PALM CLUSTER IN THE AMAZON

A Collaborative Cluster for the Development of the Amazon Region in Ecuador

Content

A. PROJECT´S DATA AND FACTS 2
B. PRESENTATION OF THE PROJECT 3
1. Project´s Justification 3
a) Context and problem 3
b) Solution 3
2. Description of the Cluster and its Promoter 4
a) Eduardo Villaquiran C. 4
b) Natasha Chávez Montero 4
c) The Palm Farm and the Cluster 5
3. Destination of the Loan 6
4. Destination 7
5. Environment 7
Bibliography 7

A. PROJECT´S DATA AND FACTS		
1.	NAME OF THE PROJECT	PALM CLUSTER IN THE AMAZON
2.	REFERENCE NUMBER	#20181029002
3.	TYPE	AGROINDUSTRY, BIOMASS POWER GENERATION, ASSOCIATIVE ECONOMY.
4.	AREA OF INFLUENCE	THE EQUATORIAN NOTHERN AMAZON BASIN.
5.	SCOPE	REDUCE THE STRESS OF DEFORESTATION BY DEVELOPING A VALUE PALM CLUSTER IN A DEVELOPING REGION EF ECUADOR.
6.	ASISTANCE NEEDED	FINANCING
7.	TOTAL AMOUNT	$130.000.000,oo USD
8.	AMOUNT NEEDED	$130.000.000,oo USD
9.	BENEFICIARY	LOCAL FARMERS, LOCAL LABOR FORCE, LOCAL SUPPLIERS OF TRANSPORTATION, AGRICULTURAL TOOLS ETC.. AND EDUARDO VILLAQUIRAN CARDENAS, THE PROJECT DIRECTOR.
10.	COUNTRY WHERE THE PROJECT WILL TAKE PLACE	ECUADOR
11.	LOCATION OF THE PROJECT	EQUATORIAN AMAZON BASIN
12.	PREPARED BY	EDUARDO VILLAQUIRAN CARDENAS

B. PRESENTATION OF THE PROJECT

1. Project´s Justification

In order to start a strong cluster of any activity the first member must be strong and lead the way so that the other members can add up to the idea and build a cluster that can face any storm. With that in mind the acquisition of the farm called The Palm Farm is a strategic acquisition. The farm located in the northern amazon basin of Ecuador has 10.000 hectares of land and 3.800 hectares are planted with palm oil palms. The rest of the land needs to be planted with palm oil plants. Tek was planted in the farm 10 years ago and has an extension of 1,400 Hectares. Which will be sold to a local Industry and that will help the project for the first two years. This size of the palm oil plantation justifies having a mill inside the farm, and with the amount of biomass it is only natural to have the electricity generation business. The refinery that will be built to refine all the oil from that comes from our own mill will consume the electricity from the Biomass Generation Unit and will be sold by our own commercial department. This way the profit margins of the farm, the mill, the refinery and the generation will ensure the payment of the loan in the terms of ten years.

a) Context and problem

The demand of palm oil in its different stages, crude or red (CPO Crude Palm Oil), RBD (Refined Bleached and Deodorized) worldwide has double in the past ten years. From 34 to 67 million of Metric Tons and the trend keeps steady. Palm oil offers a better solution for the industry as a raw material, in comparison to other vegetable oils. The region of Orellana´s and Sucumbíos's Provinces in Ecuador are in the borderline of poverty. The factors why these regions are in trouble are: Lack of long-term credits. High local dealers' margin. Low local industry prices. No access to international clients. Colombian Guerrilla keeps investment away from the region. No collaborative models.

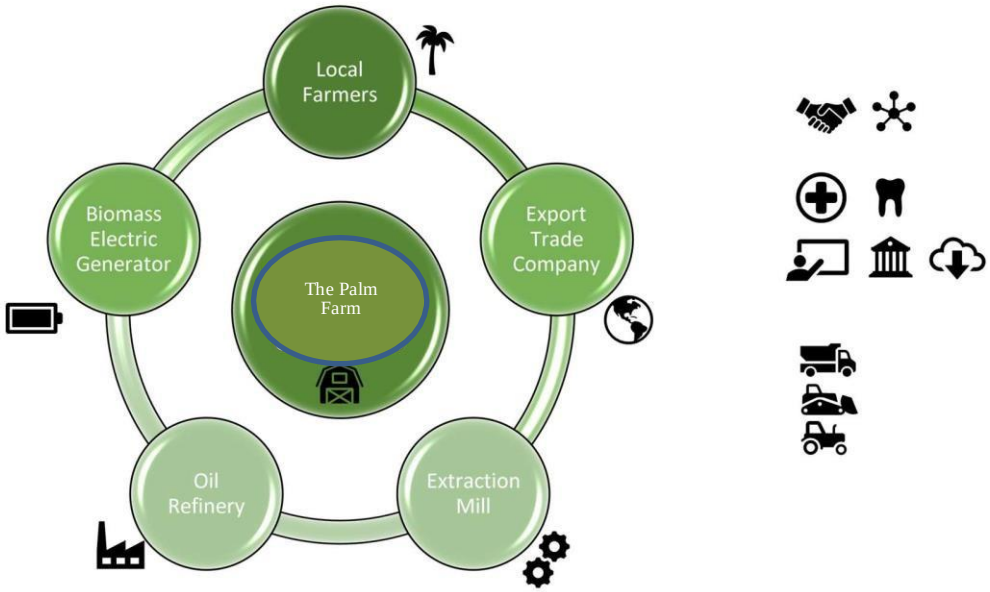
b) Solution

Building a collaborative cluster that will have 20,000 hectares of palm plantations, plant nursery, one FFB (Fresh Fruit Bunch) mill, one refinery, one electricity generation plant from bio mass, allied transportation companies for delivering to clients in Ecuador and Colombia all owned by the local farmers and local companies is the best solution for handling the problem of this region of the Equatorian Amazon basin. Half of this production comes from Palmar del Rio, and the other half is bought to third parties in the area.

Allowing the local farmers to be part of the palm cluster will give them the warranty to sell directly to international markets and Benefit from the margins the local dealers charge in Ecuador.

Having direct control of all the links involved in the production chain of the palm will give the community higher profit margins, and these will attract their families to stay in the farms and help with the family business instead of migrating to the big cities in Ecuador.

The Cluster will take active duties in local schools, universities, hospitals etc. allowing the community to access to internet and other support need by each local town. The Farm will have a department for social services with a team of people specialized in helping the most needed.



2. Description of the Cluster and its Promoter

a) Eduardo Villaquirán C.

The promoter if this Project, unique in its kind in the region, was the Founder of the first Business Incubator in Quito, serial Entrepreneur that has 20-year experience in various type of companies. He will be the owner of the farm Palmar del Rio. Industrial Engineer from Colorado State University. Master's in Foreign Trade in Universidad de Santiago de Compostela, Spain.

b) Natasha Chávez Montero.

20 years of financing projects give Natasha the best credentials in the market. She has a degree in Business Administrator and will be the General Manager of the project. Worked with the promoter of this project in Oleana, a palm company.

c) The Palm Farm and the Cluster

The Palm Farm will be the mother company that would integrate the Cluster. All small farms and related business will have direct business relationship with the farm.

This will enable to have one supplier for the whole region and would get better prices for all the associates. The Palm Farm is located in Huashito basin in the County Francisco de Orellana. At the north limits with low mountains, at the East limits with Coca River and Huashito River, at the West the Punino River and at the South the Payamino River.

All the local farms will sell all their production to Palmar del Rio´s Mill. This will ensure the volume needed for the other production units to work at its highest yields.

There is a demand of more than 3 million MT not attended in America. This means the continent must buy form Malaysia and Indonesia, leaving a Carbon Trace not friendly with the environment.

The Cluster can make long time sales agreements with Colombian Industry and local industries, nevertheless with the quality and certification we seek to obtain the price bonus will be in the export market.

International markets will value the story behind each gram of this products.

The risk of getting the PC, a disease that has sickened many plantations in Ecuador is very low. This is because all the new plants are coming from DANEC that has being developing a new variety of palm oil plant the is called hybrid. Is mixed with an American palm plant and the traditional palm oil plant. This new variety called COARI and a good agriculture program will keep any disease away from the plants.

The Cluster will create and maintain indirectly new jobs to 5,000 people 95% of them from low income sectors.

3. Destination of the Loan and Numbers of the investment

Total Investment

Purchase of the Farm			
Average Cost / Hectare	# Hectares		
$4.500,00	10.000	$45.000.000,00	A
New Planting of Plam Trees	# Hectares		
$6.000,00	6.200	$37.200.000,00	B
Extraction Mill		$6.000.000,00	C
Working Capital		$1.800.000,00	D
Palm Oil Refinery and Fractioning Plant			
Capacity of 400 TM/day		$13.000.000,00	E
Working Capital		$4.000.000,00	F
Biomass Unit Generation			
Generation with Biogas			
Production Plant of Brikets of Biomass		$7.400.000,00	G
Finance Fees, Costs and Animal Purchase			
Animal Purchase Financing for Employees 4%		$5.200.000,00	
Trust Fees and Finantial Expenses 2%		$2.600.000,00	
Project Costs and Expenses to date 6%		$7.800.000,00	
	Total 12%	$15.600.000,00	H
		$130.000.000,00	A+B+C+D+E+F+G+H

Average of IRR of each production unit in the project:

A B Farm	C D Extraction Mill	E F Refinery	G Biomass	Average
14,2%	27,1%	20,5%	21,2%	20,8%

4. Destination of the Products

The palm oil could be exported to any destination, but the cost of transportation limits its clients to countries in the American continent. The Cluster can negotiate long term contracts directly with the big consumers, such as Mars, Ferrero, Nestle etc.

All the production is designed to go to international destinations.

5. Environment

The best solution for the amazon jungle not to be cut is to develop the amazon region. The increase in wealth at that region the less interest to cut the native forest to sell its Wood and products.

With this said this **Project is social and environmental as well.**

Bibliography

Ángela Sánchez Rodríguez, É. S. (2011). Polinización del hibrido OxG. Bogotá.

Banco Central del Ecuador. (s.f.). Cuentas Nacionales. Obtenido de https://www.bce.fin.ec/index.php/component/k2/item/763

Banco Central del Ecuador. (s.f.). Sector externo. Obtenido de https://www.bce.fin.ec/index.php/component/k2/item/762

Fondo Monetario Internacional. (01 de diciembre de 2016). Proyecciones precios primarios de los commodities . Obtenido de http://www.imf.org/external/np/res/commod/index.aspx

Fundación de fomento de exportaciones de aceite de palma y sus derivados de origen nacional . (s.f.). Fedepal. Obtenido de http://fedapal.com/web/index.php/joomla/estadisticas-nacionales

Info Agro. (s.f.). Info Agro . Obtenido de http://www.infoagro.com/herbaceos/oleaginosas/palma_africana_aceitera_coroto_de_guinea_aabora.htm

Instituto Nacional de Estadísticas y Censos Ecuador. (septiembre de 2016). Encuesta nacional de empleo, desempleo y subempleo. Obtenido de http://www.ecuadorencifras.gob.ec/documentos/web-inec/EMPLEO/2016/Septiembre-2016/092016_ENEMDU.pdf

Jesús Alberto García N, M. M. (2010). Generación y uso de biomasa en plantas de beneficio de palma de aceite en Colombia . Bogotá.

Mesa Redonda sobre el Acete de Palma Sostenible. (s.f.). Certificación RSPO. Obtenido de http://www.rspo.org/certification

Ministerio de Finanzas Ecuador. (30 de noviembre de 2016). Deuda pública Ecuador. Obtenido de http://www.finanzas.gob.ec/wp-content/uploads/downloads/2016/12/DEUDA-SECTOR-P%C3%9ABLICO-DEL-ECUADOR_noviembre2016.pdf

Rafael Reyes Cuesta, E. A. (s.f.). Corpoica. Obtenido de http://datateca.unad.edu.co/contenidos/356002/Cartilla500PreguntasSobrePalmadeAceite.pdf