### **Environmental and Social Review Summary**

#### **EcoPlanet Bamboo Central America**

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA's Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by MIGA's Board of Directors. Board dates are estimates only.

Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country: Nicaragua Sector: Agribusiness

Project Enterprise: EcoPlanet Bamboo Central America, LLC

EcoPlanet Bamboo (UK) Limited EcoPlanet Bamboo IOM Limited

Environmental Category:

Date ESRS Disclosed: November 16, 2012 Status: Due Diligence

### A. Project Description

The Project entails the purchase and conversion of degraded land in Nicaragua into fully-functioning bamboo plantations for the sale of pre-processed bamboo for export, mainly to the US market. EcoPlanet Bamboo Group LLC ("EPB Group") of USA, through its wholly-owned subsidiaries EcoPlanet Bamboo Central America, LLC ("EPB CA"), EcoPlanet Bamboo (UK) Limited ("EPB UK"), EcoPlanet Bamboo IOM Limited ("EPB IOM") (together the Project Enterprises), owns, develops and operates 1,854 hectares ("ha.") in the Southern Atlantic Autonomous Region ("SAAR") of Nicaragua. The group also plans to establish a pre-processing facility to produce bamboo strips, wood chips and pellets used by wood manufacturers. Waste and lower value culms will be processed into charcoal to fuel the company's processing operations.

EPB Group started its operations in Nicaragua in 2010 with the establishment of a commercial bamboo nursery, followed by the purchase and development of land in 2011. It currently operates three farms: Rio Kama (918 ha.), Rio Siquia (890 ha.) and Rio Escondido (38 ha.). The Rio Kama farm and the original area of the Rio Siquia farm have been fully planted with bamboo, while 455 ha of the Rio Siquia farm were purchased on November 13, 2012 and will be planted in the next few months. The Rio Escondido farm is used mainly for testing and intercropping, and each farm has its own nursery. The farms are operated by EcoPlanet Bamboo Nicaragua ("EPB Nicaragua"), which is a wholly-owned subsidiary of EPB CA. EPB Group also owns another property, Port Rama (7.05 ha.), where EPB Nicaragua's offices are located and where the pre-

processing facilities will be established. All properties are connected by a network of rivers, and municipal and dirt roads.

EPB Central America plans to become a global leader in the supply of certified bamboo fiber to wood manufacturing entities. It has begun the process to double its plantation holdings in Nicaragua, aiming to develop an additional 1,250 ha. The company will also begin investment in the construction of pre-processing facilities on the Port Rama property in 2013/2014. The client has indicated that it intends to farm bamboo using a mixture of traditional, organic and agroforestry techniques and endeavors to limit negative impacts.

## **B.** Environmental and Social Categorization

The project is categorized as B under MIGA's Policy on Social and Environmental Sustainability, because the potential social and environmental impacts are limited, few in number, site-specific, largely reversible and readily addressed through mitigation measures. Bamboo will initially be planted on approximately 1,400 ha of degraded forestry land at two sites, expanding to 3,000 ha within a year. The risks are related to potential pollution due to the use of agro chemicals and liquid and solid wastes, and social issues related to workers and communities health and safety in and around the project site, including increased traffic and the use of security guards.

## C. Applicable Standards

While all Performance Standards are applicable to this project, MIGA's environmental and social due diligence indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS1: Social and Environmental Assessment and Management System
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety and Security
- PS6: Biodiversity Conservation and Natural Resources Management

The following standards have not been triggered:

- PS5: Land Acquisition and Involuntary Resettlement. The land was purchased through "willing buyer, willing seller" arrangements and title deeds were made available to MIGA during due diligence.
- PS7: Indigenous Peoples. No Indigenous Peoples (IP) are present in the areas surrounding the project site and nearest IP are approximately 90 Kilometers from the project site.
- PS 8: Cultural Heritage. One grave yard exists on Rio Siquia farm. This has been fenced off and access is unobstructed

In addition, the following World Bank Group Environmental, Health and Safety (EHS) Guidelines are applicable to this project:

- General EHS Guidelines
- Industry Sector EHS Guidelines for "Plantation Crop Production"

## D. Key Documents and Scope of MIGA Review

The review of this project consisted of appraising the technical, environmental, health, safety and social information submitted by the project enterprise, review of company's environmental systems and field visit conducted by MIGA's Social and Environmental (S&E) Specialist. The MIGA S&E specialist visited the project site in October 2012 and met with project staff and management; the local community; the Ministry of Environment and Natural Resources (MARENA); the Secretariat for the Development of the Caribbean Coast (SDCC) and the Council of the Southern Atlantic Autonomous Region (CSAAR) in Bluefields. In addition to the site visit, the Definitive Application for a MIGA Guarantee and other communication with the project and sponsor, MIGA has reviewed the following documents:

- Rio Kama Farm, Plantation Management Plan, June 2012, EcoPlanet Bamboo, Central America
- Rio Siquia Farm, Plantation Management Plan, June 2012, EcoPlanet Bamboo, Central America
- Integrated Pest Management Plan, March 2012, EcoPlanet Bamboo, Central America
- Environmental Impact Study (EIS) of Bamboo Plantations for Commercial Use in Kama River Project, El Rama, Nicaragua, September, 2011
- Environmental Impact Study for a Bamboo Plantation in the Rio Siquia Farm in El Rama, Nicaragua, August 2011
- Climate, Community, Biodiversity Alliance (CCBA) Project Document, August 2012
- EcoPlanet Bamboo Group Overview, May 2012
- Report on the port of El Rama, Jan 2008
- Report on the water ways of the Rio Escondido, SAAR, July 2008
- Eco-planet Bamboo data sheet on workers and areas planted, September 2012
- List of invitees to stakeholder meetings during DD mission
- Authorization for the project from the Southern Atlantic Autonomous Region (SAAR) Secretary for the project, March 29<sup>th</sup>, 2012
- Certificate of recognition for the contributions to the environment by ECP LLC from MARENA, June 29<sup>th</sup> 2012
- Certificate of Inspection from the Fire Department, 20<sup>th</sup> February, 2012
- Certificate of recognition of EPB Central America, President CRAAS, 9<sup>th</sup> April, 2012
- Social Impact Policy, EcoPlanet Bamboo Group, 17<sup>th</sup> April 2012
- Environmental Policy, EcoPlanet Bamboo Group, 17<sup>th</sup> April 2012
- Corruption Policy, EcoPlanet Bamboo Group, 17<sup>th</sup> April 2012
- Tax Certificate, 11<sup>th</sup> June, 2012
- Recognition of EPB on their contribution to protecting the rights of women, 15<sup>th</sup> August, 2012
- Regulations of Forest Stewardship Council (FSC) verification for certification
- Pro-Nicaragua folder, Investment Promotion Agency, Nicaragua
- Rainforest Alliance Validation Statement for EcoPlanet Bamboo Group, LLC, conformance with the Verified Carbon Standard, Version 3, November 7<sup>th</sup> 2012
- Assessment of the presence of High Conservation Value Forests (HCVF's) within EcoPlanet Bamboo Central America Forest Management Units (FMU), July 7<sup>th</sup> 2012

• Executive Summary of Rio Kama Forest Management Plan and Executive Summary of Rio Siquia Forest Management Plan, August 2012

# E. Key Issues and Mitigation

### PS1: Social and Environmental Assessment and Management Systems

At the time of planting, bamboo was neither classified by the Ministry of Environment and Natural resources (MARENA) as an agricultural crop nor as forestry, and therefore the bamboo project did not require an Environmental Impact Assessment (EIA) to be submitted to MARENA and no environmental permit to operate is therefore required.; however, EPB determined that it was important to understand the potential impacts in order to manage the operations appropriately. An EIA was therefore developed for both plantations in August 2011 and plantation management plans in October 2011. These are updated at regular intervals and are based on ensuring that the plantations adhere to the principles of sustainable forest management, as dictated by the Forest Stewardship Council (FSC) through which the company is certified and by the company's environmental policy which was approved by EPB management in April 2012. Included in the plantation management plans are details of forest management, harvesting and processing, infrastructure and equipment and employment procedures.

In compliance with PS 1, Social and Environmental Management Plans (SEMP) for each farm along with a set of key indicators to monitor and mitigate adverse impacts have been developed and online database for the storage of these monitoring events has been created. An Environmental Health and Safety Manager will be hired as a full time position in early 2013, and annual monitoring of these indicators, required for the below certification standards, will be carried out.

The plantations have been developed in line with the most stringent certification standards for sustainable forest management. Field audits were carried out in August 2012, and non-conformities addressed immediately:

- 1. Forest Stewardship Council (FSC¹) Forest Management certification was achieved on November 9<sup>th</sup> 2012
- 2. Verified Carbon Standard (VCS<sup>2</sup>) for the validation of the project and future sale of up to 816,000 tons CO<sub>2</sub> equivalent was achieved on November 8<sup>th</sup> 2012
- 3. Climate Community Biodiversity Alliance (CCBA<sup>3</sup>) is currently undergoing the final peer review, and certification is expected by November 20<sup>th</sup> 2012

Monthly meetings are held at each farm with the Senior Management Team (SMT) to discuss progress, budget, needs and any issues which have been raised by staff via the suggestions boxes located on each farm.

A staff training program was completed for 2012 and included the following:

- Uses of bamboo for construction 9 trainees
- Working with bamboo 12 trainees

<sup>2</sup> http://www.v-c-s.org

<sup>1</sup> http://www.fsc.org

<sup>&</sup>lt;sup>3</sup> http://www.climate-standards.org

- Bamboo cultivation, including integrated pest management 7 trainees
- Bamboo taxonomy 8 trainees
- Bamboo management 8 trainees
- Carbon credit certification -4 trainees
- Farm tractor driving and maintenance training 8 trainees
- Weed whacker training 8 trainees
- Fire safety and protection 66 trainees
- Forestry Stewardship Certification (FSC) all employees

In addition to the above, a training program is being developed by the company for 2013 for all staff to include activities related to cultivation, health and safety, etc.

## PS2: Labor and Working Conditions

EPB currently employs approximately 302 staff across all three farms, including 100 females (approximately 33%). Of total staff, 29 men and 32 women are on temporary/seasonal contracts. At the peak of production, the farm is expected to employ approximately 500 staff. The company ensures that no child labor is employed and staff must have a national identification card to prove they are over 18 before they can be hired. A Human Resources (HR) office is situated at each farm where all relevant laws and manuals are available. The company has represented that wages and benefits are above the national minimum and no lower than sector or countrywide commercial standards. Benefits include holiday pay at two and half days per month, thirteenth month paid, health insurance for worker and family, pension scheme, Personal Protective Equipment (PPE), end of year party, Worldwide Bamboo Day party, a chicken per month, scholarship plan for university and onsite training. A human resources manual has been developed and was submitted to the "Ministry of Labour" and approved on October 9th 2012. The manual reflects policies and procedures covering areas such as recruitment and selection, retrenchment, performance, grievances and role of union. Construction contractors, for the processing plant, will also be obliged to comply with EcoPlanet Bamboo's HR and OHS policies. At the Rio Kama farm, staff are members of a workers union, as one has been established in this area as a result of a large oil palm project situated close to EPB. As yet, there is no such system at Rio Siguia farm; however the option to join is being explored.

Each farm has its own clinic where minor illnesses, such as headaches, cuts, fever, etc. can be treated. There is a health post fifteen (15) minutes' drive from the Rio Kama farm and from there patients are transported to El Rama which is one (1) hour by car. From the Rio Siquia farm, patients are transferred to El Rama. There are six (6) brigades of staff which have received the Red Cross training on first aid, distributed across Rio Siquia, Rio Kama and Rio Escondido farms. All staff will be trained in firefighting as in the dry season; the dropped bamboo foliage can be a fire risk. Once the bamboo is of an age where such foliage is present, a pre-planned system of fire breaks will be implemented.

Appropriate Personal Protective Equipment (PPE) is provided to all staff including contractors. Training is provided prior to each spray season to train staff on fertilizer handling, application and disposal. An Emergency Preparedness and Response (EPR) plan has been developed and implemented for life and fire safety, and hazardous spills or accidents. As mentioned previously, a member of the SMT oversees OHS. The client will develop, by June 2013, in accordance with World Bank Group (WBG) EHS sector guidelines, standard operating procedures (SOPs) and OHS guidelines for all operations on the farm to address risks related to pesticide and fertilizer handling (including chronic exposure), bamboo cultivations and harvesting, pre-processing, etc.

The prepared SOPs and guidelines will be shared with MIGA for review and comments. The company has also implemented an accident and incident reporting system which is tracked by the senior managers who assess the types of accidents occurring and adjust operations to reduce risks.

## PS3: Pollution Prevention and Abatement

Environment, health and safety (EHS) operating procedures have been developed within the plantation management plans, and annual monitoring will occur once the EHS Manager is on board. The company only uses organic fertilizers and pesticides that have been approved for use by the FSC. Instructions to that effect are in the purchase department guidelines/procedures. Fertilizers and pesticides are only purchased when required in order to reduce the need for storage. A fertilizers and pesticides store, in compliance with the FSC requirements for safety, storage and ventilation, exists within each plantation and is locked and managed appropriately with adequate signage.

Empty containers are cleaned efficiently and transported to La Esperanza, located 10 km from El Rama, and within one hour drive of either plantation, for recycling. Fertilizer application equipment is cleaned out after use at the designated washing site where the wastewater drains into a biological filtration system. Detoxification showers are available at all nursery sites in case of accidents. The company has produced an Integrated Pest Management (IPM) plan which presents pest control methods for the farms. The first line of defense is with organic pesticides. Current research is being done to specifically tailor organic fertilizers to the needs of the plant, taking into account differences in soil degradation and lacking nutrients across different areas of the plantation. A worm composter is also being established on site in order to produce organic fertilizer. Crop residues handling will remain in-situ and will be used as organic fertilizer. Hand weeding is carried out. Cultivation is limited and therefore heavy machinery is not necessary which reduces negative impacts on the soil. Horses are used to reach to the farm and there are a couple of tractors to carry heavy loads.

Some drainage ditches were developed on Rio Kama farm, as there was an area of low lying water. The drains were developed on the contour lines with the use of branches and stones in order to reduce soil erosion. Gravity drainage is used for all other land to improve the development of the root system of the plant.

There are a limited number of vehicles, which include a couple of tractors and a couple of jeeps. These are maintained at offsite garages. In the event that a vehicle is maintained on site such as an oil change, the used oil is reused to paint fences or given to local farmers who use it to oil their machinery. At each farm approximately 50 gallons of diesel and 85 gallons of gasoline are stored in a designated store room which requires the addition of secondary containment in case of spillages which the company has agreed to. Average annual fuel consumption on all farms is 2,928 gallons. Although previously stored together, paint supplies have been moved to a separate storage room that will be equipped with proper safety measures and in accordance to the WBG EHS guidelines.

Guadua aculeata variety of bamboo is being grown on all farms. It is native to this area of Nicaragua and is a clumping variety which does not spread roots far from the original plant; therefore the chance for the plant to become a pest is minimal. Furthermore this species flowers and sets seed only every 60+ years, and having seeded in Nicaragua during the 2009-2012 period, it is unlikely that seed will occur, and therefore the chance of plants spreading is low. Seedlings are currently being purchased from a nursery 40 km away and are transported to each farm where they are further developed until they are ready to plant out.

All waste is separated to enable composting of approximately 1,200 lbs of organic material per month. Remaining waste of approximately 700 lbs per month is transported to the municipal dump, while containers and bottles are cleaned according to FSC guidelines and transported to Managua to be recycled at a privately managed recycling center.

Pit latrines are available for all workers throughout the farm at regular intervals. These latrines, with a depth of 2 m, were constructed in 2012, and are expected to be utilized for a period of 5 years prior to being emptied. To maintain cleanliness and avoid contaminants, the upper layer of each latrine is covered with calcium every 15 days,

The nursery at each farm has the capacity to pump 4,600 gallons/hour (gph) of water from the river for irrigation of the seedlings. An extraction license is not required. Irrigation depends on weather conditions and during the wet season or rainy days the pumps are not used at all. During summer and dry days the irrigation pumps are used for approximately four hours per day, two in the morning and two in the afternoon, pumping around 18,400 gallons/day. The maximum water usage occurs in February (driest month), when water is pumped every day resulting in a usage of 515, 200 gallons of water during the month.

There are also a number of wells on the farms which are used for irrigation and no extraction license is required. Purified drinking water is provided at each location.

No generators are used as city power is used as a general source of power to the farm sites except Rio Siquia. Rio Kama, which is on the grid, uses approximately 650 watts per month. In contrast, Rio Siquia is off the grid and is self-sufficient, with three solar panels installed; two that provide 200 watts, and a smaller one with a capacity of 110 watts. A consultant carried out an assessment of renewable energy sources for the farms and determined solar power and wind would work best, therefore these may be adapted moving forward. Once the processing plant is operational, the use of bamboo chips for energy will also be considered.

Currently air pollution is limited; however, once the company begins harvesting bamboo, efforts will be made to keep dust to a minimum by watering sites every four hours. The client confirmed that trucks carrying loose material will be covered.

In order to reduce noise pollution, all machinery will be well maintained and operating hours will be during day light only.

Once bamboo is ready to harvest, it will be cut and transported to the preprocessing site at Port Rama. It will be transported by river and road and a transportation manual will be developed to ensure no negative social or environmental impacts, especially with regards to pollution of water courses. Once it has been processed predominantly into wood chips or pellets, it will be transported by ship down the Escondido River to the sea and from there to the United States of America (USA).

## PS 4: Community Health, Safety & Security

The farm sites are located close to local communities; however, there are no communities living on the farms. All farms are guarded by the local police who are armed. When the company management staff travels from site to site, they travel with armed police. The police have been trained appropriately and no issues were reported by the communities.

All drivers are licensed and trained appropriately. Signage will be added to the farm roads to remind staff to keep within the speed limits.

Once the processing plant is established, training courses will be offered to local communities on how to work with bamboo in order to create small businesses.

Due to a large palm producing company which has it border with EPB there has already been an influx of people who are not from the area looking for work. This influx has not caused any issues in the communities and issues are not anticipated if people come into the area as a result of the bamboo project. EcoPlanet Bamboo has in place formal grievance procedures, as documented within the plantation management plans. These include regular stakeholder meetings within an open forum, and the ability for any stakeholder to leave anonymous messages which are responded to first by plantation managers, and if not solvable, by the President. The company has in place policies dictating how, and the time period within which all such grievances must be resolved.

## PS 6: Biodiversity Conservation and Natural Resources Management

The main issues under Performance Standard 6 are related to the presence of protected species on the project site and the need to manage natural resources appropriately. During the EIA process flora and fauna surveys were completed by recognized specialists utilizing internationally accepted methodologies. Floral inventories were taken using plots of 1,000 m2 across the pre-identified vegetation strata. Within these plots a local botanical specialist identified all species present. Inventories from different parts of each farm, based off visual and sound encounters were carried out over the space of two weeks, to determine full species inventory for birds, mammals and herpetiles. Full details of these are available within the EIA for each farm.

The ProForest Toolkit was used for the identification of high conservation value forests (HCVFs) combined with expert opinions and it was determined that (1) the small size of existing forest fragments; (2) the individual occurrence of each of these species; and (3) the fact that EcoPlanet Bamboo is actually restoring habitat rather than destroying it, means that the presence of these species does not result in a HCVF. This was confirmed during the August 2012 FSC audit. The species listed below, are found on international classification lists and were identified as being present on the project sites.

## International Union for Conservation of Nature (IUCN<sup>4</sup>) Red list Species found on site

#### Rio Siguia

- Least Concern (LC): Caluromys Derbianus (Central American Wholly Opossum)
- Critically Endangered (CR): Ptychohyla hypomykter (No common name/amphibian).

#### Rio Kama

No endangered animal species at this time but the following tree species are listed:

- Critically Endangered (CR): Lonchocarpus yoroensis (Chaperno tree)
- Endangered (EN): Zanthoxylum belizense (Lizard tree)
- Endangered (EN): Vitex gaumeri (Bimbayan)

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<sup>4</sup> http://www.iucn.org

In addition to the above mentioned species, Convention on International Trade in Endangered Species (CITES) 5 lists a number of species, which can be found within the project sites as follows:

#### Rio Siquia

- Caiman crocodilus (common caiman) and Iguana iguana (Green Iguana) are listed under protection level II
- Boa constrictor (Boa Constritor) is listed under protection level I
- The following bird species are listed under II protection level: *Brotogeris jugularis* (Orange Chinned Parakeet), *Aratinga finshi* and *Aratinga Nana* (Olive throated Parakeet)

#### Rio Kama

The following bird species are listed under protection level II: Buteo magnirostris (roadside hawk), Elanus leucurus (white-tailed kite), Buteo brachyurus (short-tailed hawk), Micrastur semitorquatus (collared forests falcon), Brotogeris jugularis (Orange Chinned Parakeet), Aratinga Nana (Olive throated Parakeet), and Amazilia tzacatl (rufous-tailed hummingbird).

There is one mammal species protected under CITES, which is Alouatta palliata (mantled howler monkey) under protection level I.

Lastly, the Iguana iguana (green iguana) is an amphibian listed under protection level II.

Under the Indefinite National Ban and Partial National Ban, which is the Nicaraguan classification system of prohibiting the trade in endangered species, the following species were sighted on the farms.

- Buteo magnirostris (Roadside Hawk)
- Aratinga finshi (Crimson Fronted Parakeet)
- Brotogeris jugularis (Orange Chinned Parakeet)
- *Aratinga nana* (Olive Throated Parakeet)
- *Alouatta palliata* (Mantled Howler Monkey)
- Iguana iguana (Green Iguana)

EPB confirmed that an environmental specialist will be hired in January 2013 and will be responsible for compliance with the various certification schemes, as well as to develop a Biodiversity Action Plan (BAP) to protect and enhance the vulnerable and endangered species and to conserve all other biodiversity on the farms. Forestry reserves have been established on the site and these areas include habitats of the protected species. No trees have been removed during bamboo cultivations and it is the policy of the company to (1) restore habitat connectivity and maximize biodiversity through the development of a continuous and permanent canopy cover, and therefore increase habitat protection for biodiversity within all levels of the canopy and (2) to maintain existing fragments of natural forest within the plantation as conservation areas. The company has developed strict policies surrounding these areas which have been demarcated and set aside as protected areas, with no harvesting, hunting or fishing to occur. An environmental monitoring plan will form part of the Biodiversity Action Plan in order to monitor and record the numbers of protected species against the baseline in the EIA. The areas that have been set aside for conservation will be monitored with regards to total area every year, as required by both the FSC annual audits, and the VCS verification events. These monitoring events won't measure

<sup>&</sup>lt;sup>5</sup> http://www.cites.org

biodiversity, but will measure habitat size, and connectivity, and ensure that they are being positively impacted. A biodiversity audit will occur every three to five years in accordance with the company's commitment to the CCBA standards. The farms will be operated with strict adherence to the mitigation and monitoring plans to ensure that the natural habitats of the identified protected species are not destroyed and/or fragmented. No Ramsar sites are located near the project site and the closest protected area is approximately 90 km away.

The company is Forestry Stewardship Council (FSC) certified and Verified Carbon Standard (VCS) validated. Maintenance of the FSC certificate requires annual audits to ensure continued conformity to the FSC principles and criteria, while VCS verification events will occur periodically, enabling the company to sell verified carbon credits on the international market.

In addition the company expects to receive the final certification by the Climate Community Biodiversity Alliance (CCBA) by November 20th 2012. Such CCBA certification results in the mandatory monitoring and reporting of social and environmental benefits. Monitoring of these benefits for the CCBA standard will occur every 5 years.

One of EPB primary objectives is to positively impact tropical forest biodiversity, through the provision of meeting market demands with a sustainable alternative to timber that is currently being logged from natural forests. The company has been shortlisted to 10 finalists for World Wildlife Fund (WWF) Switzerland's Tropical Forest Challenge, as the for-profit company doing the most to positively impact tropical forest conservation. Through the commitment to such standards it is expected that the project activities will not only maintain fragmented areas of remaining forest as conservation areas, but also enhance biodiversity in this area and thereby comply with Performance Standard 6.

## F. Environmental Permitting Process and Community Engagement

A meeting was held with the Vice Minister of MARENA in Managua to discuss the project prior to plantation development. At the time of planting bamboo was neither classified by MARENA as an agricultural crop nor as forestry, and therefore the bamboo project did not require an Environmental Impact Assessment (EIA) to be submitted to MARENA and no environmental permit to operate is therefore required. Although not required by law, the company commissioned an EIA to provide baseline data for the social and environmental aspects, and to be used as guidance for their operations and during the various certification processes. Once the company establishes its pre-processing facility, an EIA may be required by MARENA which will also monitor project activities following the issuance of an environmental permit to operate. The SAAR council has approved the project as it falls within their jurisdiction.

EcoPlanet Bamboo's mission is to enable livelihood diversification, financial stability and economic development within the company's areas of operation. This is achieved through providing stable employment opportunities, combined with technology transfer, to enable communities to develop sustainably.

Regular stakeholder meetings are carried out with the workforce of each plantation, along with any local stakeholders. These happen on a monthly basis, with the last such meeting occurring on November 6th 2012. During these meetings EcoPlanet Bamboo provides updates, and allows for questions, suggestions etc. There is also a period during which the community expresses their own requirements. Although EcoPlanet Bamboo has a structured mechanism for providing assistance and local support, these meetings allow for the communities to continually update their own priorities against which EcoPlanet Bamboo compares the baseline socio-economic analysis.

During the November 6th meeting EcoPlanet Bamboo provided employees and communities with information regarding the new water system that is being installed on all farms, to ensure that all stakeholders have access to clean drinking water.

Although EcoPlanet Bamboo prefers to facilitate communities' abilities to help themselves, rather than direct philanthropic donations, the company does regularly get involved in small scale initiatives to support the greater community. Over the past year, the company has spent about \$9,946.30 to finance the following:

- Donation for the repainting of La Fonseca Church
- Donation to the school in La Fonseca
- Donation to La Fonseca's school teacher and Community Leader
- Donation to the football team to purchase uniforms
- Radio Dignidad January Oct 2012
- Donation to fight against social problems in Rama
- Donations to cover costs to celebrate Bluefields Autonomous Celebration
- Donation for security in Cruz de Rio Grandes-Bluefields
- Awards to the winner of the FSC contest
- Police donation for the construction of a police stand
- Donation to the Police in La Fonseca to buy beds

Although EcoPlanet Bamboo already provides healthcare and a full time nurse on each plantation, the company agreed to further support local healthcare through the financing of a permanent doctor within each community. This will be financed and organized through the Ministry of Health before the end of 2012.

Minutes are taken of these meetings, along with a list of attendees, any concerns or questions raised, and the outcome of each meeting. These files are kept within each farm office and within EcoPlanet Bamboo's Rama headquarters.

Community consultation meetings at three sites were held during the MIGA S&E site visit. A wide range of stakeholders were invited, including some staff; local parish representative; youth representative; school teacher; representative of mayors office responsible for environmental issues and who used to be responsible for cadastral issues; representative of MARENA; local community representative; police chief; police security officer; representative of Ministry of Health at local clinic and the local pastor. On the whole, the community representatives expressed that they have had a positive experience with the company so far and that they feel the project is bringing only positive benefits to them and the environment noting that women in particular are being treated equally and that biodiversity has increased since the start of the project.

A grievance mechanism, in compliance with Performance Standard 4, will be developed to provide impacted communities with a formal process to raise any issue with EPB management.

A community development plan will be developed in due course which will include education, potable water, health, security, recreation facilities, etc. The company is committed to work with local Non-Governmental Organizations (NGO) and Community Based Organizations (CBO) to make the community development activities more sustainable. On site clinics are available to local communities who are also receiving language and mathematics training. Thirty to fifty percent of the profits of the carbon credits scheme will be held in a community foundation. The

community foundation has not yet been established; therefore further details of how this will operate needs to be developed.

### G. Availability of Documentation

The following documents are available electronically as PDF attachments to this ESRS at www.MIGA.org and www.ecoplanetbamboo.net local administrative offices and EcoPlanet Bamboo farm offices:

- Executive Summary of EcoPlanet Bamboo's Forest Management Plan, August 2012
- Climate, Community, Biodiversity Alliance (CCBA) Project Document, August 2012

The Corporate Social Responsibility policies of EcoPlanet Bamboo, covering anti-corruption, land acquisition, adherence to the FSC principals, social and environmental objectives of the company, can be made available upon request to Kristena Blume at the following email address:kblume@ecoplanetbamboo.com