



## Project summary

# JARI AMAPÁ REDD+ PROJECT

Proponents: Jari Group and Biofílica Environmental Investments

Project start: February/ 2011

Location: Amapá, Brazil

Project area: 65,980 hectares

Total estimated emissions reductions: 5.536.218.8 tCO<sub>2</sub>e

## A. Project Description

### General Description

#### A.1 Context

The Brazilian Amazon initial causes of deforestation are connected to occupation policies and infrastructure investments started in the 60s. As a consequence of these policies, occurred the implementation of large infrastructure projects subsidized by the Brazilian government with the opening of roadways, colonization projects, cattle raising and agriculture, such as the Jari Project itself idealized by Daniel Ludwig in 1967. In 2000 Group Jari acquired a relevant portion of the Jari Valley restructuring it both economic and socially.

The Jari Valley enacts a very important role as home for over two thousand rural families and behave as an ecological corridor connecting several Conservation Units. With a very rich biodiversity, its vegetation includes eight forest and non-forest types and species of extreme importance ecologically (54 species of flora are considered threatened) and socially (extractivists' communities have the diverse flora as a source of income and food). Regarding Fauna it is also home for over two thousand species of animals, from which over a hundred are considered endangered.

Most of the deforestation occurred in the Amazon region is related to the implementation of large infrastructure projects, population migration, settlements and activities related to agriculture and cattle raising. It is possible to notice that in recent years there has been an increase in diffuse deforestation as observed in the Jari Valley. Throughout the years this diffuse deforestation pattern of the squatters will consolidate into large spots of deforested areas. The demand for more forest areas is mainly related to small scale agriculture and grazing areas, and several other subjacent causes related to political, economic and social issues collaborate to the amount of pressure over the forest cover in the region.

#### A.2 Main Goals

- Forest protection and monitoring: implementation of conservation activities which will reduce deforestation risks;
- Scientific researches in the area: promotion of studies focused on the efficient use of natural resources and scientific research applied to biodiversity; and
- Social inclusion of communities living within the project area: activities implemented by Jari Foundation focusing on favoring sustainable businesses chains to generate additional income to the communities and avoid leakage.

Such actives will be economically feasible with the combination of FSC-certified Management (FSC certified low impact forest management) and the commercialization of verified emissions reductions generated through the REDD+ mechanism.

Proponents and Partners	
<b>Biofílica Environmental Investments</b>	<p><b>Main functions: Project Proponent</b>, general coordination of the socioeconomic and environmental assessment, baseline studies and carbon stock, PDD (project design document) development and financing, implementation activities, project's carbon validation/verification, credits trading and project co-management.</p> <p>Biofílica Environmental Investments is a Brazilian Company that provides environmental services and credits through the management of native forest areas in the Amazon biome. The company was established in 2008 aiming to create pioneering alternatives and to turn environmental conservation into an economically attractive activity for forest owners, communities and investors. Biofílica's mission is to reduce deforestation and carbon emissions into the atmosphere, to preserve biodiversity and hydric resources, to promote social inclusion and the development of communities living within the Amazon biome through the trade of environmental services credits and to promote and finance scientific researches and the development of sustainable business chains.</p> <p style="text-align: right;"><b>Plínio Ribeiro</b>  <b>Phone: +55 11 3073-0430</b>  <b>E-mail: plinio@biofilica.com.br</b>  <b>Website: www.biofilica.com.br</b></p>
<b>Jari Florestal</b>	<p><b>Main functions: Project proponent</b>, Project co-management, sustainable forest management operator, as well as all related activities such as the environmental and social management of the Project to reduce negative impacts and generate positive ones.</p> <p>Jari Florestal S.A. is a Group Jari company, whose commercial focus is the production of FSC-certified tropical sawn wood. As a result of having a privately managed area and a sawmill, it can ensure a perfect control of its chain of custody: from the inventory to the client, providing total certainty regarding the origin of the wood. Constant investments in technology and production as well as efficient logistics structure have made Jari Florestal one of the main green stamped Brazilian companies. Founded in 2003, located in the Jari Valley in Pará, Jari Florestal turned into a global reference for developing sustainable forest management (FSC-certified Management) in 745 thousand hectares in the Amazon using low impact techniques to match the use of the forest to its conservation.</p> <p style="text-align: right;"><b>João Antônio Prestes</b>  <b>Phone: +55 11 4689-8700</b>  <b>E-mail: jprestes@grupoorsoa.com.br</b>  <b>Website: www.grupoorsoa.com.br</b></p>
<b>Jari Celulose</b>	<p><b>Main functions: Project proponent</b> and landowner. It is responsible for title and land tenure regulation, security and land surveillance.</p>

	<p>Jari Celulose S.A. is a Jari Group company producer of bleached eucalyptus pulp and is the only Brazilian company and the first in the world to receive the FSC Pure Label certificate for its whole chain of custody.</p> <p><b>Vinícius M. Garcia</b>  <b>Phone: +55 11 4689-8700</b>  <b>E-mail: vmgarcia@gruppoorsa.com.br</b>  <b>Website: www.grupoorsa.com.br</b></p>
<p><b>Jari Foundation</b></p>	<p><b>Main functions: Partner</b>, development of social activities and Project's social management.</p> <p>Jari Foundation is a non-profit organization belonging to Group Jari that, together with a large network of partners, develops programs and projects on education, health, human rights, environment, culture and employment and income generation. Since 1994, the foundation has assisted over 6.8 million people in Brazil.</p>
<p><b>Instituto Homem e Meio Ambiente da Amazonia - Imazon</b></p>	<p><b>Main functions: Partner</b>, development of baseline studies and carbon stock.</p> <p>Imazon is a nongovernmental organization that has been promoting the development of the Amazon for 17 years through its studies, public policies formulation, broad dissemination of information and construction capacity.</p>
<p><b>Instituto de Pesquisas Ecológicas (Institute for Ecological Research) - IPÊ and Arvorar</b></p>	<p><b>Main functions: Partner</b>, technical coordination of the socioeconomic module and development of environmental and socioeconomic assessment.</p> <p>IPÊ is currently one of the largest NGOs in Brazil, and it takes on an integrated action model developed over years of experience combining research, environmental education, habitats restoration, social involvement and sustainable development, preservation and preparation of policies. Arvorar is an IPÊ subsidiary that innovates solutions for current environmental challenges using modern forest restoration techniques.</p>
<p><b>Centro Internacional de Pesquisa Florestal (Center for International Forestry Research) (CIFOR)</b></p>	<p><b>Main functions: Partner</b> carrying out Global Comparative Study on REDD+</p> <p>CIFOR is a non-profit research organization located in Bogor, Indonesia whose mission is to promote human well-being, environmental preservation and equity by conducting research to inform practices and policies affecting forests in developing countries.</p>

Scope and Type of Project	
A.3 Scope	Agriculture, Forestry and Other Land Uses (AFOLU)
A.4 Type of Project	Reducing Emissions from Deforestation and Degradation (REDD+)
A.5 Methodology	Avoided Unplanned Deforestation (AUD) - VM0015
A.6 Size of the Project	Medium to large
A.7 Project Area	65,980 hectares
Location of the Project	
A.8 Country	Brazil
A.9 State	Amapá
A.10 Region	Jari Valley
A.11 Nearest Cities	Laranjal do Jari and Vitória do Jari
A.12 Biome	Amazon Forest
Regulation	
A.13 International Agreements	Not valid under Kyoto Protocol's CDM. Warsaw Framework for REDD+ strengthens these types of activities by providing general guidelines for national-based approaches.
A.14 National System	No current national REDD+ system in place. Project being designed for the voluntary market and will comply with any future national or state regulation.
A.15 Compliance with laws	The compliance with laws, statutes and other regulatory frameworks is mainly linked to the forest management activity. Jari Celulose have the license from IBAMA (Brazilian Environmental and Natural renewable Resources Agency) and the Forest Stewardship Council (FSC) Certification, which is also an evidence of proponents' commitment to respect laws, statutes and other regulatory structures.
A.16 Relationship with the Government	State Government is fully aware of the project through its State Institute of Forests and Environmental Secretariat.
A.17 Land Tenure	Jari Celulose is the rightful owner of the area where the Jari/Amapá REDD+ Project is located and has the Right of Use of the project area, according with VCS Standard criteria.

Schedule	
A.18 Project Start Date	February 14th, 2011
A.19 Project Crediting Period Start Date	February 14th, 2011
A.20 Project Crediting Period	30 years
A.21 Validation Date	July 10th, 2013
A.22 Last Verification Date	July 10th, 2013
A.23 Current Status or Phase	Project Validated and Verified under VCS Standard, CCB project design under development, monitoring of climate activities, ongoing implementation of socioeconomic and biodiversity activities and implementation of the responsible sustainable forest management.

## B. Expected Benefits

Climate	
B.1 Agents, Drivers and Underlying Causes of Deforestation	Squatters in the Reference Region represent the only group responsible for unplanned deforestation (agents), driven by population migration and demand for new small scale agricultural and grazing areas (drivers). There are several factors acting as underlying causes of deforestation, since the occupation policies and infrastructure investments started in the 60s by the Brazilian Government and more recently with land speculation, land tenure conflicts, invasion of land and lack of public policies and sustainable alternatives to activities that lead to forest degradation and deforestation.
B.2 Deforestation at Baseline	11,070 hectares would be deforested at the Project absence.
B.3 Emissions at Baseline Scenario	5,536,218.8 tCO <sub>2</sub> e would be emitted at the Project absence.
B.4 Estimative of Emissions Prevented	3,450,278 tCO <sub>2</sub> e will be prevented by the Project activities.
B.5 Estimative of Average Annual Emissions Prevented	An average of 115,009.3 tCO <sub>2</sub> e yearly will be prevented by the Project activities.

<b>B.6. Potential VCUs in the Project Timelife</b>	2,821,169.8 VCUs will be potentially generated considering discount of buffer and others.
<b>B.7 VCUs Issued</b>	243,378.1 VCUs were issued on its first verification.
<b>B.8 VCUs Tradable Available</b>	Approximately 200,000 VCUs are available for sale.
<b>Communities and Socioeconomic</b>	
<b>B.9 Communities Engaged</b>	França Rocha, Fé em Deus, Valdomiro/Barbudo, Tira Couro, Sombre da Mata, Igarapé das Pacas, Nova Conquista and Água Azul.
<b>B.10 Other Stakeholders Engaged</b>	RURAP - Rural Development Institute of Amapá, IEF - Forest State Institute, SEMA - Environmental State Secretariat, TERRAP - Land Institute of Amapá, IMAP - Environment Institute of Amapá, SEICOM - Industry and Trade State Secretariat, SDR - Rural Development Secretariat, Laranjal do Jari Municipality (Environment and Agriculture Secretariats), Vitória do Jari Municipality (Environment and Agriculture Secretariats), Rural Workers Union of Vitória do Jari and Laranjal do Jari.
<b>B.11 Initial Conditions</b>	According to the Jari Valley Human and Sustainable Development Plan the Project region known as Jari Valley encompasses a population of approximately 100,000 people whose majority is concentrated in the urban area of three neighboring municipalities and the rural population distributed in 180 small rural communities. A survey carried out showed that communities' greatest weaknesses are related to education, health, citizenship, technical assistance to improve production and transportation logistics for their products.
<b>B.12 Activities</b>	Promote stakeholders articulation, technical rural assistance and extension, associativism capacitation and marketing access facilitation to the communities in order to support the development of activities profitable to social wellbeing and economic alternatives to deforestation as a way to do sustainable business.

<b>B.13 Expected outcomes</b>	<p>I. Generation of income to the communities;</p> <p>II. Improvements of agricultural production, facilitating sales of products as a result of technical assistance and inputs and technical capacitation of the communities;</p> <p>III. Avoiding rural exodus and marginalization of people in the cities because communities will have conditions to remain in the rural area with good standards of living;</p> <p>IV. Reducing risks of extreme weather events due to climate change by reducing forest deforestation.</p>
<b>B.14 Assessments</b>	<p>Number of communities and families engaged, family income, access to public policies and services (e.g. rural technical assistance), main crops production levels (those essential to support families livelihood), management of non-timber forest products, market access and demand for new cropland areas.</p>
<b>Environment and Biodiversity</b>	
<b>B.15 Vegetation and Flora Conditions</b>	<p>The vegetation of the Project region can be considered as formed by Dense Submontane Ombrophilous Forest and Dense Lowland Ombrophilous Forest in its vast majority (83.6%). Dense Ombrophilous Forest areas are forest types commonly found in tropical regions and are characterized by dense and hummed forests. Within the Project Area it is constantly observed individuals of <i>Bertholletia excelsa</i> Bonpl (Lecythidaceae), known as the Brazilian nut tree, which represents a historically important source of income for the forest extractivists' communities and it is in the endangered species official red list (IUCN). The Project area has a number of recorded taxon, which makes evident the existence of an extremely rich flora as compared to other works developed in the Amazon. Forest inventories conducted by Jari Florestal have shown a <b>carbon stock average of 80tC/ha or 566.0 tCO<sub>2</sub>eq/ha.</b></p>



<b>B.16 Fauna Conditions</b>	<p>The Jari Valley area presents a diversified fauna including 2,069 recorded species: 144 species mammals species; 516 bird; 157 amphibians and reptiles; at least 277 species of fish species; and 859 species of insects. 133 of these are on CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) list of endangered species. Considering the Brazilian Environment Institute (IBAMA) list, the following are present: armadillo (<i>Priodontes maximus</i>), jaguar (<i>Panthera onca</i>) and woodcreeper chicken (<i>Dendrexetastes rufigula</i>). On the IUCN Red list there are: sun parakeet (<i>Aratinga solstitialis</i>), toad (<i>Atelopus spumarius</i>), giant anteater (<i>Myrmecophaga tridactyla</i>), armadillo (<i>Priodontes maximus</i>), spider monkey (<i>Ateles paniscus</i>), tapir (<i>Tapirus terrestris</i>), spectral bat (<i>Vampyrum spectrum</i>), jaguar (<i>Panthera onca</i>), white-lipped peccary (<i>Tayassu pecari</i>), Guiana crested eagle (<i>Morphnus guianensis</i>) and harpy eagle (<i>Harpia harpyja</i>).</p>
<b>B.17 Main Threats</b>	<p>The main threats to biodiversity on the project are deforestation (land use conversion to agricultural and grazing areas), poor waste management, fire (used to prepare the land to an agricultural use) and predatory hunting.</p>
<b>B.18 Activities</b>	<p>Monitoring flora and fauna (through partnership with research institutions and universities) of both endangered/ endemic species and sensitive ones such as the dung beetle, which is usually recognized as a strong indicator of a healthy tropical ecosystem, responsible use of forest resources in tandem with its conservation through collectivism, prevention of extraction of specific vegetation species and hunting of wild animals by third parts (through land inspections), maintenance of a Xylotheque (Wood Collection with 620 samples from the region) and fostering of applied scientific research especially focused on biodiversity and environmental services.</p>
<b>B.19 Expected outcomes</b>	<p>Preservation of threatened and endemic species, follow-up the ecosystem balance, conservation of vegetation and its genetic resources (through degraded areas restoration and maintenance of a nursery), act as a buffer zone to neighbor protected areas and preservation of the Amazon forest heritage through the Xylotheque.</p>
<b>B.20 Assessments</b>	<p>New deforestation areas, waste and residues management, conservation of fauna and flora, soil erosion and deterioration, water quality and fire detection.</p>

## Annex I - Location

