### RSPO

### **PROCEDURES FOR NEW PLANTATIONS (NPP)**

COMPANY: COMPAÑÍA PALMA TICA S.A.

## PLANNING AND MANAGEMENT SUMMARY

**PREPARED BY:** 



### **BIO TERRA CONSULTORES AMBIENTALES**

**COSTA RICA, FEBRUARY 2013** 



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#### 1. Executive Summary

Compañía Palma Tica S.A. founded the first African Oil Palm plantations in 1944. Its crops are currently concentrated in the south region of Costa Rica. However, the Company is expanding its crops to other regions in the country.

Currently, one of the Company's projects is to develop new African Oil Palm plantations in the northeastern region of the country. This project is the object of this study.

The Management Plan is structured around each of the impact generating activities. Each one of these activities is assigned one or more environmental or social protection standards and their compliance must be supervised and controlled through the different phases of the Project, by those responsible of environmental issues, the environmental authorities (SETENA) and the community in general.

The purpose of the Management Plan is to establish an adequate and reasoned balance between the activities in each phase and the environmental and social support conditions.

This makes a control instrument available, in order to provide follow up and application of the protection, control, and/or compensation measures proposed. This is up to the different external parties involved, such as the competent state institutions, local community, environmental managers, and of course of the Company Palma Tica S.A.

Complying with the purpose and objectives will contribute, not only to guarantee that certain particular actions are executed, but also to improve the social and environmental conditions in the study area, preventing and/or mitigating the negative impacts, or compensating for those that are inevitable and maximizing the positive ones.



#### 2. Reference Documents

#### 2.1 SEIA and HCVA Evaluation Reports

#### Study: Criteria 7.1. RSPO Standard

(Compañía Palma Tica S.A. – Atlantic Division)

Marisol Zumbado Bustillos **RSPO Accredited Team Leader** Biologist, majoring in ecology and sustainable development Master in Environmental Audit and Management, specializing in management and conservation of natural resources Biologists Association: 1416 SETENA Consultant: CI-091-2007 (before) / CI-144-2012 (current)

## Evaluation of the High Conservation Value Areas (HCVA). Procedure for new plantations

Compañía Palma Tica S.A. – Atlantic Division).

Darién Zúñiga Leitón Biologist, majoring in ecology and sustainable development. Master in Environmental Audit and Management, specializing in integral water management and recovery of contaminated soils. Biologists Association: 1519 SETENA Consultant: CI-079-2007 (before) / CI-143-2012 (current)

Characterization of social impacts generated by the activity of new African Oil Palm plantations (Compañía Palma Tica S.A. – Atlantic Division)

Mario Antonio Piedra González Sociologist, M.Sc. Public Health Sociologists Professional Association: 12-0235 SETENA Consultant: CI-021-1996

#### Soil Exploration Surveys

(Compañía Palma Tica S.A. – Atlantic Division)

Dr. Carlos A. Cervantes Umaña Ph.D. Soil Sciences, U of Columbia, Missouri Soils Specialist. Agricultural Engineering Association: 1134 Evaluator for Proper Soil Use: No. 44 SETENA Consultant: CI-084-2009



## 2.2 List of the legal documents and permits related with the areas evaluated

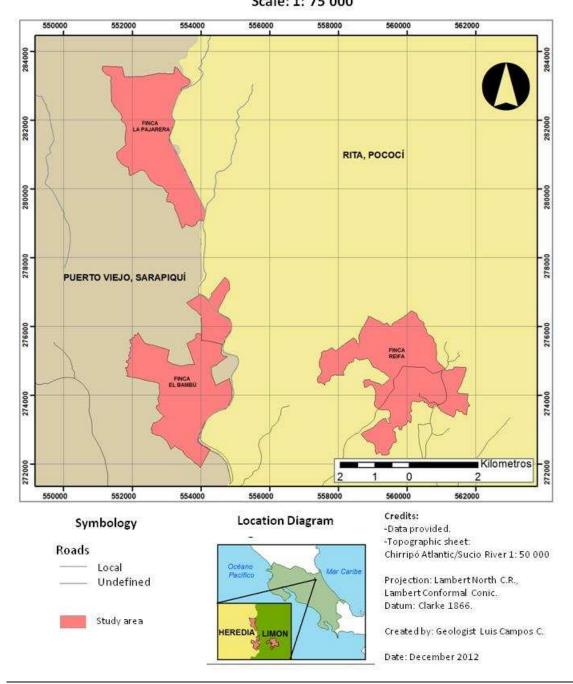
At the present time, Environmental Viability is being processed in the National Environmental Technical Secretariat (SETENA), for the new proposed plantation. The Project has been assigned case number #9077.

Simultaneously, the certification for the new proposed African Oil Palm plantations is being processed with the RSPO. For this reason, the present report is being issued.

Once Environmental Viability from SETENA is obtained, the Municipal permit for the development of the proposed activity will be processed.



#### 2.3 Location map – Surroundings and property LOCATION MAP Compañía Palma Tica S.A. Atlantic Division Scale: 1: 75 000





#### 2.4 Area for the new plantations and timetable for the new plantations

The following is a chart containing the details of the areas to be planted:

Farm	Farm's area	Area to be planted
Reifa	770,02ha	560ha
Chirriposito	124,22ha	110ha
El Bambú	589,41ha	343ha
Pajarera	635,12ha	600ha
Total	2118,77ha	1613ha

The following chart shows the production timetable proposed:

Productivity curves	Calendar year	Metric tons of fruit/Ha
Year 0	2013	0
Year 1	2014	0
Year 2	2015	6,59
Year 3	2016	14,09
Year 4	2017	25,00
Year 5	2018	26,17
Year 6	2019	27,74
Year 7	2020	28,55
Year 8	2021	29,01
Year 9	2022	27,93
Year 10	2023	28,49
Year 11	2024	30,34
Year 12	2025	32,60
Year 13	2026	31,10
Year 14	2027	31,44
Year 15	2028	28,29
Year 16	2029	28,21
Year 17	2030	28,39
Year 18	2031	28,19
Year 19	2032	27,41
Year 20	2033	25,69
Year 21	2034	24,59
Year 22	2035	24,33
Year 23	2036	23,98
Year 24	2037	22,73



Productivity curves	Calendar year	Metric tons of fruit/Ha	
Year 25	2038	21,25	

#### 3. SEIA and HCVA Management and the staff for implementation

#### 3.1 Organizational information and contacts

Nome of the Commonly	Compañía Dolma Tico C A	
Name of the Company	Compañía Palma Tica S.A	
Corporate Identification Number	3-101-173999	
Legal Representative	Erwin Martin Holmann Pastora	
Identification Number	R-155808421015	
Telephone	2284-1000	
Fax	2221-6371 / 2221-7340	
Email	info@numar.net	
Company's Environmental Manager	Carlos Playa Cruz	
Identification Number	6-0308-0889	
Telephone	2777-8125	
Fax	2777-0311	
Email	caplaya@numar.net	

#### 3.2 Staff involved in planning and execution

The staff in charge of planning and execution for the proposed Management Plans are presented below, in hierarchy:

- > Executive Management for Compañía Palma Tica S.A.
  - General Manager
  - Environmental Manager
  - Occupational Health Professional
  - Production Engineers
  - Workers

Also, the environmental regent, assigned by Compañía Palma Tica S.A., intervenes in this case, with is a legal requisite pursuant to the dispositions issued by the National Environmental Technical Secretariat (SETENA). He will be responsible for ensuring that Compañía Palma Tica S.A., duly complies with the environmental commitments acquired with the government for the development of the Project.



Lastly, the institutions with jurisdiction on this matter must be included, as well as those in charge of supervising that Compañía Palma Tica S.A. act in accordance with the current legislation regarding environmental, occupation and social matters. The following are among these institutions:

- > Municipality
- ➢ SETENA
- > MNAET
- > SINAC
- Ministry of Health
- Ministry of Agriculture and Livestock (MAG)

#### 3.3 Community leaders to be involved:

- Community Welfare Association in Sota 2.
- > Community Welfare Association in Barbados.

#### 4. Summary of Management and Mitigation Plans (SEIA)

Impacting Action	Impact generated	Mitigation Measures	Phase	Responsible Party	Timeframe
Site preparation for planting of new plantations: - Presence and movement of heavy machinery - Elimination of coverage - Leveling the land - Creation of drainages - Mobilization of debris	<ul> <li>Change in the landscape of farms</li> <li>Change and/or replace- ment agro- production activities</li> </ul>	<ul> <li>Comply with the national regulations regarding working hours and conditions</li> <li>Comply with the regulations regarding transit of heavy machinery (use of tarps)</li> <li>Comply with the national regulations regarding the</li> </ul>	- Preparation of the land for crops in the new African Oil Palm plantations	<ul> <li>Compañía Palma Tica S.A.</li> <li>Producers</li> <li>Environmental manager or regent</li> <li>MAG, MINSA, INDER, MTSS, and other regional offices</li> </ul>	- During the entire site preparation phase for the new African Oil Palm plantations

4.1 Mitigation plan for minimizing negative social and economic impacts



Impacting Action	Impact	Mitigation	Phase	Responsible	Timeframe
Planting process for the new plantations: - Consolidation of greenhouses - Planting new African Oil Palm plants - Use of various agro- chemicals traditionally used in agricultural and livestock in the area	generated - Change in the farm's landscape - Change and/or replace- ment agro- production activities	Measures protection of archeological resources - Observe the farm's border with regards to the rural settlements in the area - Comply with the national regulations regarding working hours and conditions - Comply with the national legislation regarding handling of hazardous substances (agro- chemicals) - Observe the farm's border with regards to the rural settlements in the area	- Planting new African Oil Palm plantations	Party - Compañía Palma Tica S.A Producers - Environmental manager or regent - MAG, MINSA, INDER, MTSS, and other regional offices	- During the entire planting process phase for the new African Oil Palm plantations

# 4.2 Management plan for improvements in the social and economic contributions

Possible positive impact	Measures for maximizing the possible impact	Responsible parties
Economic stability	- Comply with the provisions	- ASOPALMA
for the families that	contained in the Master Plan	- Compañía Palma Tica S.A.
will participate in the	for African Oil Palm Planting	- Environmental manager or
new plantation	in Atlantic Huetar	regent
activities	- Involve the people venturing	- MÁG, MINSA, INDER, INA,
	into the cultivation and	MTSS, and other regional



Possible positive impact	Measures for maximizing the possible impact	Responsible parties
	<ul> <li>harvesting of African Oil Palm</li> <li>in the existing agricultural</li> <li>value chain in the Atlantic</li> <li>Huetar Region</li> <li>Conduct a training process</li> <li>including the different</li> <li>activities involved in the</li> <li>cultivation and/or harvesting</li> <li>of African Oil Palm, to ensure</li> <li>adequate participation in this</li> <li>activity from those involved.</li> <li>Establish production contracts</li> <li>with those parties that will be</li> <li>involved in the activity, as</li> <li>independent producers.</li> </ul>	offices
Generation of job opportunities for those individuals living in the surrounding communities	<ul> <li>Give priority of employment to people living in the communities located in the vicinity of the farms where the new plantations will be developed.</li> <li>Comply with the provisions contained in Laws No. 2 (Work Code); No. 7142 (Equality Women's Act); No. 7476 (Law against Sexual Harassment in the Workplace and in Education), No. 7600 (Equal Opportunities for People with Disabilities Act).</li> <li>Comply with the provisions regarding prohibition and/or limitations for child labor in agricultural activities.</li> <li>Create, implement, and disclose an occupational health and safety plan, to raise awareness within the employees regarding the importance of using personal protection equipment in risk activities, as a mechanism for accident prevention.</li> <li>Promote education and/or training in the local</li> </ul>	<ul> <li>ASOPALMA</li> <li>Compañía Palma Tica S.A.</li> <li>Producers</li> <li>Environmental manager or regent</li> <li>MAG, MINSA, INDER, MTSS, and other regional offices</li> </ul>



Possible positive	Measures for maximizing	Responsible parties
impact		
Improvements in the communities located in the vicinity of the farms where the new plantations will be developed	the possible impactcommunity to widen the scope of work opportunities and not limit them to agricultural crops, allowing the possibility of administrative positions within the African Oil Palm activity Diagnose the organizational status of the communities located in the vicinity of the farms where the planting of the new African Oil Palm plantations will be developed, in order to define the linking mechanisms between the	- ASOPALMA - Compañía Palma Tica S.A. - Producers - Environmental manager or regent - MAG, MINSA, INDER, MOPT, MTSS, and other regional
	<ul> <li>mechanisms between the inhabitants and the developers.</li> <li>Establish a protocol for contributions and assistance to the communities located in the farm's vicinity, to create a regulatory framework for the linking mechanisms between the inhabitants and the developers</li> <li>Perform an assessment of the community needs for those located in the vicinity of the farms where the new plantations will be developed, to establish a contributions and/or assistance plan that is beneficial to the inhabitants, as well as for the developers</li> </ul>	offices

## 4.3 Mitigation plan for negative environmental effects

Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
Soil removal	• The work will be stopped immediately if archeological materials are found; inform the	NA (This is to take place only in the	The Company



Impacting	Environmental Measure	Application	Responsible for
Action		Timeframe	implementation
	corresponding officer (or the National Museum of Costa Rica) and act according to his or her recommendations.	initial site preparation stage)	
	• The material needing off-farm export, should be transported to a licensed disposal site, approved for these purposes.		
	• Use the materials obtained from the canals that are made, according to their quality and feasibility, for filling the land, where necessary, within the farms.		
	All fill material must be compacted.		
	<ul> <li>Soil mounds must be covered in plastic to avoid windborne particles, and to avoid erosion processes due to surface runoff.</li> </ul>		
Dust generation	<ul> <li>Apply systematic irrigation to keep moist the bare soil lacking vegetation coverage during the initial phases of the project.</li> <li>Use tanker trucks to keep moisture of roads during the dry season, in order to reduce the amount of dust generated.</li> </ul>	D (only during the dry season)	The Company
	<ul> <li>If it is necessary to export materials from the farms, trucks must be covered with tarpaulins to avoid spreading dust particles.</li> </ul>		
Deterioration of air quality	• Ensure that the machinery used for the works is in good mechanical condition (does not generate excessive smoke).	D	The Company



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	• Use only the equipment and machinery necessary with the highest degree of efficiency, in order to limit the sources of environmental impact as much as possible.		
	<ul> <li>Comply with the current laws regarding noise levels (Refer to Decree No. 78718-S).</li> </ul>		
	<ul> <li>Hire trained personnel for the operation of machinery.</li> </ul>		
	<ul> <li>Implement a work schedule involving machinery that ensures the minimum noise disturbance possible (6am a 6pm).</li> </ul>		
	• Do not perform repairs in heavy machinery or vehicles within the farms.		
	<ul> <li>Ensure that heavy machinery and vehicles are in optimal mechanical conditions, to avoid leaks or spills.</li> </ul>		
Surface water	<ul> <li>Have a containment plan for fuel spills, to avoid any type of pollution.</li> </ul>	D and Q (in the event of maintenance to canals and drainages)	
pollution	• Store solid wastes in a location for that purpose, for due treatment and remove them from the farm on a daily basis.		The Company
	<ul> <li>Protect soil from erosion, through correct storm water management techniques (placing bags in the runoff canals to decrease speed), in order to avoid runoff of materials towards bodies of water associated with the farms.</li> </ul>		



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	• Do not discharge untreated solid or liquid wasted into bodies of water.		
	<ul> <li>Provide periodical maintenance to the rain water drainage network in the farms, performing inspections aimed at identifying the presence of obstructions and to remove accumulation of sediment.</li> </ul>		
Soil and underground water pollution	• This section reiterates the measures described in the previous section, except those relating to the maintenance canals and drains.	D	The Company
Generation of solid waste	<ul> <li>Set up a waste collection area within one of the farms and classify according to type.</li> <li>Have enough waste containers for the volume of waste generated, to maintain adequate sanitary conditions. The waste containers must have a lid, be equipped with plastic bags and must be cleaned periodically.</li> <li>Give weekly maintenance to the waste containers installed in each farm, to avoid bad smells.</li> <li>Collect waste periodically, with proper sanitary final disposal, in a location authorized by the Ministry of Health.</li> <li>Farms must be in orderly and clean conditions.</li> <li>Establish waste management systems to minimize waste generation as much as possible</li> </ul>	D, S and M	The Company



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	(recycling), implementing a basic classification system and waste utilization.		
	• Also, where applicable, waste must be returned to the suppliers, such as product containers used for applications and others.		
Potential effect on the biological environment	<ul> <li>and others.</li> <li>Prior to cutting down any forest species, Article 20 of the Forestry Law No. 7575 must be observed, as well as Articles 14 and 16 of the Forestry Law regulations, Executive Decree No. 25721-MINAE.</li> <li>Notify MINAET of the presence of endangered flora or fauna species, if found during the project's development.</li> <li>If possible burrows, shelters or nests of any species are identified, coordinate with specialists and MINAET for relocation.</li> <li>Ensure no impact on the forest coverage or the water protection zones associated with each of the farms.</li> <li>Keep strict erosion and sedimentation control practices, mainly regarding surface runoff draining towards the bodies of water associated with the farms.</li> <li>Promote vegetation recovery plans in the associated water protection zones, in full coordination with MINAET.</li> </ul>	NA and SE (in the event of water monitoring)	The Company



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	<ul> <li>Monitor the physical and chemical conditions in the associated bodies of water, twice a year.</li> </ul>		
	• Take samples from the bodies of water for benthic macro- invertebrates (biological indicators), twice a year.		
Occupational safety risks	<ul> <li>The Company commits to ensuring the physical, mental and social wellbeing of all the workers, by hiring the services of an Occupational Health professional, and to comply with the guidelines set forth in the Occupational Health Policies.</li> <li>Comply with the regulations and technical guidelines set forth by the authorities, with regards to Occupational Health and Safety.</li> <li>Establish an Occupational Health and Safety.</li> <li>Establish an Occupational Health and Safety Program, pursuant to the current legislation, adapted to the conditions of the site where the works will be developed. This program must be known by the project's workforce.</li> <li>Define the guidelines and safety measures that must be applied by workers for their personal safety.</li> <li>Place the safety sheets and use manual for dangerous products in the corresponding warehouses, to ensure availability to the employees. This must comply with the current legislation.</li> </ul>	NA and D (when using PPE and guidance compliance)	The Company



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	<ul> <li>Provide employees with initial and ongoing training on health and safety matters.</li> </ul>		
	<ul> <li>Limit access to the Plantation to authorized personnel only.</li> </ul>		
	• Create policies for the use of personal protection equipment (PPE) and train employees in the correct use of said equipment.		
	• Make the use of PPE mandatory for all employees, according to the tasks performed.		
	• Provide insurance coverage for the employees with an Occupation Risk Insurance Policy from the National Insurance Institute (INS).		
	<ul> <li>Issue warnings to those employees not complying with the safety guidelines set forth for the project.</li> </ul>		
	• Post signs that warn drivers and pedestrians about heavy machinery and vehicles exiting and entering the farms.		
Vehicular traffic	<ul> <li>Observe the maximum speed for heavy machinery and vehicles of 25 km/h.</li> </ul>	NA and D (with regards to the maximum allowed speed)	The Company
	<ul> <li>Provide periodic maintenance to the road sections that are damaged by the transit of heavy machinery and vehicles.</li> </ul>		
Replacement of production activities	• Fully comply with the national regulations regarding work schedules and conditions.	D	The Company



Impacting Action	Environmental Measure	Application Timeframe	Responsible for implementation
	Respect the land borders with the rural settlements in the area.		
	• Prior to cutting down any forest species, Article 20 of the Forestry Law No. 7575 must be observed, as well as Articles 14 and 16 of the Forestry Law regulations, Executive Decree No. 25721-MINAE.		
Changes in the scenery	• Ensure no impact on the forest coverage or the water protection zones associated with each of the farms.	NA	The Company
	• Promote vegetation recovery plans in the associated water protection zones, in full coordination with MINAET.		

NA: Does not apply, D: Daily, W: Weekly, Q: Quarter, SE: Semester

#### 4.4 Management plan for promoting positive environmental effects

For this section, no positive environmental effects were identified as such. However, compliance of the proposed management plan detailed in the preceding section will automatically generate positive environmental effects, since this plan seeks to protect and promote all ecosystems with conservation potential, such as bodies of water, river bank vegetation, isolated forests, among other things.

### 5. Summary of the Management and Mitigation Plans (HCVA)

#### 5.1 HCVA monitoring plan and periodic date review

It is important to establish within this section that neither of the 4 farms included in the study were identified as HCVA. Nonetheless, some High Conversation Values were detected (HCV), which although by themselves do not turn the farms into HCVA, they do present variables that must considered for their conservation.



Therefore, a monitoring plan was not prepared as such. However, a series of management and monitoring recommendations are detailed below, in order to establish sustainable management mechanisms for these identified HCV.

#### General actions:

- Establish contact with local institutions, non government and government agencies, in order to promote conservation and management policies and actions to be executed.
- Take a firm position regarding the policies and actions that will be executed by the Company regarding environmental matters and inform the surrounding communities.
- Identify social and cultural behaviors that may affect the HCA and formulate solutions.
- Identify internal Company problem issues regarding future plantations that could affect the HCA
- Identify local and regional problem issues regarding affectation of these areas.
- Know the position of the farm's neighboring owners with regards to future management and conservation plans for these areas.
- Monitor the ecosystem's dynamics and behavior, with regards to the general landscape (increase or decrease in the forest areas).
- Elaborate a management plan for the plantations, including the environmental affectation.
- Identify in the landscape the potential of connecting areas with the forest that could favor the creation of biological corridors.
- Perform a survey on those areas that are considered protection zones for bodies of water that could be experiencing an invasion and take the proper corrective actions.

#### Specific actions:

- Evaluate the threatened or endangered wildlife species that use or pass through the farms, in order to determine their population status.
- Determine the use of this farms as transit and travel ways towards more established forests, by identified wildlife species.

#### 5.2 Management and mitigation plan for HCA potential threats



As mentioned on the previous section, no HCVA were located in the 4 farms in the study, yet some HCA were identified. With the purpose of preserving said HCA's, the following chart details the environmental measures that must be observed:

Objective	Environ- mental Impact	Environmental Measure	Application Timeframe	Responsible Party
Ensure respect and maintenance of all bodies of water and forest coverage present in the farms and influence areas	Potential affectation on the biological environment (forest coverage and bodies of water)	<ul> <li>Prior to cutting down any forest species, Article 20 of the Forestry Law No. 7575 must be observed, as well as Articles 14 and 16 of the Forestry Law regulations, Executive Decree No. 25721-MINAE.</li> <li>Notify MINAET of the presence of endangered flora or fauna species, if found during the project's development.</li> <li>If possible burrows, shelters or nests of any species are identified, coordinate with specialists and MINAET for relocation.</li> <li>Ensure no impact on the forest coverage or the water protection zones associated with each of the farms.</li> <li>Keep strict erosion and sedimentation control practices, mainly regarding surface runoff draining towards the bodies of water associated with the farms.</li> <li>Promote vegetation recovery plans in the</li> </ul>	Periodical application. However, constant alert should be in place with regards to these measures. For water monitoring, periodicity shall be every semester.	La Compañía



associated water protection zones, in full coordination with MINAET.	
• Monitor the physical and chemical conditions in the associated bodies of water, twice a year.	
• Take samples from the bodies of water for benthic macro-invertebrates (biological indicators), twice a year.	

# 5.3 Management plans for improving and/or maintaining conversation values in the HCVA

As has been mentioned before, no HCVA were located in the study areas. However, the chart above details the proposed measures that seek to improve and/or maintain some HCA's identified.



#### 6. Internal Responsibility

## 6.1 Formal waiver for the implementation of management and mitigation plans

Bio Terra Consultores Ambientales, an RSPO accredited company specializing in the environmental field and RSPO fully assumes responsibility for the studies summarized on this public notification reports, with regards to the content of said reports.

Notwithstanding the above, responsibility over the implementation of the proposed management and mitigation plans contained herein is formally and officially waived.

Nothing further, receive my regards,

Biol. Marisol Zumbado Bustillos, MSc Team Leader Bio Terra Consultores Ambientales