# 1. Scope of the Environmental and Social Review

Kahai SAS ("Kahai" or "the Company") is a company dedicated to the industrialization of the cacay tree (Orinocense Caryodendron), native of the Amazon rainforest. Since 2009, it has endeavored to open markets for cacay nuts, oil and flour. The company operates in the Meta district, with offices and a processing plant in the city of Villavicencio, and plantations and a nursery in the adjacent farms of "El Cimarrón" and "Matalarga" in the Nueva Fundación neighborhood of the municipality of Puerto Gaitán, Colombia. The company Agrocacay SAS ("Agrocacay" or "the Company") is in charge of the plantations and nursery. It owns both farms, totaling 1320 hectares (ha) of land in which it plans to gradually extend the cacay plantations while respecting protected areas. The Project financed by IDB Invest will be developed in the Matalarga estate (600 ha).

The scope of the IDB Invest's environmental and social review included the analysis of Project data and documents, in addition to meetings and conference calls with its representatives. In addition, IDB Invest conducted an Environmental and Social Due Diligence visit (DDAS) on August 15 and 16, 2019, which included the following activities: (i) meeting with Kahai staff; (ii) inspection visit to the plantations, nursery and associated facilities, including the accommodation area for field staff; and (iii) visit to the nut processing plant.

# 2. Environmental and Social Categorization and Rationale

The Project is classified as a Category B operation under IDB Invest's Environmental and Social Sustainability Policy, since its impacts and risks are mostly limited, reversible, and can be managed through the implementation of social and environmental programs and plans and widely available technologies. The purpose of the Project is to finance the maintenance of existing cacay crops on own land and to expand plantations by an additional 300 hectares.

The Project's possible environmental and social risks and impacts mainly include: (i) hazardous (or special handling) and non-hazardous (or domestic) waste generation; (ii) polluting emissions into the atmosphere (mainly, dust from land readying and the transit of agricultural vehicles and machinery, and combustion gases from agricultural vehicles and machinery); (iii) domestic wastewater generation; (iv) generation or increase of occupational health and safety risks and (v) resource use, such as energy and surface or groundwater sources.

The Project will trigger the following Performance Standards (PS): PS 1: Environmental and Social Assessment and Management System; PS 2: Labor and Working Conditions; PS 3: Pollution Prevention and Abatement; and PS 6: Biodiversity Conservation and Sustainable Management of Natural Resources.

#### 3. Environmental and Social Context

Agrocacay has more than 1300 hectares of land for cacay crops. Kahai has a nursery on Agrocacay land where it produces grafted cacay seedlings. The grafts produced by Kahai decrease the unproductive period from 8 to 3 years, increasing productivity by up to 80%[2].

The fruit supply to meet the demand for cacay is scarce, which is why the company seeks to increase production through its own plantations and by gaining suppliers through the promotion of this crop to other farmers.

Agrocacay's lands in Puerto Gaitán, which are intended for use as plantations and for the nursery's production, are located in an area of high agribusiness potential, with dense low herbaceous plant cover, crops, and forest relics.[3] Kahai, which owns Agrocacay, has a Permit for persistent

harvesting for commercial purposes of non-timber forest products of the species Cacay (Caryodendron orinocense) issued by the environmental authority of the Meta district, i.e. the Corporation for the Sustainable Development of the La Macarena Special Management Area (CORMACARENA, for its acronym in Spanish), in June 2017. The permit considers the purposes of transformation and commercialization, specifically the extraction of fallen ripe fruits (ripe fruit, nuts and seeds) in 192 female individuals in the Meta district. This permit is valid for five years.[4]

Kahai is responsible for registering, and then reporting incoming trees into its supply chain. To this end, Kahai has established appropriate channels of communication and coordination with the Regional Environmental Corporations (mainly with CORMACARENA). The exploitation of trees planted on private land outside the forest does not require a permit for non-timber forest use.

The Ministry of Environment and Sustainable Development has yet to regulate the rates for non-timber products[5]; therefore, authorized products are exempt from forest harvesting rates. Growing does not require licenses or permits from the corresponding Colombian authority. The cacay grafted seedling production nursery has been authorized by the Colombian Institute of Agriculture (ICA, for its acronym in Spanish) since 2015, while cacay farming is in the process of being registered with this entity. Registering this crop is voluntary, but it is useful to obtain a good agricultural practices certification down the line.

Agrocacay's lands, which have no registered communities or private housing, border on extensive areas of soybean crops. Agrocacay's main on-site operations are land adequacy and preparation for planting seedlings and the maintenance of current cacay crops (comprehensive management of weed control, reseeding, insect control, pests and disease evaluation, fire control and road maintenance). The processing plant located in Villavicencio receives nuts (green and dried) purchased from the company's suppliers, where they are selected and prepared for oil extraction, flour production, or drying for direct consumption. These products are part of the marketing chain for the cosmetic and food industries.

# 4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

## 4.1. Assessment and Management of Environmental and Social Risks and Impacts

#### 4.1.a E&S Assessment and Management System

The company has adapted and updated its existing procedures and policies in order to include them in its Environmental and Social Management System (ESMS). There is only one ESMS, which applies to both Kahai and Agrocacay.

The ESMS includes policy definition, risk and impact identification, management programs, organizational capacity and competency, emergency preparedness and response, stakeholder engagement, and an internal communications mechanism. The mechanism to monitor and review the ESMS is currently being designed.

Although the implementation and consolidation of the ESMS are still in their early stages, Kahai and Agrocacay have committed to develop and implement them in line with the provisions of PS1.

#### 4.1.b Policy

Kahai and Agrocacay's operations have an Environmental and Social Policy, which, together with the corporate social responsibility, contracting, purchasing, and occupational health and safety policies, comprise the set of policies currently applied in the Project.

In July 2019, all of the Companies' policies were reviewed, updated and approved by Management, pending their dissemination. Through their Environmental Policy, Kahai and Agrocacay undertake to comply with national environmental legislation, as well as to prevent, mitigate, correct or compensate for unwanted environmental impacts. Their Social Policy frames the ethical behavior of Companies within a framework of respect and promotion of human rights, extending compliance to contractors and suppliers. Finally, their Corporate Social Responsibility Policy commits to take actions focused on generating employment and income, promoting the environment, and supporting vulnerable populations and the victims of armed conflict.

## 4.1.c Identification of Risks and Impacts

Kahai and Agrocacay have an Environmental Management Plan (EMP) that identifies their significant, negative and positive environmental impacts for each stage of their processes. Some negative impacts that could materialize with the implementation of the Project are: gas emissions, soil compaction, changes in soil chemistry, impacts on the ecosystem's flora and fauna, impacts on surface and groundwater quality, and increased noise levels. The positive impacts of the Project include reforestation with non-timber forest products, reconversion of extensive livestock areas, reuse of waste and biomass in other processes, changes in work dynamics, and an increase in pollinating insects.

The ESMS also identifies occupational health and safety (OHS) risks based on the roles and activities of each Company employee, setting out management measures for them. However, given that the execution and operation of the Project is dynamic, the Companies will continually update their environmental, social and OHS risk matrix for each phase of the Project.

## 4.1.d Management Programs

Kahai and Agrocacay's EMP identifies control measures for: i) water use and protection, ii) air emissions management, iii) adequate land use, iv) ecosystem protection, and v) waste management. In addition, Kahai will develop procedures and records for the proposed control measures. The ESMS has procedures for adopting corrective and preventive actions, whereby all employees have the power to identify and record violations of the ESMS, propose or suggest actions to be taken, request a root cause analysis, and propose corrective or preventive actions, appointing officers responsible for their execution.

#### 4.1.e Organizational Capacity and Competency

The Administrative Manager is responsible for managing the ESMS and OHS, actively involving all staff in their implementation, as stated in the company service manual. The current design of the ESMS includes the definition of the roles, duties and capacities of the personnel vis-à-vis the ESMS. However, Kahai has yet to allocate complementary human resources to ensure the effective implementation of the ESMS.

As part of the ESMS, the companies have developed a personnel training matrix that includes issues related to safety, health and prevention and emergency response. However, this matrix does not include personnel training on environmental and social issues and lacks records of its implementation.

#### 4.1.f Emergency Preparedness and Response

Kahai and Agrocacay have an Emergency Plan that covers all their operations and defines the duties of employees and visitors in the event of fire, earthquakes, terrorist attacks, robberies and kidnappings. The plan also identifies the measures for risk reduction and prevention of possible

operational failures. For example, in the event of a fire, which is classified as medium risk, the preventive maintenance program includes installing fire extinguishers in different areas within the facilities, a fire network in the building and emergency brigade training on fire prevention and firefighting. A procedure is also included for differently-abled people (people with physical, auditory, visual and intellectual disabilities) during evacuations and in the event of medical emergencies.

The plan's dissemination activities use supporting material[6] prepared by the company Aseguradora de Riesgos Laborales (ARL), which has been made available in the company's various divisions.

#### 4.1.g Monitoring and Review

In compliance with its non-timber forest harvesting permit, Kahai submits annual activity reports to CORMACARENA that include information on tree identification, silvicultural management activities developed with suppliers, pest management (e.g., hornworm), and management of plant residues generated from forest harvesting (fruit epicarp and wooden pits). This report contains records on the fruits, nuts and seeds harvested, identifying individuals based on the numbering assigned by the company. Similarly, it submits quarterly reports to the ICA on the nursery's plant management.

The ESMS contains a review procedure by the general management that includes the Occupational Health and Safety System (OHSS) and a checklist to verify how these systems work, based on the results of audits, management and process indicators, and the results of corrective and preventive actions taken.

Kahai is responsible for ensuring the implementation of the follow-up, monitoring and control plans of the Project ESMS and of the obligations included in its permits and licenses. In this regard, Kahai will develop two matrices, one to measure the effectiveness of the implementation of the ESMS and another for the fulfillment of all legal obligations during the Project implementation, operation and maintenance.

## 4.1.h Stakeholder Engagement

The programs developed by Kahai and its suppliers focus on harvesting cacay, thereby improving their revenue. Kahai actively promotes cacay farming with institutions interested in supporting production projects in the region and generating employment for mothers who are heads of household, displaced persons and victims of violence.

Kahai's stakeholders have been identified, but have yet to be mapped or specifically included in a stakeholder engagement plan. Kahai maintains contact with its local, regional and national stakeholders, for which it uses various publications that are disseminated through various media and communication activities. Kahai and Agrocacay's CSR policy also requires the preparation of a "Sustainable Development Report", which consolidates the monitoring and evaluation of all its programs and activities on an annual basis.

#### 4.1.i External Communication and Grievance Mechanisms

External communications on environmental, social and occupational health and safety issues are done via the e-mail address published on the Company's website (info@kahai.co). In addition, Kahai has published a telephone number (also on its website) as a complementary means for its employees and the general public to channel their grievances, claims, suggestions and requests for information.

The ESMS receives, documents, records and attends to external communications, creating a record of the inquiry or grievance and the decision or content of the related action taken. However, to

ensure the fulfillment of PS-1, its system shall be updated to document: (i) how information is received from key stakeholders and/or the general public; (ii) how these grievances are evaluated; (iii) how responses are provided and followed up, concluding with the closure of the grievance; and (iv) any adjustments or improvements, in terms of communicating and disseminating information.

## 4.2 Labor and Working Conditions

## 4.2.a Working Conditions and Management of Worker Relationships

Labor relations issues are governed by the contracting policy and the internal labor regulations, both of which are in line with local labor laws. In addition, Kahai fosters diversity and equal opportunities in hiring, employment, development and retention.

The total number of workers to date, considering both Agrocacay and Kahai's operations, is 54 people (13 of whom are women). However, Kahai's hiring peak is during the harvest season, when the total number of workers among both companies increases to 80 (30 of whom are women). In the case of Agrocacay, the peak is during sowing season, when workers increase from 30 to 44. It is estimated that 11 new workers will be incorporated with the implementation of the Project. During the sowing and harvesting/production periods, all new workers have to pass a pre-occupational medical examination and sign a contract for a minimum period of two months. All workers receive corresponding employment benefits in accordance with local labor laws.

The company provides accommodation for workers who perform on-site activities. The camp is equipped with rooms, a kitchen, bathrooms, offices, a laundry and a recreation area. The basic cleaning is done by the residents, who organize themselves into shifts and teams, as defined in a "Common Areas Cleaning Policy" (published inside the facilities). All rooms have natural ventilation and mosquito nets on the windows; Kahai asks the workers to bring, as personal items, their sheets and mosquito nets for their beds.

The facilities use self-generated solar power; water comes from a deep well and is purified before being used in the plantation cafeteria. Every day workers are provided with three meals, three liters of water, sugar and lemon to carry out their work on the fields.

#### 4.2.a.i Human Resources Policies and Procedures

Kahai has a Recruitment Policy that defines the recruitment and selection framework, highlighting its commitment to promotion and gender equality, favoring youth access to their first job, emphatically prohibiting child labor, and facilitating measures that promote work-life balance. The Company has also developed its Internal Labor Regulations, which set forth comprehensive worker protection, the obligations of both the employer and the employee, and the list of misdemeanors and disciplinary sanctions.

#### 4.2.a.ii Working Conditions and Terms of Employment

The Project has an internal labor regulation that defines employment terms and conditions, work schedules, and the responsibilities of both the employer and employees. The farm's work schedule, which consists of 22 days of work and 6 days off, from 6:30am to 3:00pm, is considered convenient by the workers because it lets them rest properly and reduces their exposure to the sun.

Overtime is duly clocked and paid according to the provisions in the work contracts. All on-site personnel have written contracts, with a minimum working period of two months. The Administrative Management of Kahai, which is also responsible for administrative issues in Agrocacay, ensures that each person understands the contracts before signing them, talking with

the workers both collectively and individually, responding to their inquiries and answering their questions. This process is clear, transparent and suitable even for workers with lower literacy levels or whole mother tongue is not Spanish.

The Internal Labor Regulations have been updated and reviewed. However, Agrocacay has yet to publish them and thus comply with the provisions of the Labor Code.

## 4.2.a.iii Workers' Organizations

Kahai and Agrocacay workers are neither unionized nor belong to labor organizations. However, in accordance with local legislation, a Joint Committee on Occupational Health and Safety and a Coexistence Committee must be formed; both with the participation of Company and workers' representatives.

# 4.2.a.iv Non-discrimination and Equal Opportunity

Kahai's CSR Policy promotes diversity, equal opportunity and support for vulnerable populations and victims of conflict. During the ESDD visit, the promotion of women's work in the Villavicencio plant and farms was evident, as well as the incorporation of indigenous people into agricultural work. In addition, 9% of the workers are Venezuelan migrants who have arrived by their own means, and the company has also provided them with job opportunities.

#### 4.2.a.v Retrenchment

The retrenchment processes after the sowing and harvesting periods are set out in the contract. Contracts for workers entering these periods last for two months; some of them could be renewed depending on the demand for work after the sowing and harvesting periods.

#### 4.2.a.vi Gievance Mechanism

Kahai and Agrocacay promote an atmosphere of openness and communication in their work environments. The supervisors of both companies aim to encourage their groups of workers to express themselves in the event of their identifying deficiencies or if they have grievances. The company also has internal labor regulations stating that workers' grievances will be communicated to the company's Administrative Manager, who will listen to them and resolve said grievance with justice and fairness. In addition, Kahai has formed the Coexistence Committee, with Company and worker representatives, where workers' concerns and grievances are addressed in bulk.

In view of the different formal and informal mechanisms available, Kahai will consolidate them into a Conflict and Grievance Mechanism, including its proper formats for receiving formal grievances, whether anonymous or otherwise, and the grievance response format. Kahai and Agrocacay will disseminate the Mechanism among their workers, keep a record of grievances received and addressed, and analyze the performance of the mechanism.

## 4.2.b Protecting the Workforce

The Internal Labor Regulations highlight the work that is prohibited for women and children under 18 years of age due to exposure to risks to their health or physical integrity (in accordance with the law). Likewise, this regulation adheres to the provisions set forth in Law 1010 on the mechanisms for the prevention of workplace harassment and internal settlement procedure. Therefore, the Company has set up the "Work Coexistence Committee", which is made up by two parties, one representing the Company and one for the workers, in order to address cases of workplace harassment.

## 4.2.c Occupational Health and Safety

Kahai has an Occupational Health and Safety Policy that provides the management framework for its operations in fulfillment of the national regulations in force, including, explicitly, identification, assessment of risks and controls against hazards to which all employees, contractors and subcontractors are exposed.

The Occupational Risk Administrator (ORA) performs inspection visits of working conditions at Kahai operations. The most common diseases among workers are dengue, muscular injuries and diseases caused by common viruses (e.g. the common cold). In the last twelve months, the Company has reported to the ORA two occupational accidents (lower back pain and foot injury), which in total represented a loss of 60 days of work.

Kahai and Agrocacay have carried out a self-assessment of the minimum OHS standards in accordance with the legislation in force, obtaining an implementation level of 83.5% (moderately acceptable). In response, they have implemented an improvement plan, which considers actions, persons responsible, compliance dates and resources allocated for both companies. This plan also has three framework actions: (i) keeping the Ministry of Labor (MoL) informed, (ii) sending a progress report to the ORA and (iii) implementing a visit plan for the MoL.

Agrocacay keeps records of the delivery of personal protective equipment (PPE) for its workers, and requires medical examinations upon joining the company, withdrawal, and also at regular intervals during the performance of their duties. The company also uses audiovisual material produced by the ORA or the manufacturers about the safe use of insecticides, assessing their effectiveness on-site.

## 4.2.d Supply Chain

The Purchasing and CSR Policy sets out the need to carry out evaluations and ratings of supplier performance applied in terms of the characteristics of the product purchased or service contracted, social and environmental responsibility, and OHS standards. Likewise, the ESMS has a procedure for selecting and reassessing suppliers.

Kahai provides technical assistance to farmers and institutions that promote the planting of cacay to develop them as suppliers. This guarantees the quality of the fruit, implements technology transfer, operates in compliance with the requirements of its non-timber forest use permit and its CSR Policy. Kahai also encourages the growth of the supply chain through alliances with other institutions (CorpoAmazonía, Amazon Conservation Team, GIZ, BioCarbon Fund).

As demanded by its non-timber forest harvesting permit for commercial purposes, Kahai maintains a detailed record of its suppliers and the cacay trees within its production chain. Most of the former are in the Meta district (189 beneficiaries), followed by the Putumayo (25), Guaviare (12), Caqueta (10) and Vaupez (4) districts.

#### 4.3 Resource Efficiency and Pollution Prevention

## 4.3.a Resource Efficiency

The characteristics of Agrocacay's fields are represented in topographic maps where plots, access roads (external and internal), water sources, forests, camps, etc. are outlined. The plantations respect water source buffer zones, leaving a strip of 30 meters from the edge of the streams to the areas intervened for growing. Plantations coexist with pre-existing vegetation and maintenance activities; weed management and the application of fertilizers and insecticides are limited to the area around the tree trunk (planters of approximately one meter in diameter) and, less frequently, in

the access roads (external and internal).

The power supply in the camp is solar and self-generated (installed power of 3 kW). Unfortunately, its performance is poor, and it has presented installation and operating problems. The Company has a diesel backup generator, and its ignition, shutdown, and fuel consumption are controlled under time registration. The offices in Villavicencio are connected to the main power grid.

Cacay biomass by-products (nutshell) are used as a fuel source in the fruit drying process.

#### 4.3.a.i Greenhouse Gases

In the Plantations, the main gas emission is Nitrous Oxide (N2O), which is produced by nitrogen-based fertilizers. Other activities that generate gas emissions are vehicles and agricultural machinery, which emit Carbon Dioxide (CO2). In the agroindustrial extraction activities carried out at the Villavicencio plant, gas emissions are produced by the biomass used in the drying processes.

Kahai asked CORMACARENA for the technical and environmental criteria it applies to emissions permits, for the nut-drying process that uses the shells (exocarp) of the cacay nut as fuel. In response, CORMACARENA stated that in order to process the permit in question, it is necessary to carry out "isokinetic monitoring for particulate matter (PM) and nitrogen oxide (NOx) pollutants at the time of greatest production". Such monitoring is programmed to take place during the first quarter of 2020. After analyzing its results, CORMACARENA will confirm to the Company the technical criteria required to issue the emission permit allowing the use of cacay nutshells as biofuel.

# 4.3.a.ii Water Consumption

Agrocacay promotes the care and conservation of water through personnel training, with its principal aim being to avoid the excessive and uncontrolled application of agrochemicals that use water in the product mix. Agrocacay plantations are not intensively irrigated; irrigation is rainfed (rain-dependent) and sprinkler irrigation, the source of which is the rainwater collection system installed in the worker camps area, is only used in the nursery. At the industrial level, no water is used for processing. Water is supplied to the worker camps by means of a deep well that uses a mill (6 meters high) to extract water from an approximate depth of 26 meters.

Water from the well is used for fertilizer and insecticide mixing operations, for staff consumption (after passing through a purifier) and for cleaning the housing complex, cafeteria, and offices. Because well water is not used for productive purposes (nursery and plantations), Agrocacay does not require a water use permit. The Company will implement a water consumption register to measure its current consumption and forecast future consumption. Additionally, Agrocacay will monitor water quality to ensure its drinkability.

#### 4.3.b Pollution Prevention

Kahai keeps its warehouses well organized; it carries out adequate fuel management and controls the access of people to its premises. The plantation has a septic tank in operation to treat the wastewater it generates, which shall be complemented by a grease trap.

Kahai has been processing the air emissions permit for its cacay processing plant in Villavicencio with CORMACARENA. The cacay drying process uses combustion ovens fueled by nutshells, whose emissions have yet to be identified. Kahai shall ensure that the emission permit has been obtained and the corresponding monitoring implemented when production begins.

#### 4.3.b.i Wastes

The solid waste produced in the camp, the plantation offices, and the facilities in Villavicencio correspond mainly to domestic solid waste; in addition, the agricultural activity produces special and hazardous waste (medicine containers, herbicides, insecticides, etc.).

The plant residues that are generated by the processing of cacay are reused in several ways: the epicarp of the cacay fruit and the wooden pits are used as fuel for drying ovens; the other plant residues are used as livestock feed, organic fertilizer or soil cover to control weeds and erosion.

Domestic solid waste is separated into containers identified by a color code, in accordance with Colombian guidelines. Its final disposal is as follows: in Villavicencio, through the municipal public service, and in Puerto Gaitán, in coordination with a company authorized for this purpose. Agrochemical and fertilizer containers (plastics and waste mix), are also classified on site and their final disposal is entrusted to certified third parties. However, the waste management system does not keep track of the waste that is generated, reused and ultimately disposed of.

#### 4.3.b.ii Pesticide Management

The pesticides used in Agrocacay operations are blue label (medium level of caution). Agrochemicals (fertilizers, insecticides) are acquired through the Company's purchasing system. The only insecticide used in the plantation is LorsbanTM 4 EC, which belongs to the organophosphate group whose action is by contact, ingestion and inhalation. Precautions for use and storage[7] of all these compounds are carried out in accordance with the procedures suggested by the companies that manufacture them. Kahai will complement its purchasing procedure by incorporating the non-use of pesticides that do not meet the requirements of PS 3.

The personnel handling these products wear appropriate protective equipment (mask, gloves and goggles). During application, personnel are not allowed to drink or eat food. Kahai staff monitors the cacay tree foliage to identify the presence of insects that feed on its leaves and determine the damage caused to the plant, its level of incidence and severity, and perform, if necessary, a timely control. Crops are further managed with entomopathogens that act as biological controllers of rooteating pests. The Company will consolidate these practices into a Comprehensive Pest and Vector Management Plan, with explicit reference to the management and use of pesticides as required by PS 3, including a staff training program.

## 4.4 Community Health, Safety and Security

The Project does not trigger PS-4 because the Company does not employ private security contractors and it does not rely on military or police forces to protect its personnel, its property or its assets. Since there are no nearby communities that could potentially be affected by the Project's operations, Agrocacay does not have an Emergency Plan or a Community Emergency Preparedness Plan.

## 4.5 Land Acquisition and Involuntary Resettlement

The Project does not trigger PS-5, as it will be developed in previously acquired and owned properties. Agrocacay has the property deeds, certificates of tradition, real estate registrations and confirmation of the legal ordering of the land through title and legality of purchase studies. In addition, the Matalarga site on which the Project will be executed has official confirmation by the authority that the land does not have any pending requests for inclusion in the "Registry of forcibly dispossessed or abandoned land".

In the unforeseen event that the acquisition of additional land is required, Kahai and Agrocacay's

Social Policy sets out that for property management and negotiation of easements, it will act in a responsible manner aligned with PS-5.

## 4.6 Biodiversity Conservation and Management of Natural Resources

## 4.6.a General Requirements

The land use of the El Cimarrón (720 hectares) and Matalarga (600 hectares) farms has been mainly associated with semi-intensive livestock farming, introduced pastures and cut pastures, associated with agroforestry activities (fruit trees, rubber, timber species)[8]. According to the Geographic Information System of the Instituto Geográfico Agustín Codazzi (SIGAC, for its acronym in Spanish), the main land use proposal for both farms is the conservation of native forest and reforestation of degraded areas; annual and perennial crops and pastures for semi-intensive livestock, with practices that protect vegetation.

At the request of Kahai, in June 2018 CORMACARENA issued an identification of "environmental determinants" (areas that must be conserved and protected) for the El Cimarrón farm, which highlights that the farm has 9 lotic ecosystems (streams), 1 slow ecosystem (wetland) and 9 natural outcrops of water (spring heads). In accordance with local legislation[9], each of the identified ecosystems and spring heads shall maintain a water protection strip comprised of protective forest areas[10]. CORMACARENA determined that in El Cimarrón a total of 94.5 hectares must be protected and conserved (52 hectares due to streams, 14 hectares due to wetlands and 27 hectares due to spring heads). The Matalarga farm has yet to identify areas that must be preserved and protected according to CORMACARENA.

Kahai and Agrocacay's EMP frames their responsibility for biodiversity management and commitment to "favoring the processes of biological corridors through the gallery forests adjacent to the crops or the restoration of degraded areas to favor the creation of niches and habitats with native flora for common local, regional and migratory fauna species of the Meta District" (Kahai EMP, 2019). To comply with the above, Kahai has implemented control measures resulting in programs and procedures incorporated into its ESMS.

Kahai has entered into technical agreements with Agrosavia, the institution in charge of agricultural research in Colombia; it has consolidated a good coordination with the Colombian Agricultural Institute (ICA) to strengthen the tasks of phytosanitary diagnosis of cacay pests and diseases; and has obtained the advice of GEBO Laboratories (producer of biological inputs) for the implementation of biological management practices for the control of pests, diseases, and weeds, using living organisms to control problem populations.

#### 4.6.b Protection and Conservation of Biodiversity

The Project area is located in an area of high environmental vulnerability (class 3)[11] because of the activities that were developed there prior to Agrocacay, which generated an environmental deterioration of the area both through the use of natural resources (water, soil, flora and fauna) and through pollution processes due to the use of agrochemicals and improper waste disposal (SIGAC, 2003). According to Agrocacay's land use aptitude analysis, this vulnerability condition does not represent limitations for the good management of the cacay crop, since the resources can be used in a reasonable way and standards and techniques that favor the environment can be applied.

The Puerto Gaitán Planning Office issued the "Land Use Concept" document, which confirms that, according to the current Land Management Scheme, Agrocacay lands are located in rural soils where the permitted uses are "protective forest - Protective forestry and agricultural producer". It

should be noted that the forest areas that are within the Agrocacay lands will be conserved even when the Project requires expansion. In addition, the EMP sets out that minimal tillage will be conducted for cacay farming, involving only 27% of the total land area, which avoids the disturbance of the soil and allows the capture of rainwater in the area of influence of the roots.

Kahai keeps a record of the companies, organizations, and people that buy cacay seedlings from its nursery, which allows it to identify potential suppliers of this product (the cacay is a late, but perennial crop). In addition, CORMACARENA requires that the Company notify it when it identifies tree felling that lacks authorization by the competent authority (especially trees located in protected water body areas) to expand cacay farms.

## 4.6.c Sustainable Management of Living Natural Resources

Agrocacay does not have information on the native fauna and flora present in its land, however, in compliance with an ecosystem protection control measure, defined in the environmental management plan, the Company has installed billboards informing its workers of the prohibition from hunting or capturing species for commercial purposes or for domestication. Agrocacay will develop a biodiversity baseline in the primary forest areas present in its farms and a critical habitats analysis.

# 4.6.d Supply Chain

As part of the requirements set forth in the non-timber forest use permit, CORMACARENA requested that the Project support its suppliers on issues related to silvicultural management, field fertilization, and phytosanitary control to improve their development. Consequently, Kahai has been conducting training and knowledge transfer campaigns with its suppliers on issues of good crop management.

## 4.7 Indigenous Peoples

Agrocacay maintains relations with a small group of individuals of indigenous descent (a dozen people, who reside in the surroundings of Puerto Gaitán), restricted to the provision of work under the regulations set forth in the applicable legislation. It also does this through NGOs to which it has sold cacay seedlings for local production programs implemented by these populations.[12] However, the Project does not trigger this Performance Standard, since there is no record of indigenous peoples in the area where it develops its activities and no effects of any type on these communities is foreseen.

## 4.8 Cultural Heritage

The Project does not take place in an area with current or possible presence of cultural heritage, so it does not trigger this Performance Standard.

#### 5. Local Access of Project Documentation

The documentation related to the project can be accessed at the following link:	
https://www.kahai.co/	

- [2] Source: https://www.kahai.co
- [3] The Subdirectorate of Agrology of the *Instituto Geográfico Agustín Codazzi* (SIGAC, for its acronym in Spanish) has implemented and maintained a geographic information system (GIS) for the production and supply of agrological products, on which Kahai has based its environmental and land use analysis for the lands it owns.
- [4] Resolution No. PS-GJ.1.2.6.17.0889.
- [5] Article 5 item 29 and Article 42 of Law 99 of 1993.
- [6] These materials include emergency brigade handbooks, posters for the prevention of fires (especially forest fires), landslides, floods, earthquakes and terrorism, which contain recommendations on what to do before, during and after the emergency, as well as contact numbers within the country.
- [7] For example, products are not stored or transported together with food. Storage is done together with agricultural tools and supplies in a mixed-storage warehouse. Each type of input has a defined location, and everything is properly labeled.
- [8] Geographic Information System of the Instituto Geográfico Agustín Codazzi (SIGAC) 2003.
- [9] Decree 1076 of 2015, Article 2.2.1.1.18.2.
- [10] The strips correspond to 100m around the springs of water and a strip of no less than 30m in width parallel to the channels of water courses and around water reservoirs.
- [11] Class 3 groups land with moderate limitations and restrictions for use due to erosion, slope, soil, moisture or damage, alone or in combination. These reduce the chances of crop selection and planting times and imply proper tillage and harvest practices. These lands can be used in agriculture with moderate to intensive conservation practices and intensive livestock farming with high yield pastures (IGAC, 2014, Methodology for land classification by their capacity for use, available online <a href="here">here</a>).
- [12] It is expected that these communities' production could be part of the Kahai supply chain, which would be the anchor company that would buy cacay production. Work with the communities is managed directly by the NGOs (CorpoAmazonía, Amazon Conservation Team, etc.).