NON-PERMANENCE RISK REPORT
AGROCORTEX REDD PROJECT

Document Prepared by Ecológica Assessoria

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1 INTERNAL RISK

Project Management		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.* Not applicable. The Project Activity involves sustainable forest management of existing forest resources in the Project Area. During the current monitoring period, in 2020 and 2021, the Agrocortex team carried out the planting at strategic points, such as wood decks and along the road that gives access to the exploration area and the banks of streams. Seedlings of the 8 main species of commercial interest were produced: Mahogany (*Swietenia macrophylla, King*), Jatobá (*Hymenaea courbaril*), Yellow Ipê (Hadroanthus serratifolius, Vahl), Cedar (*Cedrela odorata* L.), Red Cabreúva (*Myroxylon balsamum* L.), Cumaru (*Dipteryx odorata* Aubl.), Garapeira (*Apuleia leiocarpa*, Vogel) and Cerejeira (*Amburana acreana*, Ducke). All of which were produced in the company's own nurseries with seeds collected in the project area itself. Planting for forest enrichment was performed through the planting of native seedlings, and it has been carried out in clearings originated from forest exploration during the execution of the crops, along the access roads and storage yards. The seedlings are being georeferenced with GPS points, and their height and diameter growth are being monitored. For this purpose, 2 nurseries were built with a total production capacity of 27,250 thousand seedlings per year. They are located at the headquarters of the industry and at the management unit camp. A flowering calendar for the species was also created to optimize seed collections at their correct maturation time.	0
b)	*Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued.* No, the Project had an unplanned deforestation of around 200 ha since the project start date, which means that less than 50% of the carbon stocks are fragile to encroachment by outside actors and, therefore, need active protection. The most fragile areas are located at the South of the Project area, surrounding the Purus River. Other areas subject to encroachment are those around existing roads (mainly the BR-364 Highway) and around established communities. Agrocortex performs an active monitoring of unplanned deforestation. Actions include monitoring the area based on satellite images (to detect heat sources and	0

	deforestation), airplane surveillance of distant areas and ground surveillance using pickup trucks and boats in areas surrounding established communities.	
c)	*Management team does not include individuals with significant experience in all skills necessary to successfully undertake all project activities (i.e., any area of required experience is not covered by at least one individual with at least 5 years' experience in the area).* The work of the Ecológica Assessoria is included here under the direction of Stefano Merlin, co-founder and CEO of Ecológica Assessoria, co-founder the Ecológica Institute NGO in 1998, in the state of Tocantins Brazil. Ecológica Institute experience in forest projects dates back to 1998 with ten projects and contracts. To give two examples: the reforestation project located at the INCRA project called "Assentamento Manchete", in Tocantins State, of which the project document was published on August, 25th 2008[1]; and the conservation, regeneration and agroforestry systems projects on Ilha do Bananal, consisting of two phases from 1998-2003 and 2000-2002, details of which can be found at the following web address: http://www.ecologica.org.br/en/sequestro-de-carbono-na-ilha-do-bananal/, and in peer-reviewed scientific journals[2]. In addition, the Ecológica Assessoria team under the leadership of Marcelo Haddad, has successfully validated and verified more than 20 voluntary emission reduction projects, , over fourteen years, details of which can be found on Mr. Haddad's CV: http://buscatextual.cnpq.br/buscatextual/visualizacv.do?id=K4491762P1. Four forestry projects were developed: "Agrocortex REDD Project" in the State of Acre, "Yellow Ipê Grouped REDD Project" in the State of Amazonas, "Ecomapuá Amazon REDD Project" in the State of Pará, Brazil. Furthermore, other VCS REDD project located in the Amazon Region was developed, which is currently waiting for validation[3]. Furthermore, other VCS REDD projects located in the Amazonas State are currently in the process of being developed. He also participated in the development of Environmental and Socio-Economic Indicators for REDD projects to be used under the SOCIALCARBON Standard[4]. Moreover, Mr. Haddad participated in several activities in charge of the Governors Climate and Forests Task Force (GCF) in the State of Tocantins (workshops, REDD+	0

[1] More details at: <http://iecologica.blogspot.com.br/2009/06/entre-os-meses-de-janeiro-e-maio-de.html> and <http://www.ecologica.org.br/en/carbono-florestal/>. Last visit on: April , 2022.

[2] Boyd et al. Exploring socioeconomic impacts of forest-based mitigation projects: Lessons from Brazil and Bolivia. Environmental Science &Policy. Number 10 (2007). pp. 419 – 433.

[3] The details of these projects can be found here: Ecomapuá Amazon REDD Project (VCS Project ID: 1094): <https://registry.verra.org/app/projectDetail/VCS/1094>; and Genesis Forest Projects: <https://registry.verra.org/app/projectDetail/CCB/1588> and < https://registry.verra.org/app/projectDetail/CCB/1589>. Last visit on: April, 2022.

[4] Available at: <http://www.socialcarbon.org/wp-content/uploads/2012/11/Template_Submission_of_Indicators-for-an-Amazon-REDD-Project_v1-1_08_11_201311.pdf>. Last visit on: April, 2022.

	course, creation of database with landowners, estimates of GHG emission reductions by REDD+ in Tocantins, and development of reports to Environmental Agencies)[5]. Finally, Mr. Haddad's master thesis, entitled: "An analysis of REDD+ mechanisms and their benefits in Brazil"[6], obtained in May 2013, has the main aim of identifying the benefits of applying REDD+ mechanisms in Brazil, in accordance to the VCS requirements. The sustainable forest management plan within the project area and its many operations were carried out by Agrocortex and other companies, such as Parkia Soluções Ambientais, FC Florestal and GMF, qualified service providers with experience in sustainable management. In addition, the management team of Agrocortex includes qualified Forest Engineers. This team has been involved in the management of forest operations and on the certification of forest management against the Forest Stewardship Council (FSC), which demonstrates their qualification to manage this REDD Project. Marcos Preto, the CEO of Agrocortex, has more than 25 years of experience in financial and commercial management in areas related to the forest, sustainability, and low carbon economy. He participates in REDD and carbon market regulation commissions in Brazil. In 2020, together with Agrocortex, he received some awards for the projects they develop focused on the environment, such as the Best Socio-Economic Impact Project Brazil, Best REDD Expert Latin America[7], Best Global Sustainable Agroforestry Company[8] and Best Individual Offsetting Project[9].	
d)	*Management team does not maintain a presence in the country or is located more than a day of travel from the project site, considering all parcels or polygons in the project area.* The management team, responsible for reporting and responding to any events, such as unpermitted deforestation, degradation or unauthorized resource use, is located less than a day of travel from the Project site. Part of the management team is based inside the Project Area, while others are based in Manoel Urbano, the	0

[5] Available at: <https://www.ecologica.org.br/en/projeto-gcf-tocantins-a-forca-tarefa-dos-governos-para-clima-e-florestas/>. News media about the course carried out in September 2014: <https://seagro.to.gov.br/noticia/2014/10/10/curso-sobre-meio-ambiente-e-encerrado-com-estudos-de-caso/>. Last visit on: April, 2022.

[6] Available at: <http://cassiopea.ipt.br/teses/2013_TA_Marcelo_Haddad.pdf>. Last visit on: April, 2022.

[7] Available at: https://cfi.co/awards/latin-america/2021/agrocortex-best-redd-expert-latin-america-2020/ Last visit on, May, 2022

[8] Available at: https://www.corporatevision-news.com/winners/agrocortex/. Last visit on May, 2022.

[9] Available at: https://www.environmental-finance.com/content/market-insight/agrocortex-unlocking-value-for-redd-projects.html. Last visit on: May, 2022

	closest city to the Project Area. This team is capable of monitoring the Project Area using pickup trucks or boats. The furthest possible point of access today is at the end of UPA 14 and is approximately 56.7 km from the industry, taking an average of 2.5 hours to access. The other locations that have not yet been explored do not have access but can be monitored by airplane, if necessary.	
e)	***Mitigation:*** *Management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (e.g., individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS Program or other approved GHG programs* Ecológica Assessoria team includes members responsible for the validation of verification of more than 20 voluntary emission reduction Projects. Likewise, the Agrocortex team has experience in the sustainable management plan and in the management with social projects, as described on item (c), above.	-2
f)	***Mitigation:*** *Adaptive management plan in place.* The Agrocortex REDD Project applies the SOCIALCARBON® Standard, which includes, as the relevant tool specifies, "processes for monitoring progress and documenting lessons learned or corrections that may be needed". Therefore the relevant mitigation score was applied here. This methodology is an innovative concept developed by the Ecológica Institute to measure the contribution of carbon projects to sustainability. The SOCIALCARBON® Methodology is based on six main indicators: Biodiversity; Natural; Financial; Human; Social and Carbon Resources, and aims to deliver high-integrity benefits to each resource. A set of indicators has been developed as part of the efforts from the Project Proponents to properly measure the impacts and cobenefits resulting from the Agrocortex REDD Project. These indicators are called "indicators for REDD + SFMP projects" and are available on the SOCIALCARBON website[10]. Agrocortex also manages forest resources according to a Sustainable Forest Management Plan developed by third party experts and performed by its management team with significant experience in forest management. Such plan has procedures to identify and assess environmental and working safety risks. The plan also establishes procedures for the regular training of Agrocortex staff. After the 2nd MR, an action plan was drwn up to guarantee the Buffer score and maintain the minimum score. Among the actions taken, the issue of financial viability, the longevity of the project, engagement with the community, actions to fight fires and monitor the occurrence of bamboo mortality so as not to impact the carbon stocked stand out.	-2

[10] SOCIALCARBON indicators are available at: <https://www.socialcarbon.org/documentation>. Last visit on May, 2022.

	Additionally, the internal audit reports of the Sustainable Forest Management Plans have definitions of corrective actions to be carried out in the future. Thus, for each area being managed, there are action plan reports.	
Total Project Management (PM) [as applicable, (a + b + c + d + e + f)] Total may be less than zero.		-4

Financial Viability		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*Project cash flow breakeven point is greater than 10 years from the current risk assessment* Not Applicable	0
b)	*Project cash flow breakeven point is greater than 7 and up to 10 years from the current risk assessment* Not Applicable	0
c)	*Project cash flow breakeven point greater than 4 and up to 7 years from the current risk assessment* Not Applicable	0
d)	*Project cash flow breakeven point is 4 years or less from the current risk assessment* According to the cashflow analysis, it was possible to verify that the project has already reached the breakeven point, which is less than 4 years from the current risk assessment. Cashflow in included conservative commercial revenue streams associated with timber production and additional revenues from Agrocortex operations. The cash flow in also included conservative estimates of revenues from the sale of GHG credits and from the payment of other environmental services. Cash flow out included all the project implementation costs, such as the costs associated with GHG credit generation (eg, validation, verification and registration) and the costs associated with the operations of the sustainable forest management plan and the wood processing facility.	0
e)	*Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven* The project currently has secured funds to cover part of its expenses, but the amount secured represents less than 15% of the funding needed to cover the total	3

	cash out before the project reaches breakeven. Secured funds include agreements for the future sale of timber from the Project area.	
f)	*Project has secured 15% to less than 40% of funding needed to cover the total cash out required before the project reaches breakeven* Not Applicable	0
g)	*Project has secured 40% to less than 80% of funding needed to cover the total cash out required before the project reaches breakeven* Not Applicable	0
h)	*Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven* Not Applicable	0
i)	***Mitigation:*** *Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven* Agrocortex has available callable resources, as indicated by the following entities that are shareholders of Agrocortex Madeiras do Acre Agroflorestal Ltda: - Corporación Masaveu - Kendall Develops. S.A. (KENDALL) - Agroview Participações e Empreendimentos LTDA. - R. Capital SGPS, S.A. Such entities have confirmed they are able and willing to provide the financial resources needed to fund Agrocortex operations at the Project Area throughout the project's lifetime. Therefore, it is possible to conclude at least 50% of the funding requirements until the operation reaches breakeven are available.	-2
Total Financial Viability (FV) [as applicable, ((a, b, c or d) + (e, f, g or h) + i)] Total may not be less than zero.		1

Opportunity Cost		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*NPV from the most profitable alternative land use activity is expected to be at least 100% more than that associated with project activities; or where*	0

	baseline activities are subsistence-driven, net positive community impacts are not demonstrated Not Applicable	
b)	*NPV from the most profitable alternative land use activity is expected to be between 50% and up to100% more than from project activities* Not Applicable	0
c)	*NPV from the most profitable alternative land use activity is expected to be between 20% and up to 50% more than from project activities* Not Applicable	0
d)	*NPV from the most profitable alternative land use activity is expected to be between 20% more than and up to 20% less than from project activities; or where baseline activities are subsistence-driven, net positive community impacts are demonstrated* Not Applicable	0
e)	*NPV from project activities is expected to be between 20% and up to 50% more profitable than the most profitable alternative land use activity* Not Applicable	0
f)	*NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity* NPV from the project activity is expected to be at least 50% more profitable than the most likely alternative land use activity. As described on Section 2.5 of the VCS PD, the most likely alternative scenario is considered the implementation of a sustainable forest management plan, however without carrying out FSC-certification and additional activities with the aim of reducing deforestation. Although this scenario involves reduced cost, as the activities to certify FSC and emission reductions and to prevent unplanned deforestation would not occur, the expected revenues would be much lower. Carbon credits compose a significant income to the project activity to maintain its operations and benefits. Simulations on the projected cash flow indicate the NPV project activities would be higher than the NPV from the alternative land use scenario. Other land uses are not considered credible alternatives or to provide lower NPV. The scenario involving the continuation of current (pre-project) land use scenario is not expected to provide financial returns, as unplanned deforestation is performed by unrelated third parties, instead of a single entity. Cattle ranching would be a plausible alternative scenario for the land use. However, Agrocortex Madeiras do Acre Agroflorestal Ltda. would not undertake such activities as cattle ranching are not their area of specialization.	-4
g)	***Mitigation:*** *Project proponent is a non-profit organization*	0

h)	***Mitigation:*** *Project is protected by legally binding commitment (see Section 0) to continue management practices that protect the credited carbon stocks over the length of the project crediting period* The project is protected by legally binding commitment to continue management practices that protect carbon stocks, but they do not cover the entire crediting period. Agrocortex has received permissions to manage forest resources based on a Sustainable Forest Management Plan that was made available to IBAMA, the Environmental Agency responsible for licensing these activities in the Project region. The Project area started being managed according to such plan on 2012, and the Plan has a lifetime of 30 years, i.e. management practices should be maintained until 2042. However, the main shareholder of Agrocortex (Corporación Masaveu, S.A.), a company with a lifetime over 180 years, has increased its share to 75%, and will certainly renew the SFMP after the end of the 30-year forest management. It is important to note that Agrocortex is allowed (and has the intention) to request the renewal of the sustainable forest management plan for more 30 years once this first period is over.	-2
i)	***Mitigation:*** *Project is protected by legally binding commitment (see Section 0) to continue management practices that protect the credited carbon stocks over at least 100 years* The Project is not protected by legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years.	0
Total Opportunity Cost (OC) [as applicable, (a, b, c, d, e or f) + (g + h or i)] Total may be less than 0.		**-6**
Project Longevity		
a)	*Without legal agreement or requirement to continue the management practice* Not applicable, Agrocortex has legal agreements/requirements to continue the management practice (as evidenced by the Sustainable Forest Management Plan).	0
b)	*With legal agreement or requirement to continue the management practice* Agrocortex Madeiras do Acre Agroflorestal Ltda., on behalf of its CEO Marcos Preto, hereby states that the company has the main objective of	1

	promoting the sustainable development and the reduction of deforestation in the Amazon region through FSC-certified sustainable forest management activities and generation of carbon credits through forest and biodiversity conservation. Furthermore, Agrocortex Madeiras do Acre Agroflorestal Ltda. is controlled by Corporación Masaveu, S.A., a group with over 180 years-lifetime that has as its main shareholder Fundación Maria Cristina Masaveu Peterson. Such Foundation is a non-profit organization dedicated to cultural projects, focused on the diffusion, conservation and recovery of historical heritage, professional training of young workers and scientific research, and maintains the sustainability as its main core business. Corporación Masaveu believes that Agrocortex is an important project for the conservation of the Amazon biodiversity while generates alternative income sources for local communities through the certified sustainable forest management. They also confirm that they are able and willing to continue to fund Agrocortex's operations beyond the first cutting cycle. Corporación Masaveu will certainly renew the sustainable forest management plan for another 30-year forest management period. Agrocortex Madeiras do Acre Agroflorestal Ltda. is the company responsible for logging operations, being part of a Brazilian holding company that owns Batisflor Florestal Ltda., the landowner of Fazenda Seringal Novo Macapá. In 2014, a partnership agreement between Batisflor and Agrocortex was established, which mentions that Batisflor assigns to Agrocortex the entire farm for logging and harvesting of other assets, including carbon credits. Besides this, a purchase agreement between Agrocortex and Batisflor was established at the end of 2016 for the acquisition of Batisflor's remaining share capital (51%) in monthly installments. The share capital has been proportionally transferred to Agrocortex according to the payment of each instalment. Therefore, Agrocortex confirms that will continue the management and conservation practices for at least the end of the second cutting cycle, which represents a total 60-year management period, i.e., at least until 2072. Hence, the equation below was used to determine Project longevity: Project longevity = 30 – (58/2) = 1	
Total Project Longevity (PL) May not be less than zero		1

Internal Risk

Total Internal Risk (PM + FV + OC + PL) Total may not be less than zero.	0

2 EXTERNAL RISKS

Land Tenure and Resource Access/Impacts		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*Ownership and resource access/use rights are held by same entity(s)* Yes, both ownership and resource access/use rights are held by the same entity. Agrocortex Madeiras do Acre Agroflorestal Ltda. (i.e., the project proponent) is the company responsible for operations in Brazil, being part of a Brazilian holding company named Agrocortex Florestas do Brasil S.A. The latter also holds Agrocortex Florestas Tropicais Ltda., which owns Batisflor Florestal Ltda., the landowner of Fazenda Seringal Novo Macapá (where the project area is located). In March/2014, the Agrocortex holding company and Batisflor Florestal Ltda. established an agreement to harvest forest products/by-products and NTFPs in a manner consistent with the conservation of the local ecosystem, granting rights of timber harvesting, NTFPs extraction and carbon credits to Agrocortex Madeiras do Acre Agroflorestal Ltda. Furthermore, as aforementioned in the Project Longevity risk factor, at the end of 2016 Agrocortex and Batisflor have established a purchase agreement for the acquisition of Batisflor's remaining share capital (51%) through monthly installments. The share capital has been proportionally transferred to Agrocortex according to each instalment's payment.	0
b)	*Ownership and resource access/use rights are held by different entity(s) (e.g., land is government owned and the project proponent holds a lease or concession)* Not Applicable	0
c)	*In more than 5% of the project area, there exist disputes over land tenure or ownership* Even though there was small illegal deforestation during the monitored period, which are lesser than 5% of the project area, there are no disputes over land tenure or land ownership within the project area.	0

d)	*There exist disputes over access/use rights (or overlapping rights)* There are no disputes over access/use rights (or overlapping rights) within the project area. In addition, a portion of land measuring 3,690.22 ha located on the southern portion of Fazenda Seringal Novo Macapá was excluded from the Project Area[11], as it is expected that the ownership of this area will be transferred to the local community in the near future. This includes areas surrounding the places where communities are currently established. This area was also defined as the Leakage Management Area, where social, environmental and economic activities will be developed and monitored according to the SOCIALCARBON methodology. This will help preventing disputes over access/use rights on the Project Area.	0
e)	*WRC projects unable to demonstrate that potential upstream and sea impacts that could undermine issued credits in the next 10 years are irrelevant or expected to be insignificant, or that there is a plan in place for effectively mitigating such impacts* Not Applicable	0
f)	***Mitigation:*** *Project area is protected by legally binding commitment (e.g., a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period* The project is protected by legally binding commitment to continue management practices that protect carbon stocks and it will be certainly renewed, as described on item (h) of Opportunity Cost.	-2
g)	***Mitigation:*** *Where disputes over land tenure, ownership or access/use rights exist, documented evidence is provided that projects have implemented activities to resolve the disputes or clarify overlapping claims* There are no disputes over land tenure, ownership, or access/use rights within the project area.	0
Total Land Tenure (LT) [as applicable, ((a or b) + c + d + e + f + g)] Total may not be less than zero.		**0**

Community Engagement		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted*	0

[11] The exclusion occurred at the time of the elaboration of the PD.

	There are no communities or households living within the project area.	
b)	*Less than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted* According to the 2020 Social and Environmental report, performed by Agrocortex, consultations and analyzes were carried out in 10 communities surrounding the Project Area. Approximately 95 families were interviewed in order to understand the role of the company, as well as its social responsibility with the community. As part of this assessment, surveys were conducted with all of these families so Agrocortex could mitigate impacts and create positive dialogues and partnerships with them. Agrocortex team visits the communities around twice a year, with the objective of establishing a diagnosis of the social impacts from Agrocortex operations. During these visits, questionnaires are applied to the communities in order to evaluate their satisfaction and the existence of any conflict or issue about the company. In addition, this procedure is also analyzed by the FSC certification, which requires an open communication channel with local communities and the monitoring of social impacts resulting from Agrocortex operations.	0
c)	***Mitigation:*** *The project generates net positive impacts on the social and economic well-being of the local communities who derive livelihoods from the project area* Besides forest conservation, the present project aims to improve and quantify its social and environmental benefits through application of the SOCIALCARBON® Methodology. This methodology is an innovative concept developed by the Ecológica Institute to measure the contribution of carbon projects to sustainability. The SOCIALCARBON® Methodology is based on six main indicators: Biodiversity; Natural; Financial; Human; Social and Carbon Resources. In addition, the sustainable forest management plan within the Agrocortex project's area is certified under the FSC. This certification, combined with the SOCIALCARBON® Standard, will help to demonstrate social and environmental benefits beyond GHG emissions reductions or removals. A proportion of funds from the sale of carbon credits are used for socially and environmentally beneficial programs run within the leakage management area, as many programs are carried by Agrocortex through the carbon credit's revenue, such as: - The company produced materials presenting Agrocortex and its communication channels, highlighting SFMP and instructions traffic safety for redsidents who use the same access roads for where trucks travel; - Fauna monitoring to evaluate the impacts of the SFMP on the local fauna and proposing mitigation measures to avoid affecting hunting practices by local	-5

communities around the project area. The practice of burning within the project area is prohibited to avoid impacts on the fauna and flora;

- Gathering and training a Forest Fire Brigade, besides promoting lectures for fire prevention and control to the local communities and collaborators, and distribution of educational signs in the access ways to the property;

- Generating alternative income sources and local development for local communities through low-impact logging activities with FSC-certification; promoting trainings and qualification in low impact logging, work safety, first aid, and the importance of conservation of threatened flora and fauna species;

- Promoting local commerce by purchasing products from local sources, generating income and development to the communities;

- Precisely locating selected trees for cutting through geoprocessing techniques, and planning the infrastructure construction in each annual production unit, such as opening of main and secondary roads, skidding trails, and timber yards, with the objective of reducing the logging impact;

- Visiting communities with an average frequency of twice a year, with the objective of establishing a diagnosis on the social impacts from Agrocortex's operations;

- Constant revising of equipment and vehicles, in order to avoid atmospheric pollution; building drainage devices, manholes and bridges, to facilitate runoff and prevent erosion;

- Donating wood residues to the local communities;

- Attending a request from the communities to do the maintenance of the Itaúba community access;

- Partnering with the State government to donate wood residues for the Artisans Association, stimulating the production of handicrafts. The program helps 40 artisans, indirectly benefiting 250 families;

- Promoting the "Jovem Aprendiz" (young apprentice) initiative, a project that creates job opportunities to young people at risk and vulnerability situations;

- Loaning heavy machinery to the municipality of Manoel Urbano to repair streets and highways in the region;

Aside from all benefits mentioned above, the project generates about 200 direct jobs and 100 to be generated by the multiplier effect, totaling 300 direct and indirect jobs, causing a very positive impact on Manoel Urbano's local economy as well as for its surroundings. All workers, including outsourced workers, are hired in accordance with labor and social security legislation. Currently, of all the employees that Agrocortex employs in management and industry activities, 60% come from communities surrounding the project area. It is important to note that most of the municipalities in the reference region have a Very Low Human Development Index (HDI), i.e., Pauini has a very poor

	positioning, as it placed 5538th of 5565 Brazilian municipalities, while Manoel Urbano in the 5186th. All revenues from carbon credit sales are invested into Agrocortex's operation and social and environmental benefits. Between 2020 and 2021, the credits were sold to national and international companies, which were fully integrated into the company's working capital used to maintain the activities listed above. Moreover, carbon credits are also fundamental to maintain the FSC certification, due to the difficulty in competing with illegal logging in Brazil.	
Total Community Engagement (CE) [where applicable, (a + b + c)] Total may be less than zero.		-5

Political Risk		
Risk Factor	**Risk Factor and/or Mitigation Description**	**Risk Rating**
a)	*Governance score of less than -0.79* Not Applicable	0
b)	*Governance score of -0.79 to less than -0.32* Not Applicable	0
c)	*Governance score of -0.32 to less than 0.19* Mean of the 6 World Bank Institute Worldwide Governance Indicators for Brazil across the most recent five years of available data (between 2016 – 2020)[12]: **-0.20** Please, see table below:	2

Voice and Accountability		Political Stability and Absence of Violence/Terrorism		Government Effectiveness		Regulatory Quality		Rule of Law		Control of Corruption	
Year	Rank	Year	Rank	Year	Rank	Year	Rank	Year	Rank	Year	Rank
2016	0.45	2016	-0.38	2016	-0.17	2016	-0.21	2016	-0.16	2016	-0.38
2017	0.45	2017	-0.47	2017	-0.23	2017	-0.15	2017	-0.25	2017	-0.5
2018	0.36	2018	-0.44	2018	-0.45	2018	-0.33	2018	-0.25	2018	-0.4
2019	0.3	2019	-0.71	2019	-0.19	2019	-0.18	2019	-0.18	2019	-0.34
2020	0.26	2020	-0.42	2020	-0.45	2020	-0.16	2020	-0.18	2020	-0.34
Mean	**0.36**	**Mean**	**-0.48**	**Mean**	**-0.3**	**Mean**	**-0.21**	**Mean**	**-0.2**	**Mean**	**-0.39**
Mean	**-0.20**										

The mean of Governance Scores across the six indicators of the World Bank Institute's Worldwide Governance Indicators (WGI), averaged over the most recent

[12] Available at: <http://info.worldbank.org/governance/wgi/Home/Reports>. Last visit on: June 9th, 2020.

	five years of available data (between 2016 and 2020) for Brazil was equal to -0.20.	
d)	*Governance score of 0.19 to less than 0.82* Not Applicable	0
e)	*Governance score of 0.82 or higher* Not Applicable	0
f)	***Mitigation:*** *Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.* The Project Area is located in the States of Acre and Amazonas. Both states/jurisdictions participate in the Governors' Climate and Forest Taskforce (GCF)[13].	-2
Total Political (PC) [as applicable ((a, b, c, d or e) + f)] Total may not be less than zero.		0

External Risk	
Total External Risk (LT + CE + PC) Total may not be less than zero.	0

3 NATURAL RISKS

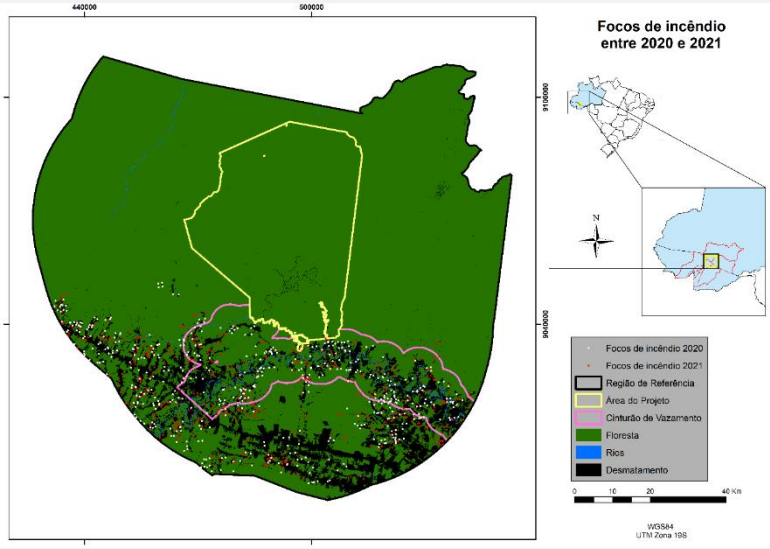
Natural Risk (Fire)	
Significance	*Insignificant* To assess the fire risk, data from INPE's monitoring program "*Queimadas*" was used. This program has nine satellites with optical sensors which operate in the thermal-average range of 4um. The information is processed in the Image Generation Division DGI and in the Satellite and Environmental Systems Division - DAS. Two types of images are used: satellites with polar orbit (AVHRR/3 of NOAA-18, NOAA-19 and METOP-B, MODIS from NASA TERRA and AQUA, and VIIRS from NPP-Suomi and NOAA-20), as well as the images of the geostationary satellites (GOES-16 and MSG-3). Over 200 images are processed per day, with

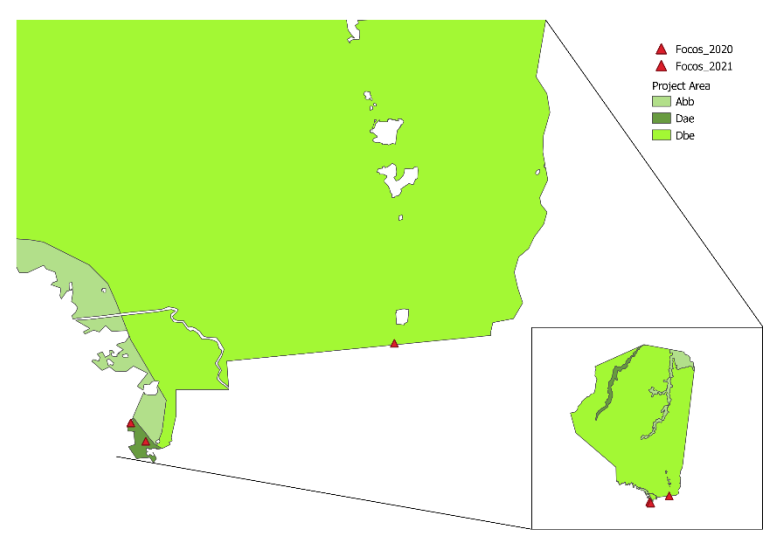
[13] Available at: <https://www.gcftf.org/member-states>. Last visit on: March 22, 2022.

at least two sets of polar orbiting satellites being generated per day, and four images of geostationary stations per hour.

Between 2020 and 2021, 930 fire outbreaks were counted within the limits of the reference region, being: 2, in the project area; 368, in the leakage belt; and, 560, in the rest of the reference region. It was also verified that a large part of the detected outbreaks occurred in areas already deforested or in areas that did not generate forest loss, with few fire outbreaks being succeeded by forest loss.

Through this analysis, it is possible to conclude that fire recurrence was very low during the monitored period, and that they had insignificant impact in the project area, consequently not influencing its carbon stocks.[14]





[14] All the information is available in the *Monitoramento Agrocortex REDD Project period 03012020-31122021* (Baseline Monitoring of Agrocortex REDD Project) Report.

Likelihood	*Less than every 10 years* INPE sources report that the project area is within a minimal-low fire risk region[15,16]. No large-scale fire was detected from 2005 to 2021 within the Project Area. Furthermore, no fire occurrence was reported by the project owner and the management team during this monitoring period. A conservative estimate of fire likelihood in a period of less than 10 years is being considered on this report, following the opinion of Agrocortex management team.
Score (LS)	2
Mitigation	0.50 The following measures were performed by Agrocortex to mitigate the risk of fire: forest fire prevention and firefighting training with all management personnel (invites are also sent to request the presence of local communities), training of fire brigades, periodic maintenance of fire extinguishers, periodic maintenance of forest machinery, utilization of signs indicating the area of forest management, prohibition of fire, and periodic monitoring by satellite images of the entire project area.

Natural Risk (Pest and Disease outbreaks)	
Significance	*No Loss* This risk was assessed by Agrocortex's management team, who has considered it as probably not causing any loss to the carbon stocks in the Project Area. There is no record of any pest and disease outbreak in the project area. The project area is covered by 100% Amazon rainforest.
Likelihood	*Every 50 to less than 100 years* There was no record of any pest and disease outbreak in the project areas of the Agrocortex REDD Project for this monitoring period. The project area is covered by 100% Amazon rainforest. Therefore, a likelihood of once every 50 to less than 100 years is being considered on this report, which is more conservative than the opinion of Agrocortex's management team.
Score (LS)	0
Mitigation	1.00 No measures are taken addressing this matter.

[15] Fire risk map. Available at: <https://queimadas.dgi.inpe.br/queimadas/risco-de-fogo-meteorologia>. Last visit on: March 9th, 2022.

[16] ProgramaQueimadas – Fire Monitoring Program, INPE.Available at: <http://queimadas.dgi.inpe.br/queimadas/portal/risco-de-fogo-meteorologia>. Last visit on: March 9th, 2022.

Natural Risk (Extreme Weather)	
Significance	*Insignificant* The significance of extreme weather was determined using a search of the Brazilian National Institute of Meteorology[17]. Wind records during the available reference period (2020–2021) show that the categories of tropical storm or hurricane were never reached in the meteorological Station located in the municipality of Boca do Acre, Amazonas. In addition, Espirito-Santo et al. (2010)[18] found that blowdowns affect a relatively small proportion of overall forest area (~0.02%). Moreover, blow-down disturbance events do not make an important direct contribution to carbon dioxide emissions or even for the overall forest succession process in the tropics. Also, the project region is not affected by extreme drought events. For these reasons, this risk was considered to be insignificant.
Likelihood	*Every 10 to less than 25 years* No extreme weather events damaging the project area were reported in the interview with the project owner and his team for this monitoring period. The likelihood of blow-down winds was determined using a search of the Brazilian National Institute of Meteorology (Boca do Acre Station) wind records during the available period (2020–2021). During this period, the wind speed has never exceeded 10m/s, which is significantly below the wind speed for the categories of tropical storm or hurricane[19]. In addition, the map showing the average regime of winds in Brazil[20] displays the project region having an average wind speed below than 5m/s. In continental equatorial regions of the Amazon, hurricane damage does not occur. However, Espírito-Santo et al. (2010)[21] used Landsat images of the Brazilian Amazon to detect large natural gaps (>30 ha) with fan-shape forms (blowdowns), probably caused by high-velocity wet downburst winds. Blow-down occurrence frequency and the associated disturbance area are usually greater

[17] INMET: <http://www.inmet.gov.br/portal/index.php?r=home/page&page=rede_estacoes_auto_graf>. Last visit on: March 22nd, 2022.

[18] Espírito-Santo et al. (2010). Storm intensity and old-growth forest disturbances in the Amazon region, Geophysical Research Letter, Volume 37, L11403. Available at: <http://onlinelibrary.wiley.com/doi/10.1029/2010GL043146/pdf>. Last visit on: March 22nd, 2022.

[19] National Weather Service (USA): weather categories determined using Saffir-Simpson Hurricane Wind Scale: <http://www.nhc.noaa.gov/aboutsshws.php>. Last visit on: March 22nd, 2022.

[20] Available at: <http://www.cresesb.cepel.br/publicacoes/download/atlas_eolico/mapas_1a.pdf>. Last visit on: June 22nd, 2022.

[21] Espírito-Santo et al. (2010). Storm intensity and old-growth forest disturbances in the Amazon region, Geophysical Research Letter, Volume 37, L11403. Available at: <http://onlinelibrary.wiley.com/doi/10.1029/2010GL043146/pdf>. Last visit on: March 22nd, 2022.

	where severe storms occurred more frequently. Nevertheless, the conclusion of this study shows that the recurrence interval for blow-downs in the western Amazon region is around 27,000 years, based on the occurrence of new blow-downs and the assumption of a constant disturbance rate for the western region. Furthermore, the project region was not affected by extreme drought events during this monitoring period. The area is not subject to such events, as indicated by neutral-positive values on the Palmer Drought Severity Index[22]. Therefore, a likelihood of once every 10 to 25 years is being considered on this report, which is more conservative than the opinion of Agrocortex's management team.
Score (LS)	1
Mitigation	1.00 No measures are taken addressing this matter.

Natural Risk (Geological Risk)	
Significance	*No Loss* No geological events damaging the project site were reported by the Agrocortex management team or in source searches. Furthermore, the Preliminary Seismic Hazard Model for South America prepared by a group of experts from the Regional Seismological Center for South America - Centro Regional Sismological para América del Sur (CERESIS), the U.S. Geological Survey (USGS) and the Global Earthquake Model (GEM) place the project region in an area of low hazard[23]. Moreover, the project region was not affected by extreme landslide events during this monitoring period. For these reasons, this risk was considered to be insignificant.
Likelihood	*Every 50 to less than 100 years* The project area is located in a stable geological area with no faults. No geological events damaging the project site were reported in the interview or in source searches for the duration of this monitoring period. In addition, the Project region is of low hazard to geological risks, as previously described on the Significance component of this risk assessment.

[22] Dai, A., K. E. Trenberth, and T. Qian, 2004: A global data set of Palmer Drought Severity Index for 1870-2002: Relationship with soil moisture and effects of surface warming. J. Hydrometeorology, 5, 1117-1130. Available at: <http://www.cgd.ucar.edu/cas/adai/papers/Dai_pdsi_paper.pdf>. Last visit on: March 22nd, 2022.

[23] Preliminary Seismic Hazard Model for South America. Available at: < https://www.usgs.gov/media/files/preliminary-seismic-hazard-model-south-america >. Please view Figure 6 on Page 10 of the publication. Last visit on: March 22nd, 2022.

	Moreover, the average altimetry is about 200m and the topography does not present large irregularities. Landslide risk may vary according to the type of soil, geology, slope, and/or according to human activities. Generally, land slide events may occur in areas with slopes above 20°-25°, when forested lands begin to be subject of landslides[24]. Therefore, there is a minimal risk of landslides within the project area. In addition, such event has never happened according to the project owner and his management team. Therefore, a likelihood of once every 50 to less than 100 years is being considered on this report, which is more conservative than the opinion of Agrocortex's management team.
Score (LS)	0
Mitigation	1.00 No measures are taken addressing this matter.

Natural Risk (Other Natural Risk)	
Significance	*Insignificant* Another risk was identified by Agrocortex's management team. This risk refers to the synchronic mortality of the bamboo, which generally occurs once every 30 years. However, this risk is considered to be insignificant in terms of its impact on carbon stocks, as carbon stocks are expected to fully recover in less than 10 years from the event. No other sources of natural risk were identified in interview or literature sources.
Likelihood	*Every 25 to less than 50 years* The synchronic mortality of the bamboo is expected to occur once every 30 years, according to Agrocortex's management team. No mortality has occurred during this monitoring period. This frequency is consistent with information on the Sustainable Forest Management Plan for the Project Area and also with peer reviewed literature[25]. Therefore, a likelihood of once every 25 to less than 50 years is being considered on this report.

[24] Ministérios das Cidades. Capacitação em Mapeamento e Gerenciamento de Risco. Available at: <http://www.defesacivil.mg.gov.br/images/documentos/Defesa%20Civil/manuais/mapeamento/mapeamento-grafica.pdf>. Last visit on: March 22nd, 2022.

[25] CARVALHO, Anelena Lima de. Ciclo de vida de populações de bambu (Guadua spp.), no tempo e no espaço, no sudoeste da Amazônia, 2010. Available at: <http://bdtd.inpa.gov.br/bitstream/tede/1801/5/Disserta%C3%A7%C3%A3o_Anelena%20Lima%20de%20Carvalho.pdf>. Last visit on March 22nd, 2022.

Score (LS)	1
Mitigation	1.00 No measures are taken addressing this matter.

Score for each natural risk applicable to the project (Determined by (LS × M)	
Fire (F)	(2 x 0.50) = 1
Pest and Disease Outbreaks (PD)	(0 x 1) = 0
Extreme Weather (W)	(1 x 1) = 1
Geological Risk (G)	(0 x 1) = 0
Other natural risk (ON)	(1 x 1) = 1
Total Natural Risk (as applicable, F + PD + W + G + ON)	**1 + 0 + 1 + 0 + 1 = 3**

4 OVERALL NON-PERMANENCE RISK RATING AND BUFFER DETERMINATION

4.1 Overall Risk Rating

Risk Category	Rating
Internal Risk	0.00
External Risk	0.00
Natural Risk	3.00
Overall Risk Rating (a + b + c)	**10**[26]

4.2 Calculation of Total VCUs

Project year	Ex post net anthropogenic GHG emission reductions		Ex post VCUs tradable		Ex post buffer credits	
	annual $\Delta REDD_t$ tCO_2e	cumulative $\Delta REDD$ tCO_2e	annual VCU_t tCO_2e	cumulative VCU tCO_2e	annual VBC_t tCO_2e	cumulative VBC tCO_2e
2020	443,821	443,821	397,013	397,013	46,807	46,807
2021	555,921	999,742	497,962	894,975	57,958	104,765

[26] According to the Risk Report Calculation Tool: VCS Version 04 – The minimum risk rating shall be 10, regardless of the risk calculated.