Germán Cala Gaitán

Apartado Postal 1717-2100, Guadalupe, San José, Costa Rica Tel. (506) 2.224.9554, (506) 8.837.0751 germancala@racsa.co.cr

Mechanical Engineer specializing in the Oil and Fats Industry.

Engineering consultant in industrial and Agro business of the Palm Oil: Extraction, Refining and Oleo chemicals. Development Oil Palm Projects for Small Farmers

EDUCATION

- Specialization: 1971

Industrial Production, Universidad de los Andes, Bogotá - Colombia

- Engineering Degree: 1970

Mechanical Engineering, American University, Bogota - Colombia

OTHER STUDIES (1973-1995)

- Financial. Management, INCAE, Honduras
- Trade in Agro industrial Goods, Port Alegre, Brazil
- English, London England.
- Logical Framework, IDB, Costa Rica.
- Guthrie Palm Oil Mill Executive Course, Malaysia.

PUBLICATIONS

- 2008 Co-author in writing, editing and publishing of the book denominated "Processos Modernos en Plantas Extractoras de Aceite de Palma" (" Modern Processes in Palm Oil Mills") First print run of 1,000 volumes.
 - 2005 Co-author of the authorized Spanish version of the book denominated "Sinopsis del Proceso de la Palma de Aceite" (Overview of the Process of Oil Palm) original writing by Noel Wambeck from Malaysia
- 1973 Author of the "Manual de Plantas extractoras de Aceite de Palma" (""Handbook of Palm Oil Mills) for the management of Monterrey Palm OIL Mill in Puerto Wilchez, Colombia.

ARTICLES

- 2001, "Industrialización y Perspectivas del Aceite de Palma" ("Industrialization and Prospects for the Palm Oil "
- 2000, "La Oleo química como Alternativa para el Desarrollo de la Agroindustria de la Palma Aceitera" ("Oleochemical as an Alternative for the Development of Agribusiness of Oil Palm")
- 1998, "Las Alianzas Estratégicas en el Desarrollo Palmero" ("The Strategic Partnerships in the Palm Development)
- 1995, "Aplicación Energética de los Racimos Vacíos de la Palma Aceitera" (Energy Application of the empty bunches)

PROFESIONAL EXPERIENCE

• FEDEPALMA 2008

Four weekly seminars around oil palm areas in Colombia about the book denominated "Procesos Modernos en Plantas Extractoras de Aceite de Palma" (" Modern Processes in Palm Oil Mills") as Co-author in writing, editing and publishing it.

• ACCIONA BIOCOMBUSTIBLES S.A., subsidiary of ACCIONA S.A. Spain. From August 2006 to February 2008

Integral Adviser in Oil Palm developments and agro-industry in nine countries of Central and South America:

- 1. Study of selection countries, investment opportunities, areas for crop developments.
- 2. Implementation of business plans.
- EXPORTACIONES CALA Y BLANCO S.A. Costa Rica (2000- Present)

Owner & President

Marketing, mixing and homogenization of Oils and Fats, for the industry of concentrate meals for animals.

CIPA R.L.

Technical adviser for the assembly of a 15 tons RFF / hr, palm oil mill located in Rio Claro Puntarenas. August 1997-August 1999- 2007

• COOPERATIVA DE PRODUCTORES DE PALMA ACEITERA R.L. (COOPEAGROPAL) Costa Rica. Cooperative integrated by small farmers with fields between 6 and 20 hectares of oil palm. August 1997- August 2000

Director of Strategic Partnerships. (November 1999 - August 2000)

General Manager (August 1997-October 1999)

• INTER AMERICAN DEVELOPMENT BANK (1977 – 1982 y 1987-1997)

- AGROINDUSTRIAL DE COTO SUR PROJECT

Loan: 196 IC-CR - (1987 to 1997)

International Consultant IDB

Project Director-Executive Unit

Cost of the Project U.S. \$ 54 million.

Developed Area: 22,000 acres in parcels of Agrarian Reform

Beneficiary population: 1900 small farmers.

Directed credit

For 520 farmers, establishing 5100 hectares of Oil Palm.

Agroindustrial:

Construction of Palm Oil Mill . 25 tons/h of capacity . Oil Palm refinery of 90 tons / day.

<u>Infrastructure:</u>

Construction of 270 km of roads, 240 km of sewers, 65 bridges and 180 in particular access to land.

Organization promotion and training

Technical and administrative training for small farmers.

- BAJO AGUAN PROJECT Honduras. (1977 - 1982)

Loan 479 SF / HO

International Consultant IDB

Production and organization of harvest of 11,000 hectares of oil palm in 55 cooperatives and introduction to the agrobusiness.

Construction and operation of 5 palm oil mills with capacities of 6, 6, 15, 20, 15 tons / hour respectively

Cost of the project \$ 30 Million.

- **COAPALMA-** Honduras, 1983-1985

General Manager.

Agroindustrial cooperative integrated by 55 cooperatives related with oil palm plantations and 3 Palm Oil Mills of 20, 15 and 15, RFF ton / Hr respectively.

- **CONSULTÉCNICA,** Bogota, Colombia. 1976-1977

Technical Director-Technical Supervisor of Palm Oil Mills assembly.

Technical Assistance in 22 Palm Oil Mills in Colombia, Ecuador, Honduras, including design and star up of new Palm Oil Mills.

- **AGRICULTURAL MONTERREY**, Colombia 1973-1975

Oil Palm Mil Technical Chief

- FADALTEC SA, Colombia. 1970-1973

Chief of Maintenance and Chief of Production

INDEPENDENT CONSULTING

- INDUSPALMA Dominican Republic, September 2008. Expansion of the OIL Palm Mill from 22 to 30 ton / hr including installation of additional equipment, and a cogeneration system using biomass or solid boiler up to 32 bars of pressure.
- PALCASA (USA). Technical assessment of the Palm Oil Mill and plantation of PALMAR DEL RIO Ecuador. South America.
- **CONSULTECNICA**. Colombia 2007, Technical direction of the assembly and commissioning of an Oil Palm Mill in Coto Sur, Costa Rica, owned by CIPA.
- **FEDEPALMA**. Colombia. February 2005 to Present.
 Co-author in the translation, publication, edition and technical complementation of the book denominated "Synopsis del proceso de la palma de aceite" ("Overview of the Oil Palm Process") by Noel Wambeck.
- BANCO HSBC (Former Banco Banex). Costa Rica. July 2002 to Present. Consultant. Various projects consisting in the valuation of companies: Fertica S.A. in 2002, re-valuation in 2004. Quivel S.A. Alajuela, external consultant in the Certification of the Assembly advance in Quivel. Technical Assistance in the closure of the Alimentos PRO plant.
- AQUAPLASTICA S.A. Dominican Republic, June 2002.
 Consultant. Feasibility study for the installation of manufacturing plants in Costa Rica, Nicaragua, and Panama.

- **INASCA**. Dominican Republic, February to August 2001. Consultant. Provided technical consulting for the selection and subsequent installation of a palm oil refinery.
- **INDUSPALMA.** Dominican Republic. November 2002 to November 2007. Responsible for a technical study which resulted in an increased efficiency of two Palm Oil extraction plants.
- **COMME IL FAUT- CODINA S.A.** Haiti, November 2000 to December 2001. Consultant. Responsible for an International Marketing Study in Central America, Colombia, and Mexico, for the subsequent import and export of goods to and from Haiti.
- BANCO NACIONAL DE COSTA RICA. Costa Rica, February 2000 and January 2008
 Responsible for a research study of the strategic convergence of the oil palm and oil chemistry industries and Re-evaluation of equipment extraction palm oil Mill and Refinery
- AGENCIA INTERNACIONAL DE DESARROLLO (AID). EE. UU. 1995. Consultant. Responsible for the installation of a Palm Oil extraction plant for Oikos Corporation in Ecuador, with a capacity of 30 ton fruit/hour.
- VARIOUS PALM OIL PROJECTS. 1984 to Present Consultant. Various degrees of consulting from the manufacturing, installation and marketing to private companies in Colombia, Panamá, Honduras, and Guatemala.
- CONSULTANT OIL PALM-HONDURAS 1986-1987
 Agro industrial and Infrastructure aspects simultaneously in the following Companies: CAICESA, AGROINVASA and oilseeds Agro Industrial S. A.

VALUATIONS

- NATIONAL BANK OF COSTA RICA 2008
 - 1. Valuation of 4 plants owned by COOPEAGROPAL: Palm Oil Mill refinery, Fractionation, Finished Products.
- 2. Technical Conceptualization Feasibility Study for the construction of Palm Oil Mill of PALMATEC. Costa Rica.
- **BANCO HSB***C* (Former Banco Banex). Costa Rica. July 2002 to present. Consultant. Various projects consisting in the valuation of companies: Fertica S.A. in 2002, re-valuation in 2004. Quivel S.A. Alajuela, external consultant in the Certification of the Assembly advance in Quivel. Technical Assistance in the closure of the Alimentos PRO plant.

- **COOPEAGROPAL.** Costa Rica. 1996. Valuation of a 25 ton/hour palm oil mill located in Laurel, Corredores, Costa Rica.

- **HONDUPALMA.** Honduras 1996. He did the valuation of a 25 ton/hour palm oil extracting plant.

OTHERS

- CAMARA NACIONAL DE PALMA ACEITERA, (CANAPALMA) Costa Rica. Executive Chief. February 1988- March 200

CONFERENCES AND SEMINARS

- Speaker at 7 Conferences on Palm Oil and its applications in Honduras, Brazil, Costa Rica and Colombia.

PARTICIPATION IN INTERNATIONAL EVENTS

- Congress, lectures and workshops at the scientific level in palm oil and Oleo chemicals: South America, Central America, Dominican Republic, USA, Europe (4) and Malaysia (5).

PERSONAL DETAILS:

ID of Costa Rica: 800 780 798

Place and Date of Birth: Ibagué, Tolima, Colombia, November 16, 1947

Status: Married

Place of Residence: San Jose Costa Rica