance. In terms of livelihoods Afro women living in mangrove communities have a significant level of control over the extraction of seashells or "conchas" (a key income generation activity in these communities). However, women are at a distinct disadvantage in financial matters, and within the family they often do not have control over the income they receive, especially from informal markets or labour. Control over income is a key factor contributing to family violence in Afro communities.

Awá women are usually in charge of animal husbandry and handicraft production, but often receive very low compensation for their finished goods and are subject to the decisions of middlemen. As education levels are low and young women are expected to produce offspring, their livelihood options are severely limited. As well, young girls are not given the same treatment as boys in many communities (shorter breast feeding times for girls so that the women can more quickly produce a boy for example). Importantly, as the natural resources they depend upon become less available due to climate shocks and environmental degradation, traditional livelihoods and income generation opportunities for Afro and Awá women are increasingly at risk.

Despite these inequities, Afro and Awá societies do promote women in certain types of decision-making. In Afro society, the ethno-development plan of RECOMPAS promotes gender equality and the empowerment of women in environmental management practices and includes women on community councils, their main governance structure. Similarly, the Life Plan of the Awá promotes the participation of women in certain decision-making spaces. However, the actual implementation of such policies can be slow to take effect; women have not yet achieved the equity and true empowerment needed to face the new realities associated with climate change.

Climate Change Adaptation, Food Security and Peace

In December of 2016, the Colombian government and FARC rebels signed a peace agreement which provides an opportunity for communities in the Colombia-Ecuador border region to rehabilitate their lands, integrate their traditions and livelihoods and work to improve community food security and nutrition. Climate change adaptation and peace are mutually reinforcing, as enhancing community capacities to adapt to climate variability reduces conflict risk. At the same time peace-building actions that address weak governance and socio-economic issues strengthen joint adaptation actions.[56] CbA and EbA approaches are tools to support peace-building and develop culturally sensitive models to address both social and economic injustices as well as the potential damages from increasing climatic variability.

[55] Defensoría del Pueblo. 2011.
[56] Smith, D. and Vivenkananda, J. 2007.

Project Objectives

This project proposes to strengthen food security and nutrition through climate change adaptation measures in two watershed on the Colombia-Ecuador border area in accordance with the binational working groups', and Awa and Afro community´s priorities. Project actions will contribute to reversing the marginalization that Afro and Awá communities have faced from the social and environmental damage from the conflict and contribute to peace and reconciliation through adaptation to climate change.

The project aims to achieve the following high-level objectives:

1) Reduce climate vulnerabilities of local Afro and indigenous communities and the ecosystems they depend on, promoting food security and nutrition and gender equality, and contributing to the construction of peace; and

2) Strengthen adaptive capacities of Afro and indigenous communities in the cross-border region and strengthen regional institutions to address the threats posed by climate change.

Project Components and Financing

Outcome / Output	Activity	COUNTRIES	TOTAL USD
Component 1: Increase community awareness and knowledge on climate change risks and food security and nutrition in two border binational watersheds			**1.781.500**
1.1. Traditional and local knowledge recovered to support sustainable adaptation measures, food security and nutrition, and resilient livelihoods.	1.1.1. One study per watershed produced on traditional and local practices, promoting resilience to climate change and variability in the targeted binational watersheds, with community participation, a gender sensitive approach and particular attention to ancestral and native plant and tree species that can improve dietary diversity and are resilient to climate change	**Colombia Ecuador**	169.200
	1.1.2. Feasibility study conducted with communities to assess the potential for marketing native species for medicinal, artisanal, food and fodder related uses at regional and departmental levels	**Colombia Ecuador**	56.400
	1.1.3. Workshops, dialogues and cultural events (including fairs) organized to disseminate study results to 120 Afro and Awá communities, leaders and decision makers, in local languages. Equitable participation of men and women will be promoted	**Colombia Ecuador**	430.200
1.2 Traditional knowledge related to climate change threats and adaptation measures integrated in community dialogues and decision-making processes.	1.2.1. In 120 communities, leaders, community members and women groups trained on climate change threats with culturally and gender sensitive methods. Equitable participation of men and women will be promoted	**Colombia Ecuador**	200.200
	1.2.2. Dialogues, fairs and exchanges involving 120 communities, leaders and community members on food security, nutrition and healthy living habits, considering climate threats, with special focus on diversifying diets and increasing incomes from the production and sale of native species and products. Equitable participation and opportunities of men and women will be promoted	**Colombia Ecuador**	150.000
	1.2.3. One binational web-based adaptation learning platform in use	**Colombia Ecuador**	150.000
	1.2.4. Compilations and sharing of best practices on risk reduction and risk management actions at binational watershed level, considering ecosystem type and emphasizing traditional and local knowledge	**Colombia Ecuador**	625.500[57]

[57] Upon further consultation with community members, an increase in funding for knowledge management, including the sharing best practices, was agreed to.

Component 2: Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition			**1.681.800**
2.1. Increase scientific knowledge to manage climate change and risk, affecting food security and nutrition.	2.1.1**.** Studies at the binational watershed level produced on: 1) water provision considering climate threats; 2) ecosystem vulnerability in the face of climate change and variability and extreme events; 3) food security and nutrition in risk prone communities project area and 4) a gender assessment	**Colombia Ecuador**	761.300
2.2. Risk reduction capacity of binational institutions and communities strengthened, including leveraging climate services.	2.2.1. Binational Early Warning Systems introduced, specifically tailored to inform the Afro and Awá communities about extreme events. Additionally, climate services will be introduced to include agro-meteorological data; vulnerability mapping, with a focus on crop yields and cycles; and climate risks in mangrove and high-mountain ecosystems	**Colombia Ecuador**	700.500
	2.2.2. Approximately 120 leaders and community members trained in Emergency Preparedness and Response and understanding and planning for climate threats with a focus on gender	**Colombia Ecuador**	220.000
Component 3: Reduce recurrent climate vulnerabilities through innovative community and ecosystem-driven adaption measures that reduce food insecurity			**8.320.500**
3.1. Improved access to livelihood assets, enhanced resilience and reduced risks from climate shocks in food-insecure communities and households.	3.1.1**.** Participatory approaches developed, interfacing scientific and traditional knowledge	**Colombia Ecuador**	40.000
	3.1.2. Effective adaptation measures designed and implemented incorporating participatory approaches, traditional and local knowledge and tested techniques, and promoting equal opportunities for access to resources for women and men to recover degraded ecosystems in 120 communities	**Colombia Ecuador**	3.800.000
	3.1.3. Community water harvesting, storage and management measures introduced	**Colombia Ecuador**	1.300.000
	3.1.4. Cost-benefit analysis of proposed adaptation measures at micro-watershed level	**Colombia Ecuador**	220.000
	3.1.5. Native species reintroduced to diversify production and consumption and for commercialization, including introduction of organic and agro-ecological crop production practices and ocean species	**Colombia Ecuador**	1.280.500
3.2 Increased adaptive capacity and ecosystem resilience to respond to climate threats and food insecurity.	3.2.1. Soil management activities implemented, including agro-forestry and native nitrogen-fixing species	**Colombia Ecuador**	780.000

	3.2.2. Conservation and recovery of 3,000 ha of forest ecosystems and 2,000 ha of mangroves threatened by climate change through tree planting and forest management actions, at the micro-watershed level, with species that are native and resistant to climate variability, in line with national plans	**Colombia Ecuador**	900.000
Project Components		**11.783.800**	
Project Execution 9.5%		**1.119.400**	
Total Project Cost		**12.903.200**	
MIE Management Fees 8,5%		**1.096.800**	
Total Financing requested		**14.000.000**	

Projected Calendar

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	June 2017
Mid-term Evaulation	January 2020
Project/Programme Closing	May 2022
Terminal Evaluation	May 2022

PART II: PROJECT JUSTIFICATION

A. Project Components

The governments of Colombia and Ecuador recognize the importance of territorial and differential approaches, especially in strengthening the role of Afro and Awá communities within the priorities of the binational technical commissions on Environmental Affairs and Social and Cultural Affairs.[58] The project additionally aligns with the Paris Agreement through leveraging local knowledge on adaptation into relevant socioeconomic and environmental frameworks.[59] The Constitutions of Colombia and Ecuador promote adopting traditional and local knowledge for natural resource management. In support of these overarching policy directions the project will adopt a culturally, conflict- and gender- sensitive territorial approach using CbA and EbA approaches. This project will address climate change, climate variability, and shocks related to extreme events in the two targeted watersheds in the border region of Colombia and Ecuador, contributing to food security and nutrition through the following three components:

Component 1: Increase community awareness and knowledge on climate change risks and food security and nutrition in two border binational watersheds;
Component 2: Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition; and
Component 3: Reduce recurrent climate vulnerabilities through innovative community and ecosystem-driven adaption measures that reduce food insecurity

This project will support national strategies for climate change by specifically addressing local exposure to climate change risks, in particular as they affect food security and nutrition.

[58] The Environmental Affairs Binational Technical Committee focuses on integrated management of binational watersheds, protection of biodiversity and disaster risk reduction activities. Within the Social and Cultural Affairs Binational Technical Committee, there is a sub-committee on Afro and indigenous affairs, which focuses on environmental matters, political, educational and institutional strengthening and protection and human rights.

[59] Article 7, bullet point no. 05. *"Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate."*

The project will incorporate the territorial and differential approaches promoted in the recently signed peace agreement in Colombia (Havana Peace Agreement 2016). The specific economic, cultural and social conditions of local communities and territories will be assessed to include peace building and community solidarity. Actions promoting social and environmental sustainability will also contribute to peace as community development and economic progress will help build confidence in local and national institutions.

The binational territorial approach will be coordinated at four levels: national, departmental/provincial, municipal and communal, with implementation of concrete measures at community level. However, coordination will be strengthened at all levels through concrete management mechanisms and the active involvement of the project management committee. Participatory methodologies, tools and planning approaches will be developed as part of the project, with the aim of broader application in other binational watersheds. The project recognizes that the Awá and Afro cultures do not live within current territorial or administrative borders, rather their sense of territory and belonging is embedded in their historical lands which cover the border area of Colombia and Ecuador. Thus, the project has adapted a regional or binational approach to adequately consider the context of the Awa and Afro communities affected by climate variability.

The project is innovative and highly cost-effective due to its binational watershed approach, which will result in several cost-savings and efficiencies (See Part II Section D). The commitment and local knowledge of executing partners, including the Grand Family Awá, RECOMPAS and CANE, will contribute to locally-driven planning and execution, thus helping .to ensure ownership and the high potential for replicability, scalability and the sustainability of this regional project.

Importantly, WFP has technical and management capacity in the proposed departments including sub-office presence in the targeted territory.[60] WFP has worked for over a decade with the targeted Afro and Awá communities and is recognized for improving food security and nutrition, and building resilience at community level in the area. The organization frequently works in sensitive situations and can access remote territories.

Components

1) **Component 1:** Increase community awareness and knowledge on climate change risks and food security and nutrition security in the binational watersheds

Objective: *Integrate, with full participation of Afro and Awá communities, traditional knowledge and capacities to manage climate change risks and food security and nutrition in targeted binational watersheds.*

All activities under this component will raise awareness and understanding of climate risks and adaptation solutions, with special attention given to integrating ancestral knowledge, with a culturally and gender sensitive lens and a focus on food security and nutrition. Afro and Awá communities are faced with increasing fragmentation of their social structures due to external forces like environmental damage and the influx of mega projects, which accelerate the loss of traditional and local knowledge. In accordance with IPCC recommendations, integration of cultures, local languages and traditional knowledge are means to strengthen social fabrics and connect younger generations with community elders,

[60] In Colombia - Pasto, Nariño. In Ecuador – Tulcan, Carchi and San Lorenzo, Esmeraldas.

promoting the transfer of knowledge and practices.[61] Specific traditional practices and knowledge to integrate and exchange include: traditional medicinal practices with native plants that are resilient to climate variation, native plant and crop species resistant to climate change for food production and diet diversification and traditional food preparation practices. Thus, attention will be given to promoting collective memory, the role of women and reintroducing traditional music to communicate climate threats, risk reduction measures and concrete response measures.

This component will build cultural spaces to integrate traditional practices and promote inter-generational dialogue and learning, with the participation of women, youth and community elders. All training will involve the equitable participation of men and women. Such spaces include community events to present and discuss climate threats and responses. Importantly, a portfolio of studies will be produced to document traditional and local knowledge for community climate change adaptation and food security, including the identification of adaptation measures that include gender considerations and target women and girls. Specifically, the studies will drive the introduction of concrete adaptation measures through: 1) inventories on native species resilient to climate variability; 2) an inventory of ancestral and native foods that can improve dietary diversity; and 3) a feasibility analysis on transforming ocean, forest and crop species into higher value products and marketing these products (medicinal plants, grains, fruits, vegetables, fodder, and shellfish) for local and regional exchange and trade (See Table 2). These inventories will be completed jointly with community leaders and will be shared in print and online with relevant stakeholders, such as the Colombia-Ecuador Neighbor and Integration Commission and the Colombia-Ecuador Binational Border Commission –COMBIFRON.

With a focus on generating knowledge, exchanging practices, sharing study findings, and promoting a better understanding of climate threats and adaptation solutions, cultures will be strengthened and communities become more cohesive. Strengthened binational institutional and community capacities will lead to more informed decisions on climate change and food security and nutrition, with culturally and gender-sensitive actions. This component includes two outcomes and seven outputs aligned to activities which aim to increase awareness at binational, territorial and community levels.

TABLE 2
Studies and Analyses in Component 1

Study	Description
Traditional practices	Inventory of tree and plant species resilient to climate variation (extreme changes in temperature and precipitation levels)
	Inventory of ancestral, traditional and native food crops that can improve dietary diversity and planting practices that are resilient to climate variability
Increasing value added of native species	Feasibility analysis on the potential to transform and market native species (shellfish from mangrove ecosystems) and crops (medicinal plants, grains, fruits, vegetables and fodder) for exchange and regional markets

Outputs 1.1.1 and 1.1.2 will build a compendium of information on traditional and local practices for climate change adaptation and food security and nutrition as described above. Through knowledge sharing events such as workshops and cultural fairs (***Output 1.1.3)***, the

[61] IPCC. 2014. *Articles 4 and 5*

results of these studies will be disseminated at binational (the Colombia-Ecuador Neighbor and Integration Commission), territorial and community levels to inform decision-making on climate change adaptation responses, conservation of ancestral knowledge and biodiversity and income generation opportunities, with gender considerations and a focus on food security and nutrition practices.

Outputs 1.2.1. and 1.2.2. will focus on training activities to effectively promote dialogue and the exchange of experiences between different actors including territorial authorities, nutritionists, community leaders, ensuring the equitable involvement of youth, community elders and women in Afro and Awá communities. Events will involve the equitable participation and opportunities of men and women. These knowledge and information-sharing events will focus on inter-generational exchanges between elders and youth on how to adapt to climate threats, mitigate risks, recover, conserve and transform traditional native species for medicinal use, diversify family diets and sell agricultural products. A gender sensitive approach will be integrated in all training modules and awareness campaigns. Under ***Outputs 1.2.3.*** **and** ***1.2.4.,*** lessons learned and best practices on community risk reduction and management actions from communities will be compiled and shared with community leaders, governmental entities, and binational commissions through a web-based platform. This platform will incorporate lessons learned from previous ENSO phenomena and consider local context and ecosystem type and emphasize traditional and local knowledge. The platform will be managed on a regional basis, and is expected to involve binational entities such as the Colombia-Ecuador Neighbor and Integration Commission.

2) **Component 2:** Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition

Objective: *Strengthen knowledge generation to effectively plan, design and implement adaptation responses in highly food insecure communities, considering emergency preparation and response actions.*

All activities under this component will enhance scientific knowledge and community understanding of climate change threats and potential adaptation solutions, linking food security and nutrition with an ecosystem perspective. Currently, Afro and Awá territories lack adequate planning information and tools at territorial and regional levels. With increasing climate variability, changes in crop cycles and rainfall patterns and extreme events, communities are facing growing unpredictability, and, thus, vulnerability. Therefore, this component will help build a concrete scientific knowledge base about the binational watersheds as a means to enhance community capacities to respond to climate threats, complementing existing climate scenarios at national levels.

Scientific studies include: climate variability and extreme event vulnerability analysis in the binational watersheds, water provision and hydro-climatic risks evaluation in the binational watersheds considering the importance for irrigation and human consumption, native species and crop vulnerability to increasing temperatures and a baseline ecosystem vulnerability assessment (See Table 3).

To link traditional and local knowledge with scientific information, these national climate scenarios and new scientific studies will feed into culturally and gender-sensitive EWS and

climate services in binational communities, with agro-meteorological data enhanced, and vulnerability mapping networks adapted to the micro-watershed level. Threat mitigation recommendations will also be provided, based in traditional and local knowledge. A key aspect of the EWS and climate services will be recommendations on agro- and hydro-climatic management related to important forest, mangrove and crops species for promoting dietary diversity, as well as recommendations tailored to women. Information will be collected, processed and managed at the local and regional levels to strengthen articulation with national hydro-climatological networks. A needs assessment will be conducted to evaluate local capacities for messaging services, looking at different modes of communication depending on level of access and preferences at the community level. Thus, communities will have concrete information on climate threats and appropriate risk reduction and risk mitigation measures at micro-watershed level. In coordination with Ecuador's National Institute of Meteorology and Hydrology (INAMHI) and IDEAM, the project will identify climate information gaps in the border region and establish monitoring stations in strategic areas as necessary.

Emergency preparedness and response (EPR) training with regional community leaders, government officials as well as women, youth and community elders, will ensure that the appropriate territorial institutions will have the capacity to respond to the threats identified in the climatic studies and interpret and implement EWSs in local contexts. All EPR training will be coordinated with national disaster management authorities Regional EPR workshops will involve technical experts from binational commissions such as the Colombia-Ecuador Neighbor and Integration Commission and the Colombia-Ecuador Binational Border Commission –COMBIFRON. This will provide opportunities to strengthen binational risk assessments and contingency planning efforts. All scientific information will be customized to Afro and Awá community needs and the EPR training will involve traditional and local knowledge on emergency response and mitigation measures and have a gender focus. Scientific information and workshops will be translated into local languages in easily understandable materials, depending on literacy levels.

Importantly, under this component, climate change adaptation and risk management will be incorporated into territorial planning. The plans will be adjusted to prioritize adaptation measures including appropriate budgets, in accordance with national climate scenarios and vulnerability analyses that are part of the National Communications on Climate Change to the IPCC. This will support decision-making in both countries, as well as effective implementation of adaptation measures and incorporation of lessons learned at local and national levels. This component will additionally promote coordination between local, regional, national and binational authorities to guarantee project sustainability and replicability.

Outputs 2.1.1. will build a portfolio of scientific information on climate change threats and risks at the micro-watershed level, with a focus on binational mangrove forests. The project will analyze gaps in climate knowledge on the micro-watershed level and then fill these gaps, considering: climate variability and extreme events (local climate scenarios in the short, medium and long-term); water provision and hydro-climatic risks in the two binational watersheds important for irrigation and aqueducts; and an analysis on how native crops important for dietary diversity will shift along altitudinal lines due to increasing temperatures. Building on the Colombia and Ecuador National Communications on Climate Change, climate and environmental assessments will be carried out at watershed level, analyzing vulnerability of specific communities and groups, women and men, to climate change threats

and level of ecosystem degradation. In order to ensure the integration of gender-responsive activities needs in the implementation stage, a gender assessment will be carried out (for details see Annex 11).

Output 2.2.1. will focus on enhancing regional institutional capacity through improved climate services and climate information generated in ***Output 2.1.1.***, targeting binational institutions and regional leaders, not only in the Afro and Awá communities but also territorial governmental entities, including the Autonomous Decentralized Government (GAD) of Carchi and Esmeraldas, and technical agencies like IDEAM and Corponariño (the Autonomous Environmental Authority of Nariño). Binational EWS targeting the micro-watershed level will be strengthened by filling climate information gaps using seasonal forecasts, agro-meteorological data, and vulnerability mapping networks. Weekly and monthly radio bulletins (a total of five per month) will reach isolated communities in both Spanish and Awápit, the language of the Awá. A community participatory agro-climatic climate services focused on the timing of crop planting and harvesting cycles will be developed jointly with the Afro and Awá, in accordance with their traditional experiences. Bulletins will be integrated with other climate services provided by national and regional entities in Colombia and Ecuador. These participatory climate services will monitor climate risks related to the following variables: shellfish productivity, crop growth, diversity and the cropping cycles. A needs assessment will be performed to analyze gaps in current information available to communities and the preferred medium for communication (radio, sms, and others).

Output 2.2.2. will conduct EPR training with a gender focus with regional women and men community leaders and government officials in the Mira-Mataje and Guaitara-Carchi watersheds, with at least 120 community leaders trained. These trainings will be coordinated and implemented jointly with the National Risk Management Secretariat (SGR) and the National Water Secretariat in Ecuador, and the National Risk Management Unit (UNGRD) in Colombia. They will link agricultural production with hydro-climatic threats, in order to build local capacity to identify and mitigate the impact of emergency situations. Mapping tools such as GIS will be used to view the potential social impact of natural disasters on the Awá and Afro-descendent populations. Activities with leaders will also include participatory agro-climatic assessments and analysis of climate predictions and crop vulnerability at the local level, in order to build local capacities to conduct such assessments and disseminate results as a preventative mechanism and improve decision-making.

TABLE 3
Studies and Analyses in Component 2

Study Theme	Description
Climate	A gap analysis to identify the information needs in priority micro-watershed territories, involving local and regional institutions
	Analysis of climate variability and extreme events in the binational watersheds- both on the coast and in the Andean region, considering local climate scenarios
	Analysis of water provision and hydro-climatic risks in binational watersheds important for irrigation and aqueducts, to identify the most at-risk areas to climate variability. Special consideration will be paid to threats and risks in dry forest and mangrove ecosystems. This includes a multi-

	temporal analysis of land-cover as well as identification of risk scenarios or landslides flooding and forest fires
	Analysis of native crop risk to changing temperature regimes in binational watersheds. This includes an analysis on how native crops and shellfish important for dietary diversity will shift along altitudinal lines due to increasing temperatures

3) **Component 3:** Reduce recurrent climate vulnerabilities through innovative community- and ecosystem-driven adaption measures that reduce food insecurity

Objective: *Strengthen adaptive capacity of highly food insecure communities to reduce climate risks and food insecurity and improve community resilience in targeted populations through concrete adaptation measures, promoting gender equality and the equal treatment of women and men and recognizing their differentiated vulnerabilities.*

This component will support community identification, planning, and implementation of concrete adaptation actions to enhance resilience to climate and environmental threats. Afro and Awá territories are vulnerable not only to climate change and climate variability, but also to environmental damage from illegal commercial activities and the former conflict. While concrete adaptation activities are a means to improve ecosystem service provision, binational watersheds communities lack the capacity to implement large-scale conservation initiatives in their territories. All concrete adaptation activities will respond to the climate threats identified in component 2 and involve the participation of community youth, women and elders. In line with these climate threats and local priorities, communities will select from a portfolio of feasible concrete adaptation activities, which link scientific and traditional and local knowledge of Afro and Awá populations. These activities will be designed with support from local technical experts, including local universities, scientific research organizations and territorial government entities to ensure high technical capacity. All actions will be identified by the community through a participatory process that involves women, men, elders and adolescents, and incorporated in community-based adaptation plans. These plans specify the adaptation measure, resources to be allocated, roles and responsibilities for development and maintenance of community assets, including community contributions. Specific results to be achieved will be highlighted in addition to the timeframe for completion of the activity.

The non-climatic drivers of deforestation, forest conversion, environmental degradation and social inequalities and marginalization are addressed differently by the Awá and Afro-descendent people. The former tend to increasingly adopt integral renewable natural resource management practices which will increase the effectiveness of their production initiatives. They also try to reduce the potential for squatters, logging, and mining within their lands. As for the Afro, the massive loss of traditional lands, has so far led them to increasingly rely on waged work, local trade and migration in order to cope with these non-climatic drivers.

By focusing on activities that strengthen environmental integrity and productivity, this component will help construct resilient ecosystems and agricultural systems, improve ecosystem service provision and strengthen institutional and community capacities to implement such measures even after the project end-date. This component will thus

enhance natural resource and ecosystem integrity and integrate traditional and local knowledge for adaptation and contribute to reconciliation and peace-building.

A methodology that interfaces scientific and traditional knowledge will be developed in ***Output 3.1.1.*** with the participation of communities and scientific actors, in accordance with the Paris Agreement, Article 7. ***Outputs 3.1.2., 3.1.3., and 3.1.5.*** use a CbA approach, focusing on linking traditional and local knowledge with scientific information for climate change adaptation. Community-level activities considered under this component include the introduction of environmentally sensitive community water harvesting, storage and management measures as well as the promotion of sustainable land management practices, all contributing to both livelihood and risk mitigation objectives. Activities also include the cultivation and transformation of traditional products like cacao, banana, chiro, chilman, beans, corn, yuyo, chiangua and papacun, as well as of traditional medicinal plants. The use of native seeds that are resilient to climate variability, traditional farming techniques, as well as the introduction of organic and agro-ecological crop production practices will be encouraged to diversify risk and income sources.

The production of these native crops and medicinal plants, many of which provide important nutrients, will not only contribute to an improvement in the quality and diversity of diets in targeted communities, but will also represent an additional income generation source particularly once they are transformed and market opportunities are identified for specific products. Potential commercialization opportunities already exist for local medicinal plants which have a very high value in local markets. Targeted communities need training in this regard, particularly in the identification of marketing opportunities in order to exploit this potential.

The additional income is expected to benefit in particular women members of Afro and Awá households, and women will be encouraged to take a lead in these transformation and commercialization related activities. The income generation opportunities associated with the production, transformation and commercialization of local products are also expected to reduce the necessity of Afro and Awá communities to resort to negative coping strategies which are environmentally damaging, such as resource extraction (through illegal mining and logging). As well, they present an alternative to the adoption of extensive agriculture and mono-culture production models (such as the production of rice, beans, bananas, corn and illicit monocultures).

Cost-benefit analyses of proposed adaptation measures will be conducted at the micro-watershed level to assess financial/technical viability of priority adaptation measures considering potential to reduce hydro-climatic risks on food security and nutrition with a gender focus (***Output 3.1.3.***). These adaptation activities will consider the climate threats and analyses in components 1 and 2, based on adjusted crop calendars considering climate variability and changes in rainfall patterns and temperatures (See Table 4).

Outputs 3.2.1. and 3.2.2. consider an EbA approach, focusing on integrating culturally-sensitive scientific information into the design and implementation of adaptation actions. Climate change has brought with it a new wave of vulnerabilities which, when combined with other social and natural threats, has greatly affected local peoples. The proposed project measures will respond to climate threats in the two watersheds (See Table 4) with actions that include training activities, reforestation, recovery of fish and shellfish stocks, and selection, storage and propagation of resistant native seeds. As these measures focus on

use of the traditional knowledge of the targeted communities, they can be readily adopted and incorporated into the project. The project will also address the need for dependable sources and quality of water through appropriate technologies such as rainwater capture and harvesting, fog harvesting and water distribution systems.

One of the most popular forms of collecting water for community water reservoirs in this region is through installation of water-catchment tanks (aljibes) below the roofs of houses for agricultural purposes. This is amongst the most cost-efficient of methods to address water shortages including those which occur in the coastal mangrove forest area. These activities will also align with national priorities and programmes for ecosystem restoration. Measures will not only address the severe nutritional and environmental threats, but also promote gender equity, tap into sources of ancestral and traditional knowledge, and promote independent sources of food and income-generating activities. Communities will implement these measures jointly with technical support of experts from organizations such as Corponariño, decentralized autonomous governments of Carchi and Esmeraldas, MAE, MADS, the Ministry of Agriculture, Livestock, Aquaculture and Fisheries of Ecuador (MAGAP) and The Center for Tropical Agriculture (CIAT). These activities build on identified climate threats in the binational watersheds and complement activities based in local and traditional knowledge above (See Table 2). Incentives such as restricted cash-based transfers (CBT) may be considered to promote family agriculture, healthy life-styles and nutrition. These incentives would be considered without discouraging frameworks of community-based asset creation models that are adapted to local practice, whereby community members collectively provide part of their time and labour to voluntarily participate in activities that will benefit the community (locally called “Mingas”).

A key focus in all of these measures is the empowering of women as providers for their families and communities while improving their livelihoods and addressing gender inequalities. The promotion of fish as a protein source and recovery of native species, as well as the creation of traditional gardens and agricultural plots will not only enable community food security, but also generate much needed income. In addition, community resilience to other aspects of climate change will be promoted. Overall, the project implementation approach will be uniform for all communities. Nonetheless, specific adaptation sub-activity methods in mangrove and forest zones will differ from other areas of the watersheds due to basic differences in aquatic and forest ecosystem types, as well as variables related to social, cultural and community structure.

All of the activities in Component 3 have been designed through a participatory approach with targeted communities in order to integrate traditional knowledge, reintroduce native species, conserve soils, access clean water and recover degraded ecosystems for the 120 communities of focus. There are no major infrastructure activities in this project and a rigorous activity screening followed by adequate activity design will ensure that there will be no adverse effect on the environment or on the communities.

TABLE 4
Project Activities in Component 3

Livelihood Resource	Climate threat	Livelihood risk	Adaptation Solution (to address livelihood risks)	Sub-Activities
Soil	Drought Intense periods of precipitation.	Reduced soil fertility and productive capacity Landslides Loss of arable lands Loss of crop diversity and dietary diversity	Improvement of soil quality through the introduction and recovery of vegetation cover and use of good agricultural practices, to mitigate impacts of heavy rains in areas highly affected by erosion and drought	Vegetative recovery of affected soils Wind breaks *Terraces*, bunds and retention structures Introduction of agroforestry and silvopastoral systems Family gardens and introduction of organic products
Water	Drought Intense periods of precipitation which contaminate water sources	Reduced water for agriculture production Water source contamination	Implementation of water storage, capture and harvesting systems to increase water availability for agricultural use	Community water reservoirs[62] Fog harvesting[63]
Ecosystems -Forest, Mangrove	Intense concentrated rains and accompanying land and mud slides	Reduction in ecosystems services- forest and non-wood forest products	Protection and regeneration of forest areas, incorporating ancestral knowledge	Native species seed collection and storage Establishment of nurseries Tree planting[64] to reforest and fill gaps Animal management to prevent encroachment

[62] **Community water reservoirs** will be developed in open areas without any disturbance to surrounding natural resources including rivers or streams. All materials used will be eco-friendly and dimensions of such structures will be determined in close consultation with communities as well as government experts.
[63] **Fog harvesting** consists of a single or double layer mesh net supported by two posts rising from the ground. Water droplets that collect on the mesh run downwards due to gravity and channeled via pipes to a storage tank.
[64] **Trees** will be native varieties and will be verified by CIAT and the governments before planting.

	Combined effects of repeated and persistent droughts, short and intense rainfall and abrupt changes of temperature	Reduced ecosystem productivity, availability of nutritious foods, subsistence opportunities and incomes (from ecosystem services)	Diversification of food production, consumption, leading to improved health of the population. Integration of traditional practices to ensure food security	Training Reforestation Ponds preparation for fisheries[65] Seed selection Commercialisation and transformation of products
	Reduction in rainfall; temperature increases	Reduced availability of fish, molluscs and forest products for consumption Reduced diet diversity (reduced protein intake) Reduced incomes	Increased adaptive capacity, through the recovery of mangrove and tropical forests to ensure sustainable livelihoods and food security	Protection of fish spawning areas through water level regulation Propagation of mangroves Development of supply chains and market access for fish, molluscs and forest products Barriers (vegetative or other natural materials)

[65] **Pond preparation** for fishery will be done in existing dried ponds or in open spaces without any disturbance to surrounding natural resources including rivers or streams. Fertilization of ponds will be organic.

B. New and Innovative Solutions to Climate Change Adaptation

As the border region is characterized by a multitude of challenges, innovative approaches that are sustainable and efficient are required. The proposed binational project has many pioneering aspects supporting the national strategies, international frameworks, geographical focus, targeted population groups and implementation mechanisms. The project's components have a potential to improve climate resilience, enhance levels of food security and nutrition, create economic opportunities, prolong peace, regenerate lost knowledge and provide an opportunity to combine scientific evidence with indigenous solutions.

The unique solutions provided by the project include: 1) leveraging climate and ecosystem services to strengthen community resilience with respect to food security and nutrition; 2) implementing solutions for adaptation, risk reduction and environmental recovery, combining traditional and local knowledge with scientific findings;[66,67] 3) strengthening culture and local economies by working with marginalized binational Afro and Awá communities to address their own climate threats and years of marginalization; 4) empowering women to be agents of climate change adaptation and identifying adaptation measures with gender considerations; and 5) using climate change adaptation as an approach for promoting reconciliation within watersheds impacted by the former conflict. In addition to the above, the following are the key features of the project:

- *Innovative approaches* - This project creatively combines institutional and community empowerment to address the interrelated challenges posed by climate change and environmental degradation and their effect on food security and nutrition. The challenges of climate change and environment will be addressed through integrated approaches that promote resilience, gender equality and peace-building. Strategically, introducing adaptation measures to support reconciliation and peacebuilding is ground-breaking, not only for Colombia and Ecuador but in and outside the Latin America and Caribbean (LAC) region. Knowledge and lessons learned from the implementation of the project can bring about a paradigm shift and be replicated and scaled-up in other regions. For example, WFP in Colombia has introduced a web-based platform to transfer nutrition messages, including recipes and the nutrition value of local foods. This platform can be expanded to include climate messages and early warning information.
- *Pioneering solutions* - Climate services will include the first binational EWS specifically tailored to Afro and indigenous community needs and government priorities in Colombia and Ecuador. Systems will be translated to local languages such as Awápit, adapted to local hazard risks and used in community decision making for adaptation planning. An existing web-based platform (NutriFami*)* developed by WFP in local languages will be adapted to include actionable information on climate threats, early warning messages and potentially market information. The project could potentially increase the number of meteorological stations where gaps exist in the network.[68] Additionally, the use of innovative

[66] Berkes, F., Colding, J. and Folke, C. 2000.
[67] Bandaranayake, W.M. 1998.
[68] Subject to agreement with stakeholders, maintenance costs would be covered by local governments.

solutions including fog harvesting for livestock watering would be considered based on a feasibility analysis in selected parts of the watersheds. These actions will also contribute to constructing peace in Colombia, which will also generate benefits for Ecuador by helping to stabilize the border region.

- *Generating climate information* – The project aims to expand and link regional monitoring networks with community risks, in order to improve both information quality at the national and information access for decision making at the local level. These monitoring networks cover both mangrove and inland ecosystems, allowing ecosystem detection of climate trends, anomalies and emergencies. Given the binational vulnerability to long term climate and short term weather phenomenon, and the importance of monitoring these events, the project proposes to strengthen and involve communities in the monitoring of marine indicators, providing valuable information for the Global Ocean Observing System (GOOS). The project will expand access to information that communities will be able to use for climate change adaptation planning, as the region has a low density of stations.

- *Capturing traditional knowledge* - This project will be the first initiative in Colombia and Ecuador which will use traditional knowledge from Afro and Awá communities for environmental conservation and adaptation planning.[69] In addition, the emphasis on reintroducing native species which are resilient in the face of diverse climate events will require a special focus on seed collection, propagation storage and dissemination. Other, similar efforts have only disseminated hybrid seeds, which in some cases has affected the ownership and sustainability of agricultural activities.

C. Economic, social and environmental benefits

Afro and Awá communities in the binational watersheds are vulnerable to the impacts of climate change and climate variability, with already evident damage to their livelihoods, and food security and nutrition. By rehabilitating degraded and disaster-prone areas through an EbA approach, vulnerable populations will have better access to ecosystem services and safe water that will improve well-being and nutrition outcomes. Of critical importance is the sustainable provision of water for human, animal and production purposes. The sound management of water would allow for the introduction of new livelihood activities. The Awá specifically mentioned the idea of fish ponds and medicinal plant production. Using community participatory planning, reinforced with culturally and gender sensitive climate information, this project will inform in local adaptation as well as peace building, which are mutually reinforcing. The project will follow 'do no harm' principles and avoid any processes or activities that will fuel tensions in the binational territories. Enhanced local adaptive capacities will improve risk management and livelihood stability in the face of natural disasters and empower communities to cope with climate change.

The project will promote inter-sectorial coordination and territorial collaboration in line with binational agreements to ensure that economic, social and environmental benefits are integrated at all steps of project design and implementation. The project will also enforce the WFP Gender Policy and the WFP Gender Action Plan for Latin-America and will ensure that women and men benefit equitably from project activities. In the absence of this project, the

[69] https://www.minambiente.gov.co/index.php/component/content/article?id=1363:el-uso-sostenible-de-los-bosques-prioridad-de-minambiente-598

baseline scenario would see continuing deterioration in ecosystem integrity and household food security and nutritional status, which could erode territorial stability in the post-conflict phase, affecting both sides of the border.

Economic benefits
Agricultural and productive activities occur in approximately 40 percent of the binational watersheds. Rising temperatures, decreasing precipitation, the increasing frequency of extreme events in micro-watersheds and sea level rise that floods agricultural lands threaten the sustainability of territorial agricultural economies through: 1) reduced crop yields of cacao and plantains; 2) reduced water access for livestock and cultivation purposes ; 3) reduced access to ecosystem services, including marine products; and 4) reduced market access due to flooding and landslide events. Through agro-forestry, agro-climatic early warning systems and ecosystem rehabilitation with native species, the project will sustainably increase incomes in the short and medium term, generating the following economic benefits:

1. Reduction in harvest and post-harvest losses and waste due to lack of information on temperature/rainfall patterns through the generation and sharing of traditional and scientific information linked to early warning and contingency planning.
2. Reduction in losses and damages to assets from landslides and mudslides through increase in vegetative cover for soil fixation.
3. Increased capacity to diversify planting and other livelihood strategies, considering climate variability through improved access to agro-climatic information from EWSs, training and the introduction and testing of diversified planting models.
4. Improved incomes from the cultivation, transformation and sale of native crops and products in regional markets based on feasibility studies, including less water intensive species such as moringa and others mentioned above.
5. Reduction in outmigration due to increased livelihood opportunities and a focus on integrating traditional practices and cultures, and their promotion through cultural events and training.
6. Increased benefits in sales with better demand for specific markets, for example organic products.
7. Better community coordination; when communities are organized, sales chains are reduced via direct market access, allowing farmers higher revenues from production.
8. Introduction of new techniques like permaculture, reducing agricultural inputs.
9. Improvement in yields and potential reduction in inputs requirement promoted by technical assistance and training activities.
10. Savings in expenses due to a better and balanced nutrition, preventing frequent diet related diseases. This could lead to a potential improvement in life expectation especially for the Awá people.
11. Reduced cost of purchased food, through the adoption of sustainable agricultural production for community and household consumption.
12. Increased ecosystem services, for example for the sustainable provision of wood as a reliable construction material.

Environmental benefits
Binational watersheds are vulnerable to the over use and degradation of soils, as 22.5 percent of the Mira watershed faces soil degradation and 4.3 percent registers soil over-use.[70] Thus, ecosystems are more vulnerable to climate threats and increasing climate

[70] According to WFP Colombia research team, 2016

variability through: 1) reduced absorptive capacity of ecosystems during extreme rainfall events; and 2) lowered ecosystem service provision of degraded ecosystems. Through reforestation of 3,000 ha of forest and 2,000 ha of mangroves, as well as forest restoration and water conservation activities, Afro and Awá communities will prosper from the following benefits:

1. Reduction in erosion and soil loss due to extreme climate events contributing to higher yields.
2. Increase in reforested and protected areas and forest related ecosystem services, including water and non-wood forest product provision, and wood for a variety of uses.
3. Conservation of biodiversity which would contribute to livelihood protection in addition to environmental benefits.
4. Rehabilitation of mangrove areas threatened by environmental degradation.
5. Maintenance of soil fertility and increased genetic diversity.
6. Reduction in monocultures, which also reduces use of insecticides and environmentally hazardous chemical fertilizers.

Social benefits

This project prioritizes women and vulnerable ethnic populations, which is in line with the Paris Agreement and the Constitutions of Colombia and Ecuador. Afro and Awá communities have faced historic marginalization, damage to their lands from climatic and anthropogenic events, as well as adverse impacts from Colombia's armed conflict. As mentioned above, in Afro and indigenous communities, women are particularly at risk due to gender inequality, gender-based violence and cultural barriers that affect their food security and nutrition. Despite making up more than half the population, women have not yet achieved equality in the economic, social, political and cultural power structures of Colombia and Ecuador. The project will contribute to gender equality, through strategies to empower women and girls with concrete commitments to ensure equal rights, access and opportunities for participation and leadership in the project, and in community decision-making. In addition, the empowerment of women through this project support Colombia's Havana peace agreement and will contribute to peace building and strengthening of social networks, benefiting both countries.

The project will make a concerted effort to reduce the historical marginalization that has affected both Afro and Awá populations in the shared border regions of Colombia and Ecuador. In accordance with the Lima Work Programme, the project will proactively integrate gender-responsive climate actions and culturally sensitive programming through: a) training and awareness-raising for Awá and Afro female and male participants on issues related to climate change, culture and gender; and b) working with women to integrate traditional and local knowledge for natural resource management and food security and nutrition (Component 1). The project will provide equal opportunity to build resilience to women and men while contributing to address data gaps on gender-related vulnerabilities and taking into account the experiences and knowledge of women and men participating of the project. Through these actions the project will generate the following social benefits:

1. Increased participation of Afro and Awá women in decision-making process for identifying, planning and implementing climate change adaptation strategies and actions.

2. Strengthened community organization and social cohesion and empowerment of both women and men to participate in activity planning and implementation.
3. Increased capacities of women, youth and elders to rehabilitate and manage natural assets contributing to the protection of natural resources, risk reduction and livelihood strengthening.
4. Diversified diets and improved nutrition through the promotion of native species and traditional dietary practices.
5. Increased commitment to reconciliation and peace-building through training and cultural events.
6. Improved water access and quality for crop production and animal use.
7. Increased recognition of Afro and Awá cultures, particularly their traditional practices and knowledge.
8. Reduction in time dedicated to water supply and transportation, especially for women and children, due to better systems of water storage and management.
9. Integration of traditional practices, including barter, can potentially increase associative capacity and leverage of community members to negotiate prices and products in markets.

D. Cost-effectiveness of Project Activities

The project is cost-effective and the regional approach supports cost-effectiveness in the following ways:

- *Resource efficiency* - Implementing concrete adaptation activities with community ownership is cost effective when properly executed and is the most sustainable means to achieve scalable and long-term results within the border watersheds. The cost-effectiveness of concrete adaptation activities, as outlined in Component 3, will be enhanced through a detailed cost efficiency analysis for each adaptation measure, using a methodology developed by WFP, which compares measurable outcomes with feasible options and risk analyses. This community-level analysis will help ensure that the most cost-effective options are implemented during project design and implementation (See Annex 11).

  A financial feasibility study will be carried out to assess how to improve the profitability of marketing traditional and local species and products. The proposed project will build on and complement activities with the focus on food security and adaptation approaches such as CbA and EbA to address climate change threats. Through a regional approach, the co-benefits are doubled as one set of resources generate productive outcomes for two countries, which individual projects would have achieved using twice the resources (human as well as material resources).

- *CbA* - According to a CARE study,[71] CbA makes strong economic sense, leading to social, environmental and economic improvements even in a volatile and evolving environment. Projects in communities in Kenya showed that "investing £1 ($1.68) in CbA generates between £1.45 ($2.44) and £3.03 ($5.09) of wealth for communities". In the most conservative scenario, intervention costs were still 2.6 times lower than

[71] Community-Based Adaptation In Practice: A global overview of CARE International's practice of Community-Based Adaptation (CBA) to climate change

doing nothing to counter the impacts of climate change and extreme events (and then having to respond to disasters).

- *EbA* - Enhancing ecosystems resilience can restore natural protection against extreme climatic events. Several studies have suggested that EbA actions result in a greater benefit/cost ratio compared to the implementation of hard infrastructure. EbA can complement, or be substitute for, more expensive measures to protect vulnerable settlements and sectors.[72] For example, as natural buffers, ecosystems are often cheaper to maintain, and often more cost-effective than physical engineering structures such as dykes or concrete walls.[73] A cost-benefit analysis of all EbA activities will help ensure the long-term financial sustainability of project activities and outcomes.

- *Optimizing geographical reach* - Working at territorial levels will allow the regional project to reach approximately 30 additional communities in comparison with individual country projects[74]. This project will determine the most efficient routes to access remote areas, facilitating access to populations that migrate across the border. WFP sub offices located on both sides of the border are familiar with various logistical options that will generate cost savings, such as accessing remote areas from either Colombia or Ecuador, depending on input and transport costs and exchange rates at the time of implementation. Additionally, cross border actions will allow both countries to share information and avoid duplication.

- *Multiple co-benefits* - Protecting and enhancing ecosystems and biodiversity can provide social, economic and environmental benefits.[75] The multiple-benefits offer the opportunity to integrate adaptation priorities with development processes, for example the new Sustainable Development Goals, and Agenda 2030. The regional project will not only lead to more resilient systems, but also to the development of new jobs and new ways of thinking for communities as well as policy makers. Thus, the project and its adaptation focus will contribute to a win-win situation, with strategies that address multiple objectives aimed at minimizing anthropogenic stresses.

- *Building national and regional capacities* - Working with binational territorial and regional institutions increases efficiencies and builds long-term capacities to respond to climate-change related disasters. The economic benefits generated from project interventions will be significant when compared with the initial investment, especially when considered at the decade time frame. The project will also address the issue of ad-hoc and small scale adaptation efforts through its binational watershed approach. The integrated focus on the management of natural resources, processes to integrate ancestral knowledge to reduce and mitigate climate change related risks, and opportunities for income generation actions will increase the cost effectiveness. Using one set of resources to generate a menu of actionable solutions for communities in both countries, with replication potential generates cost savings and reduces duplication. Strategically located adaptation assets, meteorological stations

[72] World Bank. 2009.
[73] Colls, et al. 2009.
[74] Estimation based on logistical costs for WFP in Colombia and Ecuador.
[75] Piran, et al. 2009.

and early warning systems at the land- scape level will lead to broader coverage and impact.

Coherent approaches at a watershed- and binational-levels will help eliminate externalities and result in economies of scale which could be lifesaving in the case of preventing and responding to emergency situations. Finally, improvements in nutritional status generate savings for the family, community and national economies, especially if measured in disability adjusted life years (DALYs). Nutrition outcomes are crucial for achieving not only Sustainable Development Goal 2- Zero Hunger, but all other goals in the Agenda 2030.

- *Proven benefits of concrete adaptation measures* – Proposed concrete adaptation measures combining traditional knowledge of Awá and Afro communities with modern technologies reduce costs for communities. Additionally, proposed activities increase income and access to sources of nutritious foods and improve provision of ecosystem services. The project will be highly profitable for participating families, with a projected net benefit of up to 2,200 USD per family after the first year of implementation due to diversified and increased production and enhanced marketing opportunities.

- *Replication and scaling up of proven technological solutions* – An existing web-based platform (NutriFami*)* developed by WFP in local languages will be adapted to include actionable information on climate threats, early warning messages, and potentially market information. The existing system provides a cost-effective means of disseminating relevant information in a timely manner and avoids the duplication of establishing new information systems.

E. Alignment with National and Binational Priorities

The project supports binational and national climate change, development, food security and nutrition, and peace objectives in Colombia and Ecuador. These objectives align with a number of strategies and plans, including: the Binational Plan for Border Integration 2014-2022, the Colombia's National Food Security and Nutrition Plan 2012-2019, and the National Climate Change Adaptation Plan (PNACC), Colombia's National Development Plan, the Ecuadorian National Strategy for Climate Change 2012-2025, the Ecuadorian National Strategy to Change the Productive Matrix, Ecuadorian Strategy for Equality and Poverty Eradication and the Ecuadorian National Plan for Good Living. Relevant binational, national and territorial plans which the project will complement and support are presented in Table 5, highlighting convergence at the component level.

The Governments of Colombia and Ecuador have developed a Neighbor and Integration Commission in order to more effectively coordinate binational agendas, initiatives and priorities. Under the framework of this commission, there are the following Binational Technical Committees: 1. Border Affairs, 2. Energy and Infrastructure, 3. Environmental Affairs, 4. Economic and Commercial Affairs and 5. Social and Cultural Affairs. This project aligns specifically with these committees by prioritizing environmental protection, culture and traditional knowledge, employment and income generation, and cross-boundary watershed management. The Colombia and Ecuador Neighbourhood and Integration Commission will benefit from this initiative as it will provide a basis for additional advocacy for bi-national

projects and the implementation of projects closely associated with the priorities of both national Governments, local and regional authorities, and communities.

The project observes the relevant regulations on gender in Colombia and Ecuador, including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the national constitutions of both countries and other policies as the National Policy for Gender Equality and the National Policy Guidance on Protection and Guarantee of the Rights of Women Victims of the Armed Conflict in Colombia.

The project also aligns and supports the Environmental and Cultural Territorial Plan for the Awá and their local information collecting initiative, Traditional Knowledge Associated with the Conservation of Biodiversity. Lastly, the proposed project supports WFP's global mandate and the following strategic objectives: SO2 which supports food security and nutrition and rebuild livelihoods in fragile settings following emergencies; and SO3 which reduces risk and enables people, communities and countries to meet their own food and nutrition needs. The project also aligns with: Sustainable Development Goals 2 (Zero Hunger), 5 (Gender Equality), 13 (Climate Action) and 17 (Partnerships for the Goals).

TABLE 5
Relevant Policies and Links with Project Components

BINATIONAL		
BINATIONAL	***Binational Plan for Border Integration Ecuador-Colombia 2014-2022*** *promotes poverty eradication, peace and territorial integration for the Border Integration Zone Ecuador-Colombia (ZIFEC)*	***Components 1, 2 and 3***
BINATIONAL	***Binational Development Plan Colombia-Ecuador*** *guarantees the rights of nature and promotes global and territorial environmental sustainability, mitigation and adaptation measures to reduce economic and environmental vulnerabilities*	***Components 1, 2 and 3***
BINATIONAL	***Life Plan of the Grand Family Awá*** *recognizes the link between food security and nutrition and climate change and promotes the recovery of plants used in traditional medicine, ancestral farming practices and native seeds, as well as commercialization of native species*	***Components 1 and 3***
BINATIONAL	***Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)*** *requires State parties to eliminate discrimination against women in all its forms. It also seeks to achieve substantive equality between women and men – not just in laws but in reality. It thus requires both de jure and de facto equality. It further requires eliminating individual acts of discrimination and taking insightful initiatives to transform institutional practices to respect, protect and fulfill women's equality rights.*	***Components 1, 2 and 3***
NATIONAL		
Constitutions		
COLOMBIA	***Colombian Constitution (1991):*** *Article 80. Establishes as a duty of the State, the management of the planning and use of natural resources to ensure sustainable development, conservation, restoration and*	***Components 2 and 3***

	replacement. Chapter XI establishes the Rights of Indigenous People in Colombia. Specifically, Article 7 establishes that the State recognizes and protects the ethnic and cultural diversity of the Colombian nation	
ECUADOR	***Ecuadorian Constitution (2008)**: Article 414 mandates that the State shall take appropriate and transversal measures for climate change mitigation and protect populations at risk. Chapter Four establishes the rights of communities, peoples and nations. Specifically, in Article 57, the Constitution outlines the right of Afro and Indigenous populations to freely uphold, develop and strengthen their identity, ancestral traditions and forms of social organization* *Article 11 numeral 2, establishes: "The exercise of the rights will be governed by the following principles ... 2. All people are equal and enjoy the same rights, duties and opportunities. No one shall be discriminated against on grounds of [...] sex, gender identity ...; Nor by any other distinction, personal or collective, temporary or permanent, whose object or result is to impair or nullify the recognition, enjoyment or exercise of rights".*	***Components 2 and 3***
National Development Plans		
COLOMBIA	***The National Development Plan 2014-2018** defines peace as an opportunity to reduce the economic and environmental impacts from the armed conflict and generate social benefits for affected populations and to drive the sustainable use of natural resources and climate change mitigation and adaptation. This plan aims to strengthen the synergies between adaptation and mitigation, based on socio-ecosystem adaptation and resilience in sectorial and territorial planning. Importantly for this project it also sets the Goal of Zero chronic malnutrition in Colombia and identifies the importance of territorial and differential approaches with a strong focus on ethnic populations*	***Components 1, 2 and 3***
ECUADOR	***The National Plan for Good Living 2013-2017** promotes adaptation and mitigation to climate change. Several of the objectives of the plan are to build spaces for social interaction and strengthen national identity, diverse identities, pluri-nationality and interculturality. It guarantees the rights of Nature and promotes environmental sustainability to foster social and territorial equity, cohesion, inclusion and equality in diversity*	***Components 1, 2 and 3***
National Climate Change Policies		
COLOMBIA	***The National Plan for Climate Change Adaptation (PNACC)** defines priorities for Climate Change Adaptation in Colombia, aimed to reduce risks and impacts related to climate change, and identify and take advantage of potential opportunities*	***Components 1, 2 and 3***
ECUADOR	***The National Strategy for Climate Change (ENCC) through Ministry Agreement 095** promotes the incorporation of climate change and risk management in different economic sectors to enhance emergency preparedness, response and recovery capacities. The GADs present their plans, programs and strategies for climate change to the national government for approval for incorporation into the national climate change plan*	***Components 1, 2 and 3***

National Food Security and Nutrition Plans		
COLOMBIA	***The National Food Security and Nutrition Plan 2012-2019*** *supports the national FSN policy with three main priorities: i) ensuring adequate supply and access to nutritious food; ii) social welfare and quality of life dimensions including nutrition education, prevention and reduction of malnutrition, and promoting healthy lifestyles; and iii) improved food and water quality linked to coordinated responses*	***Components 1, 2 and 3***
National Low-Carbon Development Policies		
COLOMBIA	***Colombian Low Carbon Development Strategy and the National REDD+ Strategy*** *encourages sectorial and regional planning processes to prepare for and mitigate climate-related disasters, and promote conservation and protection of natural ecosystems. These strategies hold Colombia to reduce carbon emissions by 20 percent under baseline by 2030*	***Components 2 and 3***
ECUADOR	***Ministerial Agreement 033*** *promote the use of* ***REDD+*** *in national development mechanisms to reduce national carbon emissions*	***Component 3***
Gender Policies		
COLOMBIA	***The National Policy for Gender Equality (CONPES 161 of 2013)*** *is a roadmap to achieve gender equality in Colombia. It includes an action plan to eliminate all forms of discrimination against women, and promote opportunities for women, access and control of assets, and women empowerment and participation in decision-making processes.*	***Components 1, 2 and 3***
COLOMBIA	***The National Policy Guidance on Protection and Guarantee of the Rights of Women Victims of the Armed Conflict (CONPES 3784 of 2013)*** *addresses the specific challenges that women victims of the armed conflict face. It is aimed to i) create or strengthen strategies of risk prevention and protection of women rights, guarantying no-repetition of rights violations, ii) promote the realization of women rights, and iii) strengthen institutional articulations and the number of social programmes benefiting women victims of the armed conflict.*	***Components 1, 2 and 3***
LOCAL AND TERRITORIAL		
COLOMBIA	***The Safeguard Plan of the Awá*** *promotes education, health, inter-generational communication and cultural exchanges between different age groups. This plan identifies key priorities for the Awá, including food security and nutrition, human rights and mitigating environmental damage from the armed conflict and illegal economies. The plan emphasizes the important role that political autonomy and cultural development and preservation play in responding to external threats*	***Components 1, 2 and 3***
COLOMBIA	***Territorial Plan for Adaptation to Climate Change Nariño (PTACC – Nariño),*** *advocates for regional adaptation and mitigation to climate change actions to reduce carbon footprints through ecological restoration*	***Components 1, 2 and 3***
COLOMBIA	***The Ethno-Development Plan of RECOMPAS*** *promotes political consolidation, human development and sustainable use of natural resources. This strategy is based on identity, sustainable human*	***Components 1,2 and 3***

	development, peace and coexistence and institutional and organizational capacity building	
ECUADOR	***Organic Code on Territorial Organization, Autonomy and Decentralization*** *supports the strengthening of decentralized government organizations to promote equitable sustainable development with community participation and empowerment*	***Components 1, 2 and 3***
ECUADOR	***Ministry Agreement 095:*** *provides mechanisms for Decentralized Autonomous Governments to present to MAE their strategies, plans and projects* ***Ministry Agreement 137:*** *offers a guide to local institutions on how to incorporate climate change in local planning processes*	
ECUADOR	***Life Plan of the Federation of Awá Centers of Ecuador (FCAE) -*** *outlines the objective and activities of FCAE, emphasizing the conservation of biodiversity and territorial strengthening as well as health and education*	***Components 1, 2 and 3***

F. Compliance with National AF Environmental and Social Policies

The proposed interventions will adhere to all national technical standards in both Colombia and Ecuador, particularly those relating to concrete adaptation measures, including mangrove protection, reforestation, water conservation and crop loss reduction. Ongoing consultations with the following entities will take place at all stages of project design and implementation to ensure that all project activities comply with the relevant national technical standards:

1. Ministry of Environment and Sustainable Development (MADS) - Colombia
2. Ministry of Environment (MAE) - Ecuador
3. Ministry of Agriculture, Livestock, Aquaculture and Fisheries - Ecuador
4. The Autonomous Regional Environmental Authority of Nariño (CORPONARIÑO)
5. Autonomous Decentralized Governments of Carchi and Esmeraldas

The necessary safeguards will be incorporated into project design through environmental and social assessments and during implementation through the monitoring and evaluation components. The project will also comply with the Environmental and Social Policy of the Adaptation Fund and WFP's environmental policy. A complete screening of risks was completed (Annex 8) and controls will be put in place to ensure that the project will not exacerbate inequalities, negatively impact marginalized populations, or harm the environment.

To finalize the formulation of the project design, a number of actions were carried out with stakeholders to verify interest and commitment to the project and better define activities and strategies for each project component. Consultations were carried out at national level with MADS and MAE, and they were also fully involved in territorial consultations. Workshops were carried out in Colombia and in Ecuador to share the project concept and exchange lessons with government officials, Afro and Awá leaders and community members, civil society and UN agencies who have experience in the two targeted watersheds. These workshops were crucial for finalizing the project design, by understanding how current and

previous projects have addressed the issues of climate, food security and territorial planning. In addition to updating stakeholders about the proposed project activities conversations highlighted the importance of avoiding duplication and coordinating actions.

Following on from the workshops, a participatory-based rapid assessment was carried out in both Awá territory and Afro territories. The assessment documented community perceptions of climate risks, possible solutions and how indigenous knowledge and practices should inform adaptation planning. An important result of the community work was the validation of community interest to participate in the proposed project. These activities facilitated the full screening of project compliance with the AF Environmental and Social Policy (Annex 8).

As well, a more detailed composite analysis of climate threats, environmental degradation and food insecurity was carried out based on micro-watershed and agro-ecological zones. This facilitated a better understanding of the different areas which are most vulnerable to described climate impacts. The results are shown in the maps (Annex 9) and associated analyses presented in a final workshop with key stakeholders on December 12th and 13th 2016. This served not only to validate the project strategy and prioritize adaptation measures in the two watersheds, but also to reconfirm commitment to the project from both Awá and Afro leadership.

G. Avoidance of Duplication

During the design process, all stakeholders, including donor- funded projects were consulted in order to avoid any potential duplication of efforts, resources or geographical coverage, and to ensure synergy between ongoing initiatives and the proposed project. While Colombia and Ecuador both have a range of climate initiatives in place, there is a clear gap in CbA and EbA projects, particularly binational projects and those with a focus on food security and nutrition in Afro and Awá communities. A review of current projects in the binational watersheds shows that there is no duplication with this proposal nor with any other multinational, trans-boundary or national organizations.

Importantly, this project will strengthen and build on current and former initiatives, and activities and territorial development plans that relate to climate change adaptation, food security, gender, nutrition and peace building. For example, the pilot project with FAO and WFP has provided important lessons-learned for diversifying production and developing marketing models for indigenous crops. Additionally, the role of women has been highlighted as crucial for convincing farmers to expand their cropping opportunities. As well, a UNICEF and WFP project in Awá communities highlighted the importance of women in bringing food and nutrition security messages and practices to remote and isolated communities suffering from high levels of malnutrition. Another example is the binational project implemented by World Wildlife fund which ended in 2016. The project developed processes and materials for addressing climate threats in Awá communities. While Table 6 shows a rich experience of projects in the targeted departments, the proposed project offers the unique opportunity to consolidate this experience and learning, and tackle the significant issues in the region which have yet to be addressed by any concrete climate change adaptation measures.

The project will also complement *The Plan Contract-Nariño* between the Government of Colombia and the Department of Nariño which aims to strengthen territorial capacities in order to promote sustainable development. The project aims at reducing inequity and Unmet

Basic Needs in targeted sub-regions of Nariño which includes parts of the border area with Ecuador. This project promotes sustainable agricultural practices and water management, with a budget of US$112,797,992 over five years, but is ending in 2017. The proposed project will build on and complement *Plan* activities with the focus on food security and adaptation approaches such as CbA and EbA in order to address climate change threats.

The proposed project will be compatible with and incorporate lessons-learned from other border initiatives including the Catholic Relief Services Borderlands Coffee Project, which targeted smallholder coffee farmers on both sides of the Colombia-Ecuador border. Also, the project will coordinate with UNDP's small-scale work with the Awá at the micro-basin level in order to replicate best practices at a larger scale.

In Ecuador, the Global Environment Facility project entitled *Adaptation to Climate Change through Effective Water Governance in Ecuador* will provide vital lessons-learned on effective water conservation techniques with local communities. Additionally, this project will build on Conservation International's *Chocó-Manabí Conservation Corridor Project*, which focused on territorial and cross-national environmental conservation to enhance ecosystem services provision for marginalized communities. Similarly, lessons-learned from midterm evaluation of the WFP Ecuador Adaptation Fund project entitled: *Enhancing Resilience Of Communities To The Adverse Effects Of Climate Change On Food Security, In The Province Of Pichincha And The Jubones River Basin*, will be directly incorporated into design and implementation of this project.

TABLE 6
Other Projects Implemented in the Area

Actor/Organization	Date	Objectives	Cooperation Network	Comparative advantage and interest to participate in project
Colombia				
Government of Nariño	Since 2013 – on going	Contribute to the social and economic development of border populations through joint actions with different local and regional actors	Commonwealth Group (Grupo la Mancomunidad)	Border Plan for Prosperity (PFP) Partnership projects specific to the border area especially those in the Carchi - Guaitara y Mira- Mataje basin. WFP has an agreement signed with the Government of Nariño. High interest
Government of Nariño	Until 2016	Share local knowledge on climate change, risk management, adaptation measures and tools Departmental Climate Change discussion forum for inter-institutional strengthening	Institutions participating in the Climate Discussion Table	Department of Nariño Territorial Plan for Climate Change Adaptation (PTACN) Climate Change Discussion Working Group- South Pacific Node High interest
Government of Nariño	Until2016	Create incentives to change land use patterns where lands have been converted for cultivation of illicit monoculture s	Presidential Pilot Implementation project RECOMPAS community projects	Management of the Pacific Plan for substitution of illicit monocultures in Territories of the Awá people and in the Mira-Mataje River watershed Includes Community Awárds contest, food Security and Nutrition projects rice, sugarcane, and Cacao, agroforest systems and design of water supply and sewage systems in the border zone

			Indigenous organization Corpoica – community of *Las Varas* Universidad de Nariño (*UNDENAR)*	Medium interest
Government of Nariño	Until 2016	BIO/3200 Ha Project, Science-based tourism in the Planada Reserve with emphasis on social innovation, economic collaboration, science and traditional knowledge	*Colciencias* program, Newton Fund, British Government, University of Nariño (UDENAR), Indigenous Organizations	Research and implementation of projects related to ancestral knowledge and culture with MADS Focused in Pialapi- Pueblo Indigenous Reserve (10,600 Ha) High interest
Municipal Mayors of Communities	2016 to 2019	Increase knowledge on reduction and management of disasters Elaborate and carry out municipal Risk Management Plans According to Law 1523 of 2012	Municipal councils and risk management departments Municipal mayors of *Tumaco, Barbacoas and Ricaurte*	Risk management plans and community emergency preparedness plans for environmental and natural disasters WFP works in *Tumaco, Barbacoas and Ricaurte* High interest
El Gran Sábalo Indigenous Reserve of the Awá	2014 to 2016	Local program development to strengthen women's capacities, guarantee their rights and children's rights, create protective environments for disadvantaged and vulnerable peoples	Members of the Binational Grand Family Awá (GFAB) and directly involved communities	Water – basic sanitation – education (intercultural, bilingual), healthy protective environments, human rights protection Protection and survival of cultural identity in protected zones Expressed high interest in the project and participated in the planning process
Oxfam UK	April 2015 to March 2017	Promote equity and territorial rights for rural women	Direct implementation	Integrated water resources management, livelihoods and environment preservation from Awá and Afro Colombian communities to preserve their resilience with four communities in the municipalities of Ricaurte and Tumaco, Colombia Provision of water tanks, wells and food security gardens in focalized communities
United Nations High Commissioner for Refugees UNHCR	Until2017	Implement protection strategies for indigenous survivors of conflict violence and gender based violence	*Chacana*	Protection strategy for indigenous groups in Nariño Capacity building actions for the Women's Council of the Awá communities including training and equipment of radio station WFP has a global agreement with UNHCR specially in areas related to protection and durable solutions Medium interest
FAO Colombia Ministry of Foreign Affairs	Until2016	Implement income generation and productive activities through technical support for cacao and rice production	*Alianza para la Solidaridad (APS)*	Social and local development in border areas through income generation for rice and cacao producers in the *Tumaco* municipality WFP is currently discussing joint actions in Nariño with FAO

				Medium interest
United Nations Office Against Drugs and Crime UNODC	2015 to 2018	Provide alternative development opportunities for families in the municipalities of Barbacoas, Tumaco and Ricaurte who voluntarily eradicated illicit monocultures	*UNODC*	Alternative development and illegal crop substitution COL/K53 Income generation The program includes capital and equipment to grow legal crops in areas where illicit monocultures were produced WFP has an agreement with UNODC and ongoing discussions to implement joint-activities Medium interest
National Natural Parks - Corponariño	2013 to 2016	Coordinate and maintain local and national protected areas	*Parques Naturales* *Unipa CamAwári*	Coordination of local reserves La Nutria – Pimam – Río Ñambi and national reserve La Planada Equipment and monitoring of the natural reserves in the project area Interested
PS (Social Prosperity)	2015 to 2017	Livelihood strengthening activities with ethnic vulnerable communities at risk of physical and cultural disappearance or internally displacement in Ricaurte and Tumaco thorugh income generation, food security actions and local management Improve food access and consumption through food production and healthy habits promotion	*Fupad*	National social programs for ethnic communities, including IRACA Program and RESA Program WFP has agreements with FUPAD and is currently negotiating new actions High interest
ICBF (Colombian Social Welfare Institute)	Until2017	Recover nutritional status of vulnerable children from 0 to 59 months suffering from malnutrition	*Unipa*	Nutrition recovery centers in semi-rural communities where medical attention is provided to children and pregnant women who suffer malnutrition WFP has an agreement signed with ICBF for actions in 2017. Nariño can benefit for these agreements Medium interest
WWF	Until 2016	Strengthen organizational capacities of Awá communities, through design and implementation of participative planning tools with local authorities and communities for	*Corponariño* *Foundation Water Seeds* *Foundation The Hummingbirds of Altaquer (FELCA)* *Corponariño*	Capacity Strengthening and knowledge generation, evaluation and diagnosis of the physical characteristics of ecosystem services of the borders of the rivers Mira and Mataje Contribution to the improvement of livelihoods in forest areas, under sustainable management in Choco – Darien areas in Colombia and Ecuador Binational forum for the Mira Mataje basin

		environmental management Improve communication between relevant actors for the management of the Mira Mataje and Carchi Guaitara watersheds Produce and share information on food security and sustainable agricultural practices in Tumaco		Project will build on the experiences of WWF in Colombia and Ecuador. WWF has stated their willingness to collaborate with the project High interest
UNICEF-WFP	Until 2016	Strengthen capacities of community members in nutrition habits and healthy lifestyles, with an ethnic sensitive approach and in collaboration with community leaders.	*GFAB*	"Mensajeras de vida" programme, to promote nutrition education among Awá in remote areas and prevent Gender Based Violence. WFP and UNICEF will continue to support this initiative High interest
WFP	2018	Support to Victims of Violence and Recovery of Livelihoods	National and local Governments, NGOs, Communities	Nutrition support and education, local markets development, resilience building
Ministry of Environment and Sustainable Development (MADS)	2014-2022	Binational Agenda: Ecuador – Colombia. Colombia: National Plan for Adaptation to Climate Change (PNACC) Ecuador: National Climate Change Policy (PNCC)	MRE (Ministerio de relaciones exteriores) MADR (Ministerio de Agricultura y Desarrollo Rural) Cooperantes ONG Gobierno Exterior	GEF (Global Environment Facility): Plan Binacional manejo de cuencas Mira - Mataje, Carchi – Guaitara MADS has endorsed this project and will be part of the project management structure High interest
Ecuador				
Ecuadorian Presidency	On going	Binational integration	Foreign Offices of Ecuador and Colombia, SENPLADES and DNP	Binational Plan for Frontier Integration Ecuador Colombia 2014-2022
Ecuadoran Ministry of	2013-2016	Reforestation, conservation of natural forests	MAE, Conservation International, GEF	"Plan Socio Bosque" Forest Plan

Environment (MAE)				MAE has endorsed this project and will be part of the project management structure High interest
Ministerio de Salud (Health Ministry)		Communitarian health centers	Health Ministry	Health Centers Medium interest
HIVOS Ecuador	2014-2017	Recuperation of shellfish foods	Hivos International FEDARPON	Renewable natural resources, food security, income generation High interest in being an implementing partner
Altrópico Foundation	Until 2015	Communal Conservation alternatives	WWF, FCAE	Binational Fair of Flavors, Knowledge and Field Seeds High interest in being an implementing partner
Children and Lands United (NYTUA)	On going	Forest conservation and sustainable use of the ecosystem	MIES, Flora and Fauna International	Promotion of water facilities in the mangrove area Medium interest
Iniciativa San Andrés	2016-2017	Environmental education, forest management	Universidad Luis Vargas Torres, MAE	Environmental education Center High interest
World Vision	2015-2017	Protection of vulnerable people, promote food security and nutrition	MAE, MIES, San Lorenzo and Mira municipalities and rural parishes	Defense of human, nutritional and environmental rights of children High interest
Ecuadorian Foundation of Populorum Progressio (FEPP) (aligned with Papal encyclical initiated in 1967)	2010-2017	Protection of vulnerable people, promotion of food security and nutrition	MAE, San Lorenzo local government	Land tenure issues, reforestation and environmental capacitation in San Lorenzo County High interest

Afroecuatorian Federation of Collectors of Bio-aquatic Products in Mangroves of San Lorenzo (FEDARPOM)	On going	Protection of mangrove forests, support Afro communities to improve their well-being	HIVOS, MAE, FEEP	Sustainable use of mangrove resources, protection of mangrove forests in the Pampanal, Palma Real and Pianguapi islands High interest in being an implementing partner
MOMUNE	On going	Women of North Esmeraldas/San Lorenzo county	CANE	Protection of women rights and promotion of income opportunities for them High interest Afro descendant population will participate in the project
CANE	On going	Afroecuadorians communities of the North of Esmeraldas	MOMUNE, FEDARPON, ABYA YALA	Territorial and cultural issues; recovery of the Palenque territory High interest Afro descendant population will participate in the project
Rural parishes of the Tulcan, Mira and San Lorenzo counties		Territorial management, human development	Ecuadorian State, MAE, WFP, NGOs, local communities	Territorial management, basic public services, promotion of local productive initiatives High interest
WFP		Displaced people in the Ecuadorian-Colombian frontier zone	Viceministry of Human Mobility	Assistance to Colombian refugees addressing the risk of food insecurity High interest

H. Learning and Knowledge Management

The project will emphasize the collection, analysis and dissemination of lessons learnt and best practices that might be beneficial to the design and implementation of similar future projects. Key outputs of the proposed intervention include knowledge generation as well as increasing capacities. Specifically, under *Output 1.1.3.* cultural spaces will be developed in Afro and Awá communities for elders and youth to engage in inter-generational dialogue about traditional practices for land management and food security and nutrition and will contribute to gender mainstreaming. Best practices on adaptation and risk reduction will be characterized and disseminated bi-nationally through the learning platform. (*Output 1.2.4.).* Study results on traditional knowledge as well as scientific climate vulnerability analyses will be shared at the community level in a culturally-appropriate manner, translated into local languages as required, as well as regionally and binationally (*Outputs 1.2.3. and 1.2.5.*). Early warning and climate information generated through scientific and economic analyses will be tailored to Afro and Awá communities and translated to the local context and disseminated broadly.

The creation of a knowledge-sharing platform to distribute climate research and analyses will streamline information-sharing, avoid duplication and extra costs and empower leaders and stakeholders at all levels to improve their strategic decision-making. By disseminating climate information to community leaders, regional decision makers and scientists, the project's investment will reach a wide audience and generate benefits for the entire LAC region. The project will also emphasize the generation, analysis and dissemination of lessons learned and best practices, with particular attention to adaptation responses most appropriate for indigenous and ethnic communities. Attention will be given to capturing the effectiveness of culturally sensitive adaptation approaches. Best practices will be shared through the binational knowledge platform as well as through local workshops and events. Of particular interest is capturing, documenting and sharing traditional knowledge and practices and their support for mitigating and improving food security and nutrition and promoting gender equality.

Furthermore, gender and adaptation approaches in culturally sensitive contexts will be documented and attention will be paid to documenting how CbA activities impact society and create an environment of harmony and contribute to peace building. Lessons and case studies will be disseminated within and beyond the project intervention through:

- Existing national information-sharing networks and forums
- Public media articles in both national print and electronic media
- Local media news in local language

Where possible, there will be close collaboration - including national and regional workshops- with the Ministries of Environment of Colombia and Ecuador for national capacity building. Through partnerships with universities and research institutes such as University of Nariño, Colombia, CIAT and the State University of Carchi, lessons learned will be documented through the lens of national development policies and strategies. These policy documents will enable both governments to better plan rural development interventions keeping in mind existing community knowledge and EbA approaches for climate change adaptation planning.

I. The Consultative Process

WFP has worked in close coordination with MADS in Colombia and MAE in Ecuador to develop this project concept in support of binational and regional policies related to climate change adaptation, development, marginalized populations and peace. WFP held two bi-national meetings with government counterparts to share views on the concept, and to jointly identify priorities for the development of the concept note. This process was complemented by a series of bi-weekly and/or monthly meetings with stakeholders at national, departmental and territorial level. In addition, WFP sub offices held meetings with other relevant actors including NGOs and UN Agencies to discuss ongoing sectorial activities and experiences relevant to the project strategy.

Addressing climate change risks was explicitly stated as a priority by both ethnic groups, enhancing the potential for their collaboration and interest in this project. As ownership at various levels is essential for the appropriation and sustainability of approaches and activities, this project, through its participatory, cultural and gender approaches will base all

planning and implementation on the results of these considerations. The capacity of community-based organizations to adequately address socio-economic and environmental risks associated with climate variability and change was identified by the representatives of both the Awá and Afro communities as key for the survival of their current way of life. Thus, communities in the targeted watersheds have identified climate change risk reduction as a priority which will help them strengthen their cultural identify. Through this project, a concerted process with communities will enable them to reinforce their strong collaborative culture to address the problems related to climate change that they have collectively identified. Also, there is a recognition that their subsistence and cultural models are closely associated with how they address the risks that affect nature and the resources provided. Thus, commitment to and ownership of the project from both the Awá and Afro communities is a low risk.

WFP engaged in a series of discussions with leaders of the Grand Family Awá, CANE and RECOMPAS to understand their perceptions of climate threats, their perceived vulnerabilities to climate change and food insecurity and possible opportunities to engage with WFP in adaptation actions. The perception exercises highlighted social, economic and cultural perceptions, highlighting that the Awa and Afro communities in the targeted watersheds are aware of how climate is effecting their livelihoods and the nutrition of their children. For example, it was mentioned that compared to the past there is lack of diversity in their diets, they have reduced the number of crops planted, there are more intense floods, and droughts are more frequent. Of particular importance was the discussion that any adaptation measures should include native species and traditional knowledge and agricultural practices. It was also mentioned that water is not always available for cultivation or household uses (See Annex 2). These perceptions exercises would be an important part of all adaptation plans and activity identification and design. These participatory vulnerability assessments will be complemented with climate knowledge generated under components 1 and 2.

A gender expert participated in the entire consultation process and cultural and gender sensitive methodologies where designed and implemented in all activities part of this process. A subsequent meeting was held to jointly identify their priorities for climate change adaptation, food security and peace under this proposed project. During these discussions, WFP worked with Afro and Awá leaders to identify priority adaptation measures and potential roles of key territorial stakeholders for the development of this project proposal (Annex 2).

The project pre-concept note was circulated in Spanish to Afro and Awá leaders and decision makers for their review during their annual planning meetings. The draft concept note was also circulated to leaders for comments which were also considered in finalizing the approved concept note. Following approval of the concept note, WFP has continued to engage in a full range of consultations which have been expanded to include increased focus at the community level. This has enabled a detailed understanding of priorities, capacities and activity plans. These community-level consultations have included participatory perception exercises to capture the views of elders, adolescents, women, men and community leaders in order to understand local climate, environmental and social threats as well as adaptation opportunities and solutions.

J. Full Cost of Adaptation Reasoning

Component 1: Increase community awareness and knowledge on climate change risks and food security and nutrition in two border binational watersheds.

Baseline scenario

The governments of Colombia and Ecuador have solid political frameworks to address climate change and food security threats in their respective National Communications to the UNFCCC. As well, the binational agenda on border integration institutionally and conceptually lays out priorities related to climate change, food security and rural development. However, these measures fail to concretely address local adaptation to climate change challenges, especially in Afro and indigenous areas. As well, the important role that traditional and local knowledge plays in reducing community vulnerabilities to climate variability is not specified. Additionally, climate change adaptation measures in both countries typically focus on rural farmers rather than marginalized smallholders and those living in disperse watersheds.

The baseline scenario results in climate change adaptation measures continuing to be developed at the national level without leveraging local and territorial capacities and the exclusion of traditional and local knowledge to improve the range of adaptation options, especially in Afro and Awá communities. Without this project, traditional practices for environmental management and food security will not be systematized in a shareable manner and there will continue to be a lack of cultural spaces in which Afro and Awá communities can bridge cultural and inter-generational gaps to improve their nutrition food security and environmental management, and reduce the very real risks that climate change and vulnerability poses. Without this project, climate change adaptation initiatives in this region will face low local acceptability.

Additionality (with AF resources)

AF resources would support the integration of traditional and local knowledge to address climate change and food security and nutrition risks at the local level. The proposed project would facilitate this process by involving communities, particularly youth, elders and women, in planning and designing local solutions and collecting traditional practices for environmental management and food security and nutrition with a gender focus. Through a participatory planning process and cultural spaces to encourage inter-generational dialogue, Afro and Awá populations will be empowered to drive local solutions to respond to climate threats. Additionally, conducting a feasibility study on the marketing of native species and products to territorial, regional and national markets will encourage livelihood diversification and a stronger family economy. Such actions will help increase the adaptive capacity of communities and the resilience of their cultural traditions and livelihoods.

Component 2: Increase binational, institutional and community capacities to sustainably address recurrent climate risks, particularly those that affect food security and nutrition.

Baseline scenario

Afro and Awá communities are particularly vulnerable to the impacts of climate change, specifically rising sea levels and temperatures and rainfall reductions. However, accurate information upon which to make critical livelihood decisions is not available and there is limited capacity to analyze, access and incorporate information. Accurate and specific

climate information is critical to build capacity to adapt agricultural production to climate variability. While meteorological stations that record temperature and precipitation patterns exist, there is incomplete coverage and lack of capacity and political will to analyze data on a micro-watershed level. Importantly, information is not distributed to local communities due to a lack of local technical capacity. Furthermore, the private sector has little incentive to invest in these regions.

Even when climate scenario information is available on a national-scale, it is often not accessible by Afro and Awá communities because it is: 1) extremely technical and not customized to the micro-watershed level; and 2) not disseminated in local languages like Awápit, the local language of the Awá. There is limited coordination between scientific actors and local decision-makers in Afro and Awá communities and local institutions lack the capacity to analyze climate information and make informed decisions on climate vulnerability adaptation mechanisms. Scientific information also is not analyzed in conjunction with local knowledge and traditional practices to arrive at feasible solutions. Thus, projects tend to introduce solutions that are not traditionally appropriate in the context of Afro and Awá culture.

Additionality (with AF resources)

AF resources will be used to improve the scientific information on climate threats available to Afro and Awá communities in the border region. Specifically, the project's activities will support the compilation of a portfolio of climate studies relevant for the food security and nutrition of vulnerable populations. This climate information will be linked to communities through the development of participatory EWS as well as emergency preparedness and response training that are customized to prevention of local climate threats. All climate studies will be condensed and published in local languages and all training will be conducted with the participation of community leaders, elders, youth and women, in local languages.

By improving the delivery and accuracy of climate information for Afro and Awá communities, this project will enhance institutional capacity to respond to threats in a tailored, effective manner. This increases the adaptive capacity of local institutions and the resilience of their constituent communities and has the potential of contributing to gender equality and women empowerment. The project will undertake specific studies to identify feasible climate resistant species and other adaptation solutions, combining scientific information on threats with traditional practices. This integrated focus will strengthen Awá and Afro institutional structures to address climate threats at the local level. WFP will work with community leaders to update territorial development plans with aspects of climate change adaptation and food security and nutrition based on the information generated in this component, in conjunction with Component 1.

As well, WFP will assist government entities in strengthening their threat, risk and vulnerability analysis capabilities by expanding its current Vulnerability and Analysis methodologies to overlay climate threats and monitoring changes in landscapes using GIS technologies.

Component 3: Reduce recurrent climate vulnerabilities through innovative community- and ecosystem-driven adaption measures that reduce food insecurity

Baseline scenario

Without the concrete adaptation actions proposed in this project, the baseline scenario would see continued deterioration in ecosystem service provision, food security and livelihood resilience. These trends will worsen in the long term as climate change risks advance, and in the short term with recurring ENSO threats. Unless concrete adaptation measures are developed considering traditional and local knowledge and implemented jointly with targeted communities, Afro and Awá vulnerability to climate variability and food insecurity will increase.

Additionality (with AF resources)

AF resources will be used to implement concrete CbA and EbA initiatives with local communities, contributing to adaptive capacity, food security, and nutrition, livelihood resilience and gender mainstreaming. In the border region, there is a lack of understanding of appropriate and cost-effective adaptation measures for specific local contexts. Through cost-effectiveness analyses of the above adaptation approaches and actions, this project will customize adaptation measures to the local context leading to project efficacy, considering lessons learned from previous ENSO phenomena.

Another constraint is ensuring ownership of adaptation measures by Awá and Afro communities, as well as ensuring all proposed actions are in line with their culture and world vision and incorporate a gender sensitive approach. AF resources would support the transition from a focus on centralized planning to the implementation of concrete actions at the local level identified through participatory and culturally sensitive processes. While sector-specific projects are under implementation, they do not always promote an adaptation focus. They do not consider the impact on food security and nutrition which is a community and government priority. The proposed project would help make this transition by bringing together the Grand Family Awá, RECOMPAS and CANE with other territorial environmental entities to help implement the appropriate adaptation actions.

To promote food security and nutrition, four categories of adaption interventions have been identified based on meetings and planning sessions with Afro and Awá participation. These activities were prioritized based on a common understanding of climate threats and possible local responses to these threats with a focus on securing diverse diets and reducing malnutrition rates. They include: 1) promotion of diversifying native species production and consumption including through the introduction of organic and agro-ecological crop production practices; 2) reforestation and natural resource conservation measures; 3) commercialization and marketing of traditional species to enhance livelihoods; and 4) water conservation and protection of water sources to provide clean water for consumption and irrigation. These interventions will be based on climate threats identified under component 2 and traditional and local practices and priorities identified under component 1. They will promote food security and nutrition by enhancing ecosystem quality, improving community resilience, agricultural productivity and the diversification of local incomes, taking into consideration both short-term and longer-term climate threats.

An important adaptation benefit comes from understanding how climate threats will impact the targeted watersheds and the related vulnerabilities of communities to these threats in their cultural context including the vulnerability of women and girls.

It is anticipated that AF resources will help to leverage additional resources from government entities or binational resources, and that documented successes, combined with awareness raising, will promote local spontaneous adaptation responses to climate change threats.

K. Sustainability of the Project

Several concrete strategies will help to achieve scalability and sustainability of project approaches and actions after the project end date. The most important element for achieving sustainability is building processes to guarantee ownership by the Awá and Afro institutions who will be implementing the project. Thus, ensuring that project approaches are culturally sensitive and derived from consensus within these population groups will determine the success of the project. Another important sustainability strategy relates to the importance given to capacity building in Component 2 and coordination between local, national and regional institutions. Building capacities at multiple levels to generate and disseminate relevant climate information and then integrate said information in local decision making processes will help ensure that a range of actors have a stake in promoting local adaptation actions.

Capacity building and coordination at the territorial and regional levels will provide a number of benefits after the project end-date, including trained government and community leaders in EWS management and emergency preparedness and response actions. After the project end-date, trained officials will be able to transfer their knowledge to other regional leaders in and outside of the binational watershed territories. To make certain that project initiatives continue after the proposed end-date, all adaptation initiatives will be implemented jointly between technical experts and communities, leaving the technical expertise in the community post-2022.

This project reinforces the binational framework and plans and thus replicable actions can be transitioned to binational plans and then coordinated by governmental institutions after the project is completed. The governments of Colombia and Ecuador prioritize decentralization and the role of departmental governments in peace construction and adaptation to climate change. Thus, the project will emphasize updating territorial and regional development plans with a food security and nutrition and adaptation perspective. The project will work to ensure that priorities are clearly set and that funding is allocated so that future leaders will be able to expand the successful adaptation approaches to new areas with marginalized populations.

Under Component 3, environmental sustainability of proposed adaptation approaches and measures will be enhanced through detailed feasibility analyses, considering environmental, social and economic factors. Communities will be able to choose from the portfolio of adaptation interventions based on the local context and the potential of an intervention to produce a positive environmental and economic impact. This participatory approach will leverage local support for project implementation and help ensure project sustainability.

L. Environmental and Social Impacts and Risks

The 15 principles of the AF's Environmental and Social Policy ~~will~~ helps ensure that proposed projects respect laws, people's rights, gender equality, heritage, biodiversity and the environment. Based on an initial environmental and social analysis, t~~T~~his project

complies with most of these core principles as part of project design, and fully considers gender and women's inclusion and empowerment, climate change adaptation, disaster risk reduction, and the physical and cultural heritage of marginalized indigenous and Afro peoples in~~of~~ Colombia and Ecuador.

The project has been designed to generate positive environmental, cultural and social impacts, using indigenous and local knowledge, incorporating ~~and~~ best practices from other projects and ~~through~~ undertaking extensive consultations with ~~the targeted~~ community members and leaders~~ies~~, stakeholders, ~~, all~~ relevant authorities, and with inputs from experts who know the area and the communities. The adaptation measures proposed are small-scale, culturally-appropriate and will be ~~activities~~ selected by the communities. They~~s~~ ~~and~~ are not expected to generate negative environmental impacts, if they are designed and executed as proposed.

WFP made a preliminary screening of environmental and social risks according to the 15 principles outlined in the AF's Environmental and Social Policy ~~based on the~~analysing information available at project design stage. The potential risks identified and preventive or mitigation measures planned are presented in Table 7. ~~A m~~More detailed risk ~~analysis~~analyses will be carried out at activity design and ~~ty level~~ during project implementation. Specific ~~and the identification of~~ mitigation measures will be ~~carried out at all stages of project~~identified and planned accordingly. Annex 8 describes how risks will be further assessed at activity level. It ~~contains~~also includes ~~an~~the Environmental and Social Management Plan for the project with tools to screen activities for environmental and social risks, ~~, and a Grievance Mechanism, including a preliminary checklist and screening form. This annex also includes~~ the planned Grievance Mechanism.~~a detailed list of examples of potential mitigation measures and relevant indicators to be implemented in the case a risk is identified.~~

~~The entire project was screened for environmental and social risks according to the 15 principles outlined in the AF's Environmental and Social Policy. The results – potential risks identified and preventive or mitigation measures planned – are presented in table 7.~~
~~A detailed screening process will be put in place for all project activities to identify all potential environmental and social risks before implementation and for implementing corrective measures that will avoid, minimize or mitigate all risks. The screening will incorporate an evidence-based risk analysis. This process is presented in Annex 8.~~

Because of the risks identified through the preliminary screening and the ~~presence of~~lack of specific details regarding unidentified sub-activities in component 3, ~~T~~the project ~~will be~~is categorized as medium risk (**Category B**). The Environmental and Social Management Plan ~~The project~~ will ~~work to~~ ensure that all risks are identified and managed, and that measures are implemented to the highest standard with an emphasis on risk avoidance. Finally, the EbA and CbA approaches to be undertaken in this project, will be designed to ensure positive environmental and social impacts.

~~Components 1 and 2, because of the nature of their activities, are categorized as low risk (Category C). Component 3 in general is categorized as medium risk (Category B), which therefore categorizes the entire project as **Category B**.~~

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~~A detailed screening process has been put in place for Component 3 activities to identify potential environmental and social risks and allow to plan for and implement corrective measures that will avoid, minimize or mitigate these risks. The project will work to ensure that all measures are implemented to the highest standard with an emphasis on risk avoidance. Finally, the EbA and CbA approaches to be undertaken in this project, will ensure positive environmental and social impacts.~~

~~An Environmental and Social Management Plan and Grievance Mechanism are included in Annex 8 together with more detailed risk mitigation measures for the specific risks identified in the table below:~~

TABLE 7
Initial r~~R~~isk screening of the ~~entire~~ project at design stage ~~based on~~using the 15 principles of the AF's Environmental and Social Policy

Checklist of environmental and social principles	Potential ~~impacts and~~ risk~~ss identified~~	Preventive and mitigation measures
Compliance with the Law	Insufficient alignment ~~of~~with Stat, e ~~and~~ indigenous and Afro law during adaptation measures design~~, creating conflict in compliance with legal standards.~~	With support from MADS, MAE, ~~CARs,~~local environmental authorities, indigenous and local leaders and other ~~technical actors~~stakeholders, the project will ~~identify~~ensure compliance ~~-~~with indigenous and Afro environmental and social standards. ~~The project will ensure compliance with these standards.~~ All aspects of the project will be aligned with current national government law and policies including the National Plan for Climate Change Adaptation of Colombia, the National Strategy for Climate Change (ENCC) of Ecuador, among others as presented in Table 5.[76] Relevant national, regional and territorial authorities were consulted during the proposal development process to ensure compliance with all relevant laws.
Access and Equity	Equitable distribution of project benefits among community members may be~~not~~ hindered by~~take place due to po~~ political interests~~, community leaders and political authorities.~~	Participatory assessments will be carried out to ensure full and equitable participation of women, men and targeted ethnic groups. It will identify potential areas of conflict. Conflict resolution measures that are culturally appropriate will be included to mitigate this risk. The project will monitor and put in place controls to ensure that equitable and improved access to sustainable livelihood assets benefit targeted ~~s~~individuals ~~everyone~~ and considers~~s~~ gender roles of women, youth and elders within all targeted communities.
Marginalized and Vulnerable Groups	Particularly marginalized groups, including the displaced and the elderly, are excluded from decision making processes and their needs and views are not	Measures will be put in place to identify any potential negative impacts on Afros, indigenous, women, the elderly and the displaced. Potential impacts will be monitored throughout the project. All community members will be consulted during activity selection and designed to ensure that their identified priorities are adequately

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[76] MADS. 2013a. La Propuesta de Preparación para REDD+ (R-PP). Versión 8.0. Bogota, Colombia http://www.minambiente.gov.co/images/BosquesBiodiversidadyServiciosEcosistemicos/pdf/Documentos-Redd/021013_r_pp_redd_v_8.0.pdf

	being adequately taken into account. Traditional knowledge and practices can be appropriated by third parties	considered. A needs assessment and a gender screening will also be carried out to identify how the most vulnerable can benefit as well to prevent these groups fromas being negatively impacted by the project. Through all components, the project will empower these vulnerable groups to make decisions on concrete adaptation actions, valuing their traditional and local knowledge. Clear and fluid channels of communication between community members and leaders, local authorities and partners will help avoid misunderstandings and negative impacts. The role of community leaders and project staff in monitoring will ensure that any existing or developing tensions are inmediatlyimmediately identified, mediated and resolved. This risk is minimized by protecting communities' intellectual property of traditional knowledge and practices. Appropriate regulation and policy recommendations will be considered
Human Rights	Human rights are not anrights could be affected, especially those of community leaders, women and girls, if outside groups are not consulted about the project explicit part of local community practices and decision making.	This project will monitor that the rights of all people in the binational watersheds are not violatedaffected, in particular the rights of community leaders, women and girls. Promotion of human rights in the project will be achieved by creating awareness with all involved in the project operationsimplementation, including design, execution, monitoring, and evaluation. Outside groups such as Special Interest Groups and local authorities in surrounding areas will be extensively consulted.
Gender Equality and Women's Empowerment	The project could exacerbate existing tensions in gender relations, especially in indigenous and Afro communitiesGender empowerment and equality not fully supported by male-dominated leadership.	Male-dominated leadership could be unsupportive of gender empowerment and equality. To ensure gender equality, measures will be taken to reduce disadvantagesidentify and work around practices that prevent women and men from participating in and benefiting from project activities. Special sessions for awareness raising of men, women and community leaders will be held to ensure gender equality. Gender roles and needs will be identified through a Gender Assessment conducted in each community. The context-specific gender assessment will be carried out, using methodologies appropriate to the Awá and Afro context in the two watersheds. As well, the project will monitor compliance with the result of the Gender Assessment findings throughout project implementation. Any potential negative impacts will be identified during this assessment and actions identified to ensure that those impacts will not occur. Program design focuses on women as leaders of adaptation. During activity selection, gender experts such as from UN Women will be consulted to ensure that the project effectively responds to the unique needs of women and girls and promotes gender equity. Their roles and needs have been considered during project design will be assessed at project outset through a Gender Assessment and monitored semi-annually. WFP's participant feedback mechanism for grievances will be activated and serve as an important tool for mitigating this risk. can be activated as needed. Women as climate change adaptation participants/leaders will be promoted and participation will be monitored from outset. This project will promote women leadership in public spaces and decision-making power for climate change adaptation and food security and nutrition. During the consultation process and project design phase, workshops focused on gender and the role of women in all project

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		components. These consultations found that women have specific knowledge and roles in the integration of traditional knowledge, including plants for medicinal use and food security.
Core Labour Rights	Contractors for the project may not adhere to ~~the~~ ILO labour Standards and national labour laws~~.~~	The project will monitor that international and national labour laws and codes are respected, for any work that may be carried out in relation to the project. This includes the eight International Labour Organization Convention (ILO) core labour standards related to fundamental principles and rights of workers, as well as ILO Convention No. 169 which concerns rights of indigenous and tribal peoples. Contracts will be reviewed periodically to ensure compliance with these laws.
Indigenous Peoples	Actions which include western science or technology are not fully embraced by Awá due to conflict with their Cosmo vision~~.~~	With support from national and local authorities, the project will identify the relevant national and international standards for~~on~~ indigenous rights that need to be compli~~ed~~ant with. The project will follow Colombia and Ecuador's consultative process with indigenous communities as established by law, and ensure consistency with the United Nations Declaration on Rights of Indigenous Peoples. All project components will be designed through extensive consultations and participatory approaches with Awá community members. Evidence of this process will be documented by the MIE. Extensive consultations with the Awá will ensure that the project appropriately incorporates the priorities and needs of these population, leading to strong ownership of project activities. ~~Project Components 1 and 2 will be fully developed and adopted by communities and leaders before identifying and finalizing community adaptation plans. A~~ BaBaseline, ~~semi-annual Monitoring and Evaluation;~~ongoing monitoring and a~~A~~nnual pProgress rReporting exercises will include all potential risks~~be prepared~~ and be adjusted as~~if~~ required.
Involuntary Resettlement	B~~The b~~enefits from project assets might not be sufficient to keep people in their current areas	The project will work to ensure that no involuntary resettlement takes place. All actions will be monitored to ~~ensure~~control that physical and economic displacement does not occur. ~~The project does not foresee any voluntary or involuntary physical or economic displacement.~~ Adequate measures will be introduced to ensure this risk does not materialize. The Steering Committee will ~~ensure~~ultimately responsible for compliance with relevant international and national laws and regulations, including the Human Mobility Law in Ecuador which aims to avoid and minimize any involuntary resettlement.
Protection of Natural Habitats	Activities not sited or designed adequately might have negative ~~environmental~~ impacts on natural habitats	~~All project a~~~~Activities of component 3 will be screened, risks identified and mitigation measures planned.~~implemented. The project will identify the presence ~~presence in or near the targeted area~~ of natural habitats in the project area and will ensure to comply with~~, observing t~~he relevant laws and regulations in Colombia and Ecuador. Activities will not be implemented in protected areas, including those recognized by indigenous and local populations. Risks will be assessed, with any spill-over effects from targeted areas controlled. By implementing ecosystem-based adaptation activities such as reforestation, water conservation efforts, land rehabilitation and restoration of ecosystem service provision, the project will ~~ensure the protection~~proactively protect ~~of~~ natural habitats in binational watersheds. Natural water sources to be conserved through this project will be ~~provided~~ protect~~edion~~ from contamination from livestock (e.g. live fencing). ~~Project will observe and enforce protection measures implemented in protected areas, specially under component 3. Only native species will be introduced, using indigenous practices. Additionally, this project will promote the storage of traditional and native varieties' species, including through seed banks to protect and encourage biodiversity.~~

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Conservation of Biological Diversity	Project incentives are not sufficient for communities to turn away from monocultures and non-native species~~.~~	Only native species, combined with conservation efforts, will be introduced to protect and encourage biodiversity. To minimize this risk, the project will conduct an inventory of native species, including their uses and economic benefits. The project will incorporate native species in community adaptation plans through awareness raising and training activities. Theseis plans will be ~~approved~~endorsed and monitored by the ~~Steering~~Technical Committee to ensure compliance with this key project objective. Additionally, this project will avoid monocultures, non-native crops and invasive species. Geo-reference maps will be produced to facilitate monitoring of all ecosystem-based activities. By working with Afro-descendant and Awá populations to rescue traditional and native plants and crop species, this project will support the conservation of biological diversity and increase ecosystem resilience.
Climate Change		The project is not expected to generate any significant emissions of g~~G~~reen-h~~H~~ouse g~~G~~ases. The project will complete a qualitative risk assessment of greenhouse gas emissions and other drivers of climate change. The project will also promote actions, such as reforestation, that may positively impact on carbon capture and sequestration capacity. Ongoing monitoring will ensure that during the implementation of the project activities do not increase greenhouse emissions. All project components and activities contribute to increasing local capacities to face climate change in the long-term and climate variability in the short and medium terms.
Pollution Prevention and Resource Efficiency	Resources for project activities are not used in the most efficient way possible	The project will minimize the production of waste and the release of pollutants, as well as promo~~ting~~te reasonable and cost-effective use of resources. Given the proposed activities, this risk was determined to be low at project design. The project will monitor efficient use of energy and resources as applicable to the identified activities. If this risk is perceived to be moderate or high~~hly probable~~, then a waste and pollution prevention and management plan will be prepared.
Public Health	Project agricultural activities may contribute to contamination of water sources ~~in the project area~~ that may be used for human consumption	A preliminary assessment of this risk was carried out and concluded that water contamination was ~~a~~ possible, but of low risk. However, this risk will be monitored. The project will provide community members training on use of agricultural inputs in order to avoid water pollution. A qualitative h~~H~~ealth impacts screening ~~has been~~is included in the proposed Environmental and Social Screening Checklist in A~~a~~nnex 8.
Physical and Cultural Heritage	Project activities might affect some unidentified cultural sites which exist in the targeted areas ~~and are impacted by project activities~~	After consultation with community leaders, the project has determined that there is no natural or cultural heritage sites present in the targeted watersheds. During the final selection of project areas, further consultations with indigenous and local authorities will be undertaken to ensure that no cultural or natural sites exist in the project area and if they do, the project will ensure that no activity undertaken by the project affects them either during project implementation or after the project lifetime. E~~H~~owever, efforts will be made to protect the culture of Afro and Awá populations. Under C~~c~~omponent 1, traditional and local knowledge will be integrated for environmental management and food security and nutrition. ~~and c~~ Cultural spaces will be created to

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		encourage the presentationrvation of Afro-descendant and Awá heritage. Ancestral knowledge and traditions will be the basis for developing adaptation plans in a culturally-sensitive manner.
Lands and Soil Conservation	Degraded soils are not the most appropriate to benefit from aAdaptation measures not sited or designed adequately might further degrade soils	Soils will be analysed before project outsetcommunity based adaptation plans are finalized, identifying the presence of fragile soils and mangrove areas. Adaptation measures will match the site potential, and land use will be matched toand land capability analysis. The Steering Committee will be charge of ensureconfirm that ing the appropriate use of soil and water resources and that activities are appropriate for selected areas. To ensureassure that soil protection activities efficiently promote food security and nutrition, this project will perform cost-benefit analyses of all concrete adaptation measures. , and monocultures,crops All activities will be screened to minimize soil loss and degradation, and to improve soil quality. Risks will be identified and mitigation measures planned. Through the ecosystem-based adaptation actions in component 3, this project will aim toidentify, rehabilitate lands and restore degraded soils through natural regeneration, planting of native nitrogen-fixing plants and reforestation. Activities of component 3 will be screened, risks identified and mitigation measures planned.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Arrangements for Project Management

Project management, financial monitoring and reporting to the AF will be coordinated by WFP, the Multilateral Implementing Entity (MIE). WFP will provide technical, fiduciary and managerial support throughout all stages of project implementation. The project will be coordinated at the national level through WFP Country Offices in Colombia and Ecuador and through WFP sub offices at territorial level. Additional technical support will be provided by WFP's Regional Bureau in Panama and WFP Headquarters in Rome as required. MAE, MADS and the Neighborliness and Integration Commission and Binational Border Commission will provide technical guidance for project implementation under their respective policies and programmes**.** Colombia's Presidential Coordination Agency (APC) will ensure appropriate involvement of key national actors**.** All emergency preparedness and response training will be coordinated with the National Risk Management Secretariat (SGR) in Ecuador and the National Risk Management Unit (UNGRD) in Colombia. The project governance structure will include territorial, departmental and provincial governments and promote coordination and articulation to ensure that all appropriate territorial entities are involved in planning, implementation and monitoring (Figure 1).

Project management will be coordinated through the Binational Steering Committee. This team will be composed of national level actors including MADS, MAE and WFP. The Binational Steering Committee will support effective project implementation and coordination. The team will integrate project strategies, approaches and activities in binational plans and strategies for border integration and territorial development plans. Specific responsibilities include: approving annual operational plans, following up with

national authorities to ensure that technical standards are maintained, reviewing monitoring reports and ensuring alignment with the Environmental and Social Policy of the AF.

As the project aims to integrate local and scientific knowledge to better plan, design and implement adaptation responses, territorial execution will be managed by local Afro and Awá organizations, including the Grand Family Awá, RECOMPAS and CANE. These organizations are umbrella associations of indigenous and Afro territorial authorities and have existing binational coordination mechanisms, operating in the two countries. These organizations will implement concrete activities under Components 1 and 3, such as the collection and dissemination of traditional knowledge for food security and ecosystem service restoration. Technical assistance will be provided by organizations such as Corponariño and UN Women (see Table 8), with support from the departmental, provincial and municipal authorities such as the Autonomous Decentralized Governments of Carchi and Esmeraldas and the Office of the Governor of Nariño. A total of 19,867 participants distributed in 120 communities will benefit from the project, with 5,360 Awá and 5000 Afro in Colombia and 5,388 Awá and 4,119 Afro in Ecuador.[77]

A binational implementing partner will be selected after project approval for implementation in Colombia and Ecuador. This entity would be a non-governmental organization and would be selected based on its extensive experience working with Awá and Afro communities in both countries and implementing projects of resilience building and adaptation to climate change with a gender sensitive approach. A formal analysis on strengths and weaknesses will be undertaken during the selection process for implementing partners and all technical experts associated with the project. Its capacity to carry out gender responsive activities will be a fundamental assessment factor. A number of organizations have been already shortlisted, including *Fundación Altrópico, Fundación Hivos, Fundación Natura* and *Fundación Felca*[78]. During project implementation, gender capacity of the selected organization will be strengthened as necessary.

Specific departments and provinces within the two binational watersheds will be prioritized based on vulnerability to climate threats and food insecurity as well as border proximity and local capacity to implement large-scale adaptation activities. This project will strengthen coordination among Afro and indigenous institutions and with national and local government institutions, promoting adaptation, peace building initiatives and the use of climate services to better prepare for disasters. The possible technical partners to accompany activity implementation under components 1, 2 and 3 are listed in Table 8.

TABLE 8
Technical Actors and Links with Project Components

Country	Technical actor	Components	Role
	CIAT	2	Climate information and mapping networks

[77] Information based on Afro and Awá development plans, information provided by community organizations and national statistics offices in Colombia and Ecuador.
[78] A number of entities have been considered; however, only upon approval of the project can a final decision be made. *Fundación Altrópico* is one of the most likely candidates.

Binational	UN Women	1, 2, 3	Gender analyses, training and gender-sensitive adaptation programming
Colombia	MADS – Climate Change Office	1, 2, 3	Technical support in project implementation Ensure policy coherence at national level and complementarity with national efforts on Adaptation with climate change
	Department Climate Change Network of Nariño	1, 2, 3	Ensure coordination among right actors to provide technical and policy support for project implementation at regional level Avoid duplication of efforts
	Corponariño	2, 3	Early Warning Systems, seasonal forecasts, emergency preparedness and response training and the environmental impact assessments
	IDEAM	2	Climate, temperature and precipitation data for Colombia
	National Disaster Risk Management Unit (UNGRD)	2	Support to emergency preparedness and response training
	University of Nariño	1	Inventory on traditional practices and native plants and crops
Ecuador	National Secretariat of Water	3	Technical support on water management
	Ministry of Agriculture, Livestock, Aquaculture and Fisheries of Ecuador (MAGAP)	3	Technical support on agricultural practices
	International Center for ENSO Research (CIIFEN)	2	Seasonal forecasts and climate risk assessments
	INAMHI	2	Climate, temperature and precipitation data for Ecuador
	National Risk Management Secretariat (SGR)	2	Support to emergency preparedness and response training

Project Governance Structure

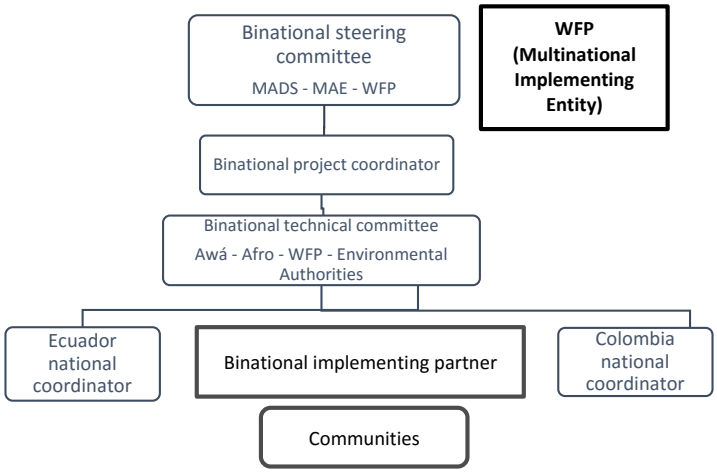
This project will be governed by a consolidated structure, which has been agreed upon by community leaders and relevant stakeholders, and will be aligned as follows:

FIGURE 1

Consultative entities:

Binational Commissions, local disaster management authorities, local governments and civil society

Ministry of Foreign Affairs of Ecuador, Ministry of Foreign Affairs of Colombia, Colombia Presidential Agency for International Cooperation and IDEAM



National public policies and ethnic plans and policies

MADS: Ministry of environment and sustainability of Colombia
MAE: Ministry of environment of Ecuador

Functions will be organized according to the table 9 below:

TABLE 9
Project Structure and Roles

STRUCTURE	MEMBERS	FUNCTIONS

Binational Steering Committee	MAE, MADS WFP Binational Manager will act as Secretary National Technical Entities will provide advisor support as required (IDEAM, INAME, MAGAP and Ministry of Agriculture of Colombia)	Meets twice a year to set project direction, priorities, budgets, and stakeholder alignment. Approves reports submitted to the Adaptation Fund. Coordinates with APC, SETECI, Ministries of Foreign Affairs Binacional sub commissions to ensure policy alignment. Reviews monitoring reports Ensures alignment with the Environmental and Social Policy of the AF Approves annual operational plans
Binational Project Coordinator	Reports directly to the Steering Committee and is secretary to the Committee	Is responsible for the successful implementation of the project and is accountable for project funds. Oversees execution of all project activities. Facilitates relations with stakeholders. Coordinates and supervises the National Project Coordinators.
Binational Technical Committee	Local public institutions supporting implementation (Local Environmental authorities, Awá and Afro organizations)	Guarantees the alignment of project activities with national and territorial public policies, binational agreements between Ecuador and Colombia, and international environmental conventions. Ensures compliance and synergies with local and regional territorial plans, with special attention to Awá and Afro community plans (Life Plans). Endorses community level adaptation plan Presents annual operational plans to the Binational Steering Committee.
National Coordinators Colombia and Ecuador	Specialists located in the project areas of the respective countries, reporting to the Binational Coordinator	Plan, coordinate and oversee implementation of project activities. Accountable for project funds. Ensure full coordination and participation of Awá and Afro leaders and communities. Coordinate assessments that will support activity planning. Coordinate implementation of the planned activities of the project; Present community adaptation plans to the Binational technical committee.

		Prepare annual progress reports and coordinate monitoring exercises. Documents lessons learned.
Binational implementing partner	Specialized entity with technical, administrative and management staff members as needed, under the supervision of the national coordinators	Develops planning tools and processes with communities, executing entities and local technical experts. Finalizes targeting of communities. Work with communities to develop adaptation plans. Is Accountable for project resources. Participates in ongoing monitoring exercises. Ensures gender approaches are fully implemented. Provides quality and timely technical inputs. Mitigates and risks or tensions that develop during projection implementation.

B. Project Risk Management

Financial and project risk management measures will be assessed throughout project design and implementation. Potential risks related to project implementation and response measures are described in Table 10.

TABLE 10
Financial and Project Risks and Response Measures

Risk	Category	Response Measure
RELATED TO PROJECT IMPLEMENTATION		
Revaluation of the Colombian Peso	Low	The project will make transactions in dollars when possible to avoid currency fluctuations. When transactions in Colombian peso are needed, financial measures will be taken (monitoring, expenditures on time).
Lack of coordination between different entities (regional, territorial and national governments)	Low to Medium	By establishing a binational cross-sectorial project implementation team, communication between different stakeholders will be facilitated and streamlined. This risk is minimized through project coordination among stakeholders at national (MADS, MAE), departmental and local levels (Grand Family Awá, RECOMPAS and CANE). Also, By establishing a binational cross-sectorial project implementation team, communication between different stakeholders will be facilitated and streamlined.
Lack of territorial capacity to implement technical activities	Low	The risk is minimized through the support of technical organizations like Corponariño, CIIFEN,

		IDEAM and CIAT, who have worked with Afro-descendants and Awá in the border regions in climate change adaptation, water management and agro-forestry. These entities will provide specialized assistance and technical capacity as required.
Scientific and technical information on climate change in the border region is incomplete	Low	While precipitation and temperature trends in the border region are available, this information is raw and not analyzed. The project promotes the generation of scientific information, including micro-watershed vulnerability analyses and climate trend analyses. Climate change awareness activities in local languages will take place with the executing entities before project implementation begins. These training will establish strong awareness at the community level on climate change threats.
Disruptions to TransAndino Pipeline affects FSN	Low	Ecopetrol has security measures in place. Peace agreement will reduce disruptions. Environment ministry studies of hydrocarbon concentrations in sediments and fish will be used for monitoring. Those will be tracked and reported on annually.
Change of government or other key stakeholders in Ecuador or Colombia which impacts project implementation schedule	Low	Project objectives and outcomes are in line with binational and national climate change and food security policies, thus preventing a major change in policy direction Any change in governments or mandates will be assessed by Binational Steering Committee. Binational and National Coordinators will liaise with officials to explain the project and anticipated outcomes. The risk is also minimized through project coordination among stakeholders at national (MADS, MAE), departmental and local levels (Grand Family Awá, RECOMPAS and CANE). Evaluation of potential changes in lead-up to election in Ecuador (2017) and Colombia (2018) will be carried out by the Steering Committee.
Once areas are under an adaptation measure, communities can decide to grow non-project supported crops.	Low	The project will undertake extensive consultations with communities. In addition, communities will be trained on value added and marketing of the production from adaptation measures.
Traditional knowledge and practices can be appropriated by third parties	Low	This risk is minimized by protecting communities' intellectual property of traditional knowledge and practices. Appropriate regulation and policy recommendations will be considered.

C. Environmental and social risk management

Based on the Risk Screening exercise and in line with the Environmental and Social Policy of the Fund the overall risk ranking for this project is Category B.

The risks identified for the 15 environmental and social principles of the Fund in section L, Part II have been described there and concrete mitigation actions have been proposed. Other risks related to project implementation and results are included in Table 10 of Part III along with their appropriate response measures. These measures are designed to avoid or minimize risks, or, where necessary, manage an associated risk. Additionally, project implementation procedures are designed to avert any such risks, and are consistent with the environmental and social policy of the fund.

Activities under components 1 and 2 are low risk and will not require any further environmental screening or assessment.

Component 3 activities have been brought forward through consultative processes with local community and representative groups to improve livelihoods and increase community resilience, promoting gender equity and utilizing traditional knowledge as a basis for planning the adaptation measures. Considering the type of resilience-building activities outlined in component 3, it is unlikely that adverse social or environmental impacts will occur. Should any negative effects arise as a result of the project, they are likely to be reversible, small in scale and limited to a local or community level and will be easily avoided, minimized or mitigated through feasible and locally-accepted measures.

Since specific activities of component 3 are not totally identified, related environmental and social risks will be measured through a risk screening to be undertaken before activity implementation. Necessary mitigation measures will be planned and their implementation will be monitored. This will be carried out in alignment with the project management structure and through consultation with any affected communities. Proposed individual risk management actions are part of the overall Environmental and Management Plan (ESMP) described in Annex 8 along with a grievance mechanism (the WFP Feedback Mechanism).

This ESMP is comprised of two elements: i) a group of actions developed to mitigate and avoid any risk identified in the risk screening presented in section L part II of this proposal; and ii) a well-established procedure to assess community-based adaptation plans for any potential environmental and social risks and to manage them. In addition, a set of indicators will be developed to identify risks during implementation. These environmental and social indicators for risk management will be identified in collaboration with environmental authorities and Afro and Awá organizations and will be monitored throughout project implementation. The ESMP also includes a screening form to be completed by the Technical committee and the national coordinators for each adaptation activity planned under component 3 as well as a screening checklist to be used to assess the environmental and social risks of these activities. The WFP Feedback Mechanism to address possible grievances is also presented in Annex 8. During implementation, should changes in any identified risk or new risk be detected, the plans and response measures will be adapted in order to address them. The Binational Steering Committee is responsible for overseeing implementation progress and impacts on social and environmental concerns on an annual basis.

Given that the project emphasizes a participatory and transparent approach to activity selection and aims to reduce the vulnerabilities of communities and ecosystems to climate change in the two binational watersheds, there is a low risk of failure to comply with the Environmental and Social Policy of the Adaptation Fund in the projected activities.

D. Monitoring and Evaluation Arrangements

Project monitoring and evaluation (M&E) will be carried out in accordance with WFP procedures, under WFP supervision. WFP will assume financial oversight of the project and provide information on a regular basis in conformance with AF operational regulations. To facilitate coordination on outcome monitoring and evaluation the project management team the Binational Steering Committee meetings will take place at least twice per year.

In addition to quarterly reports, technical reports and a yearly financial audit, specific M&E activities to be undertaken include the following:

A **Project Inception Workshop** (IW) will bring together all stakeholders for project implementation within the first two months after project approval. Through this workshop, stakeholders and local leaders will build project ownership and identify priorities for first year of implementation. This workshop will involve local leaders and community youth, women and elders. A supervision plan will be agreed upon by relevant stakeholders during this workshop.

An **Annual Progress Report** (APR) will be prepared by the Binational Steering Committee and evaluate yearly project progress, using identified M&E indicators. The APR will identify yearly objectives and targets, lessons learned and risk mitigation measures, as well as relevant financial information. The data for monitoring will consist of financial, procurement and physical progress reports as well as compliance with the requirements of the environmental and social assessment and management frameworks, along with financial audit reports. It will also include measures considered in the risk management plans proposed in Section B of Part III.

A **Mid-term Evaluation** will take place at the mid-point of project implementation (October 2019). The MTE will determine progress made toward outcome achievements, assess financial, social and environmental risks and pinpoint corrective actions as required. It will present initial lessons learned on project implementation and management. The findings of this review will be incorporated in a midterm report.

A **Final External Evaluation** (FEE) will be undertaken by the project team, WFP Country Offices and external consultants during the last six months of project implementation (September 2021 - March 2022). The FEE will analyze project impact and sustainability in improving binational capacities to reduce climate and food security and nutrition vulnerabilities. The findings of this review will be incorporated in a final report.

The system of performance reports and the evaluations (mid-term and final) will be adjusted to track implementation of the Environment and Social Risk Management Plan proposed in Annex 8. All monitoring exercises will include gender experts.

A detailed monitoring and evaluation budget is presented in the table below:

TABLE 11
Detailed monitoring and evaluation budget

Activity	Responsible parties	Budget (does not include staff time)	Timeframe
Project Inception Workshop	Project manager and WFP	20,000	Within first three months after project approval
Mid-term Evaluation	External Evaluator/ Technical Consultants and Binational Coordinator	15,000	At mid-point of project execution. 30 month. Estimated for January of 2020.
Final External Evaluation	External Evaluator/ Technical Consultants and Binational Coordinator	60,000	End of project cycle
Final audit	External evaluator/ WFP	50,000	End of project cycle
Annual Progress Reports	Binational coordinator/ national coordinator/ monitoring assistants	40,000	Yearly
Project monitoring	Binational coordinator/ national coordinator/ monitoring assistants	28,700	Four times a year

E. Project Results Framework

Project strategy	Objectively verifiable indicators				
Goal	Reduce vulnerability and food and nutrition insecurity of Afro and Awá communities in the Mira-Mataje and Guaitara-Carchi binational watersheds to the adverse effects of climate change				
	Indicator (disaggregated by gender and age)	**Baseline**	**Target**	**Source of verification**	**Risks and assumptions**
Impact: To reduce food and nutrition insecurity through climate change adaptation measures	Afro and Awá communties' vulnerability reduced, with increased capacities to confront climate variability	Communities vulnerability is rated high	Community vulnerability is low to medium by the end of the project	Perception surveys	Climate change measures are long-term and the project may not consider long term climate variabilities
	Dietary diversity score	Four items in household diet	Increased dietary diversity to seven items in household diet	Household surveys	Communities have access to diversified nutritious foods
	Binational capacity strengthening score	Climate risks related to FSN are not articulated in local plans	Institutions strengthened to incorporate adaptation and risk reduction measures in plans	Focus groups Final project report	Capacity-building is long-term and the project captures all changes in institutional capacity
	Percentage of women with physical, political and economic empowerment	Women with limited role in decision-making, participation and opportunities for income generation	Increased the women's physical, political and economic empowerment	Perception surveys	Ethnic and cultural contexts allow the processes of empowerment
Objective 1: Integrate, with full participation of Afro and Awá communities, traditional knowledge and capacities to manage climate change risks and food security and nutrition in targeted binational watersheds,					

Outcome 1.1. Traditional and local knowledge recovered to support sustainable adaptation measures, food security and nutrition, and resilient livelihoods	Ancestral knowledge and practices integrated in support of adaptation and food security	Ancestral knowledge is being lost and not used in adaptation or development planning or implementation	By project end, ancestral knowledge and practices will be included in the design of adaptation measures and local planning	Focus groups Site visits Study on use of traditional species (baseline and end of project)	Communities willing to share traditional and local practices for adaptation and food security and nutrition
Output 1.1.1. One study per watershed produced on traditional and local practices, promoting resilience to climate change and variability in the targeted binational watersheds, with community participation, a gender sensitive approach and particular attention to ancestral and native plant and tree species that can improve dietary diversity and are resilient to climate change	Number of studies on traditional and native species	No studies related to traditional and native species and uses for resilience and dietary diversity	Two watershed-level studies produced on 1) tree and plant species resilient to climate change and variability in the binational watersheds; and 2) ancestral and native species that can improve dietary diversity and are resilient to climate change and variability	Monitoring of study quality and dissemination	Communities willing to share traditional and local practices for adaptation and food security and nutrition
Output 1.1.2. Feasibility study conducted with communities to assess the potential for marketing native species for medicinal, artisanal, food and fodder related uses at regional and departmental levels	Number of studies on marketing traditional and native species	Limited knowledge on market opportunities for native species	Three feasibility analyses of potential marketing of native species with community participation	Monitoring system and community-level interviews	Communities consider the value and benefit of marketing of traditional species for commercial purposes and participate in analytical exercises

Output 1.1.3. Workshops, dialogues and cultural events (including fairs) organized to disseminate study results to 120 Afro and Awá communities, leaders and decision makers, in local languages. Equitable participation of men and women will be promoted	Number of events to disseminate information	No previous events to raise awareness and no existing use of traditional knowledge for adaptation and food security in the border region	At least 10 workshops and cultural events organized to share and disseminate study results with 120 Afro and indigenous communities, leaders and decision makers, in local languages There is an equitable participation of men and women	Focus groups	Once information is shared, leaders at different territorial levels will use this information for planning purposes
Outcome 1.2. Traditional knowledge related to climate change threats and adaptation measures integrated in community dialogues and decision-making processes	Traditional knowledge on climate change and adaptation integrated into adaptation and development territorial planning processes	Traditional knowledge not used in adaptation or food security planning or activity implementation	By project end, ethnic communities receive support in integrating climate-related ancestral knowledge into Life Plans and Safeguard Plans	Monitoring Focus groups	Outside influences do not reduce the importance of traditional knowledge and acceptability by communities
	Percentage of women participating in dialogue processes and advocacy	Women´s voice are not consider as important actors to be heard	By project end, women´s participation increase in community dialogues and decision-making processes	Perception surveys	Women and men are involved in the dialogue processes as an integral part of the decision-making

Output 1.2.1. In 120 communities, leaders, community members and women groups trained on climate change threats with culturally and gender sensitive methods. Equitable participation of men and women will be promoted	Number of communities and leaders trained Number of women trained	Limited awareness of climate change threats and impacts on gender	By project end, leaders and community members in 120 communities trained in climate change threats, using culturally and gender-sensitive methods There is an equitable participation of men and women	Focus groups Surveys with community leaders	Community and leader participation in training is less than expected Communities agree to high levels of women participation
Output 1.2.2. Dialogues, fairs and exchanges involving 120 communities, leaders and community members on food security, nutrition and healthy living habits, considering climate threats, with special focus on diversifying diets and increasing incomes from the production and sale of native species and products. Equitable participation and opportunities of men and women will be promoted	Number of communities trained Number of women trained	Limited awareness of food security, dietary diversity and diversifying livelihoods	By project end, 120 communities trained There is an equitable participation of men and women	Focus groups Surveys with community leaders	Community and leader participation in training is less than expected Communities agree to high levels of women participation
Output 1.2.3. One binational web-based adaptation learning platform in use	Number of learning platforms	Lack of information and learning sharing in binational watersheds	By project end, one binational learning platform in place and used by communities and local authorities	Community surveys Focus groups	Complementarity will be sought with other existent platforms Technical capacity to engage in the binational platform

Output 1.2.4. Compilations and sharing of best practices on risk reduction and risk management actions at binational watershed level, considering ecosystem type and emphasizing traditional and local knowledge	Number climate risk reduction and management best practices Number climate risk reduction and management best practice sharing events	Lack of information on best practices in risk reduction and management in border region Lack of spaces to share knowledge on risks	By project end, twelve best practices compiled from each binational watershed on risk reduction and management By project end, one knowledge sharing event per watershed on risk reduction and management	Community surveys Focus groups	Community and leader participation in knowledge sharing events
Objective 2: Strengthen knowledge generation to effectively plan, design and implement adaptation responses in highly food insecure communities, considering emergency preparation and response actions					
Outcome 2.1. Increase scientific knowledge to manage climate change and risk, affecting food security and nutrition	Scientific studies tailored to binational contexts, considering traditional knowledge and community priorities	Limited scientific climate information accessible for Afro and Awá communities and decision-makers	By project end, 120 communities will have access to scientific climate risk information at the micro-watershed level	Monitoring system through community-level interviews	Scientific studies completed by external experts rather than community members
Output 2.1.1. Studies at the binational watershed level produced on: 1) water provision considering climate threats; 2) ecosystem vulnerability in the face of climate change and variability and extreme events; and 3) food security and nutrition in vulnerable communities and 4) a gender assessment	Number of scientific studies	No knowledge of water provision and ecosystem threats due to climate change	By project end, at least one study on each of the following: 1) water provision and climate risks in two binational watersheds; and 2) ecosystem vulnerability due to climate change and variability and extreme events	Monitoring system through community-level interviews	Information provided in appropriate form for communities to use Information incorporated into EWS

Outcome 2.2 Risk reduction capacity of binational institutions and communities strengthened, including leveraging climate services	Disaster preparedness score (institutions and community members disaggregated by sex)	Limited disaster preparedness and response mechanisms	Disaster preparedness score equal to or greater than 7, indicating local government capacity in disaster preparedness ad food security information with WFP support	Focus group discussions Survey data on disaster risks Final project evaluation	Local government capacity increased sufficiently to manage climate change risks
Output 2.2.1 Binational Early Warning Systems introduced, specifically tailored to inform the Afro and Awá communities about extreme events. Additionally, climate services will be introduced to include agro-meteorological data; vulnerability mapping, with a focus on crop yields and cycles; and climate risks in mangrove and high-mountain ecosystems	Number of early warning systems Number of climate information products/services provided for decision making	No Afro or Awá directed early warning systems or climate services for agro and hydro-climatic data	By project end, at least one EWS in place covering all targeted communities with at least 20 nodes at community level, and territorial organizations able to take appropriate response actions following protocols	Focus group discussions Site visits to see the EWS and climate services Final project evaluation	Technical community capacity to implement early warning systems tools and protocols as well as climate services
Output 2.2.2. Approximately 120 leaders and community members trained in Emergency Preparedness and Response and understanding and planning for climate threats with a focus on gender	Number of EPR training	Limited Afro and Awá capacity to prepare or respond to emergencies	By project end, at least five training conducted targeting 120 leaders Training of community members include equitable percentage of men and women	Site visits Community surveys	Information accepted by local communities and acted upon
Objective 3: Strengthen adaptive capacity of highly food insecure communities to reduce climate risks and food insecurity and improve community resilience in targeted populations through concrete adaptation measures					

Outcome 3.1. Improved access to livelihood assets, enhanced resilience and reduced risks from climate shocks in food-insecure communities and households	Percentage of households and communities having more secure access to livelihood assets Percentage of households where women, men or both (women and men) make decisions on the use of incomes	Limited adaptive capacity in Afro and Awá binational watershed communities	By project end, 100 percent of targeted communities in the binational watersheds have created assets which reduce risk to climate change	Focus group discussions Survey data Final project evaluation	Activities planned taking into consideration community livelihood activities and without enforcing traditional gender roles Strong institutional coordination exists
Output 3.1.1. Participatory approaches developed, interfacing scientific and traditional knowledge	Number of methodologies developed to integrate scientific and traditional knowledge	No methodology established	By project end, participatory approaches enables communities to incorporate both scientific both scientific and traditional knowledge to reduce climate risks	Final project evaluation	Communities willing to make available their traditional knowledge
Output 3.1.2. Effective adaptation measures designed and implemented incorporating participatory approaches, traditional and local knowledge and tested techniques, and promoting equal opportunities for access to resources for women and men to recover of degraded ecosystems in 120 communities	Number of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale) Time saved due to adaptation measures for women and men	Adaptation measures not customized to local context Men and Women spend excessive time gathering water, fuelwood, etc.	By the end of the project, created assets support the sustainable recovery of degraded ecosystems Target to be developed with baseline information 120 community-based adaptation plans	Survey data Field visits Final project evaluation	Participatory processes promote ownership of adaptation activities Sufficient technical assistance available to implement quality projects in territories Adaptation measures, if not well designed, increase workloads, especially during initial implementation phase

	Number of community-based adaptation plans	Communities in the area of intervention do not have adaptation plans			Community members and leaders cannot agree on concrete adaptation measures
Output 3.1.3. Community water harvesting, storage and management measures introduced	Number of communities with improved access to water for agriculture Number of women and men with access and control of water for agriculture	Limited community access to water resources	By the end of the project, up to 120 communities adopt water management measures according to community plans	Survey data Field visits	Participatory processes promote ownership of water management activities
Output 3.1.4. Cost-benefit analysis of proposed adaptation measures at micro-watershed level	Number of cost-benefit analyses	Little research completed on the cost or benefits of proposed adaptive measures	By the end of the project, cost-benefit analyses implemented for each adaptation measure, on a watershed level	Baseline and final project evaluations	Information from analyses incorporated into community-level planning and decision-making regarding the selection of adaptation measures Women are actively involved in decision making processes

Output 3.1.5. Native species reintroduced to diversify production and consumption and for commercialization, including introduction of organic and agro-ecological crop production practices and ocean species	Number of communities that reintroduced climate resilient native species Type of income sources for households generated under climate change scenario (disaggregated by sex of the head of household) Percentage increase in household incomes from ecosystem services and agricultural systems (disaggregated by sex of the head of household)	Low levels of utilization and protection for native species Communities do not market native species	By the end of the project, 120 communities increased land area dedicated to the cultivation of native crops Targeted households develop one alternate income source At least 10 percent increase in household monetary incomes through introduced adaptation measures	Survey data and analysis	Community is open to reintegrating native species into diets and economy Products can only be sold within traditional exchange system which does not generates cash revenue There is a demand for native species Lack of production is due to other reasons, including government policies
Outcome 3.2. Increased adaptive capacity and ecosystem resilience to respond to climate threats and food insecurity	Number of natural assets implemented	Limited number of natural assets in place to withstand or adapt to climate change events	Activities implemented according to community plans	Focus group discussions Field visits Final project evaluation	Communities will manage assets after project end
Output 3.2.1. Soil management activities implemented, including agro-forestry and native nitrogen-fixing species	Number of ha	Limited soil management activities	At least 3,000 ha degraded land recovered using agro-forestry and nitrogen fixing species	Focus groups Field visits	Community is responsive to agro-forestry

Output 3.2.2. Conservation and recovery of 3,000 ha of forest ecosystems and 2,000 ha of mangroves threatened by climate change through tree planting and forest management actions, at the micro-watershed level, with species that are native and resistant to climate variability, in line with national plans	Number of ha	Lack of effective protection of native forests and mangrove populations	At least 3,000 ha of forest and 2,000 ha of mangroves protected and recovered	Field visits and monitoring system	Special interest groups do not impede the introduction of protection and conservation measures

Adaptation Fund Core Impact Indicator "Number of beneficiaries"					
Date of report		9th January, 2017			
Project Title		Building adaptive capacity to climate change through food security and nutrition actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area			
Country		Colombia and Ecuador			
Implementing Agency		World Food Programme (WFP)			
Project Duration		2017 - 2022			
		Baseline	Target at project approval	Adjusted target first year of implementation	Actual at completion
Direct beneficiaries supported by project		0	**19,867**		
Gender	*Female direct beneficiaries*	0	10,144		
	Male direct beneficiaries	0	9,724		
Ethnic group	*Afro*	0	9,120		
	Awá	0	10,748		

Indirect beneficiaries supported by project		0	**72,700**		
Gender	*Female direct beneficiaries*	0	39,258		
	Male direct beneficiaries	0	33,442		
Ethnic group	*Afro*	0	32,630		
	Awá	0	40,070		

F. Project Alignment with AF Results Framework

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Objective 1. Integrate traditional knowledge and capacities to manage climate change risks and food security and nutrition in targeted Afro and Awá areas in the binational watersheds	Binational capacity strengthening score	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	**2.1.2** Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	1.781.500
	Dietary diversity score	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	**3.1.** Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	

Objective 2. Strengthen knowledge generation to effectively plan, design and implement adaptation responses in highly food insecure communities, considering emergency preparation and response actions	Binational capacity strengthening score	**Outcome 1:** Reduced exposure to climate-related hazards and threats	**1.** Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	1.881.800
		Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	**2.1.2** Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	
Objective 3. Strengthen adaptive capacity of highly food insecure communities to reduce climate risks and improve community resilience in targeted populations through concrete adaptation measures	Afro and Awá communties' vulnerability reduced, with increased capacities to confront climate variability	**Outcome 5:** Increased ecosystem resilience in response to climate change and variability-induced stress	**5.** Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress	8.120.500
		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	**6.2.** Percentage of targeted population with sustained climate-resilient alternative livelihoods	
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	
Outcome 1.1. Traditional and local knowledge recovered to support sustainable adaptation measures, food security and nutrition, and resilient livelihoods	Ancestral knowledge and practices integrated in support of adaptation and food security	**Output 3:** Targeted population groups participating in adaptation and risk reduction awareness activities		655.800

Outcome 1.2. Traditional knowledge and adaptation practices integrated in community dialogues and decision-making processes	Traditional knowledge generated, disseminated and integrated into adaptation and development territorial planning processes	**Output 2:** Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	**2.1.** No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	1.125.700
		Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	**6.1.1**. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
Outcome 2.1. Increase scientific knowledge to manage climate change and risk, affecting food security and nutrition	Scientific studies tailored to binational contexts, considering traditional knowledge and community priorities	**Output 1.1:** Risk and vulnerability assessments conducted and updated	**1.1.** No. of projects/programmes that conduct and update risk and vulnerability assessments (by sector and scale)	1.001.300
Outcome 2.2. Risk reduction capacity of binational institutions and communities strengthened, including leveraging climate services	Disaster preparedness and risk reduction scores generated	**Output 1.2:** Targeted population groups covered by adequate risk reduction systems	**1.2.** No. of early warning systems (by scale) and no. of beneficiaries covered	
		Output 2: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	**2.1.1.** No. of staff trained to respond to, and mitigate impacts of climate-related events by gender	880.500

		Output 7: Improved integration of climate-resilience strategies into country development plans	**7.1.** No. of policies introduced or adjusted to address climate change risks (by sector)	
Outcome 3.1. Improved access to livelihood assets, enhanced resilience and reduced risks from climate shocks in food-insecure communities and households	Community adaptation asset score (natural and physical)	**Output 6:** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	**6.1.1**. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	6.440.500
Outcome 3.2. Increased adaptive capacity and ecosystem resilience to respond to climate threats and food insecurity	Community adaptation asset score (natural and physical)	**Output 5:** Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	**5.1.** No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	1.680.000

G. Detailed Budget

TABLE 12
Activity-wise Budget for the Project

Outcome / Output	Activity			Y I	Y II	Y III	Y IV	Y V	TOTAL
Component 1		**Sub-Total Component 1**	**Notes**	**479.200**	**548.500**	**218.400**	**251.300**	**284.100**	**1.781.500**
1.1.	1.1.1.	**Total Activity 1.1.1**		**169.200**	-	-	-	-	**169.200**
		Local Consultants	- Experts with relevant experience on collection of traditional practices and knowledge	99.300	-	-	-	-	99.300
		Travel	- Travel costs of consultants	49.700	-	-	-	-	49.700
		Workshops & meetings	- Logistical costs of workshops to complete proposed studies	20.200	-	-	-	-	20.200
	1.1.2.	**Total Activity 1.1.2**		**56.400**	**-**	**-**	**-**	**-**	**56.400**
		Local Consultants	- Expert responsible for completing a feasibility study of the potential for marketing native species	46.600	-	-	-	-	46.600
		Travel	- Travel costs of consultants	9.800	-	-	-	-	9.800
	1.1.3.	**Total Activity 1.1.3**		**110.300**	**319.900**	**-**	**-**	**-**	**430.200**
		Local Consultants	- Experts on activities 1.1.1 and 1.1.2 with experience working with Awá and Afro communities	-	99.300	-	-	-	99.300

		Travel	- Travel costs of consultants	24.800	49.700	-	-	-	74.500
		Workshops & meetings	-Logistical costs of workshops, dialogues and cultural events	82.800	165.500	-	-	-	248.300
		Miscellaneous expenses	- Incidentals	2.700	5.400	-	-	-	8.100
1.2	1.2.1.	**Total Activity 1.2.1**		**56.400**	**56.400**	**28.300**	**29.100**	**30.000**	**200.200**
		Travel	- Travel costs of the implementing partner team	24.800	24.800	12.400	12.800	13.200	88.000
		Training	- Costs of proposed training exercises, including experts and logistical costs	30.300	30.300	15.200	15.600	16.100	107.500
		Miscellaneous expenses	- Incidentals	1.300	1.300	700	700	700	4.700
	1.2.2.	**Total Activity 1.2.2**		**24.300**	**48.400**	**25.000**	**25.800**	**26.500**	**150.000**
		Travel	- Travel costs of the implementing partner team to complete dialogue, fairs and exchanges	11.700	23.300	12.000	12.400	12.700	72.100
		Workshops & meetings	- Logistical costs of dialogues, fares and exchanges	12.400	24.800	12.800	13.200	13.600	76.800
		Miscellaneous expenses	- Incidentals and stationery	200	300	200	200	200	1.100
	1.2.3.	**Total Activity 1.2.3**		**-**	**30.000**	**40.000**	**40.000**	**40.000**	**150.000**
		Contractual Services	- Specialized services to create a web-based platform and provide technical support and maintenance	-	30.000	40.000	40.000	40.000	150.000
	1.2.4.	**Total Activity 1.2.4**		**62.600**	**93.800**	**125.100**	**156.400**	**187.600**	**625.500**
		Travel	- Travel costs of the implementing partner team to organize	19.400	29.100	38.800	48.500	58.200	194.000

			dialogue, fairs and exchanges						
		Workshops & meetings	- Logistical costs of workshops	40.700	61.000	81.300	101.700	122.000	406.700
		Miscellaneous expenses	- Incidentals	2.500	3.700	5.000	6.200	7.400	24.800
Component 2		**Sub-Total Component 2**		**761.300**	**467.000**	**413.500**	**-**	**-**	**1.641.800**
		Total Activity 2.1.1		**761.300**	**-**	**-**	**-**	**-**	**761.300**
2.1.	2.1.1.	Local Consultants	- Experts in indigenous culture responsible for data collection, completing technical studies at watershed level	326.900	-	-	-	-	326.900
		Travel	- Travel costs of consultants	372.400	-	-	-	-	372.400
		Equipment	- Cost of renting specialized equipment to collect information	52.000	-	-	-	-	52.000
		Miscellaneous expenses	- Incidentals, stationery and related costs	10.000	-	-	-	-	10.000
		Total Activity 2.2.1		**-**	**467.000**	**233.500**	**-**	**-**	**700.500**
2.2	2.2.1.	Local Consultants	- Experts on Early Warning Systems and climate services	-	198.600	99.300	-	-	297.900
		Travel	- Travel costs of the implementing partner team	-	165.500	82.800	-	-	248.300
		Equipment	- Cost of installing meteorological stations	-	58.100	29.000	-	-	87.100
		Technical Assistance	- For the introduction and maintenance of Binational Early Warning systems and mechanisms of collection of agro-metereological data	-	40.000	20.000	-	-	60.000

		Miscellaneous expenses	- Incidentals and use of specialized software	-	4.800	2.400	-	-	7.200
	2.2.2.	**Total Activity 2.2.2**		**-**	**-**	**220.000**	**-**	**-**	**220.000**
		Travel	- Travel costs of the implementing partner team	-	-	72.100	-	-	72.100
		Training	- Costs of community-based training exercises on Emergency Preparedness and Responses, including experts and logistical costs	-	-	137.900	-	-	137.900
Component 3		**Sub-Total Component 3**		**-**	**967.400**	**3.282.800**	**2.340.500**	**1.529.800**	**8.320.500**
3.1.	3.1.1.	**Total Activity 3.1.1**		**-**	**40.000**	**-**	**-**	**-**	**40.000**
		Local Consultants	- Experts responsible for developing participatory approaches	-	33.100	-	-	-	33.100
		Travel	- Travel costs of the implementing partner team	-	6.900	-	-	-	6.900
	3.1.2.	**Total Activity 3.1.2**		**-**	**904.000**	**929.700**	**964.800**	**1001.500**	**3.800.000**
		Technical Assistance	- For implementation of proposed adaptation measures	-	206.900	213.100	221.600	230.500	872.100
		Travel	- Travel costs of the implementing partner team	-	71.100	73.300	76.200	79.300	299.900
		Equipment tools and inputs	- Tools and materials used to implemented proposed adaptation measures	-	505.000	519.300	538.800	559.200	2.122.300
		Workshops & meetings	- Logistical costs of community-based	-	121.000	124.000	128.200	132.500	505.700

		workshops organized for design and implementation of proposed concrete adaptation measures						
3.1.3.	**Total Activity 3.1.3**		**-**	**-**	**433.300**	**866.700**	**-**	**1.300.000**
	Technical Assistance	- Provided to introduce community based water harvesting, storage and management measures	-	-	82.800	165.500	-	248.300
	Travel	- Travel costs of the implementing partner team	-	-	57.900	115.900	-	173.800
	Equipment, tools and inputs	- Tools and materials to build community water reservoirs and technologies water harvesting	-	-	233.300	466.700	-	700.000
	Workshops & meetings	- Logistical costs of workshops on water management	-	-	59.300	118.600	-	177.900
3.1.4.	**Total Activity 3.1.4**		**-**	**73.400**	**146.600**	**-**	**-**	**220.000**
	Local Consultants	- Experts responsible for completing a cost-benefit analysis of proposed adaptation measures at micro-watershed level	-	49.700	99.300	-	-	149.000
	Travel	- Travel costs of the implementing partner team	-	6.200	12.400	-	-	18.600
	Workshops & meetings	- Logistical costs of workshops and dialogues organized to complete the proposed cost-benefit analysis	-	17.500	34.900	-	-	52.400
	Total Activity 3.1.5		**-**	**-**	**1.280.500**	**-**	**-**	**1.280.500**

	3.1.5.	Technical Assistance	- Provided to introduce and maintain soil management measures	-	-	289.700	-	-	289.700
		Travel	- Travel costs of the implementing partner team	-	-	165.500	-	-	165.500
		Equipment, tools and inputs	- Tools and materials to reintroduce native species and agro-ecological crop production practices	-	-	700.000	-	-	700.000
		Workshops & meetings	- Logistical costs of workshops organized for community-based design and implementation	-	-	125.300	-	-	125.300
3.2.	3.2.1.	**Total Activity 3.2.1**		**-**	**-**	**251.600**	**259.000**	**269.400**	**780.000**
		Technical Assistance	- Provided to introduce soil management measures	-	-	62.100	63.900	66.500	192.500
		Travel	- Travel costs of the implementing partner team	-	-	12.400	12.800	13.300	38.500
		Equipment, tools and inputs	- Tools and materials to introduce soil management measures	-	-	133.400	137.300	142.800	413.500
		Workshops & meetings	- Logistical costs of workshops and meetings organized for community-based planning and implementation	-	-	43.700	45.000	46.800	135.500
	3.2.2.	**Total Activity 3.2.2**		**-**	**-**	**291.100**	**300.000**	**308.900**	**900.000**
		Technical Assistance	- Provided for conservation and recovery of forests and mangroves	-	-	93.100	95.900	98.800	287.800

	Travel	- Travel costs of the implementing partner team	-	-	17.200	17.800	18.300	53.300
	Equipment, tools and inputs	- Tools and materials for tree planting and implementation of forest management actions	-	-	180.800	186.300	191.800	558.900
Total: Project Components			**1.240.500**	**2.032.900**	**4.004.700**	**2641.800**	**1.863.900**	**11.783.800**
Total: Project Execution 9.5%			**204.700**	**193.600**	**212.300**	**201.300**	**307.500**	**1.119.400**
1 Binational Coordinator			28.000	28.600	29.100	29.700	30.600	146.000
2 National Coordinator			46.300	47.300	48.200	49.200	50.700	241.700
4 Officers (liaison with MAE, MADS, WFP Colombia and WFP Ecuador)			75.900	77.400	78.900	80.500	82.900	395.600
2 Monitoring assistants			17.400	17.800	18.200	18.500	19.100	91.000
Travel			4.400	4.500	4.500	4.600	4.900	23.000
Project accountability costs			20.500	5.600	20.700	5.900	106.000	158.700
National office costs (technical support including monitoring, finance and programming)			2.400	2.400	2.500	2.500	2.600	12.400
Sub-office costs			9.800	10.000	10.200	10.400	10.700	51.100
Total Project Cost			**1.445.200**	**2.226.500**	**4.217.000**	**2.843.100**	**2.171.400**	**12.903.200**
MIE Management Fees 8,5%			**122.842**	**189.252**	**358.445**	**241.692**	**184.569**	**1.096.800**
Total Financing requested			**1.568.042**	**2.415.752**	**4.575.445**	**3.084.792**	**2.355.969**	**14.000.000**

General Notes:

Local Consultants: includes consultants hired to complete studies and disseminate results.

- Under component 1, this includes a studies coordinator, two experts in agribusiness and market research, one gender expert, two translators and two consultants with extensive experience with Awá and Afro communities responsible for studies on traditional practices and knowledge, and on the feasibility of the potential for marketing native species.
- Under component 2, it includes a coordinator for studies on climate risk, two climate risk experts, two environmental experts (one for water, one for forest ecosystems), one contingency planner, two watershed management experts and two Early Warning

System experts. These consultants will undertake studies on vulnerabilities at the watershed level, as well as on the potential use of EWS. It also includes Fees for experts in anthropology, agriculture, environment and climate change with experience working with afro and indigenous communities. Experts will also be needed to conduct primary data collection from communities, translate from Awapit to Spanish and record the data, and further generate information to analyse vulnerabilities and threats faced by the communities.

- Under component 3, it includes four consultants hired to develop a methodology interfacing scientific and traditional knowledge and to complete a cost-benefit analysis, two for Colombia and two for Ecuador.

The data and information generated will be detailed in order to ensure uptake and use by community and government authorities in Colombia and Ecuador in order to support future interventions (including social protection programs, strategies on disaster preparation, land use planning, environmental conservation and local and national plans for sustainable development). Additionally, these studies will be conducted with a participatory approach and with experts who are part of, or have experience working with, Awá and Afro communities in Colombia and Ecuador. Moreover, all data collected and studies written will be in both Awapit and Spanish.

Travel: includes transportation costs for travel to the target area for consultants and the implementing partner team to Afro and Indigenous communities in mangroves and forests in remote border areas. Access to these communities requires from 2 to 12 hours travel via river, trail and horse from the closest urban center, in an area of more than 8,000 square kilometers. Additionally, only few communities are served by a regular public transportation service. These costs include fares for land, air and river transportation. It is estimated that a trip would cost approximately USD 1,800 per person, including all travel allowances, gas and rental of cars, boats, canoes, and donkeys.

Miscellaneous expenses: includes incidentals, stationery for consultants, rent for use of meeting areas necessary for project programming, and other costs.

Equipment, tools and inputs: Under component 2, this includes: equipment to complete studies, including tablets, GPS, specialized geological, climatological and other instrumentation, as well as for the strengthening of at least 3 meteorological stations for climate services as part of EWS. Cost of maintenance for these meteorological stations will be covered by government entities in Colombia and Ecuador once agreement is reached. It also includes materials and labour required in component 3 to install wind breaks, prepare fish ponds, establish family gardens, introduce organic products, build community water reservoirs and technologies for cloud harvesting of water, and implement proposed adaptation measures under this component. This encompasses storage centres, nurseries, wire, and other materials related to the proposed adaptation measures.

Workshops & meetings: includes rent of spaces, catering, transportation costs for participants and related logistical costs. It also relates to least two workshops per community in component 1 to disseminate results of studies and integrate traditional knowledge and

adaptation practices into community dialogues, promoting equitable participation of men and women. In component 3, this covers costs for at least 3 workshops with communities to develop community-based adaptation plans, a full cost benefit analysis of activities, and decisions on implementation of concrete adaptation measure activities.

Contractual Services: this includes fees for experts to consult with communities using a gender and culturally sensitive approach and compile lessons learnt and best practices. This information will be uploaded on a web-based platform. The web platform costs include fees for webmasters, procurement of software licenses, installation of programs across the binational, regional and national systems of Ecuador and Colombia, one time training of relevant authorities on usage, and maintenance and troubleshooting.

Training: includes experts to lead and organize training activities for climate change threats with a gender focus under component 1, and for EPR under component 2. It also considers logistical costs.

Technical Assistance: includes assistance to strengthen implementation capacities of proposed activities for communities and government organizations under component 2 (for EWS), and assistance to facilitate design and implementation of effective adaptation measures at the community level under component 3.

Project accountability costs: includes costs of an Inception Workshop, a Final Evaluation, five Annual Progress Reports and a Final Audit.

National office costs: includes costs of providing technical support at national level for monitoring, finance and programming.

Sub-office costs: covers local support and general maintenance costs of field offices in order to guarantee effective implementation of the project.

MIE Management Fees

The MIE Management Fees will be utilized by WFP as the Multilateral Implementing Entity to cover the costs associated with the provision of general management support in Colombia and Ecuador. It covers the costs of management services provided by WFP Colombia and Ecuador Country Offices and WFP Headquarters in support of the implementation of the proposed project. The table below provides a breakdown of the estimated costs of providing these services.

TABLE 13

Management Fees Distribution

Breakdown of costs for the project management fees	
Finance and budget	• General oversight, management and quality control • Ensure compliance with WFP judiciary standards and internal control processes, relevant international and national regulations and the Adaptation Fund Board • Manage, monitor and track financial transactions • Manage all Adaptation Fund financial resources through a dedicated Trust Fund
Programme and performance management support	• Technical support, troubleshooting, and support missions as necessary • Specialised policy, programming and implementation support services • Provide technical support in the areas of risk management, screening of financial and risk criteria and indicator selection • Provide guidance in establishing performance measurement processes
Information and Telecoms Support	• Includes maintaining information management systems and specific project management databases to track and monitor project implementation
Evaluation and knowledge management advice	• Technical support in methodologies, innovative solutions, validation of Terms of Reference, identification of experts, results validation and quality assurance
Audit and inspection support	• Ensure compliance with audit requirements • Ensure financial reporting complies with WFP and Adaptation Fund standards • Ensure accountability and incorporation of lessons learned
Legal Support	• Legal advice to assure conformity with WFP legal practices and those of Colombia and Ecuador • Contract review

H. Disbursement Schedule

TABLE 14

Project Timelines

Activity	Broad timelines
Studies on: 1) water provision considering climate threats; 2) ecosystem vulnerability in the face of climate change and variability and extreme events; and 3) food security and nutrition in vulnerable communities	3-12 months
Studies on traditional and local practices and feasibility of marketing native species	6- 12 months
Training to leaders, community members and women	6-18, 33-36,45-48, 57-60 months
Community Adaptation Plans prepared with full participation of communities	6-18 months
Workshops, dialogues, fairs, exchanges and cultural events with community members and leaders	9-18, 33-36,45-48, 57-60 months
Web-based adaptation learning platform	15-60 months
Early Warning Systems	12-30 months
Compilations and sharing of best practices on risk reduction and risk management actions	3-60 months
Methodology developed that interfaces scientific and traditional knowledge with community participation	12-18 months
Cost-benefit analysis of proposed adaptation measures	21-30 months
Livelihood activities of adaptation to climate change and variability	13-60 months
Monitoring and evaluation	Project Inception Workshop (0-2 month), Annual Progress Reports (month 12, 24, 36, 48 and 60) , Mid-term Evaluation (30 month) and Final External Evaluation (months 54- 60)

TABLE 15

Disbursement Matrix

	Upon Agreement signature	One Year after Project Start	Year 2	Year 3	Year 4	**Total**
Scheduled Date	1st June 2017	1st June 2018	1st June 2019	1st June 2020	1st June 2021	(in USD)
Project Funds	**1.445.200**	**2.226.500**	**4.217.000**	**2.843.100**	**2.171.400**	**12.903.200**
Implementing Entity Fee	**122.842**	**189.252**	**358.445**	**241.692**	**184.569**	**1.096.800**
Total	**1.568.042**	**2.415.752**	**4.575.445**	**3.084.792**	**2.355.969**	**14.000.000**

Component 1

Expected Outcomes	Expected Outputs	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.1. Traditional and local knowledge recovered to support sustainable adaptation measures, food security and nutrition, and resilient livelihoods	1.1.1 One study per watershed produced on traditional and local practices, promoting resilience to climate change and variability in the targeted binational watersheds, with community participation, a gender sensitive approach and particular attention to ancestral and native plant and tree species that can improve dietary diversity and are resilient to climate change.																				
	1.1.2. Study produced on the feasibility of marketing native species for medicinal, artisanal, food and fodder related uses at regional, departmental and national levels.																				
	1.1.3. Workshops, dialogues and cultural events (for example fairs) organized to disseminate study results to 120 Afro and Awá communities, leaders and decision makers, in local languages. Equitable participation of men and women will be promoted.																				
1.2 Traditional knowledge and adaptation practices integrated in community dialogues and decision-making processes	1.2.1. In 120 communities, leaders, community members and women trained on climate change threats with culturally and gender sensitive methods. Equitable participation of men and women will be promoted.																				
	1.2.2. Dialogues, fairs and exchanges involving 120 communities, leaders and community members on food security, nutrition and healthy living habits, considering climate threats, with special focus on diversifying diets and increasing																				

	incomes from the production and sale of native species and products. Equitable participation and opportunities of men and women will be promoted.																						
	1.2.3. One binational web-based adaptation learning platform in use.																						
	1.2.4. Compilations and sharing of best practices on risk reduction and risk management actions at binational watershed level, considering ecosystem type and emphasizing traditional and local knowledge.																						

Component 2

Expected Outcomes	Expected Outputs	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.1. Increase scientific knowledge to manage climate change and risk, affecting food security and nutrition	2.1.2. Studies at the binational watershed level produced on: 1) water provision considering climate threats; 2) ecosystem vulnerability in the face of climate change and variability and extreme events; 3) food security and nutrition in vulnerable communities; and 4) a gender assessment																				
2.2 Risk reduction capacity of binational institutions and communities strengthened, including leveraging climate services	2.2.1. Binational Early Warning Systems introduced, specifically tailored to inform the Afro and Awá communities about extreme events and sea level rise. Additionally, climate services will be introduced to include agro-meteorological data, vulnerability mapping, with a focus on crop yields and cycles; and climate																				

	risks in mangrove and high-mountain ecosystems.																				
	2.2.2. Approximately 120 leaders and community members trained in Emergency Preparedness and Response and understanding and planning for climate threats with a focus on gender																				

Component 3

Expected Outcomes	Expected Outputs	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3.1. Improved access to livelihood assets, enhanced resilience and reduced risks from climate shocks in food-insecure communities and households	3.1.1. Participatory approaches developed, interfacing scientific and traditional knowledge.																				
	3.1.2. Effective adaptation measures designed and implemented incorporating participatory approaches, traditional and local knowledge and tested techniques, and promoting equal opportunities for access to resources for women and men to recover of degraded ecosystems in 120 communities																				
	3.1.3. Community water harvesting, storage and management measures introduced.																				
	3.1.4. Cost-benefit analysis of proposed adaptation measures at micro-watershed level.																				

	3.1.5. Native species reintroduced to diversify production and consumption and for commercialization, including introduction of organic and agro-ecological crop production practices and ocean species.																						
3.2. Increased adaptive capacity and ecosystem resilience to respond to climate threats and food insecurity	3.2.1. Soil management activities implemented, including agro-forestry and native nitrogen-fixing species.																						
	3.2.2. Conservation and recovery of 3,000 ha of forest ecosystems and 2,000 ha of mangroves threatened by climate change through tree planting and forest management actions, at the micro-watershed level, with species that are native and resistant to climate variability, in line with national plans.																						

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Endorsement on Behalf of the Government[79]

COLOMBIA ***FANNY SIERRA BONILLA*** *Acting Head of the Office of International Affairs* *Ministry of Environment and Sustainable Development – Colombia*	***Date:*** *April 7th 2017*
ECUADOR ***ARQ. WALTER GARCÍA CEDEÑO*** *Minister of Environment* *Ministry of Environment of Ecuador*	***Date:*** *April 10th 2017*

[6]. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

B. Implementing Entity Certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans in Colombia and Ecuador and subject to the approval by the Adaptation Fund Board, commit to implementing the project in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.
Deborah Hines Implementing Entity Coordinator – Colombia *Kyungnan Park* Implementing Entity Coordinator – Ecuador
Date: April 10th 2017 | Tel. and email: Deborah Hines +57 1 346 9870 deborah.hines@wfp.org Kyungnan Park +593 2 2460330 kyungnan.park@wfp.org
Project Contact Person: Carmen Galarza (Ecuador) and Joseph Martinez (Colombia)
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Annex 1 - List of Acronyms Used in this Document

Acronym	*Expanded*
ACIPAP	Association of Indigenous People of the Awá Villages of Putumayo
AEI	Agriculture expansion index
AF	Adaptation Fund
ALP	Stuggle and Progress Association
APC	Presidential Coordination Agency
APR	Annual Progress Report
CAMAWARI	Major Awá Chapter of Ricaurte
CANE	The Afro-Ecuadorian Confederation of Northern Esmeraldas
CbA	Community-based Adaptation
CBD	Convention on Biological Diversity
CBT	Cash-Based Transfer
CIAT	The Center for Tropical Agriculture
CIIFEN	International Centre for ENSO Research
COMBIFRON	Colombia-Ecuador Binational Border Commission
CORPONARIÑO	The Autonomous Regional Environmental Authority of Nariño
DALY	Disability Adjusted Life Year
EbA	Ecosystem based Adaptation
ENCC	National Strategy for Climate Change
ENSO	El Niño – Southern Oscillation
EPR	Emergency Preparedness and Response
EWS	Early Warning Systems
FARC	Revolutionary Armed Forces of Colombia
FCAE-GONAE	Federation of Awá Centers of Ecuador
FECONIC	Federation of Black Communities of Imbabura and Carchi
FEE	Final External Evaluation
GAD	Decentralized Autonomous Government
GIS	Geographic Information System
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies
INAMHI	National Institute for Meteorology and Hydrology
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
ITZC	Inter-Tropical Convergence Zone
IW	Inception Workshop
LAC	Latin America and the Caribbean
MADS	Ministry of the Environment and Sustainable Development
MAE	Ministry of the Environment (Ecuador)
MASL	Meters Above Sea Level
M&E	Monitoring and Evaluation
MIE	Multilateral Implementing Entity
MOMUNE	Movement of Negro Women of North-Esmeraldas
MTE	Mid-Term Evaluation

NGO	Non-Governmental Organization
PNACC	National Climate Change Adaptation Plan
RECOMPAS	The Network of Southern Pacific Community Councils
REDD+	Reduce Emissions from Deforestation and Forest Degradation, and Foster Conservation, Sustainable Management of Forests, and Enhancement of Forest Carbon Stocks
SDG	Sustainable Development Goals
SGR	National Risk Management Secretariat
UNDP	United Nations Development Programme
UNIPA	The United Indigenous Organizations of the Awá People
UNFCCC	United Nations Framework Convention on Climate Change
UNGRD	National Disaster Risk Management Unit
VAM	Vulnerability Analysis and Mapping
WFP	World Food Programme
ZIFEC	Border Integration Zone Ecuador - Colombia

Annex 2 - List of Stakeholders Consulted and Meeting Results

Country	Dates	Location	Participants	Meeting objectives	Main results
BINATIONAL	8 April 2016	Teleconference Bogotá-Quito	MADS, MAE, WFP COs	Discuss steps forward in concept note development	MADS and MAE agreed to share lessons learned from previous adaptation projects and draft a project development timeline.
	16 May 2016	Teleconference Bogotá-Quito	MADS, WFP COs	Discuss advances from WFP in Colombia and Ecuador on concept note development	MADS agreed to follow up with MAE bilaterally.
	28 June 2016	Teleconference Pasto - Bogotá - Tulcán - Quito	MADS, MAE, WFP COs	Follow up on technical advances for concept note development and consultation plans	WFP, MADS and MAE agreed that the concept note must reflect a binational focus and that to improve communication periodic teleconferences will take place. WFP agreed to give MADS and MAE the concept note draft by July 8 and MADS and MAE agreed to give comments within one week.
	13-14 December 2016	Pasto	GFAB, MADS, MAE, FCAE, RECOMPAS, Consejo Comunitario de Bajo Mira y frontera Consejo Comunitario de Alto Mira, Resguardo el Gran Sábalo	Socialize and discuss Project management structure, proposed adaptation measures and climatic threats identified in the area of the Project	Communities agreed on proposed adaptation measures and a management structure was defined. The full proposal will be shared.
COLOMBIA	8 April 2016	Cali	RECOMPAS, WFP	Socialize the pre-concept and evaluate interest in the AF process	RECOMPAS focal point agreed to present the AF pre-concept to RECOMPAS leaders for their review.

	8 April 2016	Cali	CIAT, WFP	Learn about CIAT's innovative EbA and CbA tools and best practices	CIAT agreed to serve as technical support in project implementation, with their portfolio of innovative adaptation tools. CIAT shared information about former border-area projects.
	14 April 2016	Pasto	UNIPA (one constituent governance structure of the GFAB), WFP	Socialize the pre-concept with one GFAB leader and evaluate interest in the AF process	UNIPA invited WFP to present the AF pre-concept in front of all GFAB leaders.
	14 April 2016	Pasto	CORPONARIÑO, WFP	Learn about Corponariño's territorial adaptation projects and best practices	Corponariño agreed to be part of the concept note development process in technical support and provided information on current territorial projects and priorities.
	20 April 2016	Pasto	GFAB, WFP	Socialize the pre-concept with all GFAB leaders and evaluate interest in the AF process	GFAB agreed to continue with the AF process and invited WFP to present the pre-concept at the binational Awá congress.
	05 May 2016	Bogotá	MADS, WFP	Follow up on commitments between WFP and MADS, finalize the concept note development timeline and identify the role of each stakeholder	MADS agreed to organize a binational committee to improve the AF management process. WFP agreed to share an updated concept note development timeline.
	11 May 2016	Tumaco	RECOMPAS, WFP	Follow up with RECOMPAS leaders on their comments on the pre-concept	WFP presented the AF pre-concept to RECOMPAS leaders and presidents of community councils. RECOMPAS agreed to be part of the concept note development.
	23 June 2016	Bogotá	MADS, WFP	Review technical advances in CN development and consultative process	MADS agreed to discuss technical advances with MAE bilaterally.
	27 June 2016	Pasto	GFAB, WFP	Learn about climate threats in the border region, identify community priorities for adaptation	Analyse climate risks and measures at the local level for the Awá territory.

	28 June 2016*	Pasto	GFAB, Corponariño, Gobernacion de Nariño, WFP	Identify climate threats, priorities, traditional adaptation measures and potential stakeholder roles and responsibilities	GFAB agreed to continue with the AF process. Corponariño and the Gobernación of Nariño agreed to form part of technical assistance for project design and implementation.
	6 July 2016	Bogotá	MADS, WFP	Share advances and information about the meeting with the Awá on the 28th; review alignment of the CN with priorities of the new MADS minister	MADS agreed to submit their endorsement letter by 25 July and to give us their consolidated comments on the CN by 15 July.
	12 July 2016	Tumaco	Recompas, WFP	Learn about climate threats in the border region	Identified community priorities for adaptation.
	31 October 2016	Pasto	Public entities, environmental organizations linked to Climate Change programs	Enhance awareness of and promote the project, identify institutional stakeholders and their main interests and projects in the Ecuador-Colombia border area	WFP reported on progress on the proposal, strategies for community participation, policy alignment with the Ministry of Environment and Sustainable Development (MADS), and a workshop to identify key stakeholders present in the territory, as well as the current and potential future themes of the proposal along with priority zones and communities which may be interested in participating.
	31 October 2016	Pasto	Corponariño-MADS	Reach agreement with Corponariño regarding the structure of the project	WFP and MADS presented advances on the proposal in alignment with climate change policies. Corponariño as the local environment authority agreed on participating in the proposal formulation and designated a focal point. Corponariño provided official documents and maps to complement the proposal and explained in detail its administrative mechanisms, office locations and implementation capacity.

	31 October 2016	Pasto	UNDP	Coordinate actions at territorial level	UNDP and WFP discussed project initiatives in the territory. UNDP is in the designing phase of a hydrological management project in the department of Nariño. Agreement was reached to share documentation, complement activities with one another and to coordinate actions in the territory.
	3-4 November 2016	Pasto	UN Agencies International NGO	Map programs and projects related to climate change and food security and nutrition from UN agencies and international NGOs	WFP presented advances on the proposal, priorities and alignment to binational policies both on climate change and food security and nutrition. UN agencies including UNHCR and FAO, and international NGOs presented their programs and projects in order to identify convergence areas and community contexts.
	09 November 2016	El Diviso	Leaders from Grand Family Awá Binational UNIPA, CAMAWARI-ACIPAP from Colombia and GONAE from Ecuador, elders & AWÁ women	Approve the project concept with communities Identify applicable priority climate change adaptation methods based on the area and needs of the communities Collectively determine communities to be included in the project	WFP presented on the progress of the project and the evaluation schedule for project approval. Agreement was reached on key concepts (climate change, Risks, Vulnerabilities, Adaptation and Food Security and Nutrition) as well as criteria for targeting and selecting communities. A wall of history exercise was carried out to identify experiences related to severe climatic events, effects on the community, and roles and means for dealing with them. Reached agreement on selection of 15 AWÁ communities from Alto Mira and 15 Awá communities from Bajo Mira based on shared criteria for selection.
	10 November 2016	Tumaco	Members of community councils of Upper and Lower Mira River watershed, 13 leaders from the council of RECOMPAS,	Approve the project concept with communities Identify applicable priority climate change adaptation methods based on the area and needs of the communities Collectively determine communities to be included in the project	WFP presented on the progress of the project and the evaluation schedule for project approval. Agreement was reached on key concepts (climate change, Risks, Vulnerabilities, Adaptation and Food Security and Nutrition) as well as criteria for targeting and selecting communities. A wall of history exercise was carried out to identify experiences related to severe climatic events, effects on the community and roles and means of dealing with them. Reached agreement on selection of 15 AWÁ communities from Alto Mira

			as well as key RENCOMPAS figures and women leaders		and 15 Awá communities from Bajo Mira based on shared criteria for selection. Identified roles and ways to participate in the project for children and youth, women, elders and leaders. Community councils which were not directly included in the workshop have acknowledged that it is important to focus on the most vulnerable communities which are in the border area.
	17 November 2016		Rural communities prioritized for consultation in the Awá zone of the project	Identify appropriate and required adaptation measures in each zone as well as ways to strengthen the gender approach of the project with an emphasis on Food Security and Nutrition	An exercise was carried out to identify and prioritize climate change adaptation methods and family FSN in a gender-neutral manner, with women contributing significantly to the process. Workshop participants in breakout session groups described direct and indirect social benefits for each adaptation measure prioritized.
	18 November 2016	Pasto	WWF	Identify planning documents and experiences with local communities	WFP presented advances on the proposal and explained the consultative process with Awá and Afro Colombian Communities. WWF presented planning and research documents produced in the area and agreed to share lessons learned.
	18 November 2016		Rural communities prioritized for consultation in the Afro zone of the project	Identify appropriate and required adaptation measures in each zone as well as ways to strengthen the gender approach of the project with an emphasis on Food Security and Nutrition	Council of Economy and Production from GFAB organized the meeting and provided information about traditional agricultural systems (Awá-su y Sao). Participants identified 10 communities from UNIPA deeply affected by drought, impacting food security and stability of terrestrial and aquatic ecosystems.

	21 November 2016	Pasto	Staff involved in project "Messengers of Life"of UNICEF, Gran Sábalo Reserve.	Collect information to focus on and identify adaptation measures, with a well-defined gender approach	Using a feedback mechanism, the selection of targeted communities was confirmed, and the potential role of women "messengers of life" and the inclusion of men "messengers" based on existing experience in the area. Also identified the importance of working with youth and elders on an inter-generational dialogue, the inclusion of schools and teachers with an inter-cultural focus, and the importance of retaining ancestral languages in order to transfer traditional knowledge. Also identified was the importance of retrieving knowledge of traditional orchards and farming methods (SAU, SAW and Awá-su), as well as strengthening of human rights and the idea of protected or "safe havens" related to needs of the family, community, schools and community organizations.
	22-23 November 2016	Vereda San Isidro Alto, Consejo Comunitario Bajo Mira y Frontera Vereda Chimbuzal, Consejo Comunitario Alto Mira y Frontera Vereda Imbilí y Miras Palmas,	Leaders of Afro Communities in the area of intervention	Prioritize Afro-descendant communities through consultation sessions in the field area	Prioritization of adaptation measures, with a FSN component. WFP committed to strengthen their relationship with local Afro communities.

ECUADOR	06 May 2016	Quito	MAE - WFP	Discuss including Sucumbíos as a targeted province	WFP and MAE concluded that Carchi and Esmeraldas are more feasible to cover through the project than Sucumbíos.
	13 May 2016	Quito	MAE - WFP	Discuss how to accelerate the consultative process with community leaders	WFP and MAE agreed to hire Ecobiotec because of its knowledge in the field and good working relationship with the Awá and Afro-descendent populations.
	21 May 2016	Quito	MAE - WFP	Share information about lessons learned and the legal frameworks for climate change in Ecuador	MAE agreed to send information to incorporate in the project.
	16 June 2016	Quito	WFP-HIVOS	Learn more about HIVOS and its work with climate change in Esmeraldas	HIVOS will provide information about Afro-descendant groups in that area and its previous projects in the province – they are a potential technical or executing partner.
	27 June 2016	Tulcan	WFP-GADPC	Discuss GADPC's work with climate change and interest in the development of the concept note (GADPC – Autonomous Governing Authority of Carchi)	GADPC agreed to participate in a consultation meeting June 28th and expressed interest in the project.
	28 June 2016	Tulcan	MAE-WFP-GADPC-CANE-FECONA-MOMUNE (Afro de Esmeraldas)-FECONIC (Afro del Carchi) ECOBIOTEC	Learn about climate threats in their territories and for the communities, especially for Afro- populations	Local Afro-representatives from coastal and Andean zones expressed that they have experienced increased structural and environmental vulnerabilities due to climate change that have affected local communities. They agreed to have consultations at a community level.
	28 June 2016	Ibarra	MAE-WFP-FCAE (AWÁ)-ECOBIOTEC	Learn about climate threats in the Awá territories and communities	The Awá expressed that they have few means to adjust to changes threatening food security due to climate change.

	05 July 2016	San Lorenzo	FETANE (Afro) - ECOBIOTEC	Learn how FETANE is organized	FETANE expressed that their community members lost their communal territories due to palm oil plantation expansion.
	06 July 2016	San Lorenzo	FEDARPON-CANE (Afro)-ECOBIOTEC	Learn how FEDARPON is organized, its socioeconomic ties with the municipal government and how community members perceive climate threats	Communities lost land to palm-growers and are now co-proprietors/ labourers. Those not linked to palm-growers work in mangroves, competing with Colombians. The pressure on the ecosystem and in communities reduces prices and the quantity of products available to each family.
	07 July 2016	San Lorenzo	Lucha y Progreso-CANE - ECOBIOTEC	Learn how CANE is organized, its socioeconomic ties with the municipal government and how community members perceive climate threats	Communities are interested in sustainability projects. In terms of climate changes, there has been an insurgence of long droughts and short, harsh winters that affect the communities, such as the drought in 2014.
	30 November 2016	Ibarra	Board and staff of the Federación de Centros Awá del Ecuador (Federation of Awá Centers of Ecuador (FCAE)	Present the last developments in the building of the project “Building adaptive capacity through food and nutrition security and peace-building actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area” Inform about the next steps in the process Institutional stakeholders identification and discuss interest	The WFP team explained the latest developments in the process and discussed the possible ways of FCAE participation, climate change related problems in the Awá communities and Stakeholders in the Awá territory. It was agreed that the WFP team participate in the FCAE General Congress to be held in the following week in the Guadualito community. .

	1 December 2016	Tulcán Chical	Mayor of Tulcán and officers of the Planning Department.	Provide information on the developments of the project Learn what information the municipality of Tulcan has regarding the Awá people Learn whether the Municipality of Tulcán would be willing to work with Awà Communities of interest	The WFP team explained the progress and the current status of project. From the Mayor of Tulcán and officers of the Planning Department; the mayor expressed his interest to participate in the project and in complementing the initiatives with the Awá people, that are in harmony with his office´s efforts and functions. He expressed the willingness to carry out combined activities to identify local issues related to climate change and food security and raise awareness of same. Key concepts (climate change, risk, vulnerability, adaptation and food and nutritional security) were agreed upon as were general criteria for targeting communities for possible support from the municipality.
	2 December 2016	El Chical Rural Parish	President and members of the Parish autonomous government.	Provide information on the developments of the project Understand the parish perspective regarding the Awá indigenous communities and the possibilities of interaction in the execution of the project	The president and members of the Parish Council described the socio-economic situation of the Awá people in the area sharing his perception about the cause of their problems (insufficient linkage of indigenous peoples with external society for reasons of culture and geographical connectivity). The members of the Council stated that in Awá communities malnutrition reaches up to 98%. Officers of the health department of Chical confirmed this fact later on. The council members agree to provide information on planning and projects in the Awá communities. The WFP team invited the Parish Council President to a workshop to understand and discuss the goals and components of the project "Building adaptive capacity through food and nutrition security and peace-building actions in vulnerable Afro and indigenous communities in the Colombia-Ecuador border area"

	2 December 2016	Chical Rural Parish	Chical Health Center, Awá community Health Center	To provide information on the developments of the project, particularly regarding the link between climate change and food security and nutrition To ask about the health and nutrition situation in the Awá communities	Discussed the goal and components of the project and how it is related to nutrition issues. The health officers provided information regarding the current situation on food security and nutrition in the Awá communities, especially those in Carchi province. All of them agreed that the level of malnutrition in these communities can be very high, up to 98%. The health officers offered to send more detailed data about health and malnutrition issues in the Awá communities. However, they asked the WFP Team to send a formal request letter to the Health departments in Carchi and Imbabura provinces. The WFP invited the Health officers to send a delegate to participate in a workshop for institutions to be held in Ibarra in the following week.
	2 December 2016	Goaltal Rural Parish	Ernesto Chingal, Secretary of the Parish Council;	To provide information on the developments of the project Understand the Afroecuadorian and Awá communities present in the Parish territory Understand the parish council perspective regarding the local problems related with Climatic Change	Discussed the goal and components of the project and how the local communities can participate. The WFP invited the Parish Council to send a delegate to participate in a workshop for institutions to be held in Ibarra in the following week.
	2 December 2016	Alto Tambo Rural Parish	Segundo Saltos, President of the Junta Parroquial.	Provide information on the developments of the project Understand the Afroecuadorian and Awá communities present in the Parish territory	Discussed the goal and components of the project and how the local communities can participate. The Parish President provided information on the problem of landlessness that affects practically all the families of the central town. This problem causes food insecurity and migration.

				Understand the parish council perspective regarding the local problems related to Climatic Change	
	3 December 2016	San Lorenzo and Guadualito Awá community	Awá authorities, and Council of the FCAE, GFAB Delegations of the 26 Awá communities, including these located in the Sucumbios province; Representatives of UNIPA, CAMAWUARI Health District officers of the San Lorenzo area; International Health Brigade. Rural Parish Mataje Government	To provide information on the developments of the project To identify institutional stakeholders and their activities in the Awá Communities of the Colombian-Ecuadorian border area To identify relevant adaptation measures for climate change in the targeted area and its communities To select communities to be included in the project proposal through a participative process	Byron Real on behalf of the WFP Team gave a presentation on Ecuadorian Climate Change policy, the social and environmental effects of climate change. WFP presented on progress of the project to be implemented in the Carchi-Guaytara and Mira Mataje Hydrographic watersheds. Workshops were planned to identify local issues related to climate change and food security and nutrition. Stated the need to identify institutional actors and their activities in the targeted areas. It was agreed to facilitate future meetings to strengthen the project design and its respective local counterparts. It was agreed to arrange a new meeting in Ibarra city with the recently-elected board. The key concepts and principles to guide the project decisions and activities such as climate change, risk, vulnerability, adaptation and food and nutritional security, and the criteria for community selection, were agreed upon. The community councils recognized the importance of the project focusing on the most vulnerable areas in the Awá territory.

	4 December 2016	Afro-Ecuadorian communities located in the area of influence (Mataje River and Mangrove Reserve Cayapas-Mataje)	Indigenous Communities: El Viento, Cauchal, Changuaral, Palma Real, Pampanal de Bolìvar, La Punta de Miguel. NYTUA foundation	Socialization of the project Identify institutional actors and their activities in the mangrove communities Identify measures of adaptation to climate change according to the targeted area and community characteristics Identify socio-economic and environmental problems Invite to Consultation Workshops	It was agreed to facilitate future meetings to strengthen the project design and respective local counterparts.
	5 December 2016	San Lorenzo	World vision, MAE Decentralized autonomous government (GAD) of the Municipality of San Lorenzo, NYTUA foundation. San Andrés initiative	Awareness-raising of the project Identify institutional actors and their main areas of work in Awá and Afro communities Identify activities involved in adaptation to climate change planned or implemented in the targeted area Establish a preliminary prioritization of communities Invite to Consultation Workshops	Specific work experiences were shared within different communities in the area, particularly those related to food and nutrition security, social vulnerability and gender. The attendees proposed to continue working on forest conservation and harmonization of sacred places. Additionally, proposed to follow and respect the organizational process put forward at the time of project implementation.

Annex 3 – Governance Structure of the Afro and Awá

The Grand Family Awá

The Grand Family Awá is the binational, overarching governance structure of the Awá in Colombia and Ecuador. It is comprised of four organizations: CAMAWARI, UNIPA and ACIPAP (Colombia) and FCAE-GONAE (Ecuador). In Colombia these organizations are legally protected by Decree 1088 of 1993, and, in Ecuador, the organizations are articulated with the government through Executive Decree No. 386 of 1998. Each organization has its own internal governance structure, as described below.

The highest authority for the Awá is the Congress of the Grand Family, which convenes every three years with the participation of approximately 50 delegates from each constituent organization as well as community members and invited external partners. A lower-level assembly meets every year and involves 20 delegates from the constituent Awá organizations in order to make decisions regarding existing problems, to monitor objectives and to plan new working guidelines. The Awá are also governed by a coordination committee, which is comprised of the presidents of FCAE-GONAE, UNIPA, CAMAWARI, ACIPAP as well as coordinators and delegates including women and youth. The Grand Family Awá has a general coordinator, who represents the organization at a national level.

Organizations in Colombia: CAMAWARI, ACIPAP and UNIPA

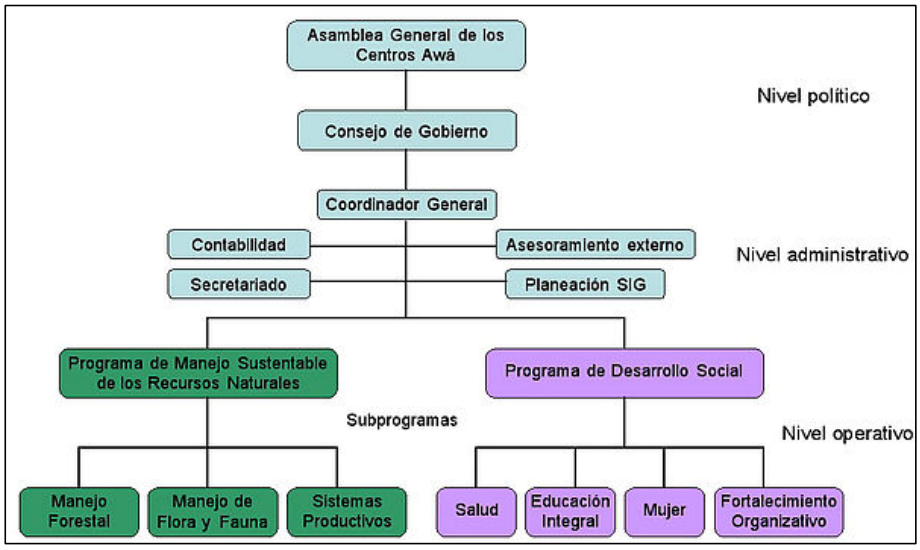
CAMAWARI is governed through an assembly, in which authorities and members of the community convene to make decisions that impact the territory. CAMAWARI governance also involves decision-making meetings with traditional authorities to select and manage projects on health, sustainable production, justice, women and family and education. The UNIPA governance structure is made up of a president, a vice-president, a secretary, a treasurer, an auditor and the project coordinators for programs in health, gender, education, production, communication and territorial governance. The smallest of the organizations, ACIPAP, is made up of a president, a secretary, an auditor, a treasurer and a coordinator for Grand Family Awá initiatives.

Organization in Ecuador: FCAE-GONAE

FCAE-GONAE is governed through an Assembly and a Governing Council. The Assembly meets every six months in order to make decisions regarding existing problems, monitor objectives and plan new working guidelines. The Governing Council is made up of 10 leaders who are elected every three years. FCAE-GONAE has a Main Coordinator, a Project Coordinator and administrative personnel. The political and administrative authorities are in charge of managing finances, national and international cooperation and coordination between FCAE-GONAE and the Grand Family Awá Governance Council. The highest authority within FCAE-GONAE is the president. Each community within FCAE-GONAE are organized into 'centers,' where decisions are made with respect to local land-use and agricultural projects.

This organization engages in two classes of community-based programmes, including sustainable natural resource management projects and social development projects. Specifically, FCAE-GONAE implements forestry management, flora and fauna conservation, education, organizational strengthening, health, family and activities.

FIGURE 1
Political Structure of the FCAE-GONAE



Afro-descendant communities

Organizational structure of the Afro-descendants in Colombia

In Colombia, Afro-descendant communities are organized at the highest level through community councils, which, according to Decree 1745 of 1995 (Article 3), constitute the highest authority of internal administration for black communities. They are composed of a general assembly (Article 4) and a board that directs, executes and manages the community internally. The Community Council Board expires on 31 December every three years. The functions of the Community Councils established by Law 70 of 1993 are to ensure the conservation and protection of the rights of collective property, preserve cultural identity, use and conserve natural resources and assist in conciliation of internal conflicts.

The Corporation Network Community Councils South Pacific (RECOMPAS) is located in southwestern Colombia. This organization consists of a general assembly, a board, a tax inspector, a legal representative, a council of elders and a technical unit comprised of a general coordinator, legal, administrative, social and organizational areas, and environmental, productive, financial and communication officers. Individual community councils are integrated into these larger governance structures.

Organizational structure of the Afro-descendants in Ecuador

Afro-descendant populations in Ecuador are similarly governed by community councils. The governance structure of these councils include a president, a vice president, a treasurer, a trustee and a secretary. The council oversees judicial and extrajudicial affairs for the

community and is responsible for summoning the assembly (members of the community) to meet on important community issues.

Communities are organized into federations, which are structured through second-tier organizations. The highest authority is the assembly, whose statutes are approved by the Minister of Agriculture and Livestock. In Carchi and Imbabura, FECONIC is regarded as a second-level organization.

Federations are structured as third level organizations. In northern Ecuador it is the Afro-Ecuadorian Confederation of Northern Esmeraldas (CANE), which seeks to achieve territorial autonomy and decision-making power over the state and participate directly in the development of territorial projects. According to leaders of this group it is an ensemble of organizations representing local communities, women organizations, and producers associations.

Among the organizations that are part of CANE are the *Movimiento de Mujeres Negras del Norte de Esmeraldas* (Movement of Negro Women of North-Esmeraldas (MOMUNE)) and the *Asociación Lucha y Progreso* (Struggle and Progress Association (ALP)). MOMUNE is comprised of approximately 38 women grassroots organizations from San Lorenzo and Eloy Alfaro and ALP is an agribusiness organization.

The Afro communities articulate with the government through the Afro-Ecuadorian Development Corporation "CODAE", which was created by Executive Decree No. 244 of June 16, 2005

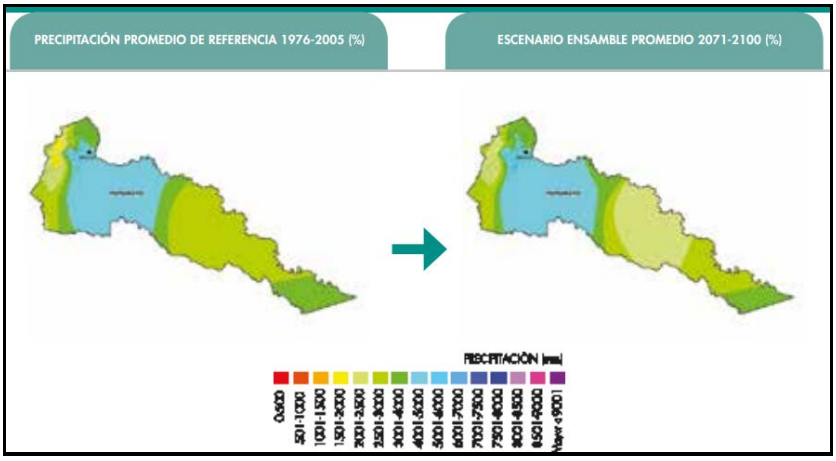
Annex 4- Climate trends in Putumayo, Colombia and Sucumbíos, Ecuador

Precipitation in Putumayo: The average annual rainfall in the department ranges from 1155 mm to 5300 mm per year. Rainfall is bimodal, meaning that there are two rainy seasons and two dry seasons. The heaviest rains, 300 mm per month, occur during the months of May, June and July. June is the wettest month with an average of 370 mm.

Temperature in Putumayo: The average maximum temperature ranges between 21.6°C in Colon to 31.9°C in Mocoa. The average minimum temperature varies between 10.6°C in the municipality of Colon to 20.9°C in Puerto Leguizamo in the Amazon region.

Precipitation Scenario for Putumayo: On average, the department's rainfall may increase by 6.7 percent over baseline. In the municipalities of Sibundoy, Colon, Santiago, Orito, Valle del Guamuéz and San Miguel rainfall may increase by up to 20 percent. Specifically, scenarios predict a 4.45 percent increase between 2011 and 2040; a 6.73 percent increase between 2041 and 2070; and a 6.74 percent increase between 2071 and 2100, with the most drastic changes occurring in eastern mountainous areas (IDEAM, 2015; Figure 2).

Figure 2
Precipitation Scenarios for Putumayo[80]



Temperature scenario for Putumayo: climate scenarios predict an increase of air temperature by 0.8°C between 2011 and 2040; an increase of 1.5°C between 2041 and 2070; and an increase of 2.2°C between 2071 and 2100 (IDEAM, 2015).

Precipitation in Sucumbíos: The months of December and January have the lowest levels of precipitation, but the area experiences rain year round. The predominant climate in the province is rainy tropical, characterized by high temperatures and abundant rainfall. Rainfall exceeds 6,000 mm per year in the area of El Reventador (MAGAP / SIGAGRO / GPS 2008).

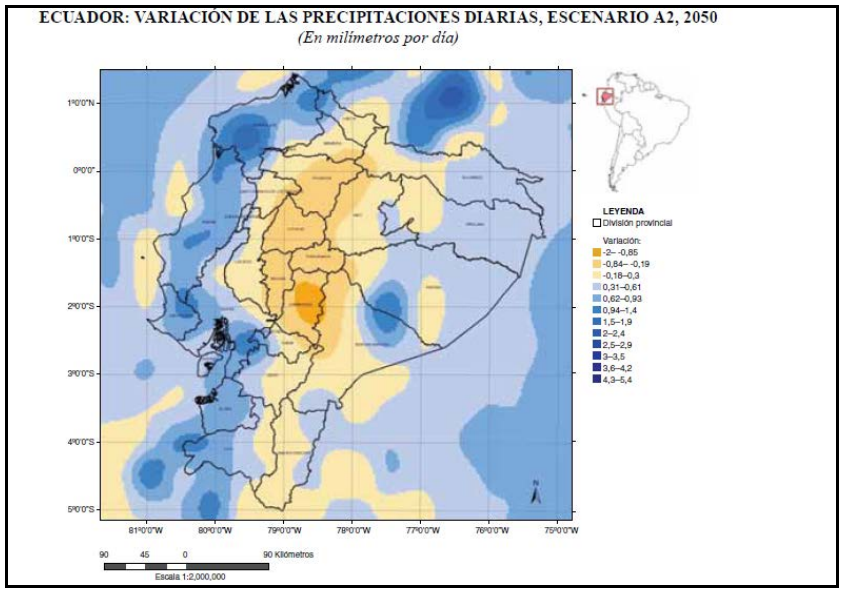
[80] IDEAM (2015)

Temperatures in Sucumbíos: Temperatures vary widely, ranging from 4 °C in the upper parts of the region to 26.2°C elsewhere. The lowest monthly average temperatures are in June and July and the highest temperatures are in December and January. The absolute maximum temperature, recorded in 2003, was 35.6°C and the average maximum was 34.1°C. (MAGAP / SIGAGRO / GPS 2008).

Temperature scenario for Sucumbíos: The average temperature in the province of Sucumbíos is 21.9°C which is expected to rise by 5.26°C by 2090, with consistently higher temperatures each decade (CEPAL, 2012).

Precipitation scenario for Sucumbíos: The average rainfall in millimeters per day (5.85 mm) is expected to rise by 4.27 percent by 2090. In Sucumbíos, the Andean slope and central regions are projected to have decreased precipitation, while increases of precipitation are expected in the Eastern region. (Figure 3).

Figure 3
Daily Rainfall Variation under the A2 – 2050 Scenario[81]



[81] CEPAL (2012)

Annex 5 – Summary of results on climate change threats from community consultations (Ecuador)

Evidence of extreme events in the project area

Afro communities in the Sierra region report that they have a problem with recurrent drought, which is exacerbated when the levels of water of the El Angel River (a tributary of the Mira River) fall considerably. When this occurs, the river does not provide sufficient water to supply the surrounding communities, and their irrigation and consumption needs are not met.

In Afro communities within the Andean region, heavy rains last for short periods of time and are interspersed amongst month-long dry periods. This leads to soil oversaturation and landslides that block roads, disrupting the transport sector.

An unusual phenomenon in recent years is the occurrence of unprecedented low temperatures in the morning. This temperature drop causes thick fog that sometimes does not dissipate until almost noon. In addition, the Chota valley in the Andean region reported a violent hailstorm which damaged crops and the roofs of houses in the area. These two phenomena have been totally absent in this area in past decades.

The most direct effect of climatic changes in this area is in the agriculture sector, where productivity is reduced and is insufficient to ensure surpluses for trade and extra income. For this reason, a large proportion of the population has migrated to larger cities in order to find more stable employment.

In the Andean region, there have been long dry periods followed by weeks of constant rain. Torrential rains have also caused floods in vulnerable places such as the Parambas and San Jeronimo sectors. The floods occurred due to overflow of the Tululbí River in San Lorenzo. These problems have mainly occurred between December and June.

Another risk linked to climate change is the occurrence of forest fires in the dry months (July to November), especially in Awá territory. The risk is especially high in the areas of the Hope commune and the Golondrinas hill. There have also been forest fires in various parts of the Mira River basin.

Additionally, these climate trends (increased temperature and rainfall) are providing optimal conditions for mosquito population growth, which will influence the prevalence of mosquito-borne illnesses like malaria, dengue and chikungunya. There are already unusually high rates of infection of malaria and dengue in San Lorenzo.

Annex 6- Additional Relevant Policies

INTERNATIONAL LEVEL ***UNFCCC AND OTHER INTERNATIONAL AGREEMENTS RELATED TO CLIMATE CHANGE***		
COLOMBIA *ECUADOR*	***Convention on Biological Diversity (CBD),*** *the* ***Development Agenda 2030****, the* ***Convention to Combat Desertification*** *(UNCCD) and the* ***Sendai Framework for Action 2015-2030****: In order to strengthen synergies between adaptation and mitigation (based on socio-ecosystem adaptation) articulate adaptation to climate change and risk management, adapting the basic infrastructure and sectors of the economy; incorporate adaptation and resilience in sectorial planning, territories and development, promote education and consolidate peace territories with climate change considerations.*	***Components 1, 2 and 3***
COLOMBIA *ECUADOR*	***Intended Nationally Determined Contributions*** *(INDCs)* *Colombia - the Government of Colombia completed 11 territorial adaptation plans and committed to develop climate change plans in 100 percent of national territory by 2030. The INDCs for Colombia also propose a national system of adaptation in which there are indicators to guide, monitor and evaluate the implementation of adaptation measures and tools for water management in priority basins nationally.* *Ecuador – the Government of Ecuador aims to restore and reforest 500,000 ha by 2017 and increase this total by 100,000 ha per year by 2025. Additionally, Ecuador's IDNC involves improving community water management, conservation of protected areas, and strengthening the resilience of vulnerable communities with a focus on food security and vulnerability analyses of infrastructure and water availability.*	***Components 1, 2 and 3***
COLOMBIA	***Paris Agreement:*** *Under this agreement, Colombia pledged to: 1) reduce greenhouse gas emissions by at least 20% by 2030; 2) achieve 10 specific actions for adaptation to climate change, including protection of moorlands and the creation of a national system of indicators to measure the traceability of climate change. Currently these commitments are being downscaled from a nationwide scale to a regional scale. Currently, six Departments are developing comprehensive plans for climate change.*	***Components 2 and 3***
BINATIONAL LEVEL ***BINATIONAL AGREEMENTS***		
BINATIONAL	***Binational Framework for Hydrological Services Colombia-Ecuador (IDEAM – INAMHI)*** *strengthens binational actions in common basins for monitoring under the Binational Committee of Transboundary Basins and the Integrated Water Resources Integrated Management.*	***Components 2 and 3***

BINATIONAL	***Border Agreement between the Governments of Carchi, Imbabura, Esmeraldas and Sucumbíos and the Departments of Putumayo and Nariño*** *to develop a binational territorial development plan and define binational border area priorities.*	***Components 1, 2 and 3***
BINATIONAL	***Integral Management Water Resources Plan for the Transboundary Watersheds Carchi Guaitara and Mira-Mataje:*** *developed a binational network (´Water Guardians´) that links technical capacity and scientific and ancestral knowledge to protect vital water resources and share lessons learned and knowledge to territorial stakeholders.*	***Components 2 and 3***
BINATIONAL	***Andean Regional Programme for Strengthening the Meteorological and Hydrological Services and Development****: seeks to strengthen binational hydrological and meteorological services in the region and provide climatic hydro-meteorological information and services for risk management for the benefit of vulnerable communities.*	***Components 2 and 3***
NATIONAL LEVEL ***NATIONAL ENVIRONMENTAL POLICIES***		
COLOMBIA	***Law 99 of 1993:*** *Integrates the National Environmental System with the National Risk Management System and guarantees the civil rights of the ethnic communities.*	***Components 1, 2 and 3***
ECUADOR	***National Environmental Policy:*** *3. Defines the goals for management of adaptation and mitigation of climate change, so as to reduce social, economic and environmental vulnerability*	***Components 1, 2 and 3***
NATIONAL CLIMATE CHANGE INSTRUMENTS FOR POLICY IMPLEMENTATION		
COLOMBIA	***Financial Strategy for Disaster Protection.*** *National Strategy responsible for identifying sources of funding for risk reduction.*	***Components 2 and 3***
COLOMBIA	***Sectorial Adaptation Plans:*** *for six priority sectors (transport, energy, agriculture, housing, health, tourism and industry); educational strategies and awareness-raising (IDEAM et al., 2015b), technical working groups on climate and agriculture, and an increase in protected areas of more than 2.5 million hectares (Government of Colombia, 2015; IDEAM et al, 2015b.).*	***Components 2 and 3***
ECUADOR	***Executive Decree 1815:*** *by which adaptation and mitigation to climate change is defined as state policy. Likewise, guidelines for the National Climate Change Strategy are formulated and delivered.*	***Components 2 and 3***
ECUADOR	***Interinstitutional Climate Change Committee*** *by* ***Executive Decree 495***, ***Official Register 302, October 20, 2010****: high-level political body for coordination of policies and measures for climate change. The members of this committee are*	***Components 2 and 3***

	Ministers and Secretaries of State. The Climate Change Secretariat serves as the technical secretariat.	
	TERRITORIAL LEVEL ***PROGRAMS, PROJECTS, INSTRUMENTS RELATED TO CLIMATE CHANGE***	
COLOMBIA	***Departmental Climate Change Network of Nariño****: is coordinated by UNDP, regional universities, the Government of Nariño and the city of Pasto to advocate for protected areas, biodiversity and integrated management of binational watersheds.*	***Components 1, 2 and 3***
COLOMBIA	***Territorial Plan for Adaptation to Climate Change Nariño (PTAC – Nariño)*** *is under construction by WWF-CORPONARIÑO-Government of Nariño. The goal is to advocate for regional adaptation and mitigation to climate change to reduce carbon footprints via ecological restoration.*	***Components 1, 2 and 3***
	LOCAL LEVEL ***DEVELOPMENT PLANS***	
COLOMBIA	***Municipal Development Plan of Ricaurte 2016-2019****: aims to limit the agricultural frontier and protect natural areas, in order to contribute to climate change mitigation. It seeks to formulate four plans and projects in the context of adaptation and / or mitigation of climate change, in coordination with the PRICC-NARIÑO.*	***Components 1, 2 and 3***
COLOMBIA	***Municipal Development Plan of Tumaco 2016-2019:*** *Establishes programs on the issue of adaptation to climate change, including ecosystem protection and adaptation to climate change, recovery of water resources, awareness of environmental protection issues, increasing hectares protected for CO2 capture, creating monitoring systems, and mangrove recovery systems. Additional activities include integrated risk management through research and studies, monitoring systems and provision of tools for emergencies.*	***Components 1, 2 and 3***

Annex 7 – Relevant Binational Commissions

BINATIONAL COMMISSIONS, BOARDS AND COMMITTES		
BINATIONAL – Related to disaster risk management	***Disasters Risk Management Board:*** *responsible for defining binational actions that facilitate adequate responses to natural, anthropic and technological disasters, and the strengthening and promotion of risk management on a binational level.*	***Components 1, 2 and 3***
BINATIONAL – Related for forests	***Forests, Biodiversity and Protected Areas Board:*** *responsible for implementing the* ***Binational Action Plan for the Development of Forests, Biodiversity and Protected Areas*** *2013-2023. This plan promotes the sustainable use of biodiversity and forest resources, the control of illegal wildlife trafficking, the strengthening of the management of protected areas and the effective generation of governance. It also prevents, controls and monitors illegal fishing activities.*	***Components 1, 2 and 3***
BINATIONAL – Related to governance and populations	***Committee for Indigenous and Afro-Descendants Communities Affairs: s****trengthens binational agreements from the Afro-descendants bureau. It is divided into two working groups that develop strategies for: territory and environment, political, educational and institutional strengthening and civil rights and protection. The Grand Awá Family participates in this committee with two representatives from Colombia and one from Ecuador*	***Components 1, 2 and 3***
BINATIONAL – Related to water	***Transboundary Watersheds Committee:*** *is responsible for the overall management of water resources in the transboundary basins of Carchi-Guaytara and Mira-Mataje, guiding coordination and sustainable management.* ***Binational Forum*** *in* ***Esmeraldas:*** *The Neighborhood Commission called this forum in April 2015 between Afro-descendant communities and Awá communities in the border area to strengthen coordination and governance. During this forum, the Grand Family Awá advocated for the recognition of their ancestral lands as a single territory.*	***Components 1, 2 and 3***

Annex 8 – Environmental and Social Management Plan (ESMP)

The ESMP constructed for this project is based on the proposed project management structure and will track identified risks, or any new risks, ensuring they are properly monitored, evaluated, and reported upon. The proposed project will fully comply with national laws and the Adaptation Fund's Environmental and Social Policy.

According to the Adaptation Fund's Environmental and Social policy, this project has beenWFP completed an initial risk screened for analysis, assessingits potential environmental and social impacts for theof the proposed project. Thise risk initial screening and assessment was carried out is in compliance with the 15 social and environmental principles of the Adaptation Ffund as described in Table 7, Ssection L. ItIt r reflects the knowledge and information available at this pointproject design and does not exclude that other risks may arise once all sub-activities have beenare identified. During project implementation, all project activities will be further screened for environmental and social risks. Actions to mitigate them will be planned through the ESMP, , when needed, according to the screening procedures presented in this Aannex.

The financial and implementation risks outlined in Table 10 in the proposal document are ranked as low. Based on the initial rRisk sScreening exercise and following the Environmental and Social Policy of the Fund the overall risk ranking for this project is **Category B**. Components 1 and 2 are comprised of studies, workshops, sharing sessions, fairs, and training sessions on Climate, EWS, web-learning platform, a compilation of best practices and activities of Disaster Management and Emergency Preparedness and Response. Thus, they that have essentially zeroare not expected to have environmental or social impacts. Component 3 "Reduce Climate vulnerabilities through innovative community and ecosystem-driven adaptation measures that reduce food insecurity" includes concrete measures that will be further identified as part of the community-based adaptation plans whichthat will be endorsed by the project Technical Committee and Steering Committee and the relevant environmental authorities. During project implementation, these plansall project activities will be further screened for environmental and social risks, and aActions to mitigate them will be planned through the ESMP, when needed.

Potential social and environmental risks identified in Table 7, Ssection L will be monitored starting from project outset., and f Further risk assessments will be conducted according to the procedure established in the second part of this Aannex. RAll risks will be managed through and the actions outlined insuch as those outlined in Table 7 and detailed in Ttable A1 below. Risk management will be integrated in the project management structure and in all participatory and gender assessment.This will be carried out in alignment with the project management structure, through consultation with affected communities.

WFP will monitor Ccompliance with ESMP and general mitigation actions listed in table 7 in section L, part II; table A1 of annex 8; and table 10 in section B, part IIIany further mitigation measures identified through the environmental and social management process will be monitored by WFP.

~~I)~~ **Examples of Potential Mitigation Measures and Respective Monitoring Arrangements ~~Risk mitigation measures for general risks identified~~**

i.

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TABLE A1

Principle	Potential ~~impacts and~~ risks	Further assessment procedure and potential mitigation measures	Potential relevant indicators
Compliance with the Law	Insufficient alignment with State and indigenous and Afro law during adaptation measures design~~Insufficient alignment of State and indigenous law, creating conflict in compliance with legal standards.~~	• The project will identify environmental and social standards, that need to be compliant with. • Environment authorities, local leaders and community members will participate ~~of~~ in risk analysis and planning of mitigation measures and monitoring arrangements. • The binational steering committee will ensure alignment with all relevant national and international regulations	Number of risk ~~evaluations~~ assessments carried out Number of risk ~~analysis~~ assessments approved by the binational steering committee, observing local, national and international standards Risk assessments methodologies in corporate-d in g-ender and participatory assessments Responsibility for risk management is in the terms of reference of the Steering Committee and Technical Committee~~...~~
Access and Equity	Equitable distribution of project benefits among community members may be hindered by political interests~~Equitable distribution of project benefits among community members may not take place due to political interests, community leaders and political authorities.~~	• Definition of sub-activities will be conducted through participatory assessments, ~~ensure~~ with full and equitable participation of women, men and targeted ethnic groups. These assessments will also identify potential areas of conflict, and conflict resolution mechanisms will be designed • Avoid sites and activities that would accentuate social inequalities, lead to incompatible uses of land and resources and/or unacceptable social conflicts	Percentage of women, men, youth and elders out of the total number of participants of the participatory assessments Number of participatory workshops held in each community New or increase in~~of~~ tensions among population or with upstream/downstream communities
Marginalized and Vulnerable Groups	Particularly marginalized groups, including the displaced and the elderly, are excluded from decision making processes and their needs and views are not ~~being~~ adequately taken into account ~~Particularly marginalized groups, including the displaced and the elderly, are excluded from decision making processes and their needs and views are not being adequately taken into account.Traditional knowledge and practices can be appropriated by third parties~~	• Identification and ongoing monitoring of any potential negative impacts on Afros, Awá indigenous populations, women, the elderly and the displaced • Consultations with community members during activity selection and design to ensure that their identified priorities are adequately considered	Number of risk assessments completed per community, identifying any potential negative impacts Percentage of women, men, youth and elders out of the total number of participants of the participatory assessments Number of participatory workshops held in each community Number of gender assessments which include risk assessments
Human Rights	Human rights could be affected, especially those of community leaders,	• Awareness raising workshops on human rights protection and prevention of violations	Number of community workshops carried out with a strong component on human rights promotion

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	women and girls, if outside groups are not consulted about the project ~~Human rights could be violated, especially those of community leaders, if outside groups are not consulted about the project Human rights are not an explicit part of local community practices and decision making.~~	• Monitoring of potential human rights non-observance	Potential risks to leaders monitored on a going basis
Gender Equality and Women's Empowerment	The project could exacerbate existing tensions in gender relations, especially in indigenous and Afro communities~~Gender empowerment and equality not fully supported by male-dominated leadership.~~	• Conduct a gender assessment in each community, identifying gender roles and needs which may produce a differential allocation of benefits between men and women • Hire women technical experts from the Afro and Awá communities • All project staff trained • Incorporate gender sensitive approaches into trainings and workshops • Complete a gender screening at project outset • Carry out a social and economic baseline, incorporating a gender perspective • All project stake-holders' meetings should review progress, considering gender issues • All community members will be trained on how to use the project Grievance mechanism and encouraged to activate it when necessary. • Ensure that gender is mainstreamed through the planning and formulation of community-based adaptation plans • ~~Include a gender comprehensive assessment in the screening of community-based adaptation plans~~	Number of gender assessments ~~c~~conducted with risk assessment before activity implementation starts Number of Awá ~~women~~ men and women technical experts hired and trained ~~and~~in gender issues ~~hired~~ Number of Afro men and women~~women~~ technical experts hired and trained in gender issues~~and hired~~ Percentage of trainings and workshops which incorporate gender sensitive approaches ~~Gender screening completed before implementation of project activities~~ ~~Baseline completed on time~~ ~~Percentage of Note for the Record of meetings that address gender issues~~ Number of training sessions held Percentage of community-based adaptation plans that have fully considered gender Number of women taking lead roles in project activity implementation ~~Gender assessment carried out before project starts~~ ~~Number of gender assessments completed~~
Core Labour Rights	Contractors for the project may not adhere to ~~the~~ ILO labour Standards and national labour laws~~Contractors for the project may not adhere to the ILO labour Standards and national labour laws.~~	• The project will monitor that contractors observe the ILO core labour standards and the national labour laws of Colombia and Ecuador	Percentage of contracts adhering to the ILO core labour standards and the Colombian or Ecuadorian labour law, respectively
Indigenous Peoples	Actions which include western science or technology are not fully embraced by Awá due to conflict with their Cosmo vision.	• The project will identify the relevant national and international standards on indigenous rights that need to be compliant with, with particular attention to ILO Convention No. 169 and the United Nations Declaration on Rights of Indigenous Peoples • Extensive consultation process will be conducted with	Introduced species included in the project Traditional practices identified in a participatory manner, respecting land property and customary rights Participatory approaches developed and applied Number of Awá and Afro staff members

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		communities and document, consistent with the United Nations Declaration on Rights of Indigenous Peoples • Take into account local hunting and gathering practices, respecting land property and customary rights • Develop participatory approaches, interfacing scientific and traditional knowledge • Encourage the hiring of Awá project staff • Ensure local expertise is used for project implementation • Ensure that Awá Cosmovision is mainstreamed through the planning and formulation of Awá communitiescommunities' adaptation plans • Include culturally sensitive criteria in the screening process of community-based adaptation plans	Local experts engaged in project implementation criteria established Distribution of benefits conform to adaptation plans
Involuntary Resettlement	BThe benefits from project assets might not be sufficient to keep people in their current areas	• All actions will be monitored to ensure that physical and economic resettlement does not occur	Benefits from project analyzed ed… Distribution of benefits conform to adaptation plans Percentage of actions monitored
Protection of Natural Habitats	Activities not sited or designed adequately might have negative impacts on natural habitatsActivities not designed adequately might have negative environmental impacts	• Identification of natural habitats in or near to the targeted area • Before implementation of any activity, the steering committee will ensure that a risk analysis is conducted and compliant with the laws and regulations of Colombia and Ecuador that protect natural habitats • Establish quality standard of protection of natural habitats and soils for all adaptation measures • Encourage biodiversity • Provide protection from contamination from livestock (e.g. live fencing) to natural water sources to be conserved through the project • Ensure that all materials used will be eco-friendly and locally available	Number of exercises of identification of natural habitats completed Quality standards produced and applied Species introduced/planted Number and hectares of diverse species introduced species / planted Quantity and Qquality (visual) of water in surrounding streams and rivers monitored Any other relevant indicator depending on the risks identified and the monitoring measures planned
Conservation of Biological Diversity	Project incentives are not sufficient for communities to turn away from monocultures and non-native speciesCommunities might want to plant monocultures and non-native species.	• Inventory of native species, including their uses and economic benefits • Ensure that only native species will be introduced, using indigenous practices • Promote the storage of traditional and native varieties' species • Avoid monoculture • Ensure proper choice of grass and plants • Choose species and systems in accordance with the	Number ofNative species inventories completed for each micro-watershed Number of sustainable iIndigenous practices promoted and documented Ongoing monitoring reports carried out and according follow up actions implementedNumber of semi-annual monitoring reports

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		characteristics of soils, water, climate, and natural ecosystems • Minimize vegetation clearing • Encourage revegetation of degraded and marginal areas to reduce runoff ~~• Ongoing monitoring~~	
Climate Change		• Complete a qualitative risk assessment of greenhouse gas emissions and other drivers of climate change • Ongoing monitoring of emissions	Number of quality risk assessments completed Number of semi-annual monitoring reports
Pollution Prevention and Resource Efficiency	Resources for project activities are not used in the most efficient way possible	• Monitor efficient use of energy and resources as applicable to the identified activities	Number of semi-annual monitoring reports
Public Health	Project agricultural activities may contribute to contamination of water sources that may be used for human consumption ~~Contamination of water sources that may be used for human consumption~~	• Complete a qualitative health impacts screening before activity implementation as part of the Environmental and Social screening Checklist	Percentage of activities screened before implementation
Physical and Cultural Heritage	Project activities might affect some unidentified cultural sites which exist in the targeted areas ~~Unknown cultural site exists in the targeted area and are impacted by project activities~~ ~~Unknown cultural site exists in the targeted area~~	• Undertake consultations with indigenous and local authorities to ensure that no cultural and natural sites exist in the project area	Number of consultations conducted
Lands and Soil Conservation	Adaptation measures not sited or designed adequately might further degrade soils ~~Degraded soils are not the most appropriate to benefit from adaptation measures~~	• Complete soil analyses before community based adaptation plans are finalized • Choose measures/activities in accordance with the characteristics of soils, topography, geology, climate, hydrology and topology Establish quality standard and decide requirements for all adaptation measures, with specific attention to degraded soils ~~Avoid sites and activities that would lead to incompatible uses of land, unacceptable social conflicts, and conflicts with respect to land tenure~~ • Consult women and men, and ensure their participation in planning and implementation • Integrate soil fertility measures • Introduce vegetative protection measures, including the use of native nitrogen fixing species • Train community members on the correct use of inputs and soil protection measures	Percentage of community based adaptation plans which incorporates results from soil analyses Number of planting ~~models whic~~systems (agroforestry and silvopastoral)~~h~~ that include~~s~~ nitrogen fixing~~ed~~ species and other measure~~s~~ that protect the soil Number of community member trained in correct use of inputs and soil protection measures ~~Community members trained~~ ~~Practices and knowledge integrated~~ ~~Agrochemicals used~~ Maps produced showing land use and land capability for the main micro-watersheds

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		• Integrate traditional knowledge and practices on soil protection • Avoid the use of agrochemicals and rely on composting and traditional practices • ~~Match land use to land capability~~ • ~~Screening of community-based adaptation plans will include an assessment of potential impacts and risks produced by high soil degradation~~	

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Monitoring arrangements for all identified risk mitigation measures will include:

1. ~~Set up~~Develop a project baseline, including risk ~~for the~~ indicators~~. This includes~~, an initial screening, and gender assessment.
2. A monitoring plan will be designed during the preparation of community-based adaptation plans and arrangements will be made to collect information every two months.
3. Minutes will be compiled from all meetings with communities and reviewed by the Technical Committee~~.~~
4. ~~Annual~~ Ongoing monitoring exercises and an end of year review ~~exercises~~ will be carried out and included in the annual progress reports.

~~i)~~ii. ~~Procedure to s~~Screening ~~community-based adaptation plans~~procedure ~~Risk Screening and Management Procedure~~

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~~Community-based adaptation plans part of component 3~~All project activities will be screened ~~through this process.~~for p~~P~~otential risks, whether social or environmental, ~~at, will be identified at~~ the micro-watershed level. ~~and M~~m~~m~~anagement measures will be put in place ~~in line with the management plan procedure~~and incorporated in the terms of reference of the Steering and Technical Committees. ~~The procedure consists~~Risk management consists of ~~4~~ 4 ~~main~~ steps:

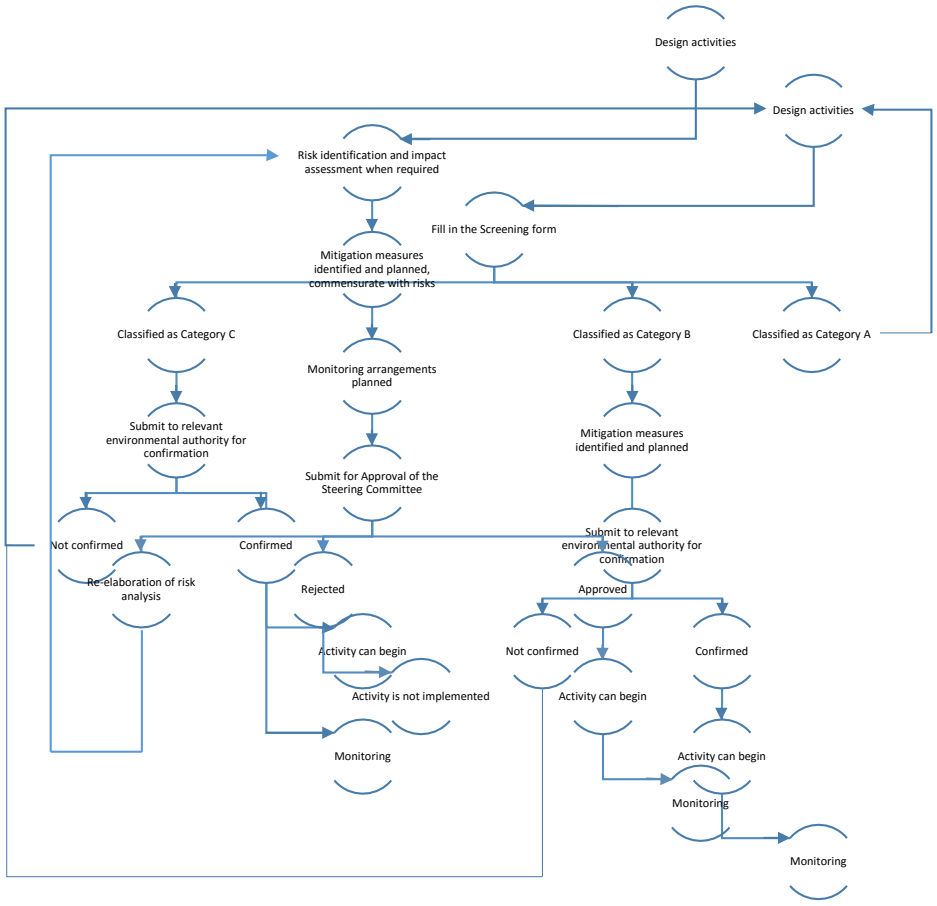
1. ~~Activity design by technical experts and screening~~Screening of environmental and social risks, in line with the Adaptation Fund's Environmental and Social Policy and Gender Policy, during project design and implementation by technical experts
2. In consultation with environmental authorities and affected population, the national coordinator in close coordination with the project Technical Committee will ~~i~~I identify ~~ing~~ and plan~~ning~~ for mitigation measures and monitoring, ~~if needed~~commensurate to the risks identified

~~2.~~3. Approval by the Steering Committee of the risk mitigation plan

~~3.~~ Ongoing ~~Verification by environmental authorities in Colombia and Ecuador~~

4. m~~M~~onitoring of risks and effectiveness of risk mitigation measures

Figure A 1: Screening procedure for all activities



~~**Figure A 1: Procedure to sScreening procedure for all activitiescommunity-based adaptation plans**~~

Step 1

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~~Activities in a community-based adaptation plan will be screened for their potential adverse environmental and/or social impacts at micro-watershed level.~~ ~~Under component 3, these a~~Activities will be ~~designed~~ identified and planned by the communities through participatory community consultations which will include environmental and subject experts. All activities will be designed with experts in conjunction with the targeted households and communities, ~~and~~ based on a context-specific and evidence-based assessments ~~of the constraints they face and their needs~~. Communities will be involved in risk screening for activities ~~along~~ with subject experts, leaders, and relevant environmental authorities. National Coordinators will ensure that activity design ~~Activity design will~~ considers the Adaptation Fund's Gender Policy and Environmental and Social Policy, ~~and~~ the WFP Gender Policy and Environmental Policy and other relevant national standards. ~~y and observe the protocols and standards that will be established to guarantee quality of the activities, and collect, and share and disseminate traditional knowledge and practices.~~ Specific designs will therefore be determined as the project progresses and will be tailored to the needs of the targeted communities, site suitability and potential to bring adaptation benefits.~~.~~

Activities will be screened for their potential adverse environmental and/or social impacts at micro-watershed level. Before an activity starts, the respective National Coordinator in Colombia or Ecuador will fill in a screening form with information provided by environmental and subject experts, the ~~and the~~ participant communities and the relevant environmental authorities. This form will include detailed information on the planned activity at micro-watershed level (type, exact size, location, materials, projected use, projected management and maintenance), and utilize information from consultation processes carried out with communities and relevant governments and stakeholders. As a result of this screening ~~process~~, the respective ~~Technical Committee~~National Coordinator will ~~also be able to~~ identify any potential ~~negative impacts~~risk the activity could have on the environment or communities, ~~and recommend a classification of the activity as Category A, B or C~~assess the impact and severity of each risk ~~identified.~~and identify mitigation measures.

The screening form to be used is presented ~~below~~ on ~~F~~figure A2 along with the screening checklist (~~F~~figure A3). ~~The checklist assesses those areas for which potential risks have been identified during the risk screening of all project components presented in Table 7~~ This screening form, ~~when~~as relevant, will be adjusted depending on the context and specific activities' design. When risks are determined to be high, an impact assessment will be conducted.~~.~~

~~**Step 2**~~

~~Should the activity be considered as a Category C, then no further action is required. Once the authority has given its approval, then proceed with implementation of the activity.~~

~~Should any activity be considered as Category B, then m~~~~Risk m~~~~itigation measures will need to be identified commensurate to the risks previously identified. These measures need to be~~and planned as part of activity implementation, and monitoring arrangements will need to be planned and specified in the screening form (along with relevant indicators, frequency of monitoring and responsibilities for monitoring).

~~No Category A ranked projects are expected to be part of this project. Any such project would need to be adjusted by the Technical Committee and the National Coordinators with the participation of participant communities so as to comply with Category B or C ranking.~~

Another screening would be required following changes to the activity by the community and a new screening form submitted for verification (See figure A1).

Community involvement and participation in the environmental and social aspects of the project will start at activity design stage. All activities will be designed in conjunction with the targeted households and communities, and based on a context-specific assessment of the constraints they face and their needs. Communities will be involved in risk screening for activities along with subject experts, leaders, and authorities. Mitigation measures will be identified in consultation with the community and relevant authorities. Monitoring will be carried out as part of the project management structure and throughout implementation.

Examples of potential mitigation measures to be implemented and monitoring indicators are presented belowon table A2.:

Step 3

All activities will be monitored following schedules outlined in Section D Part III, and will comply with local, departmental, provincial and national laws, and the Environmental and Social Policy of the Adaptation Fund. Mitigation measures will be monitored as outlined in each activity screening form.

Figure A2: Environmental and social Screening form

This is the template for the screening form to be completed for each adaptation activity planned under component 3 of the project. It will then be submitted to the relevant environmental authorities: departmental regional autonomous corporation (CAR) of Corponariño in Colombia and accredited decentralized autonomous governments (GADs) or the Ministry of Environment (if a province is not yet accredited) in Ecuador for verification and approval.

1. General information	
1.1. Activity / Asset	
Type of activity	*e.g. adaptation activity, assessment, training, etc.*
Sector of intervention	*e.g. Agriculture, Forestry/Agro-forestry, Infrastructure, Irrigation, Soil and Water Conservation, Water Mmanagement, etc.*
Activity/Asset description	
1.2. Location	
Provincia or Departmento	

Parroquia or Municipio	
Geographical coordinates	*Exact location of the asset/activity*
1.3. Screening form	
Person who filled in the form	*Name / Organization / Contact (phone, email)*
Date of screening	
Signature	

2. Categorization		
Categorization of the activity *According to results from screening checklist*	☐ Low risk – Category C ☐ Medium risk – Category B ☐ High risk – Category A	Comments:

3. Verification	
Form received and approved by government authority	*Date / Name / Signature*

4.2. Activity details	
4.1.2.1. Technical information	
Activity Description	*Mention all relevant details: surface, volume, height, length, depth, etc.*
Materials to be used	*Type and quantity needed for construction but also tree species to be planted, crop varieties, etc.*
Other technical specificities	*Add any relevant information from an environmental point of view. For instance: volume of earth that needs to be extracted, clearing needed, type of terrain, etc.*
4.2.2.2. Assets	
Is there any asset creation work to be carried out?	

What activities are planned?	
Start date of works	
End date of works	
~~4.3.~~2.3. Use of assets	
Will the activity produce any assets? Which assets will be produced? What technical standards would apply?	
How will the asset be used?	*What kind of use is planned for the asset, what benefits are expected, how will they will be distributed and who will use it (women, men, young people, minorities, etc.)?*
Secondary activities needed for the correct and proper use of the asset	*List any other activity planned to ensure the asset is used as it should be. E.g.: training and capacity building, sensitization, accompanying measures like soil erosion management, drainage, etc.*
Expected lifetime of the asset	
Management and maintenance of the asset	*What kind of maintenance will be needed? Who will be responsible and who will do it? How will the asset be managed? And by whom?*

~~5.~~3. Consultations		
Was the community consulted?	Consulted: ☐ Yes ☐ No	In agreement: ☐ Yes ☐ No
	Comments:	
Was the environmental authority consulted?	Consulted: ☐ Yes ☐ No	In agreement: ☐ Yes ☐ No

	Comments:

6.4. Environmental and social context	
Description of the environmental context and the main environmental issues on the site / in the area	*Give a short description of the environmental situation on the site and in the area and mention the main environmental issues (e.g.: deforestation, soil fertility loss, water scarcity, water quality degradation, etc.). The description should contain essential information on which the risks identification is based.*
Description of the social context and the main social issues on the site / in the area	*Example: land tenure conflicts, ~~high incidence of malaria,~~ recurrent conflicts between farmers and herders, etc. The description should contain essential information on which the risks identification is based.*

7.5. Risks

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For which environmental and social principles have risks been identified (according to the screening checklist results)?

~~☐ Marginalized and vulnerable groups~~ ~~☐ Gender equality and women's empowerment~~

~~☐ Indigenous Peoples~~ ~~☐ Protection of natural habitats~~

~~☐ Lands and soil conservation~~

☐ Compliance with the law ☐ Access and equity ☐ Marginalized and vulnerable groups

☐ Human rights ☐ Gender equality and women's empowerment ☐ Core Labour Rights

☐ Indigenous Peoples ☐ Involuntary resettlement ☐ Protection of natural habitats

☐ Conservation of biological diversity ☐ Climate change ☐ Pollution prevention and Resource efficiency

☐ Public health ☐ Physical and cultural heritage ☐ Lands and soil conservation

What are the risks identified?

Principle	Description of the risk identified	Method of identification~~Description of the risk identified~~	Risk severity ~~Impact assessment~~Risk seriousness *(according to checklist)*

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~~8.~~6. Mitigation measures

List, for each risk identified, the planned mitigation measures and monitoring requirements

Risk	Mitigation measures	Monitoring indicators	Frequency and responsibility for monitoring *(who will monitor and when)*

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~~E~~Figure A3: Environmental and Social Screening Checklist

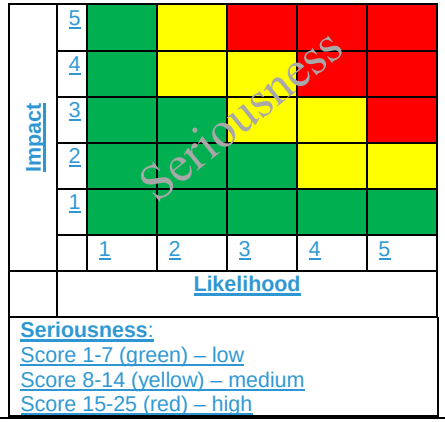
INSTRUCTIONS: The screening is mandatory for all activities. The identified risks and the related impact assessment will determine the type and scale of measures needed to avoid, minimize or mitigate the risks. Questions in the checklist are in line with the 15 principles of the Adaptation Fund's Environmental and Social Policy.	**Answer Yes/No**	**Likelihood 1-Slight 2-Not likely 3-Moderately likely 4-Highly likely 5-Expected**	**Impact 1-Negligible 2-Minor 3-Moderate 4-Severe 5-Critical**	**~~Impact assessment~~Risk seriousness = *likelihood x impact* 1-7: Low 8-14: Medium 15-25: High**
Compliance with the law				
1. Is there a risk that the activity does not comply with an applicable domestic or international law?				
Access and equity				
2. Is there a risk that the activity would exclude any potentially affected stakeholders from fully participating in decisions that may affect them?				
3. Is there a risk that the activity would impede access of any group to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, or land rights?				
4. Is there a risk that the activity does not provide fair and equitable access to benefits from the project to all affected stakeholders?				
5. Is there a risk that the activity exacerbates existing inequities, particularly with respect to marginalized or vulnerable groups?				
Marginalized and vulnerable groups				
6. Are there any marginalized or vulnerable groups present among project beneficiaries?				
7. Is there a likelihood that the activity would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups?				
8. Could the activity potentially restrict availability, quality of and access to resources or basic services to marginalized individuals or groups?				
Human rights				

9. Could the activity lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population?				
10. Would the activity possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?				
Gender equality and women's empowerment				
11. Is there a likelihood that the proposed activity would have adverse impacts on gender equality and/or the situation of women and girls?				
12. Would the activity potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?				
13. Would the activity potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?				
Core Labour Rights				
14. Does the activity involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?				
Indigenous Peoples				
15. Are indigenous peoples present in the project area?				
16. Would the proposed activity potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?				
17. Would the activity adversely affect the development priorities of indigenous peoples as defined by them?				
18. Has there been an absence of culturally appropriate consultations on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?				
Involuntary resettlement				
19. Would the activity potentially involve temporary or permanent and full or partial physical displacement?				
20. Is there a risk that the activity would lead to forced evictions?				
21. Will the activity lead to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood)?				
Protection of natural habitats				

22. Is the activity within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?				
23. Would the activity potentially cause adverse impacts to habitats (e.g. natural, modified, and critical habitats) and/or ecosystems and ecosystem services?				
24. Does the activity involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?				
Conservation of biological diversity				
25. Could the activity lead to the reduction or loss of biological diversity?				
26. Would the activity pose a risk of introducing invasive and/or non-native species?				
27. Is monoculture foreseen?				
28. Would the activity pose risks to endangered species?				
Climate change				
29. Will the activity result in significant greenhouse gas emissions or may it exacerbate climate change?				
Pollution prevention and Resource efficiency				
30. Does the activity require significant consumption of raw materials, energy, and/or water?				
31. Would the activity potentially result in the generation of waste (both hazardous and non-hazardous)?				
32. Would the activity potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?				
33. Will the activity involve the application of pesticides?				
Public health				
34. Would the activity result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?				
35. Would the activity pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials?				

36. Would elements of activity construction, operation, or decommissioning pose potential safety risks to local communities?				
Physical and cultural heritage				
37. Will the proposed activity result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)?				
Lands and soil conservation				
38. Will the activity lead to the conversion of wetlands, waterways, or woodlots?				
39. Will the activity cause the clearing of natural vegetation and/or forest?				
40. Is there a risk that the activity leads to soil degradation?				
41. Is there a risk that the activity is designed without proper soil analysis and/or does not match soil capability?				

Risk seriousness = likelihood x impact

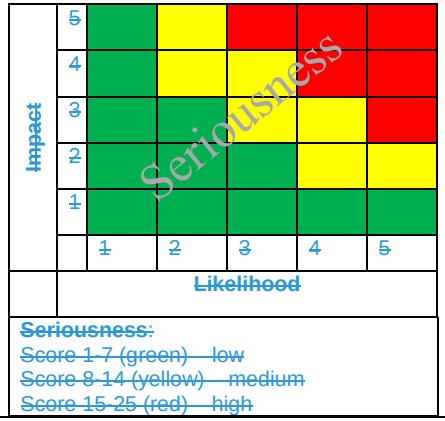


Seriousness:
Score 1-7 (green) – low
Score 8-14 (yellow) – medium
Score 15-25 (red) – high

INSTRUCTIONS: The screening is mandatory for all activities part of the community adaptation plans, under component 3 of the project. The identified risks and their potential seriousness will be used to determine whether an activity is categorized as High (category A), Medium (category B) or low (category C) risk level and what measures are needed to avoid, minimize or mitigate them. Questions in the checklist are in line with the 15 principles of the Adaptation Fund's Environmental and Social Policy.	**Answer Yes/No**	**Likelihood** **1 Slight** **2 Not likely** **3 Moderately likely** **4 Highly likely** **5 Expected**	**Impact** **1 Negligible** **2 Minor** **3 Moderate** **4 Severe** **5 Critical**	**Seriousness = *likelihood x impact*** **1-7: Low** **8-14: Medium** **15-25: High**
Marginalized and vulnerable groups				
1. Is there a likelihood that the activity would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups?				
2. Could the activity potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?				
Gender equality and women's empowerment				
3. Is there a likelihood that the proposed activity would have adverse impacts on gender equality and/or the situation of women and girls?				
4. Would the activity potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?				
5. Would the activity potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?				
Indigenous Peoples				
6. Would the proposed activity potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?				
7. Would the activity adversely affect the development priorities of indigenous peoples as defined by them?				
8. Has there been an absence of culturally appropriate consultations on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?				
Protection of natural habitats				

9. Is the activity within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?				
10. Would the Project potentially cause adverse impacts to habitats (e.g. natural, modified, and critical habitats) and/or ecosystems and ecosystem services?				
11. Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?				
Lands and soil conservation				
12. Will the activity lead to the conversion of wetlands, waterways, or woodlots?				
13. Will the activity cause the clearing of natural vegetation and/or forest?				
14. Is there a risk that the activity is designed without proper soil analysis and/or does not match soil capability?				

Risk seriousness = likelihood x impact



Seriousness:
Score 1-7 (green) – low
Score 8-14 (yellow) – medium
Score 15-25 (red) – high

Categorization of the activity:

- If no risks are identified (all answers to the 24 questions are "no"), then the activity is **categorized as low risk – Category C**
- If more than three (3) risks are rated as highly serious (score between 15 and 25), or if at least one (1) risk scores 16 or above, **the activity is categorized as high risk – Category A**
- Otherwise, the activity is **categorized as medium risk – Category B**

Step 2

Should the activity be considered as a Category C, then no further action is required. Once the authority has given its approval, then proceed with implementation of the activity.

Should any activity be considered as Category B, then mitigation measures will need to be identified and planned as part of activity implementation, and monitoring arrangements will need to be planned and specified in the screening form (along with relevant indicators, frequency of monitoring and responsibilities for monitoring).

No Category A ranked projects are expected to be part of this project. Any such project would need to be adjusted by the Technical Committee and the National Coordinators with the participation of participant communities so as to comply with Category B or C ranking. Another screening would be required following changes to the activity by the community and a new screening form submitted for verification (See figure A1).

Community involvement and participation in the environmental and social aspects of the project will start at activity design stage. All activities will be designed in conjunction with the targeted households and communities, and based on a context specific assessment of the constraints they face and their needs. Communities will be involved in risk screening for activities along with subject experts, leaders, and authorities. Monitoring will be carried out as part of the project management structure and throughout implementation.

Examples of potential mitigation measures to be implemented and monitoring indicators are presented below:

Table A1 A2
Examples of Potential Mitigation Measures and Respective Monitoring Arrangements for adaptation activities

Sector	Impacts	Mitigation measures	Monitoring indicators
Soil and water conservation	Conservation efforts involve investments and changes that frequently displace other land uses or require production trade offs	• Avoid sites and activities that would lead to incompatible uses of land, unacceptable social conflicts, and conflicts with respect to land tenure • Consult women and men, and ensure their participation in planning and implementation	• New or increase of tensions among population, or between farmers and herders • Access to / use of reclaimed land • Land-use change
	Wrong selection of species and their arrangement (e.g. in activities such as grass strips along the contours, stabilization of physical structures and farm boundaries, vegetative fencing,etc.) may increase weed infestation, shading, and competition for nutrients and moisture	• Only use native species • Ensure proper choice of grass and plants	• Crop yields
	Soil and slope stability should be adequately addressed for measures affecting the soil structure such as terracing and soil bunds. Furthermore, lack of maintenance causes structures to collapse, with subsequent increases in run-off, soil erosion and flooding	• Choose measures/activities in accordance with the characteristics of soils, topography, geology, climate, hydrology and topology • Integrate level soil bunds,and terraces with revegetation measures to ensure proper stability (possibly with drought resistant species) • Ensure adequate maintenance plans	• Slopes/soil and structures stability • Maintenance plans • Number of stabilization measures

Agriculture	Unsustainable practices—such as a crop grown in the wrong way or place—can all cause soil erosion	• Match land use to land capability • Choose the quantity and spacing of species in accordance with the carrying capacity of soils • Plant live fences, windbreaks, fruit trees, nitrogen-fixing plants and implement anti-erosion structures • Minimize vegetation clearing • Encourage revegetation of degraded and marginal areas to reduce runoff	• Soil quality (e.g. fertility, texture, chemicals) • Soil productivity
Water management	Conflicts over land uses and surface or groundwater supplies (e.g. increased extraction in certain areas at the expense of others, incompatibility with other activities that may pollute water sources) may arise. Furthermore, activities may negatively affect existing community water management practices and relationships	• Take into account the population density in relation to available water supply • Avoid sites and activities that would accentuate social inequalities, lead to incompatible uses of land and resources and/or unacceptable social conflicts	• New or increase of tensions among population or with upstream/downstream communities • Access to water
Forestry	Trees may compete with, rather than support, agricultural crops because they cast too much shade, use too many scarce nutrients or too much water, reduce growing space, or host pests and diseases. Reforestation in semi-arid regions may locally deplete soil moisture, lower water tables and result in decreased groundwater recharge and baseflow	• Choose species and systems in accordance with the characteristics of soils, water, climate, and natural ecosystems • Ensure that species are chosen in accordance with the cultivated crops characteristics	• Crop yields

Step 2

Risk mitigation measures will need to be identified commensurate to the risks previously identified and will incorporate the findings of the impact assessments, when conducted. These measures need to be planned as part of activity implementation and monitoring arrangements specified in the screening form (along with a baseline, relevant indicators, frequency of monitoring and responsibilities for monitoring).

Mitigation measures will be identified by the respective National Coordinator in close coordination with the project project Technical Committee and in consultation with the community,y and relevant environmental authorities and subject and environmental experts. This includes departmental regional autonomous corporations (CAR) in Colombia, and accredited decentralized autonomous governments (GADs) or the Ministry of Environment (if a province is not yet accredited) in Ecuador. Monitoring will be carried out as part of the project management structure and throughout implementation.

Step 3

The risk analysis, the proposed mitigation measures and the monitoring arrangements will be subjected to approval by the project Steering Committee (which WFP as the MIE will be a member of) to ensure compliance with relevant international and national laws and regulations and the Environmental and Social Policy of the Adaptation Fund. TheThe Steering Committee can: i) approve, ii) request re-elaboration of the risk analysis, iii) reject the activity. The committee will approve in the cases when a risk analysis and proposed mitigation and monitoring plans have been properly conducted, in compliance with relevant standards. If the committee found that the analysis was not completed at the highest standards, it will request the respective national coordinator and the Technical committee to re-elaborate and start the process will start again. In the cases when the impact and

probability of the risks entailed by a particular activity are particularly high, the Steering Committee will reject the activity and it will not be implemented.

Step 4

All activities will be monitored following schedules outlined in Section D Part III, and will comply with local, departmental, provincial and national laws, and the Environmental and Social Policy of the Adaptation Fund. Mitigation measures will be monitored as outlined in each activity screening form. National Coordinators will oversee monitoring of risks and mitigation measures.

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~~**Step 3**~~

~~Once completed, the screening form will be submitted to the relevant level of government for verification. In Colombia these are the departmental regional autonomous corporations (CARs) in this case Corponariño, and in Ecuador accredited decentralized autonomous governments (GADs) or the Ministry of Environment (if a province is not yet accredited). The government authority can then confirm the category of the activity and agree with the mitigation measures planned, if any.~~

~~**Step 4**~~
~~All activities will be monitored following schedules outlined in Section D Part III, and will comply with local, departmental, provincial and national laws, and the Environmental and Social Policy of the Adaptation Fund.~~
~~Mitigation measures will be monitored as outlined in each activity screening form.~~

WFP Grievance mechanism

WFP already has grievance mechanisms in place in ~~both~~ Nariño, ~~and~~ Carchi and Esmeraldas to allow project participants a rapid and efficient means of communicating any concerns they may have concerning project design and implementation. Participants will be made aware of the WFP grievance Mechanism for any criticism or complaint ~~of an activity~~. These mechanisms consider the special needs of different ethnic groups as well as gender considerations. A hotline offers immediate recourse for project participants to express their concerns in a transparent fair and effective manner. The hotline will offer services in local languages and Spanish, and offer the opportunity for project participants to provide suggestions on how to improve project implementation. The hotline is available to project participants for comments or grievances 24 hours every day. WFP personnel are trained in procedures for receiving calls and on the reporting of any grievances.

In addition, monitoring activities carried out on a monthly basis allow project participants to voice their opinions or complaints as they may see fit. A questionnaire will be used to understand participants' perceptions of the project and capture suggestions to improve

project implementation. The questionnaire will be applied through focus groups and on individual basis.

These grievance mechanisms will be made available to all communities in the project area and reported in the Environmental and Social Management Plan. Community leaders also will be changed with obtaining feedback from community members in a regular basis.

Annex 9 – Vulnerability analysis of Afro and Awá communities in the Mira-Mataje and Carchi-Guaitara watersheds

In general climate change in conjunction with a range of other socio-environmental and other factors has greatly affected the Awa and Afro communities, their livelihoods, and FSN in the target binational watershed. In order to confirm priority target areas for the proposal, map overlays detailing 6 key environmental factors were combined with recurrent food insecurity and nutrition data for the binational area, in order to determine the relative ranking of zones of vulnerability. The 7 factors utilized were derived from stakeholder and community meetings and workshops, where participants identified climate threats in their part of the binational area. The 7 key factors were chronic malnutrition, erosion, flooding, deforestation, land use conflict, water contamination and drought.

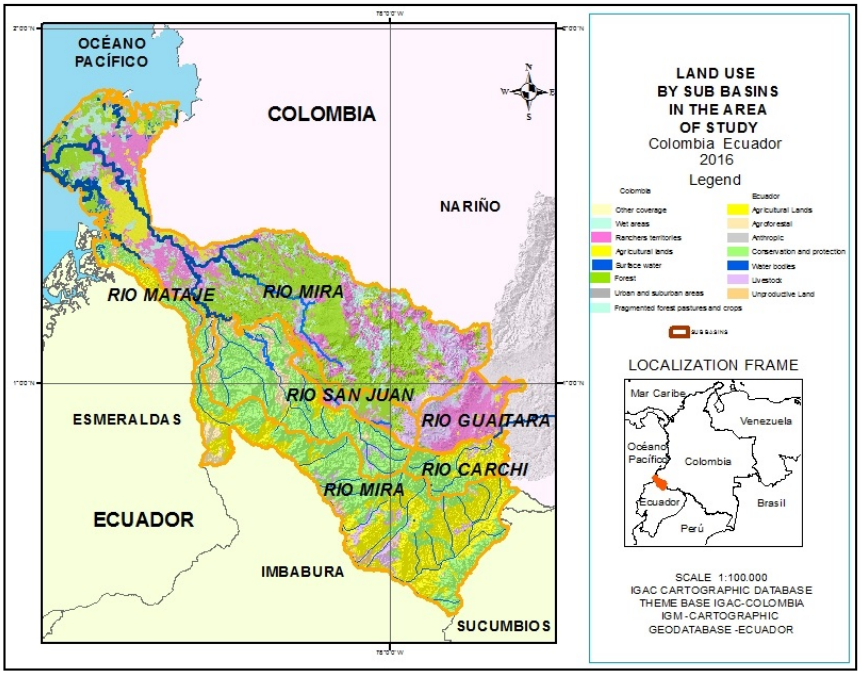
Map 1 below shows the target area as well as the Afro and Awá communities located within the watersheds. The Afro populations dominate the coastal areas and are also found upland; but more on the side of Ecuador. The Awá population is mainly in the central and upper reaches of the watershed and target area.

MAP 1
Communities by River Subareas

In Map 2 the broad range of land uses found in the region are shown; drainage patterns are also visible including major rivers in the area. Note that much of the area shown in Map 1 as

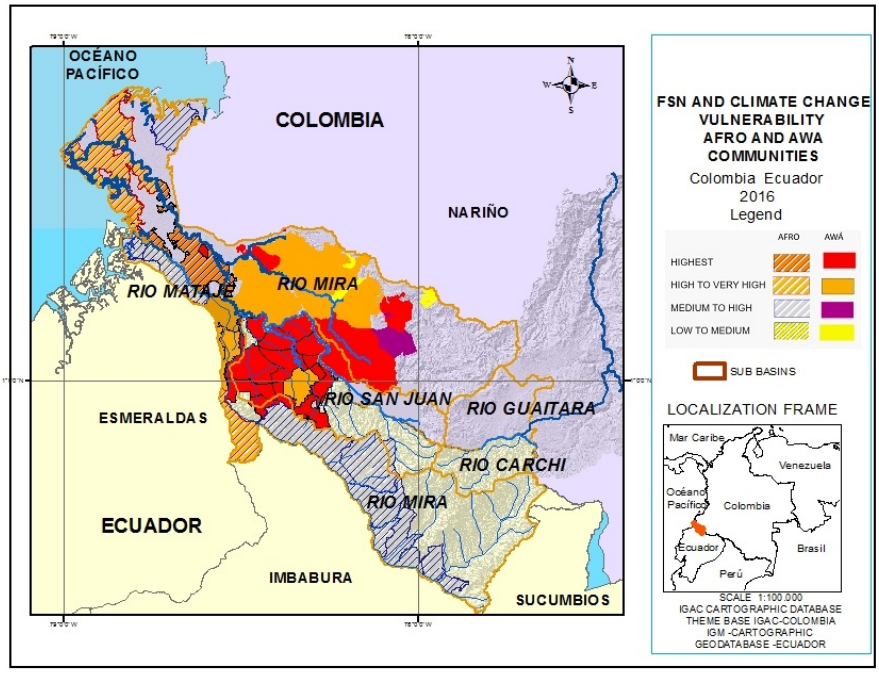
being Awá territory is represented in Map 2 as being part of conservation or protected areas. Another immediately noticeable element is the predominance of ranching and livestock operations in 3 main areas; the Guaitara upland watershed, and 2 areas nearer to the coast. These types of operations can be associated with water issues including erosion into rivers following land-clearing and decrease in water quality due to contamination, particularly during heavy rain and run-off events.

MAP 2
Land Use in Binational watersheds



Map 3 is the composite map which takes 6 of the 7 key factors listed above and then overlays them with FSN data, more specifically recurrent food insecurity and malnutrition information derived by national agencies from both sides of the border. This vulnerability map is derived by ranking each of the 6 themes on a scale of 1 to 4 from low to highest and then tabulating the data in conjunction with the map of recurrent food insecurity and malnutrition. What is most striking about the map at first glance is the prevalence of zones with higher vulnerabilities, shown in red and orange for the Awá communities, and in orange or blue with cross-hatching for Afro communities.

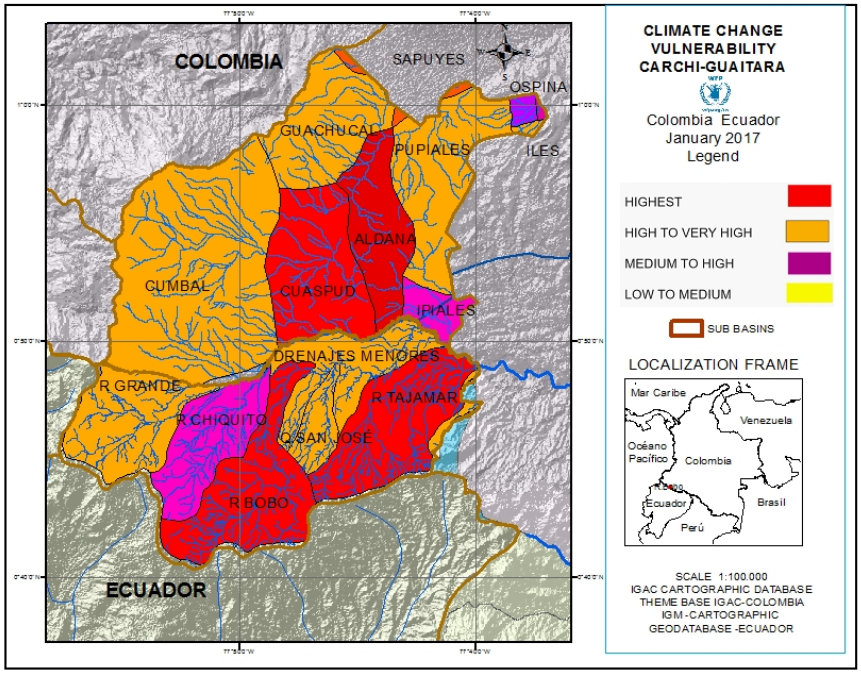
MAP 3
FSN and Climate Change Vulnerability of Afro and Awá Communities



It should also be noted that even the least vulnerable areas shown on the map, that is zones mapped as having low to medium vulnerability, are still susceptible to the effects of climate change and food insecurity, particularly when viewed in conjunction with other socio-environmental factors. Furthermore FSN issues dominate in most communities in the target area.

Also included as part of the analysis is Map 4, the Guaitara-Carchi binational watershed. As was noted previously its importance as a key tributary feeding the Mira –Mitaje system cannot be overstated. Land use conflicts and issues such as deforestation and erosion, in conjunction with other socio-environmental factors, are exacerbated by climate change and climate shocks; the combined effects of these factors greatly influence the downstream environment and communities located there.

MAP 4
Climate Change Vulnerability Carchi - Guaitara



In summary, the FSN and Climate Change Vulnerability maps prepared as part of the analysis undertaken to prepare this project proposal serve not only as an analytical tool and evidence of the vulnerability of the Awá and Afro target area communities, but also of the urgent need to address these issues as part of this Adaptation Fund proposal.

Annex 10 – Cost-benefit analysis of proposed adaptation measures

This cost-benefit analysis was carried out for potential concrete adaptation measures considered under component 3. A detailed analysis of activities will be presented during project implementation as part of activity 3.1.4. The CBA carried out reports on both direct and indirect benefits. Direct benefits are calculated as incomes generated by the proposed activities, or as losses avoided in terms of assets and products (including agricultural production and livestock). Sources of data include national databases and surveys from different government entities and business organizations, as well as fieldwork exercises and surveys performed in November and December of 2016. Indirect benefits are calculated as additional returns, above and beyond the initial investment, that can potentially multiply positive impacts of activities. All prices are in US dollars.

Concrete activity	Financial cost	Direct benefit Year 5	Direct benefits Year 10	Return rate	Indirect benefits
Improvement of soil quality through the introduction and recovery of vegetative cover and use of good agricultural practices, to mitigate impacts of heavy rains in areas highly affected by erosion and drought					
Vegetative recovery of affected soils	2,100	1,275[82]	2,322	NPV with a discount rate of 5 percent at year 5[83] 7,028.41 Cost-benefit (CBA) Rate = 1,04	Improved soil fertility Reduced erosion
Agroforestry	1,400.6	2,473.9[84]	3,809.05	NPV: 12,736 CBA Rate = 2,30	Income generation Incorporation of traditional knowledge and practices Improved soil fertility
Family gardens and introduction of organic products	3,000	2,465.56[85]	3,132.64	NPV: 710 CBA Rate = 1,06	Diversified crop production, including Tubers, fruits, roots and legumes Recovery of medicinal plants
Implementation of water storage, capture and harvesting systems to increase water availability for agricultural use					

[82] Cost calculated per hectare. Benefits calculated as losses avoided in terms of livestock, assets and crops. Estimates from field work and surveys in targeted areas.
[83] Discount rate used taken from CBA manual published by MAE.
[84] Crop yields were obtained from the book: The cultivation of the tree tomato by Revelo, Pérez y Maila (2010). Selling prices were obtained from: http://www.bolsadeproductos.com.ec/precios.html and http://sinagap.agricultura.gob.ec/index.php/mercados.
[85] Prices for sales of poultry and small livestock obtained from the following webpage: http://www.bolsadeproductos.com.ec/precios.html y http://sinagap.agricultura.gob.ec/index.php/mercados; y . http://articulo.mercadolibre.com.ec/MEC-410722215-venta-de-conejoscuyes-gallinas-y-huevos-de-campo-_JM

Community water reservoirs for agriculture	4,457.8	4,607.4[86]	5,880.3	NPV: 9,638.10 CBA rate = 1.16	Job creation Water use efficiency saving of 20 – 30 % in short-cycle crops, 30 – 60 % in citrus and orchard fruits Increased community cooperation
Protection and regeneration of forest areas, incorporating ancestral knowledge					
Conservation and increased use of native seeds	2,500	4,200[87]	5,360.4	NPV: 13,234.02 CBA Rate = 1.44	Regulation of hydrological cycle in the watershed Improved biodiversity
Diversification of food production, consumption, leading to improved health of the population Integration of traditional practices to ensure food security					
Recovery of degraded river ecosystems by natural regeneration and reforestation	2.500	9,003.73[88]	10,938.73	NPV: 58,562.18 CBA Rate = 2.60	Restoration of traditional practices through increased community cooperation Improved ecosystem services for livelihoods Increased incomes and fish availability for self-consumption Protection of coast line against natural disasters, including tsunamis
Increased adaptive capacity, through the recovery of mangrove and tropical forests to ensure sustainable livelihoods and food security					
Propagation of mangroves	450	733.86[89]	936.61	NPV: 710 CBA Rate = 1.06	Increased diversity of fish and molluscs Reduced potential damages produced by floods in coastal areas

[86]Project carried out at community level, costs and benefits from webpages: http://www.bolsadeproductos.com.ec/precios.html and http://sinagap.agricultura.gob.ec/index.php/mercados
Investment costs obtained from an interview with P.Eng Diego Yanchapaxi, (agricultural technician) and prices validated by P.Eng Julio Terán, Manager of *Plastigama*. Sales prices also validated during field work carried out in December 2016.

[87] Project carried out on one hectare of community land. Investment costs upkeep and care of plants from an interview with Holger Rogel, Coffee Program Technician wih Municipal Support Project for Enterpreneurs, CONQUITO. Data used from the text by: Jezeer, R.E. & Verweij, P.A. (2015) Coffee in AgroForest Systems- Double dividends for biodiversity and small producers in Peru. Hivos, The Hague, Holanda. Sales prices from webpages: http://www.bolsadeproductos.com.ec/precios.html and http://sinagap.agricultura.gob.ec/index.php/mercados.

[88] Productivity, size of catches, and prices used for fish products from visits with communities of Punta de Miguel, Changuaral, El Viento y Pampanal during early December 2016; validated in San Lorenzo with licensed authority Manuel Valencia.

[89] Benefits calculated with information of prices used for seafood products. Species prices from pages: www.iniap.gob.ec, http://www.bolsadeproductos.com.ec/precios.html and http://sinagap.agricultura.gob.ec/index.php/mercados. La

Annex 11 - Gender Assessment

Background and context:

Vulnerability to climate change is not the same for all people. It depends on their ability to adapt to the effects of climate change and these, in turn, depend on the economic, social and cultural situation in which women and men are immersed. Each of these effects has a distinct impact on women and men as they have differentiated capabilities and needs for adaptation, for example, gendered division of labor leaves women in charge of the practical subsistence of families.

Moreover, gender-based violence continues to have negative impacts on women's food security and nutrition, especially in rural areas and among indigenous people. Another critical factor in the social construction of gender relations is access to and control over resources and the participation of women in decision-making to deal with the effects of climate change.

Due to the importance of this issue, UN Women has incorporated actions to face the effects of the climate change from a gender perspective in its main agenda, acting in the scope of both mitigation and adaptation. It has had pioneering and successful experiences around the world, and in Ecuador, this has been done through a joint work with WFP.

During project preparation, differentiated impacts of climate change on men and women, gendered division of roles and access to resources, and gender-based power structures were identified and considered in the project design. This analysis is presented in the section "Gender Analysis on Targeted Communities" in Part I of the full project proposal. All project activities are also aligned with all the relevant gender-related regulation and policies in Colombia and Ecuador (see Table 5 in the full-project proposal). Project will also observe recommendations produced by the Council for Gender Equality, the Judicial Council and the Ministry of Justice Human Rights and Cults in Ecuador and the Office of the Presidential Advisor for Gender Equity, the Intersectorial Commission of the National Policy for Gender Equality, and the Technical Secretariat of the Technical Subcommittee on Differential Approaches of the National System of Attention and Integral to Victims of Colombia. Project activities will be informed by gender considerations and adapted to local cultures and ethnic contexts in order to enhance their positive impact on gender equality.

Based on this experience and in collaboration with UN Women, WFP will conduct a gender assessment focusing on climate change impacts on food security and nutrition. Project activities will be informed by gender considerations and adapted to local cultures and ethnic contexts in order to enhance their positive impact on gender equality. Special coordination arrangements will be agreed with UN-Women on issues related to gender equality.

Assessment Methodology:

Objective of the assessment: Provide empirical evidence, in the form of qualitative and quantitative data, for measuring the physical, political and economic empowerment of women to confront the impacts of climate change and improve their food security. The assessment will identify the gender- based challenges faced by women and the form in which these challenges and limitations would negatively impact project results.

The information and data generated by this gender assessment will be the baseline to define the scope of gender mainstreaming actions and ensure the integration of a gender approach into the program's implementation. This baseline will be continuously monitored and it will provide useful gender indicators that will be measured according to the project monitoring plan.

This assessment will include the measurement of gender indicators at output and outcome levels established in the project's logical framework. Besides, it will provide an assessment of capacity gaps relative to gender in the context of climate change and food security, which will allow to design the gender mainstreaming strategy. For this reason, this assessment will include:

1. Knowledge, attitudes and practices' diagnosis (KAP), which will be applied to the project's technical team;
2. Diagnosis of gender gaps in Afro and Awa communities and case studies, and;
3. Scenario analysis.

The design and implementation of the gender mainstreaming strategy should cover the following stages:

1. Design of the training strategy for the project technical team (according to KAP's results and the gender indicators established in the project).
2. Design of the gender mainstreaming strategy with the project technical team that was trained. This strategy will consist of:
    a. Definition of the methodology to measure the gender indicators (impact, outcomes, outputs) established in the project.
    b. Development of tools.
    c. Incorporation of the gender approach into the intervention methodology
3. Implementation of the gender mainstreaming strategy that consists of:
    a. Definition of gender actions to achieve the results established in the project´s logical framework in relation to the gender indicators (empowerment, participation, decision making).
    b. Training in the use of the tools developed to measure gender indicators (impact, outcomes, outputs) acccording to project´s monitoring plan.
    c. Application of intervention methodology with gender considerations (tools of registration and progress of activities developed, identification of critical knots, definition of solutions, records of changes).
    d. Initial support (accompaniment) for the intervention with a gender approach.