MONITORING REPORT CONDOTO REDD+

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Project Title	*Condoto REDD+ Project*
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Project Location	*Municipality of Condoto, Department of Choco, Colombia*
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Validation/Verification Body	*ICONTEC*
GHG Accounting/ Crediting Period	*08 January 2019 – 07 January 2049; 30-year total period*
Monitoring Period of this Report	*08 January 2019 – 30 June 2021*
History of CCB Status	*N.A.*
Gold Level Criteria	***Exceptional Community Benefits*** *The project will generate important benefits for the community, related to the increase in welfare and quality of life conditions. The community of Condoto is poor, with restricted access to basic services such as energy, health care, education, transport, water and sanitation, and with a large share of population under the national poverty line. The project will invest in social infrastructure and in income generating productive activities, so that incentives for deforestation are reduced. It is expected that the project will help raise the economic conditions of the community while forest governance capacity is enhanced.*

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1 SUMMARY OF PROJECT BENEFITS

1.1 Unique Project Benefits

Outcome or Impact	Achievements during the Monitoring Period	Section Reference	Achievements during the Project Lifetime
1) Strengthening of local governance and management of forests	The Condoto Community Council has managed to avoid deforestation and forest degradation as compared to the reference region and in the territory. Mining progression and practice has been kept controlled. Awareness about conservation has grown. Land use management plans developed	4.1.1. 4.1.3.	Same as in monitoring period
2) Protection of High Conservation Values	Considering that Tropical Rain Forest was defined as HCV, the loss of 1,001 hectares due to deforestation was avoided during the monitoring period.	5.1.4	Same as in monitoring period
3) Improvement of economic conditions of local communities	Community engaged in agroforestry and sustainable fish farming activities promoted by CODECHOCO	4.1.3.	Same as in monitoring period
4) Enhancement of social infrastructure and access to basic services	School infrastructure refurbished and equipped in various sites. Health care enhancement. Recreation and sports infrastructure enhanced in Santa Ana. PV energy solutions for 505 users. Aqueduct and sewage system building for various sites. Construction and paving of urban roads, maintenance of road to La Hilaria, and for Condoto/Opogodo sector. Child development center projects	4.1.1.	Same as in monitoring period

1.2 Standardized Benefit Metrics

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
GHG emission reductions & removals	Net estimated emission removals in the project area, measured against the without-project scenario	Not applicable		Not applicable
	Net estimated emission reductions in the project area, measured against the without-project scenario	441,326	3.2.4	7,315,072
Forest[1] cover	For REDD[2] projects: Number of hectares of reduced forest loss in the project area measured against the without-project scenario	1,001	3.1.2	13,474
	For ARR[3] projects: Number of hectares of forest cover increased in the project area measured against the without-project scenario	Not applicable		Not applicable
Improved land management	Number of hectares of existing production forest land in which IFM[4] practices have occurred as a result of the project's activities, measured against the without-project scenario	Not applicable		Not applicable
	Number of hectares of non-forest land in which improved land management has occurred as a result of the project's activities, measured against the without-project scenario	130	5.1.3	720
Training	Total number of community members who have improved skills and/or	240	4.1.1	240

[1] Land with woody vegetation that meets an internationally accepted definition (e.g., UNFCCC, FAO or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover and may include mature, secondary, degraded and wetland forests (*VCS Program Definitions*)
[2] Reduced emissions from deforestation and forest degradation (REDD) - Activities that reduce GHG emissions by slowing or stopping conversion of forests to non-forest land and/or reduce the degradation of forest land where forest biomass is lost (*VCS Program Definitions*)
[3] Afforestation, reforestation and revegetation (ARR) - Activities that increase carbon stocks in woody biomass (and in some cases soils) by establishing, increasing and/or restoring vegetative cover through the planting, sowing and/or human-assisted natural regeneration of woody vegetation (*VCS Program Definitions*)
[4] Improved forest management (IFM) - Activities that change forest management practices and increase carbon stock on forest lands managed for wood products such as saw timber, pulpwood and fuelwood (*VCS Program Definitions*)

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
	knowledge resulting from training provided as part of project activities			
	Number of female community members who have improved skills and/or knowledge resulting from training provided as part of project activities of project activities	120	4.1.1	120
Employment	Total number of people employed in of project activities,[5] expressed as number of full time employees[6]	Not reported	4.1.1	240
	Number of women employed in project activities, expressed as number of full time employees	Not reported	4.1.1	120
Livelihoods	Total number of people with improved livelihoods[7] or income generated as a result of project activities	Not reported	4.1.1	240
	Number of women with improved livelihoods or income generated as a result of project activities	Not reported	4.1.1	120
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	Not reported	4.1.1	1,400
	Number of women for whom health services were improved as a result of project activities, measured against the without-project scenario	Not reported	4.1.1	700
Education	Total number of people for whom access to, or quality of, education was improved as a result of project	400	4.1.1	500

[5] Employed in project activities means people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, sub-contracted workers and community members that are paid to carry out project-related work.
[6] Full time equivalency is calculated as the total number of hours worked (by full-time, part-time, temporary and/or seasonal staff) divided by the average number of hours worked in full-time jobs within the country, region or economic territory (adapted from UN System of National Accounts (1993) paragraphs 17.14[15.102];[17.28])
[7] Livelihoods are the capabilities, assets (including material and social resources) and activities required for a means of living (Krantz, Lasse, 2001. *The Sustainable Livelihood Approach to Poverty Reduction*. SIDA). Livelihood benefits may include benefits reported in the Employment metrics of this table.

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
	activities, measured against the without-project scenario			
	Number of women and girls for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	200	4.1.1	250
Water	Total number of people who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	Not reported	4.1.1	1,400
	Number of women who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	Not reported	4.1.1	700
Well-being	Total number of community members whose well-being[8] was improved as a result of project activities	505 Solar power	4.1.1.	1,400
	Number of women whose well-being was improved as a result of project activities	Not reported	4.1.1	700
Biodiversity conservation	Change in the number of hectares significantly better managed by the project for biodiversity conservation,[9] measured against the without-project scenario	Not reported	3.1.2	720

[8] Well-being is people's experience of the quality of their lives. Well-being benefits may include benefits reported in other metrics of this table (e.g. Training, Employment, Health, Education, Water, etc.), but could also include other benefits such as empowerment of community groups, strengthened legal rights to resources, conservation of access to areas of cultural significance, etc.

[9] Biodiversity conservation in this context means areas where specific management measures are being implemented as a part of project activities with an objective of enhancing biodiversity conservation.

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
	Number of globally Critically Endangered or Endangered species[10] benefiting from reduced threats as a result of project activities,[11] measured against the without-project scenario	Not reported	3.1.2	20

[10] Per IUCN's Red List of Threatened Species
[11] In the absence of direct population or occupancy measures, measurement of reduced threats may be used as evidence of benefit

2 GENERAL

2.1 Project Description

2.1.1 Implementation Description

The CONDOTO REDD+ Project seeks the conservation of forests located in the territories of the afro communities organized as the Major Community Council of Condoto and Iró, located within the municipality of Condoto, in the department of Chocó. The project zone has a total area of 65,452 ha at the beginning of the monitoring period. The project contributed to mitigate the effects caused by climate change by reducing 441,326 tCO2 emissions derived from deforestation during the monitoring period.

The main activities to be carried out during the Project lifetime are presented in the VCS CCB Project Description. These are as follows: development of economic alternatives compatible with community well-being and nature conservation, social investment, strengthen land use planning and capacities to improve and enhance traditional productive systems and monitoring and biodiversity protection. These activities aim to control and reduce the incidence of deforestation drivers such as mining activities, illegal logging, and establishment of new crops.

During the period of 08 January 2019 – 30 June 2021, corresponding to the fist VCS CCB verification period, the project has carried out workshops to address deforestation drivers, build awareness and established solutions to community and conservation problems, improvement of social cartography, construction of governance strategies, identify sustainable value chains, define monitoring strategies, investment of the financial resources associated to verified carbon credits, among others. In addition, activities such as installation of non-conventional energy sources, restoration of 130 hectares, infrastructure improvement in educational institutions, road maintenance, recreational infrastructure improvement, trainings executed by CODECHOCO (Environmental Regional Authority of Chocó Department), development of the Health Action Plan of the Municipal Mayor of Condoto and started the construction of the aqueduct and sewerage in the Community Council of Condoto were executed. The implementation of these activities has increased the community's governance capacity and willingness to protect their territory, so historical deforestation rates had reduced during the monitoring period.

2.1.2 Project Category and Activity Type

- Sectoral scope 14 – Agriculture, Forestry and Other Land Use
- AFOLU project category: Reduced Emissions from Deforestation and Degradation (REDD)
- Activity type: Avoiding Unplanned Deforestation.
- Project activity type was defined according to a decision tree located in the methodology used (REDD-MF).

2.1.3 Project Proponent(s)

Organization name	Consejo Comunitario Mayor de Condoto - Iró
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2.1.4 Other Entities Involved in the Project

N.A.

2.1.5 Project Start Date (G1.9)

Project's start date is 08 January 2019. This is the date on which the community voluntary signed an intention letter with Plan Ambiente SAS, to develop a REDD+ project and to get involved in forest conservation (see folder *Fecha de Inicio*).

2.1.6 Project Crediting Period (G1.9)

08 January 2019 – 07 January 2049; 30-year crediting period

2.1.7 Project Location

The project is in the Pacific region of Colombia within the administrative jurisdictions of the Department of Chocó and the Municipality of Condoto (see Figure 1).

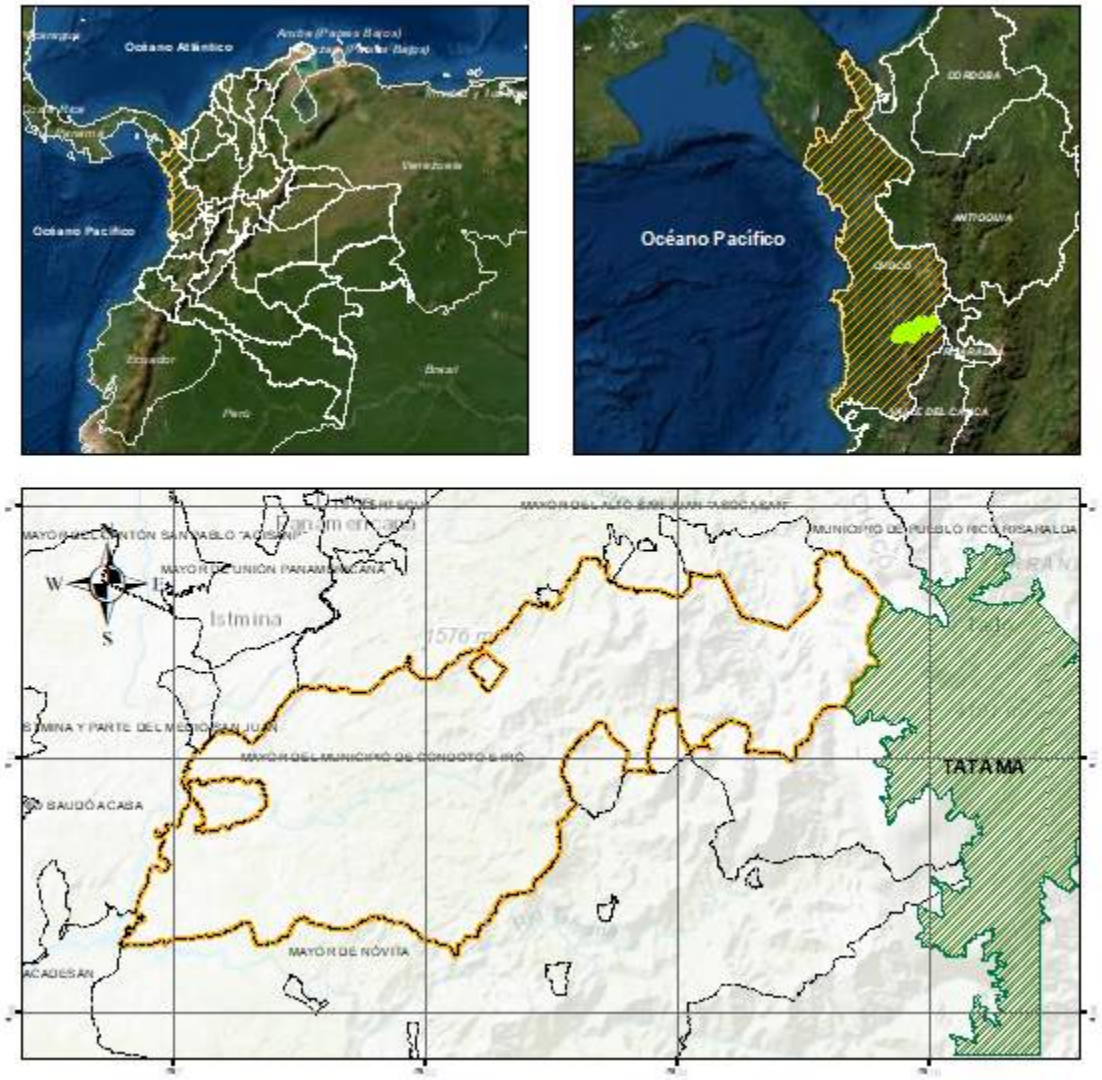

Figure 1 Location of the Major Community Council of Condoto e Iró.

2.1.8 Title and Reference of Methodology

Title	Version
VM0007 REDD+ Methodology Framework (REDD-MF)	1.6
VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB)	1.1
VMD0004 Estimation of stocks in the soil organic carbon pool (CP-S)	1.0

VMD0007 Estimation of baseline carbon stock changes and greenhouse gas emissions from unplanned deforestation (BL-UP)	3.3
VMD0010 Estimation of emissions from activity shifting for avoiding unplanned deforestation (LK-ASU)	1.2
VMD0015 Methods for monitoring of greenhouse gas emissions and removals (M-MON)	2.2
VMD0016 Methods for stratification of the project area (X-STR)	1.2
VMD0017 Estimation of uncertainty for REDD+ project activities (X-UNC)	2.2
VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities	3.0
VCS AFOLU Non-Permanence Risk Tool (T-BAR)	4.0

2.1.9 Other Programs (G5.9)

Emission Trading Programs and Other Binding Limits

The emission reduction resulted of the Project's implementation will not be used for compliance under aby other trading program or mechanisms. The current VCS CCB project is entirely independent of any other carbon project scheme in Colombia; therefore, no double counting has occurred.

Other Forms of Environmental Credit

The project has not sought or received another form of GHG-related environmental credit during this monitoring period.

Participation under Other GHG Programs

The project has not been registered under any other GHG program.

2.1.10 Sustainable Development

The project contributes to the fulfillment of the Sustainable Development Goals (SDGs), due to poverty alleviation and the implementation of socially and economically sustainable development options for the Afro-Colombian communities that inhabit the region in hand with the improvement of environmental management, the project has contributed to the Colombian fulfillment of Sustainable Development Goals (SDG) during the monitoring period considering that:

- SDG1 – No poverty: Not reported
- SDG2 – Zero Hunger: Not reported
- SDG3 – Good health and well-being: Started the construction of the aqueduct and sewerage in the Major Community Council of Condoto - Iró.

- SDG4 – Quality education: Improvement of educational institutions as it is indicated in section 2.2.7.
- SDG5 – Gender equality: Equal Opportunity and Anti-Discrimination Policy Adopted. In addition, during the meeting sessions a 36% of women participated in the decision-making processes.
- SDG6 – Clean water and sanitation: Started the construction of the aqueduct and sewerage in the Major Community Council of Condoto.
- SDG7 – Affordable and clean energy: The implementation of non-conventional energy sources with 505 members of the community.
- SDG8 – Decent work and economic growth: Not reported
- SDG10 – Reduced inequality: Not reported
- SDG11 – Sustainable cities and communities: Not reported
- SDG13 – Climate action: A total of 441,326 tCO2 emission was avoided during the monitoring period considering deforestation reduction in the project area.
- SDG15 – Life on land: A total loss of 1,001 hectares of forest deforestation was avoided during the monitoring period.
- SDG17 – Partnerships to achieve the goal: the Major Community Council of Condoto – Iró has developed partnerships with institutions such as the Municipality of Condoto, CODECHOCO, ART, among others, to execute projects that improve environmental and community conditions.

The Colombian Government has developed a series of strategies that aim to achieve an environmental management of climate change (involving both adaptation and mitigation) and to contribute to the international agenda of sustainable development 2030 (Sustainable Development Goals) and specially SDG 13 - Climate Action. Colombia has a National Policy of Climate Change as well as other regulatory instruments that allows its implementation including but not limited to: *i)* Colombian Strategy for Low Carbon Development (ECDBC), *ii)* National Climate Change Adaptation Plan, *iii)* National Reducing Emissions from Deforestation and Degradation Strategy (REDD+), *iv)* National Green Growth Policy, *v)* Comprehensive sectoral and territorial climate change management plans, *vi)* Nationally Appropriate Mitigation Actions (NAMA) and *vii)* Disaster Financial Protection Strategy. The purpose is to ensure that the country is on a path of climate compatible development.

The project constitutes an important contribution for this National Policy primarily in the Agriculture, Forestry and Other Land Use (AFOLU) sector, due to the deployment of mitigation measures such as deforestation reduction, development of economic alternatives compatible with community well-being and nature conservation, strengthening land use planning and mechanisms to guarantee food security for the communities and contributing to biodiversity monitoring and conservation. In addition, the project supports the National REDD+ Strategy as it seeks to protect existing natural resources while promoting the regeneration of degraded tropical forests and the reduction of global emissions in a high mega-diverse region of Colombia.

2.2 Project Implementation Status

2.2.1 Implementation Schedule (G1.9)

The schedule that is presented below corresponds to a 10-year period. This timetable is expected to be used for the following periods (from the 10th to 20th years and then from the 20th to the 30th year).

The implementation of each 10-year cycle is accompanied by an annex in which the monitoring of each of the activities and the registration of the indicators are specified.

Date	Milestone(s) in the project's development and implementation
08/01/2019	Start date
08/01/2019 – 07/01/2049	Activities implementation
08/01/2019 – 07/01/2049	Monitoring
02/2022 – 05/2022	Validation and verification
2022-2023	Investment for the development of REDD+ activities
2022-2023	Activities monitoring and performance assessment
06/2023 – 06/2024	Verification
2024 – 2025	Investment for REDD+ activities development
2024 – 2025	Activities monitoring and performance assessment
06/2025 – 06/2026	Verification
2026 – 2028	Investment for REDD+ activities development
2026 – 2028	Activities monitoring and performance assessment
01/2028 – 06/2028	Baseline reassessment and REDD+ strategy updating
06/2028 – 12/2028	Validation and verification

2.2.2 Methodology Deviations

The project does not involve deviations from the methodology.

2.2.3 Minor Changes to Project Description (*Rules* 3.5.6)

No community or biodiversity changes to project design occurred during the monitoring period.

2.2.4 Project Description Deviations (*Rules* 3.5.7 – 3.5.10)

No project description deviations occurred during this monitoring period.

2.2.5 Grouped Projects

The project does not correspond to a grouped project, since it is developed in a unique territory belonging to the Condoto and Iró Community Council and does not combine multiple project instances into a single.

The project does not consider adding new instances over time.

The project area map did not require updating and no changes in the governance structure, roles and/or responsibilities of the project occurred.

2.2.6 Risks to the Project (G1.10)

Identify Risk	Actions needed and designed to mitigate the risk	Actions implemented during the verification period to mitigate risk
Potential increase in the severity of storms, flooding and sea-level rise	For risks from extreme events such as, storms or flooding, no mitigation actions have been taken. It is important to point out that these risks correspond to natural phenomena, and it is difficult to establish mitigation protocols prior to the manifestation of risk in the area. It is expected that conservation of the forest in the project area can contribute to mitigate the impacts of these events.	During the monitoring period, the enhancement of governance allowed the conservation of 65,452 hectares of tropical forest in the project area. Additionally, CODECHOCO provided technical support to generate recommendations for manage risks related to hydrometeorological and geological events in the San Juan and Atrato subregion, where the municipality of Condoto is located[12].
Former deforestation activities (agriculture, pastures, mining and settlements)	To mitigate the risk, the project aims to strengthen and build capacities to fulfill the functions of forest rangers and patrols and surveillance over the territory.	During the monitoring period, the strategies to strengthen the governance of the territory were identified with the communities, as presented in

[12] Document available online at:
https://www.codechoco.gov.co/sites/Informes/Informe_Avance_PAI_2020.pdf

Identify Risk	Actions needed and designed to mitigate the risk	Actions implemented during the verification period to mitigate risk
	In addition, the Community Ethno-development Plan and strengthen local minor councils (veredas) will be developed in a participatory way through activities that are part of the REDD+ strategy (social investment, governance, productive systems, monitoring schemes).	the evidence of workshops 2 and 4 (see folders *Taller 2* and *Taller 4*). Also, communities agreed to stablish their productive in areas that have been already intervened.
Weak governance capacity within the Community Council	To mitigate this risk, the project includes two components related to strengthen governance and monitoring through capacity building and training activities.	During the monitoring period, the strategies to strengthen the governance of the territory were identified with the communities, as presented in the evidence of workshops 2 and 4 (see folders *Taller 2* and *Taller 4*).
Changes in the socioeconomic dynamics	To mitigate this risk, the project includes governance improvement and sustainable livelihoods which is expected to provide resources. In addition, community engaging, and development of participatory processes is expected to ensure that community members will participate actively and ensure the expected results of the project in the short, middle and long-term.	During the monitoring period, the productive systems to be developed and the strategies to strengthen the governance of the territory were identified with the communities, as presented in the evidence of workshops 1, 2 3 and 4 (see folder *Talleres*).
Land use changes in the project area due to deforestation and forest degradation	For this, monitoring activities will be carried out to identify areas where deforestation and forest degradation may take place. Additionally, land use planning is expected to additionally, it is	Communities agreed to stablish their productive in areas that have been already intervened. In addition, social cartography was developed during workshops 1 and 2 (see folder *Talleres*).

Identify Risk	Actions needed and designed to mitigate the risk	Actions implemented during the verification period to mitigate risk
	expected that the development of activities oriented towards land use planning will allow better control and efficient use of the land, so that deforestation and forest degradation are prevented.	
Increase in the development of mining activities in the territory of the Major Community Council of Condoto-Iró	For this, the execution of activities that promote a gradual transition to sustainable productive activities is expected to mitigate this risk. These activities correspond to the sustainable livelihoods' component. Through this, the project aims to promote the forest conservation.	During the monitoring period, the productive systems to be developed and the strategies to strengthen the governance of the territory were identified with the communities, as presented in the evidence of workshops 1, 2 3 and 4 (see folder *Talleres*).

2.2.7 Benefit Permanence (G1.11)

The REDD+ project strategy considers the articulation of different stakeholders and fund sources as part of the operative model to implement the activities detailed in section 2.1.11 of the PD. The intervention allows the Mayor Community Council to relate to different financial resources to contribute to the ultimate project objective and improve territorial protection and socio-cultural development. In that way, the strategy offers an appropriate framework to group local actions, that the Mayor Community Council can develop and execute with different institutions and/or cooperants, and direct them according to the community objectives.

During the first monitoring period, the activities implemented by the Major Community Council of Condoto - Iró were carried out with the support of institutions such as the Mayoralty of Condoto, the Territorial Renovation Agency (ART) and the Regional Environmental Authority (CODECHOCO) to improve social well-being, strengthen the exercise of community territorial control and forest governance by the community council. These activities respond to the actions prioritized by the members of the community council to tackle the problems related to the loss of forest and prevent deforestation in the project area (theory of change). Therefore, the reduction of forest loss in the project area quantified during the monitoring period is attributable to the actions framed in the project and ensures the permanence of climate, community and community benefits through:

- Construction and paving of urban roads in the neighborhoods el Silencio and highway sector Opogodó and Viento Libre in the municipality of Condoto.

- Improvement of the coliseum, synthetic field, sports equipment, inter-neighborhood soccer tournament, maintenance of the soccer field in the Santa Ana vereda.

- Through the national strategy named Development Plan with Territorial Approach (PDET), a territorial management has been addressed within a comprehensive advisory strategy. A territorial management plan had been signed on issues related to internal control.

- By 2019, CODECHOCO executed training workshops in Good environmental mining practices in the municipality of Condoto.

- In terms of health, in 2019, Condoto Community Council, among others, participate in the definition of the Health Action Plan of the Municipal Mayor of Condoto, which determined the activities related to healthy habitat, environmental health, healthy lifestyles, mental health, prevalent chronic diseases, food security, sexuality and sexual and reproductive rights, healthy life and communicable diseases, health and safety at work and differential management of vulnerable populations.

- In 2019, CODECHOCO, carried out technical visits to the 5 mining Units of Formalization Subcontracts located in the areas of mining owners of the Community Council of Condoto[13].

- Between October 2019 and June 2020, the Administrative Department of the Presidency of the Republic (DAPRE) approved the preparation of the studies and designs, execution of work and supervision of 5 projects for the construction of the Child Development Center in the municipality of Condoto[14].

- Access to energy from non-conventional sources (photovoltaic) in the rural area of the municipality of Condoto, in non-interconnected areas. The intervention, in 2020, included 505 users[15].

- Between 2019 and 2020, socialization and community training workshops in processes of recovery or restoration of areas affected by anthropic activities such as mining were developed with the community of the Community Council of Condoto by CODECHOCO.

[13] Document available online at: https://www.codechoco.gov.co/sites/Informes/Informe_Avance_PAI_2019.pdf
[14] Document available online at: https://dapre.presidencia.gov.co/dapre/DocumentosDAPRE/Acta-Informe-Gestion-Diego-Andres-Molano-Aponte-05-febrero-2021.pdf
[15] Document available online at: https://www.minenergia.gov.co/documents/10192/24280869/INFORME+PAZ+2020.pdf

- During 2020, 130 hectares of forest systems were established for the recovery of degraded lands by mining activities, conservation and protection of renewable natural resources in the Community Council of Condoto. This activity was leaded by CODECHOCO[16].

- In September 2020, the official handover of the built areas and improvement of classrooms was made in the physical plant of the María Auxiliadora Educational Institution in the municipality of Condoto, which is expected to provide education services for 400 people[17]. Additionally, the hydrosanitary reconstruction was carried out at the María Montessori and Luis Lozano Scipion institutions; The dining room of the El Paso school, the La Hilaria school and the Manuel Mosquera school in the Opogodó district were built; 2 classrooms were built in the José Eulises Mosquera Perea school in the Santa Ana district and the physical plant of the Luis Lozano Scipion institution was improved and rehabilitated[18].

- In October 2020, the first environmental tour of the Terrestrial Mobile Classroom was carried out in 8 municipalities, including Condoto, with children and issues related to caring for the environment and proper management of solid waste were addressed.

- The Ministry of Education in association with the Colombia in Peace Fund, during the second semester of 2020 the process "Better Moments to Take Care of You" was implemented, through which people and social and community organizations were qualified and certified to provide counseling or support to families with early childhood boys and girls from rural and rural areas scattered in various PDET municipalities, including Condoto[19].

- During 2020, CODECHOCO developed the management plan for the Opogodó river micro-basin in the municipality of Condoto.

- Preliminary characterization and identification of causes and drivers of deforestation in the territory and workshops to determine the project activities that prevent deforestation in the project area, including listing sustainable livelihoods, governance strengthening, social investment to improve the community quality of life and monitoring of the territory were carried out during 2021.

[16] Document available online at: https://www.codechoco.gov.co/sites/Informes/Informe_Avance_PAI_2020.pdf
[17] Document available online at: https://www.findeter.gov.co/system/files/convocatorias/PAF-JU-O-052-2018/PAF-JU-O-052-2018%40paf-ju-o-052-2018-terminos-de-referencia-obra-mejoramientos-choco-grupo-2-vf.pdf
[18] Available online at: https://www.contratos.gov.co/consultas/detalleProceso.do?numConstancia=20-11-11296448
[19] Document available online at: https://www.mineducacion.gov.co/1759/articles-402288_recurso_1.pdf

- Quantification of project mitigation, validation and verification results expected due to the project's implementation. Once the verification process will be completed, the verified carbon credits will be traded.

- Regarding transportation, the Condoto Municipal Mayor's Office carried out the maintenance of the road that leads to La Hilaria, in 2019. In addition, with Renewal Territory Agency (ART) resources, the progress in paving work has been carried out on the Animas - Novita highway, Condoto/Opogodó subsector. As of April 2021, the work has been 75% completed [20].

- In the territory of the Community Council of Condoto, in April 2021 started the construction of the aqueduct and sewerage La Hilaria, Jugualito, Opogodó, La Planta, Soledad de Tajuato y Consuelo de la Andrápeda. This project was approved by OCAD PAZ[21].

2.3 Stakeholder Engagement

2.3.1 Stakeholder Access to Project Documents (G3.1)

The mechanisms to ensure stakeholder access to project documents are described in Section 2.3.1 of the Project Description (PD). For the monitoring period, the mechanisms to ensure the access to project information that were implemented with stakeholders were:

- Socialization of the PD and the quantified mitigation of GHG emissions and activities was made with the communities from the Major Community Council of Condoto - Iró.

- Workshops, informative talks and socialization and consultation meetings with stakeholders as it is presented in Section 2.3.3 of the PD.

2.3.2 Dissemination of Summary Project Documents (G3.1)

The mechanism for dissemination of project documents is described in Section 2.3.2 of the PD. During the project formulation and implementation, supporting material was generated to ensure that project information was accessible to stakeholders, including[22]:

- Workshops where topics such as actions required to reach the conservation of the ecosystems existing in the project zone, strengthening of governance, monitoring actions, activities for economic improvement, social and technical enhancement of community orchards, tools for the diagnosis and monitoring of focal species and promotion of their conservation, among others.

[20] Available at: https://portal.renovacionterritorio.gov.co/Publicaciones/pavimentacin_de_31_km_de_la_va_condoto__opogod_con_inversin_superior_a_los_17000_millones_ya_es_un_hecho
[21] Document available online at: https://portal.renovacionterritorio.gov.co/descargar.php?idFile=33302
[22] Support documents can be found in folder *Talleres*

- Booklet with information on the REDD+ mechanism and its importance, community commitments, elements that the project helps to protect, community commitments, project safeguards, development and project objective.

2.3.3 Informational Meetings with Stakeholders (G3.1)

Informational meetings with communities and local stakeholders were carried out participatively accordingly to the methodology developed by CARBO – TERRA. The professionals that work in the program had provided technical support and oversight to the entire project on REDD+ issues through participative workshops during the monitoring period. This group had been responsible for undertaking formal social engagement activities (workshops, work sessions, meetings, etc.).

Workshops with all the representatives of the Major Community Council and some of the minor councils were carried out. These workshops aimed to i) describe REDD+ project, including its objectives (control deforestation and forest degradation) and investment required to achieve the project's objective (governance, productivity, monitoring), ii) identify and analyze deforestation and degradation drivers, iii) identify solutions and strategies to canalize investment resources of the REDD+ project, iv) define implementation schemes.

During the monitoring period, the following meetings were conducted:

Workshop	Date(s)	Place	Attendees	Topic	Procedure
Workshop 1	19-11-2020 20-11-2020	Santa Rita Condoto	Major Community Council of Condoto-Iró Board Minor Community Councils representatives CARBO-TERRA	REDD+ project presentation (objectives, interventions) Deforestation drivers Problem tree and solutions tree development Productive strategies Governance strategies	The workshops were carried out in a participatory way with the methodological guide developed by CARBO-TERRA. The problem tree, solution tree, social cartography, deforestation engines, governance strategies and productive strategies were carried out.
Workshop 2	29-01-2021 30-01-2021	Santa Rita Condoto	Major Community Council of Condoto-Iró Representatives Community representatives CARBO-TERRA	Prioritization of productive systems, social investment Identification of mitigation actions Possible leakage and reference areas mapping Survey application Budget distribution (% per component)	The workshops were carried out in a participatory way with the methodological guide developed by CARBO-TERRA. Crops, social and economic investments in the area, mitigation actions and steps to

Workshop	Date(s)	Place	Attendees	Topic	Procedure
					follow in the REDD+ project implementation process were defined. In addition, surveys were applied.
Workshop 3 and 4	08-04-2021	Condoto	Major Community Council of Condoto-Iró Representatives Community representatives CARBO-TERRA	Deforestation and forest degradation drives analysis Mitigation activities Control schedule Risk analysis Transport mechanisms and leakage prevention	The workshop was carried out in a participatory way with the methodological guide developed by CARBO-TERRA. During the workshop, the driver's matrix was elaborated, mitigation activities identified, and risks, analyzed, among others.
General Assembly	01-06-2021	Condoto	Major Community Council of Condoto-Iró Representatives Community representatives CARBO-TERRA	PDD socialization and approval	The workshops were carried out in a participatory way. CARBO-TERRA presented the Project Design Document, then an autonomous space was given for the community to discuss. Afterwards, the Major Community Council approved the PDD.

In addition, meetings with relevant institutions (Municipality of Condoto, Municipality of Santa Rita and CODECHOCO) had been carried out to present the project and identify potential synergies during its implementation. In addition, during these meetings the project's booklet was divulged among these stakeholders.

2.3.4 Community Costs, Risks and Benefits (G3.2)

The community was the one who identified the problem that needs to be addressed, that is, the territory has been degraded. The community leaders had heard about REDD+ initiatives for many years, considering that REDD+ projects have been implemented in the region for the last 10 years, so they knew that there was an opportunity unexplored previously. That's why they began to protect their territory and looked for a REDD+ project developer to access REDD+ mechanism.

The process with the community for the identification of costs, risks and benefits related with REDD+ mechanism has been done through a series of participatory workshops and information disclosing. The first community spaces were used to informed what is a REDD+ project and then analyzed the community situation. The people mentioned their problems and consequences. It was identified that mining activities, governmental neglect, lack of economic resources and armed

conflict groups in the region threat their stability and future (see folder *Taller 1*). In this way, the participants described deforestation trends and identification of deforestation drivers (problem tree).

In a second workshop proposed solutions were identified with the elaboration of a solution tree, making emphasis in alternatives or actions that lead to a change in current deforestation trends and what activities can be implemented to offer livelihood improvement and stability (see folder *Taller 2*). In a third workshop the members of the community established in what activities the carbon credit sales resources will be invested and how the distribution of the benefits should take place, according with the needs and expectations of the hole community (see folder *Taller 3*). During a fourth workshop, the implementation scheme of the project, as well as prioritization of places for productive systems development, was defined with the members and leaders of the Community Council (see folder *Taller 4*).

For educational purposes, a REDD+ booklet was design and given to the community members (see folder *Taller 4*), where they can find the outcome of all the workshops and all the principal aspects regarding their REDD+ project.

By carrying out this socialization and project designing process, the community has received relevant and transparent information about REDD+ project development and they agree to participate in a voluntarily and determined fashion (see folder *Taller 4*).

2.3.5 Information to Stakeholder on Verification Process (G3.3)

During stakeholder consultation meetings, communities and local authorities were informed about the overall functioning of carbon markets, the standard used to achieve certification and the verification process needed to achieve these carbon credits.

In addition, during stakeholder consultation meetings, the communities were informed that there will be a visit by an auditor at least fifteen days in advance. They were informed through the community leader who receives the information from the legal representative.

During the visits and meetings of the audit, members of the community attended on behalf of their partners, who were available to directly answer the questions of the auditors in the spaces that the auditor requires.

2.3.6 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)

During stakeholder consultation meetings, the communities have been informed that there will be a visit by an auditor at least fifteen days in advance. They have been informed through the community leader who receives the information from the legal representative.

During the visits and meetings of the audit, members of the community will attend on behalf of their partners, who will be available to directly answer the questions of the auditors in the spaces that the auditor requires.

2.3.7 Stakeholder Consultation (G3.4)

Detailed information on how stakeholders have been carried out during the project implementation can be found in Section 2.3.7. of the PD. That section presents information related to the strategies used during socialization and consultation processes, including presentations, document delivery, workshops, interviews, among others.

2.3.8 Continued Consultation and Adaptive Management (G3.4)

As presented in Section 2.3.8. of the PD, the project has decision-making bodies that respect the community council's own governance structure, including:

- Coordinating committee that includes the leaders of the community and the developers of the project. This instance oversees making budget and investment decisions, ensuring that the project's safeguards are respected, as well as the lines of action prioritized by the community.

- Technical committee made up of community members that addresses specific issues and is constituted as support for monitoring the implementation of activities.

- Secretariat that supports the dialogue between the technical committee and the coordinator who contributes with the records and monitoring of the administrative development.

- Request, complaint and claim committee that oversees receiving, reviewing and responding to requests, news that are reported by people in the community. It is made up of three members of the coordinating committee.

2.3.9 Stakeholder Consultation Channels (G3.5)

As mentioned in section 2.3.9. of the PD, consultation channels include:

- Workshops
- Presentations
- Document Delivery

These channels have been used throughout the project implementation for consultation and decision-making. The participation and approval of the communities in the development and implementation of the project has been fundamental to guarantee fully engagement to the project’s implementation, the appropriation of the territory and the expected results sustainability over time.

2.3.10 Stakeholder Participation in Decision-Making and Implementation (G3.6)

The processes implemented to enable the effective participation of all communities are presented in Section 2.3.10 of the PD. These measures were effectively implemented and included participatory workshops and instances where community members and leaders can propose, suggest, or complain about the initiatives and activities of the REDD+ project in the management scheme.

Participation in decision-making included:

- Development of a problem tree
- Identification of deforestation drivers
- Social Needs (transportation, health and education systems, sources of economic incomes)
- Mapping of forest areas and areas with the highest deforestation rates (social cartography)
- Development of a solutions tree
- Construction of governance strategies
- Brainstorming on productive sustainable activities (Cane, pisciculture, poultry farming, yucca, yam, achiote, cacao)
- Brainstorming on monitoring strategies
- Definition of project activities and benefit distribution

The evidence can be found in the folder *talleres*.

2.3.11 Anti-Discrimination Assurance (G3.7)

In order to comply with The CCB Standards, an Implementation Framework Agreement has been executed with the project investor as defined in the Project Management Scheme which presents the measures needed and taken in order to ensure that the project proponent (Communities) and all other entities involved in the Condoto REDD+ Project design and implementation, are not involved in harassment or discrimination, including discrimination based on gender, race, religion, sexual orientation or other habits.

2.3.12 Grievances (G3.8)

No grievances were received during the monitoring period.

2.3.13 Worker Training (G3.9)

The project has training and capacity building activities in each of main components that conform the REDD+ strategies. All training is aimed to promote adequate and useful skills and knowledge focused in increasing and strengthening local participation in the project implementation and all related activities procuring for a sustainable development of the community and the benefits permanence. During the first period of monitoring, community members have participated in

various educational meetings and courses provided by municipal and regional government agencies. After first verification process, the capacity building activities will be increased significantly to address the objectives prioritized by the communities that are incorporated as part of the REDD+ strategy.

2.3.14 Community Employment Opportunities (G3.10)

As it is stated in Section 2.3.15 of the PD, on behalf of the Community Council of Condoto, there has not been employment discrimination based on gender, age, beliefs, religious, ethnicity, among other characteristics.

The project implementation is expected to represent employment opportunities in the different activities also stated in section 2.3.7 of the PD, including productive activities and biodiversity monitoring.

To involve the community members in the project implementation, there is a need to improve and build capacities among them. Within each project component, community members will participate in trainings and programs that will deliver skills and knowledge so they can assume, in the near future, the responsibility to develop and execute most of the project activities such as field or desk tasks. Each project component has incorporated a capacity building activity, so the community will earn the skills to fulfill or perform most of the activities in the short and middle term. According to project planning, specific trainings and educational programs will begin during the second monitoring period. During this monitoring period no case of staff turnover had occurred.

2.3.15 Relevant Laws and Regulations Related to Worker's Rights (G3.11)

The most important regulation and laws in Colombia related to worker's rights, employment components throughout project development, among others, correspond to:

- Decree Law 2663 of 1950 (Substantive Labor Code)
- Law 100 of 1993
- Law 119 of 1994
- Decree 1266 of 1994
- Law 278 of 1996
- Law 584 of 2000
- Law 789 of 2002
- Decree 1703 of 2002
- Decree 510 of 2003
- Law 931 of 2004
- Law 962 of 2005
- Law 1010 of 2006
- Law 1496 of 2011
- Law 1429 of 2010

- Law 789 of 2002
- Law 1280 of 2009
- Law 1429 of 2010
- Law 1468 of 2011
- Law 1438 of 2011
- Law 1562 of 2012
- Law 1610 of 2013
- Law 1636 of 2013
- Decree 089 of 2014
- Law 165 of 2015
- Guides given by the National Development Plan 2018-2022.

2.3.16 Occupational Safety Assessment (G3.12)

The occupational safety assessment is carried out for every activity implemented in the REDD+ project framework. Each activity is analyzed, and the occupational risks are identified, so that every member of the community receives information and participates in training sessions to ensure minimizing any identified risk. All occupational safety regulations related with these activities are compiled and all required insurance, personal protection elements, trainings and risk awareness need to be provided. In addition, the measures developed to reduce risks are designed in such way that follows the cultural practices of the community.

2.4 Management Capacity

2.4.1 Required Technical Skills (G4.2)

The project proponents have a team of professionals that includes environmental engineers, social workers, biologists, cadastral engineers and economists with experience in field and community development projects, who had the responsibility to support project designing and implementation, as well as consolidate and submit the monitoring report. This team, along with the community leaders, follow up all project activities, the indicators regarding climate, community and biodiversity impacts and participatory mechanisms. This team was involved during validation and verification processes and participated in field visits. Change in carbon stocks were monitored according to description of data and parameters found in section 3 and oversaw the SIG engineers. In relation to the community leaders, appointed representatives of the Major Community Council have technical or professional degrees, are experienced community leaders or have local expertise to address specific project components.

From January 08 of 2019, to June 30 of 2021, the following key technical skills were required to implement the project:

- Workshops and consultation processes: since the beginning of the project, workshops with the community, representatives and leaders were carried out. The professional team of project proponents prepared the meetings and developed the field sessions and

compile information and consolidate the conclusions of each session. The topics addressed were tree problem structuration, solution tree, project activities, theory of change, priorization of the activities, intervention strategy, general REDD+ aspects, climate change causes and consequences.

- Field sampling: biologists, forest engineers and local experts carried out forest samplings and aboveground biomass estimations of the forest present within the territory of the Major Community Council of Condoto – Iró. A total of 40 samples were taken and measured during 2021.

- Deforestation monitoring: Cadastral engineers developed a forest cover analysis for the monitoring period and identified deforestation that occurred in the project limits according to the methods and reliable information sources described in the monitoring plan presented in the PD.

- Emission reduction estimation that occurred during the first monitoring period: Engineers and biologists modeled the forest cover permanence for carbon accounting and project emissions estimations within the project geographic boundaries.

- Monitored project activities: environmental engineers, social workers and biologists monitored project activities according to the monitoring plan and the quality control and assurance approach defined in the management information system of the project. Each professional involved in project implementation consolidated and presented all evidence and registers related to activities. Professionals in charge of generating the monitoring report gathered all evidence and results to report project progress.

2.4.2 Management Team Experience (G4.2)

The legal representative of the Community Council is elected by the community according to his experience and management capabilities to guide and represent the will and needs of the community. He has demonstrated experience in community affairs and relations management. Normally the elected person as representative has had experience in projects implementation within the community and has administration knowledge. This person is the promotor of the REDD+ project.

In addition, the project developers have vast experience implementing community-based conservation projects in the pacific region and other areas in the country. For more than ten years they have participated in designing and implementing sustainable productive schemes and community strengthening activities. Moreover, they have also developed carbon projects in the pacific and amazon regions with ethnic groups and have actively participate in public policy making regarding climate change.

2.4.3 Project Management Partnerships/Team Development (G4.2)

The implementation scheme of the project requires specific skills which are gathered through the participation of different entities. To enhance the social relationships and access to community members the project has include the organization Plan Ambiente SAS which has worked for more than five years in this region and has developed different projects with the communities.

Now, community members have participated in educational activities that CODECHOCÓ has developed. Also, some municipalities governments have improved educational facilities that benefit many children of the Community Council. Nevertheless, after first verification takes place, for further activities related with training and education will look for participation of educational institutions that have presence in this area and are known for developing specific training programs for communities, like the National Learning Center (SENA Institution). Some universities will be involved to generate formal education grants for community members.

For the social investment component, the articulation with municipality and departmental government is imperative to enhanced public health, housing, transportation and education investments. Articulation may take place after first verification process and investment resources are available for these elements.

2.4.4 Financial Health of Implementing Organization(s) (G4.3)

For readiness and project registration, validation and verification, the developers have destinated all the economic resources needed. These resources come from private funding. All the carbon monitoring activities and validation and verification processes over the project lifetime are to be covered by the developers. Investments related to these activities are detailed in the investment plan.

Regarding other activities, the community took every opportunity that allows them to access new benefits promoted by local and departmental governments, in different programs that address food security, poverty alleviation, ecosystems restoration and good production practices. Nevertheless, carbon credits sales offer new investment resources that may enhanced all activity developed to date and opens new opportunities to carry on with project implementation.

Once there is income from carbon sales, the resources are going to be transferred to a bank trust. As stated in the Project Management Plan, each year an implementation and investment plan should be defined and approved by the coordinator committee and the bank oversees the money management.

In addition, implementation has been led by the community according to the agreed benefit distribution and administration mechanisms. Funds will be kept at a financial institution through a trust where specific rules are set to ensure that all project funding proceeds are used according to the project´s objective and within the theory of change framework. During money expenditure, the community members in charge of preparing activity implementation, procurement terms and

documentation will be trained in different topics that include corporate associative schemes, business model development, financial management, procurement and monitoring and reporting. Thus, the economic resources derived from carbon credits sales will be regulated trough a community-based decision process. All payments are going to be supported in the annual investment plan, which is determined according to the available budget.

To diversify the possible incomes for community members, the sustainable production systems component is oriented towards reaching economic independence and sustainable initiatives. It is expected to develop profitable business during the first years of implementation of the REDD+ project to reduce financial risks associated to carbon markets and try to secure food safety and livelihood opportunities for most of the community.

2.4.5 Avoidance of Corruption and Other Unethical Behavior (G4.3)

All project developers have been searched within authorities and control entities databases, to find if there is any bad practices or law-breaking reports and bad financial behavior alerts and make decisions according to the case. None of them has been involved n or complicit in any form of corruption such as bribery, embezzlement, fraud, favoritism, cronyism, nepotism, extortion and collusion.

2.4.6 Commercially Sensitive Information (*Rules* 3.5.13 – 3.5.14)

Sensitive commercial information includes the Commercial and Development Agreement between the project developers and the community.

2.5 Legal Status and Property Rights

2.5.1 Recognition of Property Rights (G5.1)

The land in the project areas belongs to the communities of the Major Community Council of Condoto. In 1991 the Constitutional Law of Colombia recognized the ancestral presence and possession of lands by communities of African descent on the Pacific coast. As a result, Law 70 was issued in 1993, which gave these communities the right to own and occupy their Ancestral Lands and the right to self-administration including rights of use of the natural resources present in their territories under the legal dispositions of Colombia. Subsequent executive acts, called “resolutions”, provided official ownership to the communities organized as Community Councils and set the specific boundaries.

In July 2002, 87,803 hectares were recognized by means of the Resolution 001177 from INCORA (Colombian Institute for the Agricultural Reform) to the Major Community Council of Condoto and Iró.

2.5.2 Free, Prior and Informed Consent (G5.2)

The project proponents are the communities themselves who have been granted property rights on their lands by means of an INCORA resolution and that plan to remain in their territory. Thus, the Major Community Council of Condoto is freely pursuing and developing the REDD+ project. Due to this, the Free Prior Informed Consent (FPIC) criteria are met precisely by the free and unfettered participation of the communities in the REDD+ project proposed, which has followed a thorough process of internal consultation and community approval, reflecting the community's own institutional governance structure and by-laws.

The participatory process with the Community Council initiated within the framework of consultation activities for the construction and implementation of the project. The results of the workshops are validated by the General Assembly and the local governing board. The evidence can be found in the folder *talleres*.

2.5.3 Property Right Protection (G5.3)

The project proponents have agreed that the project boundaries will be protected and patrolled accordingly to approved governance and monitoring activities and in accordance to the ethno-development plan.

The project activities do not involve removal or relocation of property rights of the territories belonging to the Community Council.

2.5.4 Identification of Illegal Activity (G5.4)

- Illegal Mining: Comparing to historical clearance of forest for this activity, it was less observed during monitoring period, but still happen in the territory. With the project interventions, it is expected to generate new economic activities to reduce the overall development of illegal mining. Increase social awareness regarding degradation derived from this activity is part of the REDD+ strategy that will be strength.

- Illegal crops: This activity continue to manifest in the territory. Most of the places are managed by armed groups that involve community members attracted by income opportunities. As stated before, the project expects to generate new economic activities to reduce the overall development of illegal activities.

- Forestry and logging without any authorization and without any environmental management plans: The forest use decreased during monitoring period, and is expected to be reduce even more during the next years of implementation of the project. Similar to above cases, the problem lie in the income needs of the people and the inexistent alternative income opportunities. Building capacities on environmental and forest management and governance are to be develop, along with promotion of community engagement with other productive opportunities that are going to be conducted.

- Presence of illegal armed groups: The project cannot prevent presence of illegal armed groups.

2.5.5 Ongoing Disputes (G5.5)

During the monitoring period, the community identified and defined mining activities as a social and environmental threat and some of them are willing to explore different opportunities. This is reflected in the REDD+ strategy, which includes the need to develop new and alternative productive systems and initiatives to reduce the economic dependency that some of the community members have with mining activities. So far, recognizing that all mining titles were excluded from the project area, no dispute have been sustained regarding project development within the rest of the community territory. During local workshops the people manifested that through project strategy, illegal activities and bad production models of mineral resources, that still manifest, can be reduced in a progressive manner. As the project delivers benefits and improve well-being, more social appropriation and commitment will be earned.

The project approach helps community to resolve an historical crossroad regarding the need to generate incomes and protect the forest that delivers community suitability, which impacts land use definition. Since the project offers new income generating schemes based on forest protection, the expected outcome is to curb natural resources exploitation in the territory.

2.5.6 National and Local Laws (G5.6)

The list of national and local laws and regulations related to the project is presented in Section 2.5.7 of the PD.

3 CLIMATE

3.1 Monitoring GHG Emission Reductions and Removals

3.1.1 Data and Parameters Available at Validation

Data / Parameter	$\Delta C_{BSL,unplanned}$
Data unit	t CO2e
Description	Net greenhouse gas emissions in the baseline from unplanned deforestation
Source of data	Module BL-UP Module VMD0001
Value applied	12,128,241
Justification of choice of data or description of measurement methods and procedures applied	Mean carbon emissions are estimated on the carbon stock change after deforestation, according to post-deforestation land use weighted average carbon content observed in RRD during historical reference period.

	Factor is the result of inventory field plots undertaken in the Condoto territory for one stratum representative locations. Based on the average measurement for AGB, the BGB is estimated using default VMD0001 values. Also, for COS, the factor used by IDEAM for the Pacific biome is taken.
Purpose of Data	Calculation of baseline emissions
Comments	

Data / Parameter	RRD
Data unit	ha
Description	Geographic boundaries of the reference area for projection of rate of deforestation at beginning of the reference period (2008)
Source of data	Remote sensing data
Value applied	244,672
Justification of choice of data or description of measurement methods and procedures applied	Calculated from the result of remotely sensed data analysis.
Purpose of Data	*Projection of deforestation rate in PA and LB*
Comments	
Used in Equations	3, 5, 6

Data / Parameter	T_{hrp}
Data unit	year
Description	Duration of the historical reference period in years
Source of data	Remote sensing data
Value applied	10
Justification of choice of data or description of measurement methods and procedures applied	Calculated from the result of images dates used to analyze reference period.
Purpose of Data	*Projection of deforestation rate in PA and LB*
Comments	The intervals of years between the 10 years period to identified deforestation trends are 5.
Used in Equations	

Data / Parameter	Regional Forest Cover in RRD in 2008, 2010, 2014, 2015, 2017, 2018
Data unit	ha
Description	Map that shows the stratification and location of forest and non-forest areas in the Reference Region RRD at the beginning of the reference period).

Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	244,672 (2008); 235,201 (2010); 233,330 (2014); 231,896 (2015); 229,216 (2017); 225,201 (2018)
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	The images were used for all the purposed listed below: • Determination of baseline scenario • Calculation of baseline emissions • Calculation of project emissions • Calculation of leakage baseline scenario • Calculation of leakage emissions
Comments	
Used in Equations	3

Data / Parameter	$A_{RRD,unplanned,hrp}$
Data unit	Ha/year
Description	Total average area deforested during each interval of years during historical reference period in RRD
Source of data	Remote sensing data
Value applied	2,398
Justification of choice of data or description of measurement methods and procedures applied	Deforestation during each year's interval did not present significance correlation with time under any acceptable form of regression define by Module BL-UP. Then, the mean area deforested across the historical reference period was used.
Purpose of Data	• Determination of baseline scenario • Calculation of baseline emissions • Calculation of project emissions • Calculation of leakage baseline scenario • Calculation of leakage emissions
Comments	
Used in Equations	3, 5, 6

Data / Parameter	$C_{AB\_tree,i}$
Data unit	tCO2/ha
Description	Carbon stock in aboveground biomass in trees in stratum i
Source of data	Field survey
Value applied	418.5

Justification of choice of data or description of measurement methods and procedures applied	Local data was obtained to reduce uncertainty of emissions estimations. Field plots were undertaken following IDEAM´s recommended protocols
Purpose of Data	Emissions within Project boundaries
Comments	
Used in Equations	15, 22

Data / Parameter	R
Data unit	t root t^{-1} shoot
Description	Root to shoot ratio appropriate to forest type
Source of data	NTC ISO 6208 (IPCC, 2006)
Value applied	0.37
Justification of choice of data or description of measurement methods and procedures applied	Default value for tropical forests
Purpose of Data	The root ratio is used to estimate below ground trees biomass and was used to: • Calculate baseline emissions • Calculate project emissions • Calculate leakage
Comments	Where new species are encountered in the course of monitoring, new carbon fraction values must be sourced from the literature or otherwise use the default value.
Used in Equations	5,7,13 – Module CP-AB

Data / Parameter	$C_{BB\_tree,i}$
Data unit	tCO2/ha
Description	Carbon stock in belowground biomass in trees in stratum i
Source of data	Based on root ratio and Field survey of *BA*
Value applied	100.4
Justification of choice of data or description of measurement methods and procedures applied	Root ratio is appropriate to estimate below ground carbon content using default value
Purpose of Data	Emissions within Project boundaries
Comments	
Used in Equations	17, 22

Data / Parameter	$C_{SOC,i}$
Data unit	tCO2/ha
Description	Carbon stock in soil organic carbon in stratum i

Source of data	NREF (IDEAM)
Value applied	17
Justification of choice of data or description of measurement methods and procedures applied	Default value for Amazon Biome
Purpose of Data	Emissions within Project boundaries
Comments	
Used in Equations	21, 22

Data / Parameter	$C_{SOC, PD-BSL,i}$
Data unit	tCO2/ha
Description	Mean post-deforestation stock in soil organic carbon in the post deforestation stratum i
Source of data	Based on RRD data
Value applied	5
Justification of choice of data or description of measurement methods and procedures applied	Some post-deforestation land use comprises the carbon content in this deposit, so carbon stock change is significant during project implementation.
Purpose of Data	Emissions within Project boundaries
Comments	
Used in Equations	22

Data / Parameter	Regional Forest Cover / Non-Forest Cover Benchmark Map
Data unit	map
Description	Map showing the location of forest land within the reference region at the beginning of the crediting period.
Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	Map
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	Identification of forest in RRD.
Comments	
Used in Equations	

Data / Parameter	Project Forest Cover in 2018 - *PA*
Data unit	ha

Description	Map showing the stratification and location of forest within the project area at the beginning of each monitoring period. The benchmark map will show the deforested areas at each monitoring event (Map of spatial limits)
Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	65,452
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	The project area forest benchmark map for year 2018 is used to: Determine baseline scenario • Calculate baseline emissions • Calculate project emissions
Comments	
Used in Equations	3, 5, 7

Data / Parameter	Leakage Belt Forest Cover in 2018 - *LB*
Data unit	Ha
Description	Map showing the location of forest within the leakage belt at the beginning of each monitoring period. The benchmark map will show the deforested areas at each monitoring event
Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	63,394
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	The leakage belt forest cover benchmark map is used to • Calculate project emissions • Calculate leakage
Comments	Non-applicable
Used in Equations	3, 6, 8

Data / Parameter	P_{LK}
Data unit	Dimensionless
Description	Ratio of the area of the leakage belt to the total area of RRD
Source of data	

Value applied	0.2589
Justification of choice of data or description of measurement methods and procedures applied	Calculated from the result of remotely sensed data analysis.
Purpose of Data	Calculate baseline emissions in *LB*
Comments	
Used in Equations	6

Data / Parameter	P_{PA}
Data unit	Dimensionless
Description	Ratio of the area of Project Area to the total area of RRD
Source of data	
Value applied	0.2675
Justification of choice of data or description of measurement methods and procedures applied	Calculated from the result of remotely sensed data analysis.
Purpose of Data	Calculate baseline emissions in *PA*
Comments	
Used in Equations	5

Data / Parameter	CFj
Data unit	t C t-1 d.m
Description	Carbon fraction of biomass for tree species j
Source of data	Species- or family-specific values from the literature (e.g., IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.3) shall be used if available, otherwise default value of 0.47 t C t-1 d.m. can be used.
Value applied	0.47 t C t-1 d.m
Justification of choice of data or description of measurement methods and procedures applied	Default value 0.47 t C t-1 d.m. can be used, or species-specific values from the literature (e.g. IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.3)
Purpose of Data	The Carbon fraction for dry wood was used to: • Calculate baseline emissions • Calculate project emissions • Calculate leakage
Comments	Where new species are encountered in the course of monitoring, new carbon fraction values must be sourced from the literature or otherwise use the default value.
Used in Equations	1 – Module CP-AB

Data / Parameter	Dj
Data unit	t d.m. m^{-3}
Description	Basic wood density in t d.m. m^{-3} for species *j*
Source of data	Different information and studies sources were used,
Justification of choice of data or description of measurement methods and procedures applied	According to good practice procedures, project should prioritize the use of local information when available, otherwise national or regional studies may be used.
Purpose of Data	The basic wood density was used for: • Calculate baseline emissions • Calculate project emissions • Calculate leakage emissions
Comments	Non-applicable
Used in Equations	1 – Module CP-AB

Data / Parameter	Fj(X,Y)
Data unit	BA $tree^{-1}$
Description	Allometric equation for species j linking measured tree variable(s) to aboveground biomass of living trees, expressed as t d.m. $tree^{-1}$
Source of data	Allomeric models by forest stratum for aboveground organic tree matter where AGB is aboveground biomass (Mg ha-1 dry weight), D is diameter (cm), H is height (m) and WD is wood density (g cm-3). * Saldarriaga's model for palm tree biomasses in all types of forests (2014).
Value applied	Forest Stratification: Dense forest Model: (BA)=a+B1*Ln(D^2*H*ρ) or BA=139.48+7.308*H^1.133
Justification of choice of data or description of measurement methods and procedures applied	Applied to other REDD+ projects in the same regional area.
Purpose of Data	The allometric equation for tree biomass was used to: Calculate baseline emissions Calculate project emissions Calculate leakage
Comments	
Used in Equations	1 – Module CP-AB

Data / Parameter	Baseline deforestation maps
Data unit	# of maps

Description	Maps showing the location of deforested hectares in each year of the baseline period.
Source of data	Landsat and Planet Scope images
Value applied	6
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	Identified deforestation areas within RRD and PA.
Comments	
Used in Equations	

3.1.2 Data and Parameters Monitored

Data / Parameter	$A_{DefPA,i,t}$
Data unit	Ha
Description	Area of recorded deforestation in project area during monitoring period.
Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	602
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	Calculate project emissions
Comments	
Used in Equations	1, 3 – Module M-REDD

Data / Parameter	$A_{DefLB,i,t}$
Data unit	Ha
Description	Area of recorded deforestation in leakage belt during monitoring period.
Source of data	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale (Landsat and Planet Scope)
Value applied	705.3
Justification of choice of data or description of measurement methods and procedures applied	Satellite imagery used is adequate in terms of spatial resolution (less than 30 meters) and an appropriate scale.
Purpose of Data	Calculate leakage emissions

Comments	
Used in Equations	2, 4 – Module M-REDD

Data / Parameter	Project Forest Cover in 2019 and 2021
Data unit	ha
Description	Map showing the location of forest land within the project area at the beginning of each monitoring period. If within the Project Area some forest land is cleared, the benchmark map must show the deforested areas at each monitoring event
Source of data	Satellite images (Landsat and Planet Scope)
Description of measurement methods and procedures to be applied	By using satellite images and remote sensing to map forest and non-forest covering the Project Area it would be determined if there are any variations in the forest in the project area.
Frequency of monitoring/recording	Every 2 years (or less) with images. Verification of deforested areas will be continually monitored in field by the project participants.
Value applied	65,452 (2019); 65,185 (2020); 64,849 (June 2021)
Monitoring equipment	Computers and SIG software
QA/QC procedures to be applied	Following methodology of IDEAM (2019) the procedures are accurate and precise.
Purpose of Data	Calculation of project emissions
Calculation method	Following methodology of IDEAM (2019).
Comments	

Data / Parameter	Leakage Belt Forest Cover
Data unit	ha
Description	Map showing the location of forest land within the leakage belt at the beginning of each monitoring period.
Source of data	Satellite images (Landsat and Planet Scope)
Description of measurement methods and procedures to be applied	By using satellite images and remote sensing to map forest and non-forest covering the Project Area it would be determined if there are any variations in the forest in the project area.
Frequency of monitoring/recording	Every 2 years (or less) with images. Verification of deforested areas will be continually monitored in field by the project participants.
Value applied	63,394 (2019); 63,044(2020); 62,689 (June 2021)
Monitoring equipment	Computers and SIG software
QA/QC procedures to be applied	Following methodology of IDEAM (2019) the procedures are accurate and precise.
Purpose of Data	Calculation of leakage
Calculation method	N/A

Comments	

Data / Parameter	ADistPA,t
Data unit	ha
Description	Area impacted by natural disturbance in the project area at time t; ha
Source of data	Satellite images
Description of measurement methods and procedures to be applied	Analysis of natural disturbance in project area like fires, pest, drought or earthquake.
Frequency of monitoring/recording	This will be monitored at least every two years.
Value applied	0
Monitoring equipment	Computers and SIG software
QA/QC procedures to be applied	Following methodology of IDEAM (2019) the procedures regarding images interpretation are accurate and precise.
Purpose of Data	Calculation of the non-permanence risks
Calculation method	Interpretation of satellite images.
Comments	

3.1.3 Monitoring Plan

The monitoring activities follow the requirements for REDD+ projects including those stated in CCB Standard and VCS Standard. Data and parameters monitored followed the same procedures and methods used to defined project baseline. Details regarding the information management system of the project are described in the file *Procedimiento QC-QA Condoto_v1.pdf*, in folder *Procedimiento Control y Calidad*.

Data control and activity recording:

To ensure that the GHG emissions estimations and activity data reflect the characteristics and activities of the REDD+ project in a consistent, precise, complete and transparent manner, a series of activities and procedures were applied and implemented during the monitoring period. In this sense, quality assurance and quality control (QA/QC) activities are an integral part of the monitoring process. The quality control activities correspond to the methods used to verify that the collection and acquisition of data and calculations, as well as GHG emissions estimations, uncertainties, information storing and reports development, are carried out correctly and reflect the reality of the project. These activities also involved technical reviews of emission sources, activity data, emission factors, and other parameters used for carbon accounting. The results of the quality control activities allow emissions estimations and uncertainty to be adjusted and corrected, as well as identifying opportunities for improvement.

The main quality control activity consisted of validating the quality of the information sources associated with the emission sources. In this sense, all the data of the activities came from satellite images, land use interpretations carried out according to the national interpretation methodology approach defined by the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM).

To guarantee the quality of the information, the people responsible for providing the information on each technical line provided the evidence to other members of the team, who oversaw and verified the characteristics and quality of the information, in order to subsequently consolidate and prepare the monitoring report. The information on field activities was supported by clear and transparent evidence.

Regarding the process to review information, verifications were made over the data monitored and the supports (sources of information). In this step, no inconsistency was detected. Applied formulas in the calculation sheets and activity data consolidation was corroborated and verified that information was properly used. Results were compared against the baseline and estimated emissions reductions, which allowed to validate that the numbers were within the expected range. Transcription and parameterization errors were detected and adjusted. As a result, the project assures that the information declared in the monitoring reports is true and adequately supported.

All records and physical and digital files were uploaded in the project shared folders. All information that the implementation team and other professionals generated during the first monitoring period is available online.

Assessment and identification of project boundaries:

The correct identification of the geographical and operational limits of the project was essential to reflect the economic and operative reality of the initiative. The project involves a legally constituted territories of afro descendant communities and the activities to address and control deforestation drivers and contribute to sustainable development were defined and agreed with the members of the communities.

The geographical limits remain fixed respect the baseline and correspond to the forest cover that were stable during at least ten years before the start date of the project. The exact location of these forests was georeferenced and stored in digital files that guarantee the integrity of the information. These limits were used to monitor forest cover in the project area and the leakage belt. Observed changes in forest cover are reported in 3.1.2. Other REDD+ activities were monitor according to the plan and indicators were validated and presented in the respective section.

For this report, the team of professionals made sure that the project limits corresponded to the same ones that were defined in the project design document. No changes in geographic boundaries or carbon reservoirs were made, thus, no updating applies to any of the data and parameters to be monitored.

Accuracy assessment and improvement opportunities:

All activity data came from good-resolution satellite images, records and registers. Special attention and care were taken to ensure that premises or assumptions were coherent through time. Technical and procedural certainty assures that data and parameters used in this report are consistent with project design.

3.1.4 Dissemination of Monitoring Plan and Results (CL4.2)

Monitoring and Implementation Reports will be posted in the public domain on the CCB and VCS websites in accordance with each program's procedures. The document will be updated once it is approved by the Validation and Verification Body (VVB) on the following link: https://registry.verra.org/app/projectDetail/VCS/2723

Summaries of monitoring results had been presented to stakeholders and community members within the project zone prior to verification and accordingly to the communities means of communication and access to documents, through oral communication, in accordance with the procedures presented in section 2.3.1. of the PD.

3.2 Quantification of GHG Emission Reductions and Removals

3.2.1 Baseline Emissions

The quantification of baseline emissions followed the VM0007 methodology modules BL-UP, X-STR, C-AB, E-BB. Following the module BL-UP the baseline deforestation rate was calculated from the Reference Region for Deforestation (RRD). Projected areas of deforestation are based on the simple historic approach and on the average deforestation rate observed in the reference region during the reference period, thus, the population driver approach was not used.

Reference Region for Deforestation (RRD):

A combination of different geospatial data was used to delineate the reference region. The main defining criteria for the reference region is that it includes Community Councils. By defining the reference region boundaries within this type of territories, it is ensured that similar systems of governance, regulations, social structure and customs are similar to those in the project area.

Within these boundaries, the reference region was analyzed to ensure that slope, elevation, land uses, precipitation and temperature are similar in the project area conditions. All areas that have restricted access were excluded from the reference region, that is, protected areas like national natural parks. Also, areas that are licensed to be exploited, like mining titles, were also excluded from the reference region.

To define the minimum area of the RRD, the following equations were used:

$$MREF = RAF * PA$$
$$RAF = 7500 * PA-0.7$$

The project area consists in 65,452 ha, so the RDD should be at least 208,802 ha. The selected RRD had 244,672 ha at the beginning of the reference period (year 2008), which meets the minimum required by the methodology.

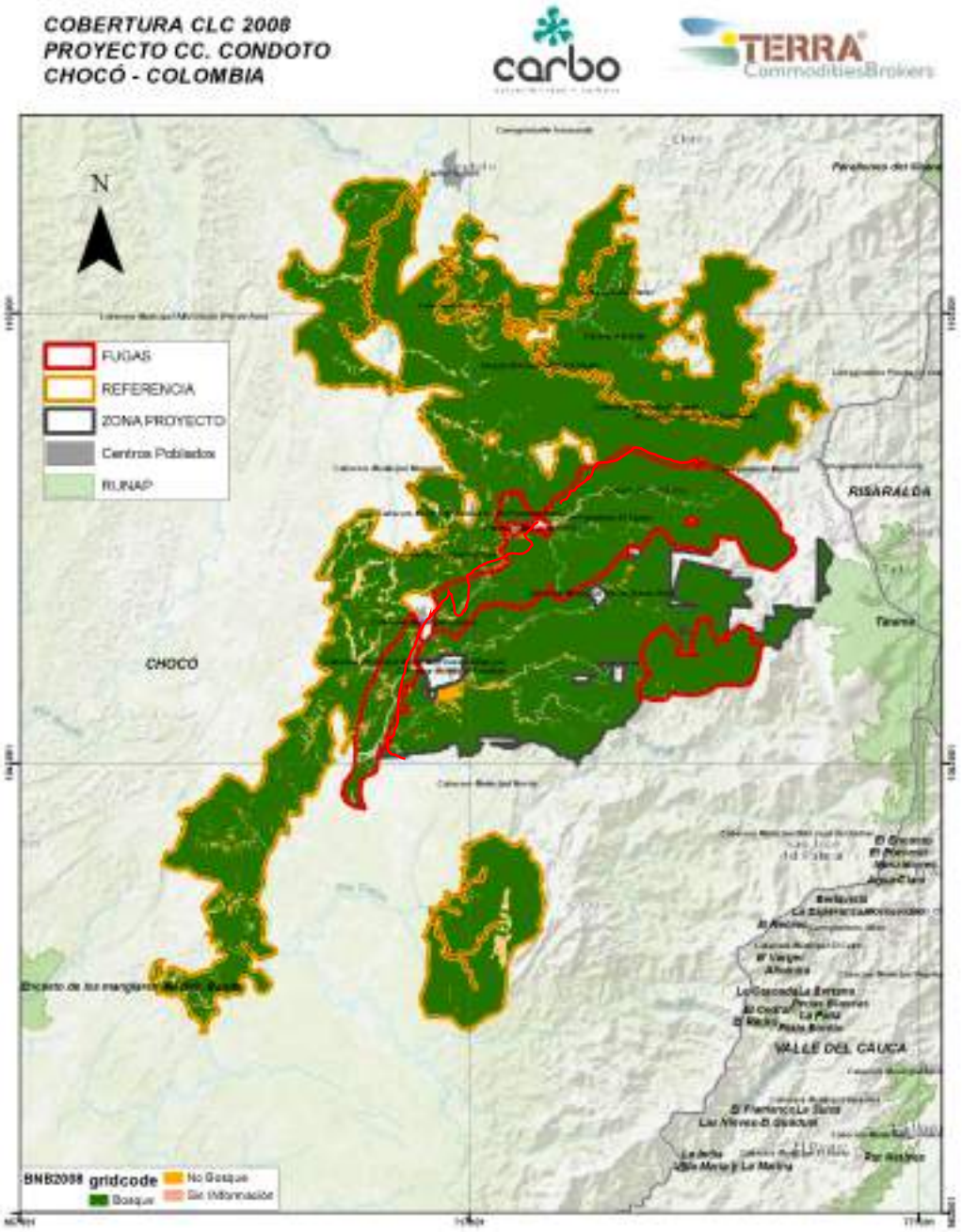

Figure 2 Project Area, Reference Region and Leakage belt in 2008.

The calculation of historical deforestation corresponds to the area of forest at the beginning and end of the historical reference period and the number of hectares deforested for each interval of the historical reference period. The five intervals used for this analysis are: 2008-2010, 2010-2014, 2014-2015, 2015-2017, 2017-2018. Gross deforestation was measured. Image interpretation was carried on according to the national guide for deforestation trends assessment (IDEAM, 2019), which corresponds to the National Reference Level methodology. All images used have less than 10% of clouds and the classification accuracy is 91% (IDEAM, 2019).

The estimation of annual areas of unplanned baseline deforestation in the RRD was identified through the historical average of annual deforestation during the historical reference period. No regression was applied because the acceptable forms that could be used didn´t meet the significance and r^2 expected values (r^2>0.75 and p<0.05) (see annex *Cálculos CONDOTO_reducciones-incertidumbre.xlsx*). So, the mean area deforested, in hectares per year, across the reference period was use and the same mean rate was used for each year of the baseline period. Annual average of forest lost during the reference period was 2,398 ha/year.

Año	Forest in RRD	Total Hectares loss during interval	Annual average of hectares loss
Bosque 2008	244,672		
Bosque 2010	235,201	9,471	4,736
Bosque 2014	233,330.1	1,871	468
Bosque 2015	231,896.3	1,434	1,434
Bosque 2017	229,216.5	2,680	1,340
Bosque 2018	225,201.3	4,015	4,015

Project area:

To estimate the projected unplanned baseline deforestation in the project area the equation #5 of the BL-UP was used:

$$ABSL,PA,unplanned,t = ABSL,RRD,unplanned,t * P_{PA}$$

After this equation, the sum of the deforested areas was estimated using the equation #7 of the same tool:

$$A_{BSL,PA,unplanned} = \sum_{t=1}^{t^*} A_{BSL,PA,unplanned,t}$$

The result of these equations is that 641.6 hectares/year are expected to be deforested in the project area and during the project implementation (30 years) this number goes up to 19,248 hectares.

Pre- and post-deforestation carbon stocks:

In the project and RRD, deforestation follows a mosaic configuration. Then, deforestation location analysis is not required. Thus, for the project scenario it has been assumed that deforestation is to happen first in the strata with the lowest carbon stocks (in all relevant pools).

To estimate carbon stock changes and greenhouse gas emissions, part 4 of the BL-UP tool was followed.

Pre-deforestation strata was defined according to module X-STR and for the total area subject to deforestation in the project area and leakage belt. The forest stratification was developed using available spatial data such as a Digital Elevation Model (DEM), soil, land cover types, climate and topography. No measurements of biomass plot density or carbon stock density were used in the forest stratification process. Also, the National Reference Level of Colombia (IDEAM, 2019) was considering defining available data for the characteristics of the forest in this region. The results showed that only one type of forest is identified in these areas, which corresponds to tropical humid forest of the Choco region.

Post-deforestation land uses were identified to estimate the long-term average carbon stocks based on current land uses in areas deforested during the historical reference period in the reference region.

Carbon stock changes per stratum was define according to modules CP-AB and CP-S. Carbon pools excluded from the project have counted as zero (DW and L). Estimation of post-deforestation carbon stocks are assumed to be the long-term average stocks on the land following deforestation. The historical area-weighted average approach was used to determine the carbon stocks of these land uses. The area-weighted average of the mature carbon stock for each land use is calculated from the historical land-use change matrix and is assumed to represent all post-deforestation carbon stocks in that land use during the project term. The historical reference - frame reference.

Due to the lack of local studies, post-deforestation carbon stocks of the identified land-use classes were obtained from NTC 6208 (ICONTEC, 2016) which takes values from IPCC (2006). The following table present the results and the carbon stock average define for post-deforestation land use during project implementation.

Post-deforestation Land Use in RR	% of land use post-deforestation	BA (t/ha)	BA (tCO2/ha)	BA weighted post-deforestation (tCO2)	COS (tC/ha)	COS weighted post-deforestation (tC/ha)	COS weighted (tCO2/ha)
Mining zones	54.39%	0.0	0.00	0.00	0	0.00	0.00
Grass and natural spaces mosaic	14.22%	12.7	23.29	3.31	60	8.53	31.29
Low Secundary vegetation	10.32%	39.2	71.87	7.42	60	6.19	22.72
Cropland, grass and natural spaces mosaic	9.58%	11.5	21.09	2.02	60	5.75	21.08

Post-deforestation Land Use in RR	% of land use post-deforestation	BA (t/ha)	BA (tCO2/ha)	BA weighted post-deforestation (tCO2)	COS (tC/ha)	COS weighted post-deforestation (tC/ha)	COS weighted (tCO2/ha)
High Secundary vegetation	6.69%	7.0	12.83	0.86	60	4.01	14.71
Grass and cropland mosaic	1.94%	10.6	19.34	0.38	60	1.16	4.27
Clean grass	1.03%	12.7	23.29	0.24	60	0.62	2.27
Cropland and natural spaces mosaic	0.83%	8.4	15.40	0.13	60	0.50	1.83
Discontinuos Urban areas	0.37%	0.0	0.00	0.00	0	0.00	0.00
Wetland	0.24%	0.0	0.00	0.00	86	0.21	0.75
Acuaculture ponds	0.17%	0.0	0.00	0.00	86	0.14	0.52
Grass with undergrowth	0.15%	12.7	23.29	0.03	60	0.09	0.33
Cropland mosaic	0.07%	8.4	15.40	0.01	60	0.04	0.16
Total carbon content post-deforestation (tCO2/ha)				**14.40**			**99.92**

Above ground biomass of forest was estimated through a field survey, using Module CP-AB as reference.

The field survey and data collection occurred in June 2021 using the Protocol for national and subnational biomass-carbon estimation in Colombia (IDEAM, 2011). Plot-based measurements were taken in the forest stratum. The protocol followed was: 40 circular plots of 15 m radius, located on a systematic random fashion over the project area, consisting of a seven series of linear arrangements, with plots located approximately every 500 m. All trees with DBH >= 10 cm were register. Heights for all trees with DBH was measured.

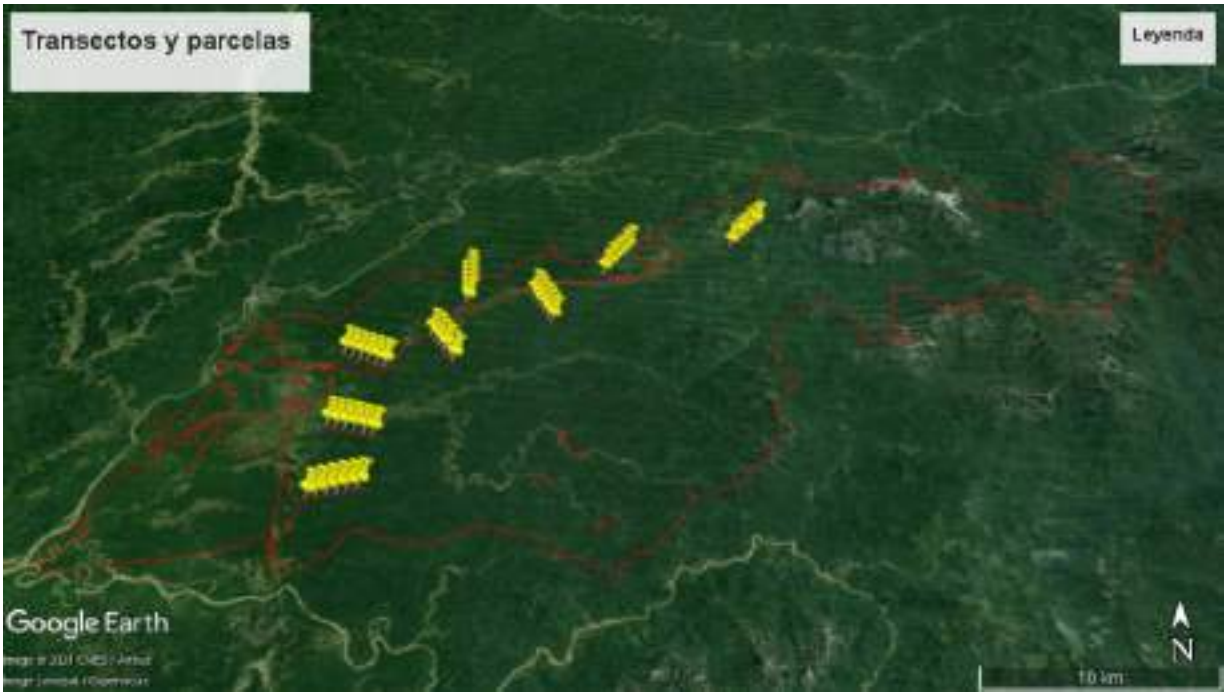

Figure 3 Forest above ground carbon stocks survey points during 2021.

Species wood density was determined according to species identification during the field phase and post-search of available literature about each species (IDEAM, 2011; WFF-Colombia, 2013;

Blanco, J. 2020 & Martínez - Guardía, Torres -Torres, & Medina - Arroyo, 2015) (for further details see annex *Informe v2_Establecimiento Parcelas Condoto_21092021,* in folder *Estudio Forestal*).

To estimate carbon stock changes due to deforestation, equations 15, 17 and 21 (BL-UP) were followed. The sum of baseline carbon stock changes is resumed in the next chart (equation 22 of Module BL-UP):

Forest SOC (tCO2/ha)	Forest BA (tCO2/ha)	Forest BB (tCO2/ha) (*1/10)	BA + BB total tCO2/ha	Post-deforestation SOC (tCO2/ha)	Change in SOC stocks (1/20)	BA Post-deforestation tCO2/ha	Total Carbon stock change post-deforestation (tCO2/ha)
220,0	418,5	15,5	434,0	99,9	6,00	14,4	425,6

Calculation of net emissions is the result of the baseline unplanned deforested area times the average carbon stock changes within the project area, according to equation 25 and 26 (module BL-UP).

Baseline emissions from unplanned deforestation in the project area were estimated to be as follows:

Year	Baseline emissions (tCO_2e)
2019	273,060
2020	286,848
2021 (june)	150,317
Total	710,225

3.2.2 Project Emissions

Emission resulting from deforestation that occurred during the monitoring period in the project area was estimated as follows:

Monitoring deforestation: Using the same remote sensing methods used for baseline definition, the project area was monitored and during the monitoring period the forest cover decreased. At project start date the forest had 65,452 ha. In December 2019 the standing forest was 65,185 ha, and at the end of the monitoring period (June 2021) 64,849 ha remained. These shows that 267 ha were lost in the first year and other 335 ha were deforested during the following 1.5 years. A total of 602 ha of forest were cleared during the monitoring period.

Following equation (3) (VMD0015, v2.2, Step 2), the net carbon stock change as a result of deforestation is equal to the deforested area multiplied by the emission per unit area (see file *Cálculos Condoto_reducciones-incertidumbre 24102022.xlsx*, in folder *Cálculos emisiones*). The emission factors used per unit area are described in section 3.1.1. The summatory of the estimated emissions during each year of the monitoring period was made using the following equation:

$$\Delta C_{P,DefPA} = \sum(A_{DefPA,u,i,t} * \Delta C_{Bpools,P,Def,u,i,t})$$

$$\Delta C_{P,DefPA,2019} = 267.34\ ha * 425.59\ \frac{tCO_2e}{ha} = 113{,}776.05\ tCO_2e$$

$$\Delta C_{P,DefPA,2020} = \left(223.43\ ha * 425.59\ \frac{tCO_2e}{ha}\right) + \left(267.34\ ha * \left(15.5\ \frac{tCO_2e}{ha} + 6.0\ \frac{tCO_2e}{ha}\right)\right) = 100{,}832.94\ tCO_2e$$

$$\Delta C_{P,DefPA,jun2021} = \left(111.7\ ha * 425.6\ \frac{tCO_2e}{ha}\right) + \left((267.34\ ha + 223.43\ ha) * \left(15.5\ \frac{tCO_2e}{ha} + 6.0\ \frac{tCO_2e}{ha}\right) * 0{,}5\right)$$
$$= 54{,}290.32\ tCO_2e$$

$$\Delta C_{P,DefPA,total} = 268{,}899.31\ tCO2e\ ^{23}$$

3.2.3 Leakage

Ex-post leakage assessment was done with tool *VMD0010 Estimation of emissions from activity shifting for avoiding unplanned deforestation (LK-ASU)*, which states that a conservative estimate must be produced to reflect potential GHG emissions in the leakage belt because of displaced deforestation agents. For this, the area deforested in the leakage belt was estimated from a cartographic analysis.

Year	Leakage Project Scenario deforestation (ha)	Leakage Baseline deforestation (ha)	Net leakage deforestation compared to Baseline (ha)
2019	350.2	621.4	-271.2
2020	236.7	621.4	-384.7
2021 (june)	118.4	310.7	-192.3
Total	705.3	1,553.6	-336.4

The estimation as of the emissions due to unplanned deforestation displaced from the project area to the leakage belt were estimated as follows:

$$\Delta C_{LK-ASU-LB} = \Delta C_{P,LB} - \Delta C_{BSL,LK,unplanned}$$

Where:

$\Delta C_{LK-ASU-LB}$	Net CO_2 emissions due to unplanned deforestation displaced from the project area to the leakage belt per year (tCO_2e)
$\Delta C_{P,LB}$	Net CO_2 emissions within the leakage belt un the project scenario per year (tCO_2e)
$\Delta C_{BSL,LK,unplanned}$	Net CO_2 emissions in the baseline from unplanned deforestation in the leakage belt per year (tCO_2e)

[23] The numbers obtained may differ due to the number of decimal places presented.

The table below presents the leakage emissions that occurred during the monitoring period. Considering that the baseline emissions were higher than those quantified during the monitoring period, net leakage emissions were quantified as zero during the first monitoring period.

Year	Leakage Baseline emissions (tCO_2e)	Leakage Project Scenario (tCO_2e)	Net leakage emissions (tCO_2e)
2019	264,476	149,039	0
2020	277,830	108,279	0
2021 (june)	145,592	58,445	0
Total	687,898	315,763	0

In addition, during the monitoring period, a decrease in deforestation was observed in the leakage area compared to the estimated in the baseline. This situation was analyzed within the framework of the geographical context and management of the territory in order to understand the causes related to this trend. It is important to highlight that there are 8 collective territories that overlap the leakage area (see figure 4).

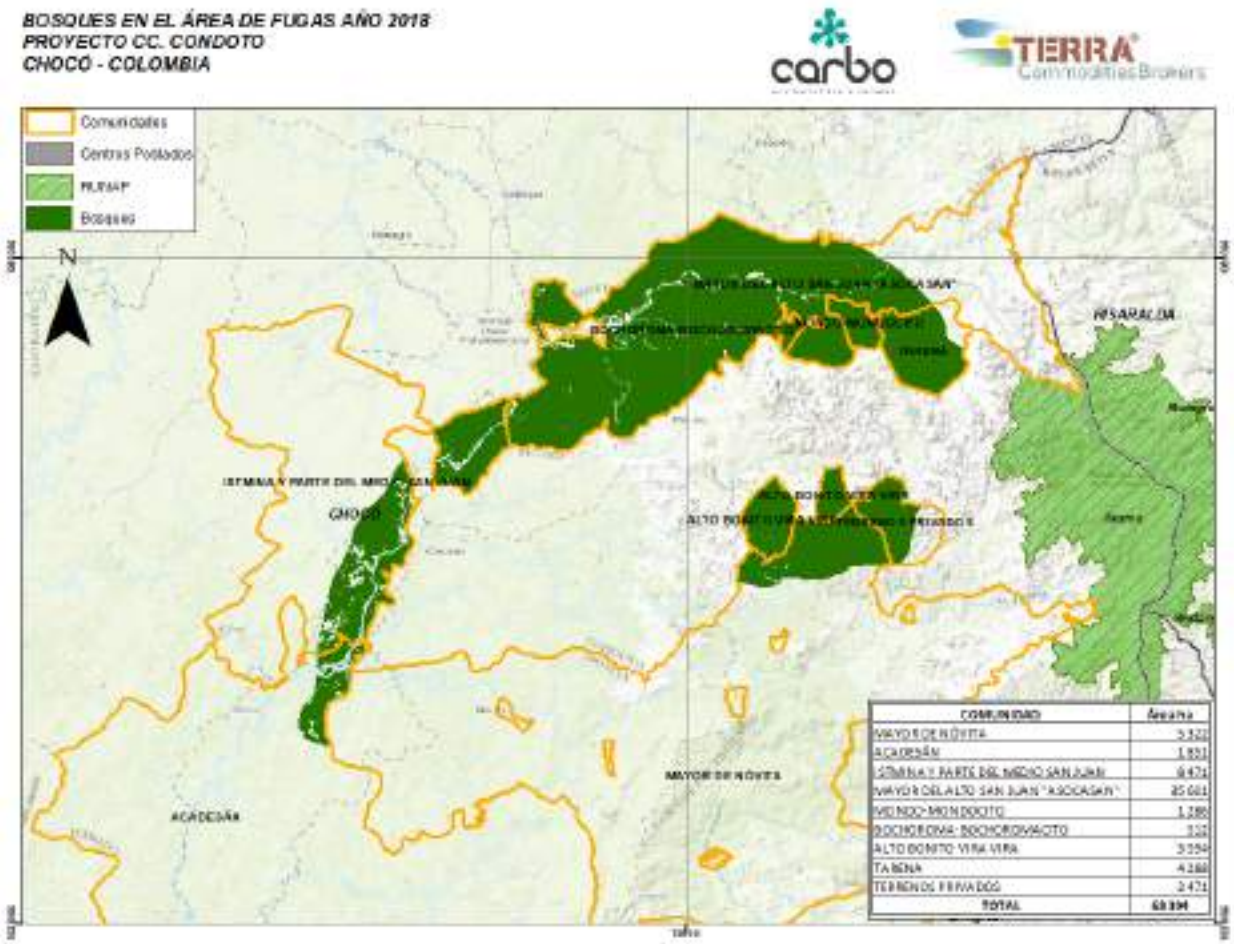

Figure 4 Forest in leakage area and area that fall under neighbor community territories.

Based on the forest cover at the beginning (66,813 ha) and at the end (63,394 ha) of the historical reference period, it was possible to determine that a total of 3,418 hectares were lost. Neighbor community territories have different extensions and only a fraction overlaps with the leakage belt. The overlapping proportion and deforestation trends are different for each territory. Considering this, a geographical analysis of deforestation in the leakage area was carried out.

The results indicate that deforestation increased in three territories, decreased in other four, and no deforestation was observed in private properties. The ASOCASAN community territory, which has one of the highest proportions of its entire territory within the leakage area (35,601 ha out of 54,517 ha), presented an increase in the deforestation rate and contributed 68% of the deforestation observed in the leakage belt. The greatest decrease in deforestation was observed in the Itsmina and part of Medio San Juan Community Councils, going from 111 ha in the historical period to only 27 ha in the monitoring period. Thus, from having an expected deforestation of 279 ha in the monitoring period, only 69 ha were deforested, showing a reduction of 210 ha.

This change occurred in only 14% of the total leakage area, caused deforestation to decrease by 17%, while if deforestation in this part of the leakage area had remained the same, it would have increased by 8% in the whole area. The changes observed in the other neighbor community's territories that showed a decrease only represent a reduction of 14 ha in the annual average, which contributes 23% of the observed reduction. Data can be observed in file *Estadisticas_Área Fugas_ Monitoreo 2019-junio 2021.xlsx (*see file *Cálculos de Emisiones*) and are summarized in the following table:

COMMUNITY	Area 2008 (ha)	Area 2018 (ha)	Deforestation (ha)	Historic def./year (ha)	Area 2021 (ha)	Deforestation (ha)	Monitored def./year (ha)	Trend
MAYOR DE NÓVITA	5.392	5.322	70	7,0	5.290	32	12,6	Increased
ACADESÁN	2.070	1.851	219	21,9	1.814	37	14,6	Decreased
ISTMINA Y PARTE DEL MEDIO SAN JUAN	9.584	8.471	1.113	111,3	8.402	279	111,6	Similar
MAYOR DEL ALTO SAN JUAN "ASOCASAN"	37.349	35.601	1.748	174,8	35.115	486	194,4	Increased
MONDO-MONDOCITO	1.366	1.286	81	8,1	1.274	12	4,6	Decreased
BOCHOROMA-BOCHOROMACITO	520	512	8	0,8	510	2	0,7	Similar
ALTO BONITO VIRA VIRA	3.647	3.594	54	5,4	3.538	56	22,2	Increased
TARENA	4.403	4.288	115	11,5	4.268	20	7,9	Decreased
TERRENOS PRIVADOS	2.483	2.471	12	1,2	2.471	0	-0,1	Similar
TOTAL	66.813	**63.394**	3.419	341,9	**62.689**	705	282,1	Decreased

The Itsmina and part of the Medio San Juan Community Councils present high levels of illegal mining compared to other community councils. According to the reports of the regional environmental authority CODECHOCÓ, with the support of the Ministry of Environment and Sustainable Development, the Ministry of Mines and Energy, the Community Councils and the Army, during 2020 and 2021 implemented strong controls and operations in mining units that included the territory of Itsmina and Medio San Juan (see file *Acciones contra mineria ilegal 2020-2021 Codechocó.pdf*, in folder *Documentos de Interés*), which is related to the deforestation reduction in these territories during the monitoring period.

These institutional control actions, framed under Law 99 of 1993, did not take place within the project area boundaries. The interventions in the Itsmina and the Medio San Juan Community Councils sought to tackle illegal mining according to the action plan of CODECHOCO, the regional environmental authority. It is also important to mention that during the historical reference period, interventions in the territory by the government's military forces were occasional and their presence and control was limited to specific operations (see *Situación mineria y acciones militares_2018.pdf* in file *Documentos de Interés*). These temporarily interventions were to address illegal mining, one of the causes of deforestation of the region, but they do not represent an integral or permanent type of intervention that would allow for a continuous reduction of overall deforestation in the leakage or in the project area. Illegal mining activities continue to cause deforestation during the monitoring period and still represent a threat to the population in this area (see file *Noticia Violencia Chocó y grupos armados_022022.pdf* in folder *Documentos de Interés*), while the other deforestation drivers described in the baseline scenario also keep on going in the project area and the leakage belt.

The territory of ACADESAN is a vast land that extends to the south of Condoto and Iró Community Council over 683.000 ha while in the leakage belt only there are only around 2.200 ha. In this specific area of the ACADESAN territory, during the historical reference period deforestation mainly resulted from expanding agriculture mostly through small plots scattered around and from developing mining activities near the San Juan River, which is known for having many minerals in its basin (see *PerdidaBosquesEn AreasFugas2008_2018.bmp* in file *Análisis fugas (2019-2021)*, file *Mapas Condoto*). The scattered deforestation plots observed in the leakage area correspond to subsistence crops and to mining activities that are not legal in this area. During the monitoring period, deforestation concentrated geographically on four parts and are related with increased mining activities and agricultural frontier expansion located next to previously deforested areas (see *FUGAS EN ACADESAN.bmp* and *PerdidaBosquesEn AreasFugas2018_2021.bmp* in file *Análisis fugas (2019-2021),* file *Mapas Condoto*); this means that deforestation agents were already present in this area. Illegal mining and agricultural frontier expansion are described as the main deforestation drivers in the baseline scenario. Despite that the mean deforestation trend decreased 7,3 ha/year during the monitoring period in this part of the leakage belt, due to a reduced need to open new subsistence crops, the main deforestation drivers did manifest themselves, and even increased their activity during this time.

The areas in the leakage belt that showed an increase in deforestation with relation to the historical specific trend correspond to parts of ASOCASAN, Novita and Alto Bonito Vira Vira community territories. A post-deforestation analysis was carried out to determine the potential causes of forest loss and their relationship with the dynamics observed in the project area. In the case of Novita, deforestation increased 5,7 ha/year compared to the historical trend and the post-deforestation land uses correspond to pastures located next to other previously deforested areas (see *FUGAS_EN_NOVITA.bmp* in subfolder *Análisis fugas (2019-2021),* folder *Mapas Condoto*). In the case of ASOCASAN, there was an increase of 19,6 ha/year of deforestation compared to the historical annual rate and the post-deforestation land uses correspond to crops, pastures and some mining (see *FUGAS EN ASOCASAN.bmp*, *FUGAS EN ASOCASAN2.bmp*, *FUGAS EN ASOCASAN3.bmp* and *FUGAS EN ASOCASAN4.bmp* in subfolder *Análisis fugas (2019-2021),*

folder *Mapas Condoto*). And in the Alto Bonito Vira Vira Indigenous Territory, there was an increase of 22 ha/year of deforestation in relation to the historical trend observed in the reference period and they also correspond to agricultural lands that were established adjacent to previously deforested areas (see *FUGAS EN ALTO BONITO VIRA VIRA.bmp* in subfolder *Análisis fugas (2019-2021),* folder *Mapas Condoto*). This means that increased deforestation in these parts of the leakage belt is related to the expansion of the agricultural frontier, the establishment of subsistence crops and some mining, as expected in the baseline scenario.

The main actors involved in subsistence agriculture are the people who live in the territory, inhabitants who have the possibility to visit the crops frequently to manage them and harvest their production without having problems with the owners of the territory. The distance from the farmer house to the crops is normally a walking distance to allow constant and even daily visits. It is also necessary to have the permission of the community that owns the territory to establish new crops or expand existing ones. On the other side, within the project area illegal mining is the main activity that was reduced by the community according to the commitment with the project strategy; in fact, the project strategy recognizes that people have the right to establish subsistence crops and is not prohibited. To address this driver the project approach is to promote a transition to more efficient crops and to better land use management, so the need to clear new areas decrease. In this sense, the activities that generated more deforestation in some parts of the leakage belt do not correspond to the same activities that were tackled in the project area, so it is improbable that displaced agents from the project area caused increased deforestation in the leakage belt. Also, the location of deforested areas is near or contiguous to previous deforested zones, so the agents may have been operating in this area before the start of the project.

Within the project area, illegal mining and the agricultural frontier expansion was reduced due to the commitment of the community with the project. Even though in some parts of the leakage belt specific military operations were executed to combat ongoing illegal mining in critical points and new subsistence agriculture establishment was reduced, the baseline deforestation drivers were observed in the leakage belt and even increased in some parts. During the monitoring period, the situation in the territory was that different armed groups were still fighting to control this region (see *Violence Noticia Violencia Chocó file and armed groups_022022.pdf* in folder *Interesting Documents)*. Also, sustainable agricultural development is weak and government support is insufficient to address all deforestation causes in a comprehensive and stable approach. The Development Programs with Territorial Approach (PDET), that will deliver cultural, productive and infrastructure benefits for some communities of the Chocó region, have been partially implemented and others are still under government planning (*Noticia reunión PDET Chocó_082021.pdf* in folder *Documentos de Interés*), so they do not relate with deforestation dynamics within the project boundaries. These situations constitute the baseline scenario, in which communities by their own are not able to address deforestation problems and implement the required actions to stablish and exercise adequate territorial governance and livelihoods, nor the government has the possibility to have constant presence in the areas or allocate enough technical and economic resources to tackle all deforestation causes in a sustainable way.

3.2.4 Net GHG Emission Reductions and Removals

Project emissions are estimated according to deforested area in the PA during the monitoring period. Leakage emissions were under the baseline estimation, so they are accounted as zero during this monitoring period. Non-permanence risk tool outcome was 16%, so the expected VCU for this period are as follows:

Year	Net GHG emission reductions or removals (tCO_2e)	Buffer (tCO_2e)	Expected VCU (tCO_2e)
2019	159,284	15,928	143,356
2020	186,015	18,601	167,414
2021 (june)	96,027	9,603	86,424
Total	441,326	44,132	397,194

3.3 Optional Criterion: Climate Change Adaptation Benefits

The project does not seek to be validated to the Gold Level for Climate Change Adaptation Benefits.

4 COMMUNITY

4.1 Net Positive Community Impacts

4.1.1 Community Impacts (CM2.1)

Community Group	Community Council of Condoto - Iró
Impact(s)	Improved access to education services and educational infrastructure
Type of Benefit/Cost/Risk	Direct impact in education infrastructure and well-being for students, including supply of furniture in the different educational institutions of the municipality of Condoto, payments for public services (energy, aqueduct, sewerage and cleaning) to the different educational institutions, Hydro-sanitary reconstruction in the María Montessori, Luis Lozano Scipion, IETEC institutions, construction of the dining room of the El Paso school, of the La Hilaria school, of the Manuel Mosquera school of the Opogodó vereda, construction of 2 classrooms in the José Eulises Mosquera Perea School of the vereda of Santa Ana, improvement and rehabilitation of the physical plant of the village of El Paso, maintenance of the physical plant of the Luis Lozano Scipion institution, improvement of 6 classrooms in the

	María Auxiliadora institution, construction of the roof of the Opogodó school. Students are served in a better way, so it facilitates access to education and improves their well-being.
Change in Well-being	400 members of the community with access to education services. 6 educational facilities improved: Maria Auxiliadora Institution, Maria Montessori School, El Paso School, La Hilaria School, Manuel Mosquera School, José Eulises Mosquera Perea School.

Community Group	Major Community Council of Condoto - Iró
Impact(s)	Territorial Governance strengthened
Type of Benefit/Cost/Risk	Through strategy PDET, a territorial management had been addressed within a comprehensive advisory strategy. A territorial management plan has been signed on issues related to internal control. This provides a guide to improve internal control and address specific issues.
Change in Well-being	1 territorial management plan defined

Community Group	Major Community Council of Condoto - Iró
Impact(s)	Improved access and conditions of health services
Type of Benefit/Cost/Risk	For the San José de Condoto hospital, a nurse was hired, a territorial health plan was designed, and deworming, prevention and control of vector-borne diseases was addressed. Also, activities to create awareness of garbage management, water use of the San Pedro stream, and promotion of mental health were carried out. In addition, during 2019, the activities related to healthy habitat, environmental health, healthy lifestyles, mental health, prevalent chronic diseases, food security, sexuality and sexual and reproductive rights, healthy life and communicable diseases, health and safety at work and differential management of vulnerable populations of the Health Action Plan of Condoto Municipality were defined. Improving health services and self-care awareness contributes to community welfare.
Change in Well-being	1 hospital facility with services improved.

	Health campaigns carried out in local communities.

Community Group	Community Council of Condoto - Iró
Impact(s)	Recreation activities and sports infrastructure improved
Type of Benefit/Cost/Risk	Improvement of the coliseum, synthetic field and sports equipment, along with an inter-neighborhood soccer tournament and maintenance of the soccer field at Santa Ana rural area. Sports promote social cohesion and community strengthening.
Change in Well-being	1 sports facility improved

Community Group	Major Community Council of Condoto - Iró
Impact(s)	Improved household services and conditions
Type of Benefit/Cost/Risk	Individual solar photovoltaic solutions for some of the rural areas of the Condoto municipality were installed. A total of 505 users were benefited by this intervention. Construction of the aqueduct and sewerage that benefits La Hilaria, Jugualito, Opogodó, La Planta, Soledad de Tajuato y Consuelo de la Andrápeda rural areas. Improving community housing benefits people well-being and facilitates social development.
Change in Well-being	505 members of the community with solar electric energy 1 rural aqueduct improved

Community Group	Major Community Council of Condoto - Iró
Impact(s)	Transportation and road conditions improved
Type of Benefit/Cost/Risk	Construction and paving of urban roads in the neighborhoods El Silencio and highway sector Opogodocito and Viento Libre in the municipality of Condoto. Maintenance of the road that leads to La Hilaria, in 2019. In addition, with the Territory Renewal Agency (ART) resources to pave had been designated and invested on the Animas – Novita road, Condoto/Opogodó subsector. As of April 2021, the work has been 75% completed.
Change in Well-being	2 neighborhood roads built. 1 road maintenance

Community Group	Major Community Council of Condoto - Iró
Impact(s)	Project planning and activities definition are made with community members
Type of Benefit/Cost/Risk	Definition and prioritization of project activities have been defined in a participatory way, ensuring the representation of community leaders and members during workshops carried out in the community territory.
Change in Well-being	Community members participate in project planning and activities definition.

4.1.2 Negative Community Impact Mitigation (CM2.2)

Expectations throughout the project development are positive for all the stakeholders. Nonetheless, potential negative impacts have been assessed to identify mitigation measures to diminish and neutralize them, if applicable.

Risk	Consideration	Mitigation measures
Leakage to outer communities	Increase of population migration to offsite spaces for the development of current productive activities; these activities include access to HCV' areas	Leakage management plan No leakage has resulted from the project implementation
Income reductions	Community could perceive a reduction in revenue due to increased governance in the project zone. In this case is likely to perform deforestation activities in nearby areas.	Proposal of alternative livelihoods and constant adaptation of governance instruments. Alternative livelihoods have been agreed with the communities. Implementation is to be done. However, no reduction in revenues have resulted from the project implementation during the monitoring period.
Increase of cost of living		Import of daily commodities using available space on boats and road transport, when available. If any, increase of cost of living has not resulted from the project implementation.

4.1.3 Net Positive Community Well-Being (CM2.3, GL1.4)

The most important impact related to project implementation have been the promotion of sustainable development as local livelihoods and well-being are boosted. The proposal of alternative economic activities has considered local infrastructure, geographic location, access to markets and culture, in order to assure community development. Capacity building for community has been designed based on:

- Improvement of inhabitant's conditions: different investments in terms of direct social benefits, including transportation, infrastructure, education, medical care, basic sanitation, as seen in section 4.1.1.

- Strengthening of Community governance: It is expected that communities strengthen land use planning and mechanisms, as seen above for territorial control. Moreover, CODECHOCO has supported the implementation of strategies regarding the mitigation of environmental problems caused by mining by executing projects focused on planning and controlling the activity (Mining Regulation) and reducing mercury contamination (Cleaner production), which are being carried out on a pilot basis in the municipality of Condoto (See file PGAR_2021, in folder Activities, productive activities, reforestation)

- Livelihoods: Community are skillful to improve its productive activities boosting conservation of forest area. Productive activities have been identified and prioritized with the community for being developed in the following years. In addition, these activities are aligned with those proposed by CODECHOCO to be executed from year 2020 to 2023 and includes the implementation of sustainable production systems with agroecological principles, promoting green business, seed recovery and fish farming (See file PAI_2020-2023, in folder Activities, productive activities, reforestation).

- Financial conditions are expected to be improved throughout the assurance of capital flows from sustainable productive activities and carbon credits trading. It encompasses productive investment and successfully sale of carbon credits.

Moreover, the project is generating net positive impacts on the welfare of women and ensuring that women participate in decision-making together with the Community Council initiatives aiming to boost participation of women in all the process.

4.1.4 Protection of High Conservation Values (CM2.4)

Community HCVs are related with subsistence dynamics and cultural identity. The project activities intend to improve the related ecosystem services and goods (forests, soils or land-use fertility, water sources) that assures that communities could have a sustainable livelihood, reduce water pollution and provide a significant improvement in sanitation and health systems.

Moreover, through forest conservation and recovery, vegetation and fauna species are expected to be recovered, economic incomes that allows the community to continue to inhabit the territory and with this, the community expects to achieve a culture identity strengthening and recovery, including their traditional medicine and traditional production practices carried out sustainably.

In this sense, no HCV related to communities' well-being have been negatively affected.

4.2 Other Stakeholder Impacts

4.2.1 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

Potential negative impacts on other stakeholders are related principally to leakage to outer communities. However, because of project implementation, during the monitoring period, no leakage has been presented. So far, early activities regarding social conditions (education, sanitation, public services) have somehow improved living conditions of the communities.

A detailed description of the strategies designed to mitigate negative impacts on other stakeholders is presented in Section 4.4.2 of the PD. During the monitoring period no negative impacts on other stakeholders had been identified and/or reported.

4.2.2 Net Impacts on Other Stakeholders (CM3.3)

The project activities have not resulted in net negative impacts on the well-being of other stakeholders.

4.3 Community Impact Monitoring

4.3.1 Community Monitoring Plan (CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5)

The community monitoring plan was designed for the next years and considers the implementation of activities that involves the community members directly. In addition, given the conservation and community-oriented nature of this project, no negative impacts on the community were identified during the first monitoring period.

The project has generated net-positive community impacts through the following activities:

<table>
<tr><td>Community groups</td><td colspan="4">Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)</td></tr>
<tr><td>Variable</td><td colspan="4">People attending workshops for identification and prioritization of the required investments in productive systems, social investment, governance and monitoring</td></tr>
<tr><td>Value</td><td colspan="4"><table><tr><td>Workshop</td><td>1</td><td>2</td><td>3 and 4</td></tr><tr><td>Total</td><td>98</td><td>110</td><td>69</td></tr></table></td></tr>
</table>

Unit	Number
Sampling methods	The number of community members who attend the training days for identification and prioritization of the required investments in productive systems, social investment, governance and monitoring is determined and the value obtained is reported.
Frequency	Annual

Community groups	Women of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Women attending workshops for identification and prioritization of the required investments in productive systems, social investment, governance and monitoring
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 41 | 47 | 11
Unit	Number
Sampling methods	The number of women who attend the training days for the management of the prioritized production systems is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	People attending workshops related to transportation conditions
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 98 | 110 | 69
Unit	Number
Sampling methods	The number of community members who attend workshops or meetings related to transportation is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Women attending workshops related to transportation conditions
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 41 | 47 | 11
Unit	Number
Sampling methods	The number of women who attend workshops or meetings related to transportation is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	6 [24]
Value	Interventions made to improve road and/or highway conditions
Unit	Number
Sampling methods	The number of interventions made to improve road and/or highway conditions is determined and the value is reported
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 98 | 110 | 69
Variable	People attending workshops related to the improvement of educational infrastructure, services and access to education
Unit	Number
Sampling methods	The number of community members who attend workshops related to the improvement of educational infrastructure, services and access to education is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Women attending workshops related to the improvement of educational infrastructure, services and access to education
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 41 | 47 | 11
Unit	Number
Sampling methods	The number of women who attend workshops related to the improvement of educational infrastructure, services and access to education is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Built/improved facilities for education purposes

[24] Construction and paving of urban roads in the neighborhoods El Silencio and highway sector Opogodó and Viento Libre in the municipality of Condoto. In addition, paving work has been carried out on the Animas - Novita highway, Condoto/Opogodó subsector; and maintenance of the road that leads to La Hilaria.

Value	8 [25]
Unit	Number
Sampling methods	The number of built/improved facilities for education purposes is determined and the value is reported
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	People attending workshops related to health services and access
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 98 | 110 | 69
Unit	Number
Sampling methods	The number of community members who attend workshops related to health services and access is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Women attending workshops related to health services and access
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 41 | 47 | 11
Unit	Number
Sampling methods	The number of women who attend workshops related to health services and access is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Programs executed to improve health conditions
Value	1 [26]

[25] In September 2020, the official handover of the built areas and improvement of classrooms was made in the physical plant of the María Auxiliadora Educational Institution in the municipality of Condoto, which is expected to provide education services for 400 people. Additionally, the hydrosanitary reconstruction was carried out at the María Montessori and Luis Lozano Scipion institutions; The dining room of the El Paso school, the La Hilaria schooland the Manuel Mosquera school in the Opogodó district were built; 2 classrooms were built in the José Eulises Mosquera Perea school in the Santa Ana district and the physical plant of the Luis Lozano Scipion institution was improved and rehabilitated.

[26] Activities related to healthy habitat, environmental health, healthy lifestyles, mental health, prevalent chronic diseases, food security, sexuality and sexual and reproductive rights, healthy life and communicable

Unit	Number
Sampling methods	The number of programs executed to improve health conditions is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	People attending workshops on housing, water and sanitation, and energy issues
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 98 | 110 | 69
Unit	Number
Sampling methods	The number of community members who attend workshops on housing, water and sanitation, and energy issues is determined and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Women attending workshops on housing, water and sanitation, and energy issues
Value	**Workshop** | **1** | **2** | **3 and 4** **Total** | 41 | 47 | 11
Unit	Number
Sampling methods	The number of women who attend workshops on housing, water and sanitation, and energy issues is determined, and the value obtained is reported.
Frequency	Annual

Community groups	Members of the Condoto - Iró Community Council, which includes the entire project zone beneficiaries (collective property)
Variable	Houses with energy and/or clean water and/or sanitation or structure improved
Value	505 households with solar power
Unit	Number
Sampling methods	The number of houses improved is determined. The percentage is estimated according to the following equation:
Frequency	Annual

diseases, health and safety at work and differential management of vulnerable populations of the Health Action Plan of the Municipal Mayor of Condoto were defined.

In addition, the following activities have been executed that had a positive impact on the community:

- Improvement of the coliseum, synthetic field, sports equipment, overcome yourself, inter-neighborhood soccer tournament, maintenance of the soccer field in the Santa Ana vereda.

- The Ministry of Education in association with the Colombia in Peace Fund, during the second semester of 2020 the process "Better Moments to Take Care of You" was implemented, through which people and social and community organizations were qualified and certified to provide counseling or support to families with early childhood boys and girls from rural and rural areas.

- In the territory of the Community Council of Condoto, started the construction of the aqueduct and sewerage La Hilaria, Jugualito, Opogodó, La Planta, Soledad de Tajuato y Consuelo de la Andrápeda.

4.3.2 Monitoring Plan Dissemination (CM4.3)

Monitoring plan was designed with community participation and according to REDD+ strategy implementation and expected outcomes. Though, as it is included in the project description, its dissemination uses the same communication channels described in section 2.3.1 and mentioned in section 3.3.4 of the PD. These channels included sending project documents to community members through emails, printed documents and socialized in community headquarters' offices. Also, during community general assemblies in which REDD+ activities were planned and approved; the monitoring plan was presented. This plan also will be posted online in the public domain of the CCB and VCS websites.

The monitoring plan was socialized with stakeholders and community members during workshops and local meetings, prior to verification process.

Monitoring and Implementation Reports will be posted in the public domain on the CCB and VCS websites in accordance with each program's procedures. The document will be updated once it is approved by the VVB on the following link: https://registry.verra.org/app/projectDetail/VCS/2723

Summaries of monitoring results had been presented to stakeholders and community members within the project zone prior to verification and accordingly to the communities means of communication and access to documents, through oral communication, in accordance with the procedures presented in section 2.3.1. of the PD.

4.4 Optional Criterion: Exceptional Community Benefits

4.4.1 Short-term and Long-term Community Benefits (GL2.2)

Short- and long-term benefits for community members are based on the theory of change model, which has included positive impacts at individual/family and community level. The most representative cases can be seen on improvement of local governance regarding to sustainable use of natural resources, improvement of living conditions (health care, electricity, transportation ways, recreation, and education infrastructure) and leadership of local institutions like CODECHOCO.

4.4.2 Marginalized and/or Vulnerable Community Groups (GL2.4)

Community Group	Members of the Community Council Condoto - Iró
Net positive impacts	According to workshops and definition of the REDD activities improvement of education, housing, transportation has taken place as seen in section 4.1.1.
Benefit access	According to the Project Management Scheme one of the criteria used to define investments is to deliver benefits to as many community members as possible. Trough the workshops it has also been identified potential beneficiaries at the first stages. The benefit access is only limited by the budget availability.
Negative impacts	No negative impact has occurred as a result of the project implementation.

4.4.3 Net Impacts on Women (GL2.5)

The project has generated net positive impacts on the welfare of women and ensuring that women participate in decision-making among with the Community Council initiatives aiming to boost participation of women in all the processes.

Traditionally, women are already involved in agricultural activities since they have access to land, and they are involved in productive activities. Due to the roles that women have been developing; they participate and have control over resources and are not excluded from decision-making processes.

Over 20 women have actively participated in workshops and general assembly for decision making regarding project activities.

4.4.4 Benefit Sharing Mechanisms (GL2.6)

The design and implementation of a benefits sharing mechanism was developed in a participatory manner with community members, based on the Community Council Guidelines.

Within this framework, a benefits distribution process was developed to reflect communities' priorities on how REDD+ revenues are and will be distributed and invested. This process aims at

assuring protection and benefits to the most marginalized and vulnerable members of the community, especially women, children and elderly (see *Talleres* folder).

4.4.5 Governance and Implementation Structures (GL2.8)

The project governance and implementation structure has been guided by the existing self-governance structures in the Major Community Council of Condoto - Iró. Regarding stated laws, a community council pursue: (i) laws stated by the government and (ii) internal laws defined and established by each community; following the main statements of Colombian Constitution and applicable normative. In the case of internal laws is agreed according to traditions, customs, norms and duties; accepted by all community members that share an identity. These laws are just applicable for Community Members and within delimited territory.

The Major Community Council of Condoto – Iró is constituted by a Community Assembly and the Local Board. Moreover, there are several minor councils. The Assembly is the highest authority of the Major Community Council and the Local Board, exercises the functions of control, monitoring and participation in the planning for the internal management of collectively titled lands to the Afro-descendant community. The legal representative is elected by the Community Assembly but exerts under local board instructions.

In accordance with governance structures of the Community Council, most aspects of the project are approved by Community Assembly. So far, through the legal representative, workshops have been scheduled and the community has been convocated to participate, ensuring effective participation.

The attendance lists of the workshops show the participation of the different veredas (minor councils) and the different people who have participated, showing that the convocations has been effective, considering the forms of representation including the president, prosecutor, secretary, treasurer and other members of the community (See *Talleres* folder).

4.4.6 Smallholders/Community Members Capacity Development (GL2.9)

Current capacity and its measurement are performed under indicators related to: (i) administrative capacity and (ii) organizational strength. CODECHOCO has supported internal control activities, strengthening organizational and territorial control capacities among the community. Moreover, training on issues of environmental regulations; strengthening ethnic-education processes, waste management is on the agenda of CODECHOCO to continue being developed throughout 2020-2023 period.

On the other hand, training processes and schemes are to be implemented oriented to develop skills and abilities required for a specific community enterprise effort and related topics that include: (i) strategic project planning, (ii) development of results chains, (iii) monitoring and forest protection, in accordance with what was prioritized by the community during workshops. Once the implementation of these activities starts, the capacity development will be measured.

5 BIODIVERSITY

5.1 Net Positive Biodiversity Impacts

5.1.1 Biodiversity Changes (B2.1)

Change in Biodiversity	Flora and Fauna
Monitored Change	Avoided deforestation: Deforestation of 1,001 ha of tropical forests in the Project Area was avoided in comparison to the baseline scenario, maintaining the ecological structure, vegetation composition and ecosystem services associated to biodiversity.
Justification of Change	The project objectives include the conservation and recovery of forests, which will enable species to be preserved and recovered under a forest structure. REDD is oriented to conserve and protect biodiversity associated with the forests. Monitoring in general is linked to the forest status monitoring. This applies both to fauna and flora which habitat and ecosystem dynamics will result from the conservation and restoration efforts.

5.1.2 Mitigation Actions (B2.3)

No mitigation actions were required during the monitoring period. The project has not had negative impacts on biodiversity. Once they start, sustainable agriculture activities will take place in already degraded lands prepared for this land use purpose. And the project will not allow the expansion of the agriculture frontier.

5.1.3 Net Positive Biodiversity Impacts (B2.2, GL1.4)

Reduced deforestation and forest degradation has resulted due to the improved maintenance of forest biodiversity and in many cases the recuperation (through natural regeneration) of forest biodiversity attributes as compared to conditions in the without-project scenario. Some of the identify improvements are:

- Increase of avoided deforestation of forest by 1,001 hectares.
- Continuation of functional biodiversity attributes and ecosystem services
- Reduced change of land use for unplanned and illegal use activities
- Greater awareness of biodiversity and of the importance of land-use practices

Together these changes correlate to a net biodiversity benefit for flora in the project area and provide habitat conditions which are conducive to the well-being of a greater number of faunal species than would be the case in the without-project scenario during the monitoring period.

5.1.4 High Conservation Values Protected (B2.4)

The project has not affected the HCVs protection negatively since it has improved the availability of ecosystem services and goods (forests, soils or land-use fertility, water sources) through forest conservation.

5.1.5 Invasive Species (B2.5)

Considering the list of species used in Section 5.2.5 of the PD and the information from the Global Invasive Species Database, no invasive species were introduced into the project area during the monitoring period.

5.1.6 Impacts of Non-native Species (B2.6)

Agricultural productive systems have not been developed so far, so the only identified non-native species have not been used. The sugar cane plant (*Saccharum officinarum*) is widely spread in the pacific region and other areas in the country, were derived products are trade across the country. During the following years it may be cultivated in already agricultural lands or transformed land, according to community plans.

5.1.7 GMO Exclusion (B2.7)

Organic fertilization and pest control methods are currently used by farmers in the project area. Prioritize plant species can be either hybrids or natural varieties, but no Genetically Modified Organisms (GMO) have been identified or used during project activities.

5.1.8 Inputs Justification (B2.8)

For the monitoring period, the project has not used inputs such as fertilizers, chemical pesticides, biological control agents and others.

5.2 Offsite Biodiversity Impacts

5.2.1 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)

No negative impacts on biodiversity took place outside of the zone due to the implementation of project activities for the monitoring period.

5.2.2 Net Offsite Biodiversity Benefits (B3.3)

Related to the net benefits on biodiversity outside the project area, it is expected that the activities will generate benefits in terms of conservation and sustainable management of the forest areas and its biodiversity. However, since the biodiversity monitoring plans have not been implemented yet, the net benefits that may have been presented outside the project area for this monitoring period have not been quantified.

5.3 Biodiversity Impact Monitoring

5.3.1 Biodiversity Monitoring Plan (B4.1, B4.2, GL1.4, GL3.4)

At the ecosystem level, forest biomass monitoring was performed using remote sensing monitoring techniques described in the Climate Monitoring Plan. A reduction of the expected deforestation in the project area occurred during the monitoring period (a total loss of 1,001 ha of deforestation was avoided). This demonstrates the efficacy of activities designed to reduce degradation and deforestation—resulting in increased forest structure and composition.

Data / Parameter	Area of Tropical Humid Forest
Data unit	ha
Description	Quantification of the area of forest land within the project area at the end of each monitoring period.
Source of data	Satellite images
Description of measurement methods and procedures to be applied	By using satellite images and remote sensing to map forest cover in the Project Area.
Frequency of monitoring/recording	Annually
Value applied	65,452 (2019); 65,185 (2020); 64,849.9 (June 2021)
Monitoring equipment	Computers and SIG software
QA/QC procedures to be applied	
Purpose of Data	Monitoring of HCVs. It would be determined if there are any variations in the forest area.
Calculation method	N/A
Comments	This number of hectares correspond to the standing forest in June 2021 in the project area.

Data / Parameter	Avoided Tropical Humid Forest loss
Data unit	ha
Description	Quantification of the area of forest loss avoided compared to the estimated in the baseline scenario.
Source of data	Satellite images
Description of measurement methods and procedures to be applied	By using satellite images and remote sensing to map forest cover in the Project Area.
Frequency of monitoring/recording	Annually
Value applied	1,001

Monitoring equipment	Computers and SIG software
QA/QC procedures to be applied	
Purpose of Data	Monitoring of HCVs
Calculation method	N/A
Comments	

Fauna

The monitoring of the jaguar has not taken place during the first monitoring period. The trainings and constitution of the forest guards and monitoring team will be defined during next monitoring period.

Data / Parameter	Number of sightings reported
Data unit	Number
Description	Quantification of the sightings reported by the community members within the limits of the community council. Quantification of the sightings recorded within the project area using camera trap.
Source of data	Direct counting
Description of measurement methods and procedures to be applied	The sightings reported by the community will be informed and interviews will be carried out to generate a record of evidence of these. Sightings on records of camera trap will be counted and reported.
Frequency of monitoring/recording	Annually
Value applied	No available
Monitoring equipment	Camera trap, binoculars, gps, filed book, record forms.
QA/QC procedures to be applied	CARBO-TERRA and the community council will store the interviews performed. If available, photographic and/or audiovisual record will be stored as well.
Purpose of Data	Monitoring of HCVs.
Calculation method	N/A
Comments	Monitoring will begin during the second monitoring period.

Data / Parameter	Number of traces observed
Data unit	Number
Description	Quantification of traces identified during monitoring trails offer an indirect way to identify the presence of the species in the territory.
Source of data	Direct identifications of traces

Description of measurement methods and procedures to be applied	Quantification of traces such as footprints, droppings, marks, urine and victims that are observed during trails or other activities may be registered in a form to enable reporting and follow up this type of sighting.
Frequency of monitoring/recording	Annually
Value applied	No available
Monitoring equipment	Camera, GPS, gypsum, binoculars, field book and track record form.
QA/QC procedures to be applied	CARBO-TERRA and the community council will store the record forms filled out during the monitoring trails.
Purpose of Data	Monitoring of HCVs.
Calculation method	N/A
Comments	Monitoring will begin during the second monitoring period.

5.3.2 Biodiversity Monitoring Plan Dissemination (B4.3)

Biodiversity monitoring plan was designed with community participation and according to REDD+ strategy implementation and expected outcomes considering HCV. Though, as it is stated in the project description, its dissemination uses the same communication channels described in section 2.3.1 and mentioned in section 3.3.4 of the PD. These channels included sending project documents to community members through emails, printed documents and socialized in community headquarters' offices. Also, during community general assemblies in which REDD+ activities were planned and approved; the monitoring plan was presented. This plan also will be posted online in the public domain of the CCB and VCS websites.

The monitoring plan was socialized with stakeholders and community members during workshops and local meetings, prior to verification process.

Monitoring and Implementation Reports will be posted in the public domain on the CCB and VCS websites in accordance with each program's procedures. The document will be updated once it is approved by the VVB on the following link: https://registry.verra.org/app/projectDetail/VCS/2723

Summaries of monitoring results had been presented to stakeholders and community members within the project zone prior to verification and accordingly to the communities means of communication and access to documents, through oral communication, in accordance with the procedures presented in section 2.3.1. of the PD.

5.4 Optional Criterion: Exceptional Biodiversity Benefits

The project is not seeking Gold Level for exceptional biodiversity benefits.