



Examining "Sustainable" Livestock Intensification and Financing: **A Critical Analysis of the Hacienda San José Case in Colombia**

Authors: Global Forest Coalition and Claretian Corporation Norman Pérez Bello, members of Tejido Únuma and Julieta Rivera Plaza.

Photographies: Julieta Rivera Plaza and Andrea Echeverri



On the way to La Primavera: Passenger boat trip between Puerto Gaitan and the Municipality of La Primavera - Vichada, through the Meta River. Trip average duration of 7 hours with unique landscapes.

Introduction

The objective of this case study is to investigate the impacts on forests, communities, and climate resulting from bilateral and multilateral public and private finance in land-based projects that claim to provide climate change mitigation benefits. We look in particular at a project that combines so-called sustainable livestock farming and plantations used for forest restoration and conservation, in the ranch Hacienda San José, Colombia.

We gathered information from various sources, including project disclosure documents, primary data obtained through right-to-request procedures from Colombian government entities¹, interviews with organizations operating in the Orinoquía region, and conversations with individuals from local Indigenous and peasant communities. Additionally, participatory workshops were conducted in the Campo Alegre and Ripialito Indigenous Reservation². Secondary sources, such as press reviews were also referenced.

It is important to note that, following telephone conversations with Hacienda San José, we sent a letter on 24 October of 2023 to the provided emails. In the letter, we explained the ongoing investigation, posed specific questions and requested a visit. Unfortunately, at the date of publishing, we have not yet received a response.

1 Although we received responses from some entities, others that were crucial did not respond.

2 The first day 25 people participated: 11 men, 7 women, 5 boys, 3 girls; the second day 54 people: 15 women, 26 men, 7 girls, 6 boys.



Entrance to the community of Ripialito: due to the presence of bodies of water, bridges are common in the Resguardo.

Description of the project and actors involved

The research examines the impacts of part of the FP212 Project funded by the Green Climate Fund (GCF). This project is [one of 11 initiatives](#) carried out by the GCF in Colombia³. Its official title is the “[&Green Fund: Investing in Inclusive Agriculture and Protecting Forests](#)”. The initiative spans 11 countries across Latin America, Africa and Asia, all of which are home to important tropical forests. The primary goal of the &Green Fund is to promote the sustainable production of raw materials (commodities) and enhance agricultural

land productivity, thereby reducing deforestation for agricultural purposes.

Within the GCF’s framework for presenting and financing proposals, various actors from different territories assume specific roles. Therefore, it is relevant to include a schematic representation available on the website of Colombia’s National Planning Department (DNP), the Designated National Authority in Colombia for the GCF. This schematic representation helps to understand the roles of the involved actors.



Graph: [National Planning Department of Colombia](#) (without date).

³ In addition, there are 13 preparatory support projects.

The total value of Project FP212 is [USD 981.6 million](#), of which the GCF finances 19.3%, distributed as follows: USD 185 million as a loan and USD 9.35 million as a subsidy. The GCF [classifies the risk of this project as A](#), signifying the highest level, owing to its diverse, irreversible or unprecedented impacts on social and environmental matters. However, the GCF's guide for categorizing the activities they finance clarifies that accredited entities implement their own social and environmental risk management systems, and the guide itself is not a GCF policy.

The Dutch entrepreneurial development bank (FMO by its Dutch acronym) is the [accredited entity for Project FP212](#), acting as [one of the two executing entities](#) alongside the &Green Fund (formally known as Stichting AndGreen Fund). In Colombia, the Designated National Authority is the DNP, which, in response to a [right of petition](#)⁴, reported that the disbursement for the project is facilitated by the FMO.

Project FP212 received approval on 13 July 2023 during the [GCF board meeting 36](#)⁵. In Colombia, the project included in the portfolio is the expansion of the Hacienda San José, justified under the concept of Sustainable Livestock Intensification. Hacienda San José aims to reach 400,000 hectares by 2050, and

the initial expansion of 180,000 hectares financed by &Green is considered a starting point. This expansion will be facilitated through a loan of 30 billion Colombian pesos (USD 7.5 million).

The project is justified based on the conservation of 13,000 hectares of forest, boasting [a carbon capture](#) three times greater than each ton emitted. Additionally, it emphasizes a significant commitment to the local Indigenous population aligning with the overarching goal of "the expansion of sustainable livestock management in Colombia." While the project is not yet underway, a field visit and the review of secondary information enable us to anticipate certain concerns regarding the planned expansion, as there appear to be some inconsistencies. For instance, project documents speak of 750,000 heads of cattle with a density of one head per hectare, which is contradictory.



Resguardo Ripialito Hut: located in the municipality of La Primavera, in the village of Nueva Antioquia. This house is part of the community of La Reforma, one of the communities that is part of the Resguardo Indígena Sikuaní Campo Alegre and Ripialito, and adjacent to the HSJ.

4 In Colombia, it is a fundamental right. It is the right of every person to submit requests to authorities or entities, whether for reasons of general or particular interest, including information requests.

5 For the amount of USD 189,350,000.

Hacienda San José

Currently registered under the name Agropecuaria Bambusa SAS in the Colombian commercial registry, Hacienda San José is a company established in 2014 specializing in cattle and buffalo farming. On its [website](#), the company portrays itself as a model of successful and innovative livestock farming, emphasizing quality production that is environmentally sustainable and supportive of the surrounding communities.

However, various documents of the FP212 Project, sourced from government and regional bodies, as well as project press releases, present inconsistent figures for the number of hectares owned by Hacienda San José and the current livestock count. Data ranges from [5,500](#) to [6,500](#) head of cattle, and the Landscape Document for the Hacienda San José under &Green indicates hectare figures of [8,891](#) and 8,660.

Presently, the Hacienda San José is promoted as a global example of livestock farming capable of contributing to global cooling, as stated by one of its directors, [Gabriel Jaramillo](#). According to different documents, this is achieved through genetic improvement and the use of the Nelore breed, known for being short-cycle cattle, as well as the cultivation of a deep-rooted grass identified as *Brachiaria humidicola*, which is highlighted for its ability to capture more carbon than it generates.



Entrance to Hacienda San José: One of the entrances to the Hacienda San José facilities, near the airstrip.

Location of Hacienda San José: Brief description of the territory

Hacienda San José is situated in the Orinoquía region of Colombia, known as the Llanos Orientales, in the department⁶ of Vichada. This extensive and remote territory poses challenges for access, and it has a low population density, with the majority of inhabitants being Indigenous. In recent years, successive Colombian governments have portrayed the Department of Vichada as a crucial global agricultural hub, following the model of the Brazilian Cerrado, citing similarity in its soils. However, these claims about the Orinoquía region appear unjust, as they seem to overlook the colonial history, dispossession and racism that have shaped the area.

In Vichada and neighbouring departments, Indigenous hunts known as guahibíadas were common at least until the 1970s. In 1970, a judge [acquitted the perpetrator of a massacre of 16 people from the Cuiva town](#), arguing that “killing Indians was not bad.” During a previous field trip, a local farmer informed us that this practice persisted into the 1980s. Many of these guahibíadas have been linked to land grabbing for agroindustrial production, involving companies such as [Poligrow](#), [Cargill](#) and [Mónica Semillas](#), contributing to an increase in the size of farms and livestock herds, often owned by individuals and entities outside the territory.

Specifically, Hacienda San José is located in the municipality of La Primavera, within the *corregimiento* of Nueva Antioquia. It is adjacent to the Sikuni Campo Alegre and Ripialito Indigenous Reserve PROCICAR (Campo Alegre Ripialito Indigenous Collective Property), which comprises five communities: Caracol, Campo Alegre, La Reforma, El Retiro and Laguna Grande (the latter inhabits a territory not legally recognized). The Sikuni Indigenous people who settled there have been victims of both the guahibíadas and the Colombian armed conflict.

The Sikuni have a history of nomadism in the Orinoquía region. However, due to forced sedentarization processes, they have now established settlements in the departments of Vichada, Guainía, Meta, Casanare and Arauca. Information from the [National Indigenous Organization of Colombia](#) (ONIC) and discussions with the Norman Pérez Bello Claretian Corporation reveal that the transition from hunting and gathering to an agricultural lifestyle has posed significant challenges for Sikuni communities. Typically lacking necessary inputs and adequate support, coupled with the acidic nature of [Vichada's soils](#), this transition has resulted in nutritional deficiencies in Campo Alegre and other deficiencies.

⁶ Colombia is administratively divided into 32 departments, which in turn are divided into municipalities (1,097). Some municipalities have an additional figure called *corregimientos*, a division of the rural area of the municipality, which includes a population nucleus.

Assessment of the social responsibility of Hacienda San José

Land

As mentioned earlier, the Hacienda San José expansion project financed by &Green is not yet in execution, and the exact location is yet to be determined. [The landscape unit corresponds to an area of 2.8 million hectares](#) along the banks of the Orinoco River, a region marked by violence, thousands of land restitution requests, and conflicts with Indigenous territories. The actual number of hectares remains unclear, as figures vary between the frequently mentioned 180,000 and other statements and references.

Nevertheless, Hacienda San José has initiated an expansion process, although confirmation is lacking on whether the 2023 purchases and plans are financed by &Green. The company has already

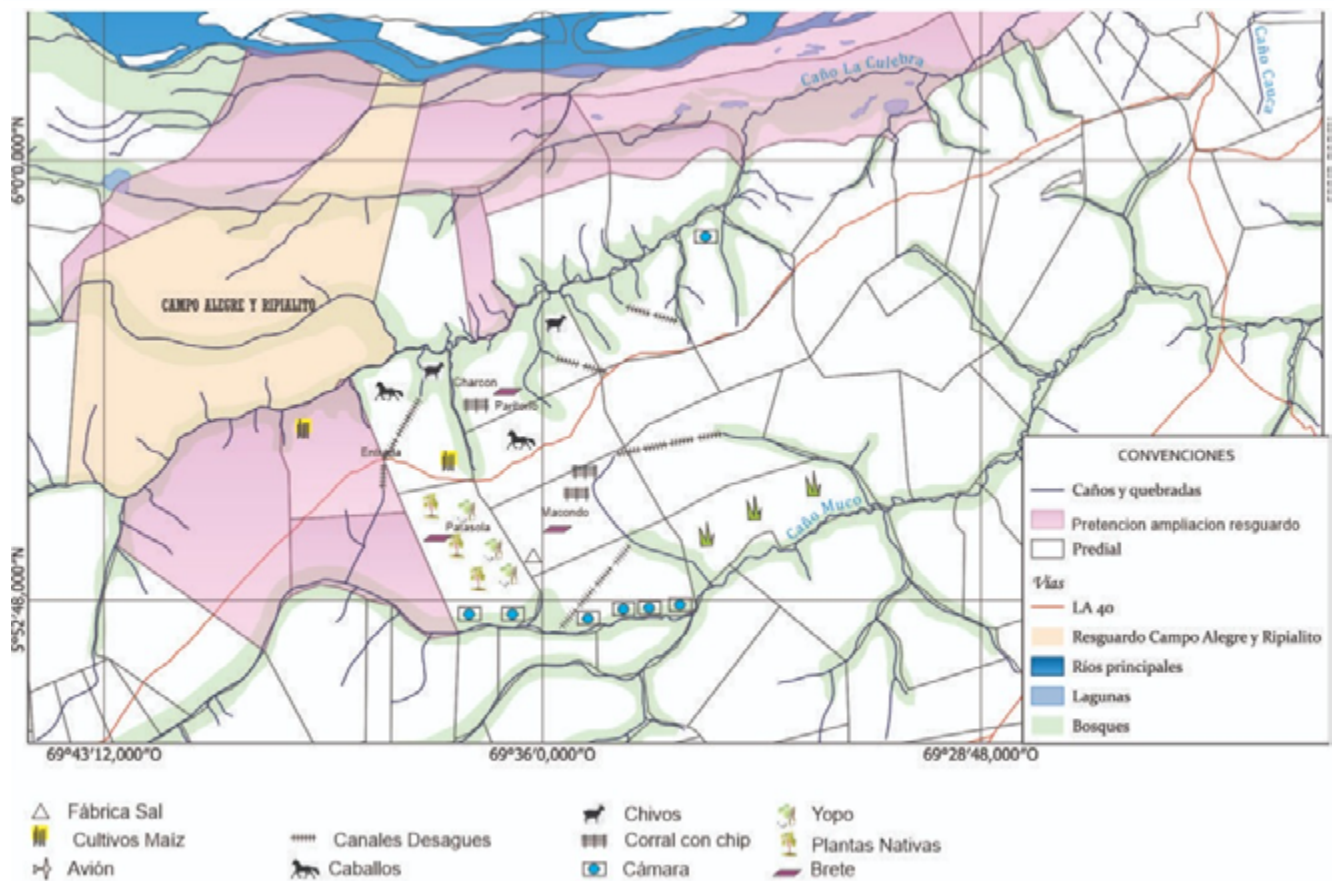
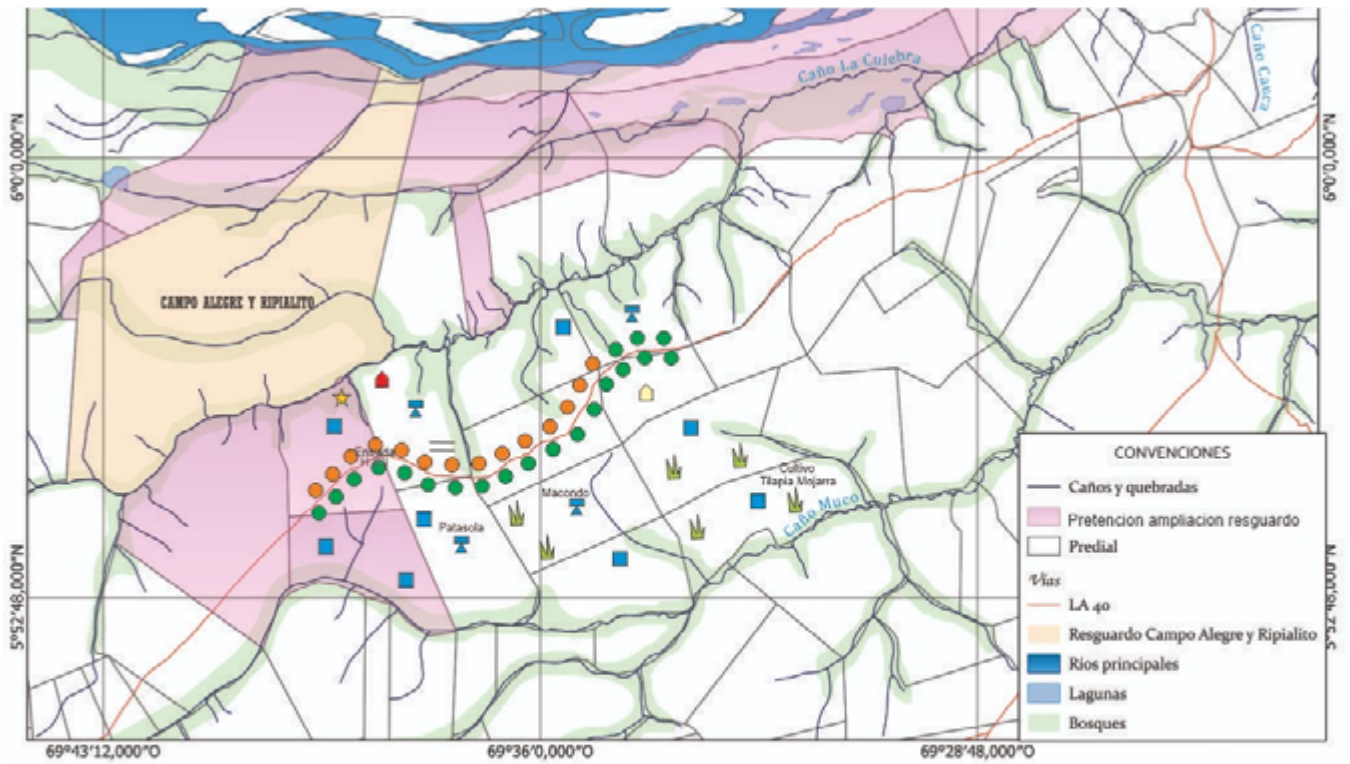
started acquiring land and forming partnerships with palm companies in the region, such as Tucunaré⁷. Our findings allow us to identify three concerns regarding the lands of Hacienda San José:

1) According to documents presented by the indigenous authorities, in alliance with the Corporación Claretiana Norman Perez Bello-CCNPB -, since October 2013, the Indigenous authorities of the Campo Alegre and Ripialito Reservation [have requested expansion from the Colombian authorities](#) (the Colombian Institute of Rural Development in 2013 and later the National Land Agency -ANT for its acronym in Spanish- in 2017). They submitted the required documentation and sought protection of ancestral territories (Decree 2333 of 2014) from the ANT. The intentions to expand a reservation of over 7,000 hectares have faced criticism, mainly due to recent injustices toward the Sikuani people and a lack of understanding of their practices and customs, making it challenging to meet their requirements. However, as people accustomed to planting crops in savanna jungles and returning later necessitate large territories to maintain these practices while adapting to an agricultural lifestyle. The extension request is ongoing, but results are pending. This bureaucratic process, though detailed documentation is not provided here, is significant to mention due to the overlap



El Retiro Community: out of the five communities, this one has a 'wise-woman', who vindicates the Sikuani culture through weaving and singing, her family (in the photo) is one of the few that speaks the language and weaves, practices that have been forgotten by most of the women and men in the Campo Alegre and Ripialito Resguardo.

⁷ Testimony of an indigenous authority.



Source: Prepared by the authors of this document using GPS referencing and social mapping data.

between the intentions of Hacienda's expansion and the Reservation expansion, as illustrated in the georeferenced map, completed with the contributions of the Indigenous community.

2) The second concern relates to previous visits by the CCNMPB, where authorities, community members, and the ANT collaborated to identify potential territories for Reservation expansion. During these visits, a property was validated as vacant, meeting the conditions for inclusion in the claim to expand the Reservation⁸. However, further investigation revealed that Hacienda San José had occupied this property, evidenced by pasture cultivation and livestock keeping.

3) The department of Vichada was officially established only in 1991 and is often perceived as a "border" region. Consequently, it has been excluded from national censuses and measurements at times, making it challenging to estimate land concentration and dispossession figures accurately. As a clue to understanding socio-demographic conditions, the estimation of [17,026 inhabitants](#) in the municipality of La Primavera is noteworthy. As of 13 September 2023, there were [134 requests for land restitution concerning 137 properties](#).

The Colombian armed conflict has led to widespread land dispossession. A widely repeated theory in Colombia suggests that forced displacement is not a consequence of the war but is its purpose —war used

as a means to seize land. [Land restitution, per the Victims Law](#), entails the "right of victims to have their property returned when it was dispossessed or abandoned due to the armed conflict" (Ministry of Agriculture and Rural Development, n.d.). The concern arises that expansion could occur on lands requested for restitution, especially since the vicinity of Hacienda San José has been a conflict zone, and a significant portion of its landscape unit is affected. While it is the victims' right, the process is notably slow.

For Project FP212, a Land Acquisition Tool (LAT) incorporating the Performance Standards of the International Finance Corporation and the recently created voluntary Colombian standard, [GANSO](#), should guide Hacienda San José's land acquisition policies. However, it is too early to evaluate the results of this tool, although initial indicators are available. This tool is assumed to be for internal use, as it could not be located in public records.

Consultation processes

On February 10 or 1, 2023 (the date varies in the available documents, specifically meeting slides and the attendance list), Hacienda San José conducted its annual meeting with authorities and individuals from the Reservation at its facilities.

8 According to the Ministry of Justice and Law in Colombia: "[Rural land that is part of the State's assets because it is located within the territorial limits and has not had a private owner.](#)"

One agenda item for the meeting was the expansion process of the Hacienda. Subsequent to the meeting, a document surfaced bearing the signature of the then-Indigenous governor, with his name misspelled by Hacienda San José. The document provides assurance that the community authorities consented to conducting the meeting in Spanish and fully comprehended the expansion project. However, a field visit revealed a lack of understanding of the expansion project. For an inclusive process, Hacienda San José must include an ethnic perspective to effectively address the colonialism and racism experienced by the Sikuani people.

It is crucial to remember that less than 50 years ago, the Indigenous peoples of Vichada were victims of hunting, and their

settlement in Resguardos, as sedentary communities, began only in the late 1960s. Consequently, socialization or consultation processes must be culturally appropriate to ensure understanding. Additionally, the document, signifying consent from the Governing *Cabildo* (the highest authority of the Resguardo) and other community authorities for the expansion, was not immediately signed after the meeting. Instead, an official from Hacienda San José visited the Reservation days later without seeking authorization to enter or providing prior notice of the visit. The official then pressured the community authorities to sign the document. Despite the rushed process, only one authority confirmed having read the document, even though almost all of them signed it⁹.



Day to share information about the HSJ expansion: In November 2023, for two days, traditional authorities, men, women and children attended this workshop share and gather information about the project and the HSJ

Consequently, this process cannot be considered a Free Prior and Informed Consultation, and the manner in which it transpired raises the possibility of legal scrutiny.

It is important to clarify that Hacienda San José has a Complaints Mechanism, as mandated by &Green. Since at least June 2022, it has had a [Format for the Report on receipt of complaints and claims](#), which is in the possession of the Indigenous authorities. Despite the option to submit a verbal complaint, the requirements set by &Green and the proper implementation by Hacienda San José should involve a pedagogical process and an ethnic perspective. The design, while comprehensive, may be unlikely to be utilized by Indigenous communities without such considerations.

Corporate social responsibility

In 2016, Hacienda San José, in collaboration with other companies in the township, established APRODENA. By 2022, the total contributions from all partners to [APRODENA](#) amounted to 60,750,000 COP, around USD 15,000. &Green documents mention commitments for the expansion of Hacienda San José that highlight the work of APRODENA and its investment in innovative approaches for rural schools. APRODENA reports acknowledge partner contributions to the maintenance of the RI Campo Alegre school. However, it can be suggested that these efforts adhered to minimum quality standards and were

notably inappropriate for the context. Testimonies from workshops revealed that school improvements mainly involved leaving some zinc tiles on the outskirts of the facilities, with the sole teacher taking charge. Workshop attendees also reported that the New School Guides, the main support for the school, lacked an ethnic perspective and were unsuitable, requiring resources like internet, computers, and experiments that the students did not have access to. Furthermore, it was noted that contrary to agreements, teachers in Campo Alegre had never received training.

In the most recent annual meeting of Hacienda San José, they presented support for a productive project involving the cultivation of cacay (a native fruit) and banana. However, our investigations revealed that the company's support, as outlined in their management reports, was limited to a couple of visits from an agronomist. The project itself was managed by the Colombian government, emphasizing the necessity of support and inputs in transitioning to an agricultural way of life.

For the Indigenous community, the cooperative relationship mentioned above was deemed insufficient, vertical and unclear. Claims of investments in the Health Center could not be verified in the field. In terms of infrastructure, the community referred to a pedestrian bridge, partially funded by Hacienda San José. A company official stated that the bridge cost more than 120 million pesos, exceeding the total contributions of APRODENA. This points to inconsistencies between APRODENA's management reports and the company's statements.

Labor conditions

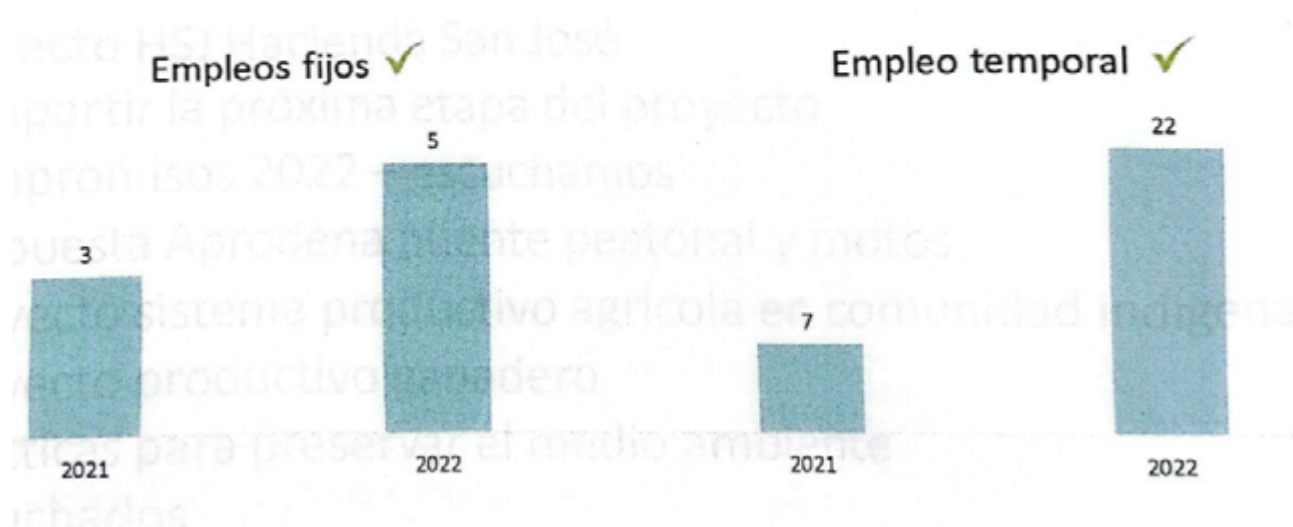
In its Landscape Document, Hacienda San José states that half of the jobs are intended for individuals from the Resguardo. During the previously mentioned meeting titled “Socialization of the HSJ Sustainable Tropical Beef Livestock Project”, some commitments to the community were outlined, including a minimum number of jobs. This was discussed in the context of the project’s expansion and diversification of activities. Additionally, figures from the previous year were shared to illustrate community participation. These figures are as follows.

Regarding the labour experiences of 2021 and 2022, the community shared the following:

- “The labor is for very short seasons. I helped for two months planting grass. The hours were from 6 am to 8 pm, they are long days and they do give you food, but the hours are tough.”
- “I worked on sowing grasses for only one month. The grass was sown in seed. Since last year it has been planted in runners, it was a job for donkeys, very hard.”
- Woman: “Mr. XXXX,, we submitted our resumé, then they hired us... that’s called an indefinite term... then, they fired us. They had told us more time, but that man started to say that we were lazy because we made comments about the schedules,

Compromisos 2022 - Empleo

HELVORARREPO



Source: Slides from the 2023 annual meeting of Hacienda San José and the Sikuni Indigenous community.

they took us out without first notifying us. That same day they said, ladies, the job is over. "You are very lazy."

- Woman: "They hired me with the other two women. What they had told us at the beginning that we had to do was fertilizing the Eucalyptus, that was our job; But after a week, they changed us and made us do whatever they wanted, to clean floors, to put poison, to carry, whatever, FOR DEMANDING THE RIGHTS THEY TOOK US OUT."

- Woman: "This year, Mr. XXXX came to the reservation and asked, raise your hands, women who have a motorcycle, I said I don't have a motorcycle, it belongs to my husband, so he told me that if I didn't have a motorcycle, I couldn't work, that that was a condition, but well if my husband uses it, how can I take it away

from him, then he didn't hire me, people who come from outside, most of them from the coast, are not required to own a motorcycle."

Concerning working conditions, it's important to note that the current minimum wage is paid. However, apparently, other regulations are not complied with. For instance, Indigenous women who participated in the workshops and worked at Hacienda San José reported that they used Lorsban as an insecticide (for eucalyptus) without any kind of protection. Lorsban is a Chlorpyrifos, [banned in territories like the United States and China](#) and subject to question in the European Union, which [led to its ban in Colombia](#).



Bridge for the entrance of cars and motorcycles: an unstable wooden suspension bridge, impossible to cross in the rainy season, is the only entrance for cars to the Resguardo.



Resguardo Bridge for motorcycles: built mostly by APRODENA in 2022. The Resguardo completed the missing steps and that was socialized as a result of the support provided by HSJ during the meeting of February 1, 2023 "Sustainable Tropical Beef Cattle Ranching Hacienda San Jose", which was held with 5 chiefs and the cabildo.

Assessment of the ecological impacts of Hacienda San José

Biodiversity and soils

As mentioned earlier, the soils in the region where Hacienda San José is situated are not particularly fertile, and the Indigenous communities are not accustomed to agricultural practices. However, they have demonstrated on the company's current properties a notable reduction in the hunting of certain species, such as the

"cachichamo," possibly the same giant armadillo, included in &Green plans.

According to the Indigenous community, the plowing processes negatively impact their survival conditions. Historically, these animals have been used sustainably as food by the Sikuani. However, hunting is no longer permitted on the company's properties, and even traveling through them at night or on certain roads is restricted. The community emphasizes that when they go hunting, they do so by hiding, in areas that were their ancestral territories.



While the project documents indicate a lack of endemism and threatened or existing species, the Indigenous community reports the loss of cachicamos, birds, deer, and fish in the streams since the establishment of Hacienda San José. This has resulted in a significant impact on the Indigenous community and the traditional way of life in the region. Despite the company's partnerships with Panthera, including the installation of 20 camera traps, in their records, we were only able to identify a vague sighting of a panther.

Hacienda San José previously held the [Rainforest Alliance certificate for sustainable agricultural practices](#), specifically under the livestock program. However, this standard has been

discontinued, and the company is now seeking another voluntary certification, considering the GANSO Endorsement as an option¹⁰. Perhaps it is worth pondering two reflections:

- i) The certification has is [category C](#), suggesting that it still has a long way to go to achieve category A, which entails compliance with the highest standards.
- ii) The Rainforest Alliance sustainability certificate has faced numerous criticisms. For example, it has certified [pineapple export farms in Costa Rica](#) with questionable labor practices, instances of pesticides used, reported [dangerous child labor in the Ivory Coast](#), and cases of [underpayments on coffee plantations in Brazil](#).



Eucalyptus monoculture plantation: located in the HSJ, according to the community there are approximately 70,000 trees near the banks of the Muco river (caño). In the short term, forest crops such as rubber, teak, tropical Caribbean pine, yopo, acacia and eucalyptus within the HSJ will be developed.

¹⁰ This [voluntary endorsement for sustainable cattle](#) ranching was created in Colombia in 2020. It has 4 pillars: environment, people, animals and management, with 50 sustainable cattle raising practices.

Climate

Emissions from the Colombian Orinoquía primarily originate from the AFOLU (Agriculture, Forestry and other Land Use) sector, driven by deforestation and changes in land use, and enteric fermentation from livestock. According to the references used in the Landscape Document of Hacienda San José, soil carbon reserves are between 15 to 20 tons per hectare, similar to the Brazilian Cerrado, with a significant portion located in gallery forests. A report by the International Center for Tropical Agriculture (CIAT) commissioned by the company, indicates a substantial increase in emissions due to a rise in the cattle population.

When considering only CO₂, this type of forage has the capacity to capture 2.5 tons per hectare per year. One of the same publications of the interviews with Hacienda San José mentions that the production of each kilogram of meat from

the Nelore breed emits 17 kg of CO₂. Assuming a conservative weight of 400 kg per beef (considering that [an adult bull can weigh up to 1000 kg](#)) and producing 305 kg of meat, [each cow emits 6,800 tons of CO₂ before slaughter](#), presumably, at two years of age. Therefore, 7,500 cattle would produce 51,000,000-tons. Even with the assumption that the 8,800 hectares of the Hacienda are planted with the aforementioned forages, only 22,000,000 tons of CO₂ would be captured. Which implies that there is not even compensation. This calculation does not include emissions from the use of tractors, boats, or trucks to transport livestock, changes in soil due to activities, fertilizer use, and other factors.

According to [the same report](#) cited in the Landscape Document of Hacienda San José: "This is offset by greater sequestration, particularly of soil, although this will occur over longer periods of time, is reversible and has a high degree of uncertainty. Good pasture management undoubtedly increases carbon stocks, but reliable quantification generally requires field testing, which can be expensive." The report also highlights that increased tree planting can significantly increase carbon sequestration.

Part of the promotion of Hacienda San José is the use of living fences, described in the Landscape Document as 400 kilometers of pine trees (though they are actually eucalyptus). Sikuani women have worked on tasks like fumigating these fences without any protection against agrotoxics. In the participatory workshops, community members from the RI Campo Alegre and Ripialito estimated that 70,000 individuals visit the banks of the (Caño) Muco river.



Nelore cattle breed inside Hacienda San José.

Although this is not an exorbitant amount, there are other precedents for financing eucalyptus forestry monocultures in the name of climate action. One such example is the [Paracel project in Paraguay](#), promoted by the Arbaro Fund and funded by the GCF. This project has faced criticism from local organizations for displacing agricultural production, lacking prior consultation processes, undermining food sovereignty, and the reproduction of life in communities in areas surrounding these crops.

It would seem that Hacienda San José has no problem with forestry monocultures, evident in its alliances with APRODENA,

and particularly with palm oil and real estate companies. Although extensive documentation of eucalyptus monocultures in the Colombian Orinoquía is lacking, there have been numerous concerns raised for several years about the expansion of oil palm monocultures in the region. These concerns encompass issues related to property acquisitions, working conditions, impacts on water, connections with the armed conflict, and more. The inclusion of species such as pine or eucalyptus, often managed as monocultures, in the justification of so-called sustainable projects, is deemed unacceptable.



Nelore cattle breed inside Hacienda San José.

Conclusions

Although the formal commencement of the expansion project has not occurred, Hacienda San José seems to have fulfilled several of its commitments on paper. However, a closer examination reveals discrepancies, including lower employment than advertised, inadequate socialization or “support”, and questionable ecological and climate certifications. These aspects cast doubt on the project’s financing as a climate action and as an alternative for sustainable production.

Both livestock expansion and monoculture tree plantations have already been shown to have adverse climatic and ecological effects, and generate impacts on excluded populations, such as women, indigenous peoples and impoverished rural communities. Financing these types of practices as climate action is a dangerous distraction that leads to forgetting integral routes and possibilities that include fair and sustainable ways of inhabiting the world, and recognizing the potential of diets with local and agroecological products to face many contemporary problems.



This report was made possible through support from Oxfam Novib and Misereor. The views expressed by our contributors are not necessarily the views of donors.