

**Tucson Transatlantic Trade
Central America Development Company (TTT-CADC)
2006 – 2008 Business Plan**

Introduction

In August of 2005, born the Tucson Transatlantic Trade Central America Development Company (TTT-CADC) as a subsidiary of the head company based in Tucson Arizona in the United States. The company has five founders partners, four from Nicaragua, Gabriel Gaitán, Marla Toruño, Denis Obando, and Silvia Elena Gaitán, and one from El Salvador Rufino Quintanilla.

The TTT Holding Group in the United States and its global partners using the advantages of the technology of communications, from 1985 provides corporative services, leads scientific researches, develops and executes projects of development of businesses in the Environmental Americas, Europe, Asia and Africa in the scopes of Energy and Applications, Food Processing, Construction and Development of Industrial Parks and Medical Applications. The Central America branch (TTT-CADC) pursues to provide these same services initiating projects in El Salvador and Nicaragua.

Business Environment

According to the World Bank study, the gap in education and technology between the wealthy countries and Latin America and the Caribbean and the rest of poor countries has been accentuated in last 50 years. The report emphasizes that while the countries of the OCDE from 1950 to the 2000 tripled their income from \$7.300 to \$23.000, meanwhile, Latin America grew from \$3.000 to \$6.200 in that same lapse. The report says very textually that "what it surprises more in this increasing bimodal distribution of the income is that not due to the concentration of factors of production like the capital, but rather to the relative ones to the knowledge". This situation still more is pronounced in the Central America countries due the low levels of investment in education on the part of the governments. The investment in technology is minimum as much by the official part as by the private company as well. Another problem which the countries of the area face is the one of housing. According to an article of La Prensa of Nicaragua of October of 2002, Nicaragua had a more than 500,000 houses deficit. In Managua the capital, this one arrived at 66,000 in addition other 22,000 are in advanced degree of deterioration and other 7,000 in situation of high risk due that were built at the border of channels or the lake of Managua, others were built on seismic faults. The same article indicates that just were 600 hectares available were one to urbanize. These numbers must have grown in an annual rate of 3.2% that represents the country population growth.

In El Salvador the report "El déficit habitacional en El Salvador" of MECOVI program (September 2004) classifies the deficit in qualitative, those houses that need replacement because they do not give the sufficient conditions to its

inhabitants, that are 132,400 in urban area and 356,600 in the rural one. The quantitative deficit that is the demand of house by families who share with another one or whose houses are in the same estate with another family, approximately 14,000 in rural area and 36,500 in the urban one.

Other sources indicate that every year the demand is increased in 48,000 new houses that is the number of new families who form. To this situation, you must add the effects caused by the natural phenomena like the Hurricane Mitch in 1998 which destroyed 40,000 houses in Nicaragua and 10,400 in El Salvador. In addition the earthquakes of the 13 of January and 13 of February of 2001 in El Salvador affected 40% of the national territory destroying and damaging thousands of houses. The most recent Tropical Storm Stan, also caused strong damages in El Salvador and Nicaragua not yet quantified. The data of the TTT-CADC objective countries demonstrates a great necessity of social character houses construction to confront the problem.

Another great problem that faces our countries is the handling of the sweepings. The biggest cities of the area produce a great amount of for which it is not suitability processing. According to the Fundación de Desarrollo de El Salvador, in an article published in January of 1998, the sweepings production in the country was about of 2,500 tons daily, corresponding to San Salvador and 20 municipalities of the Metropolitan Area 1,500 tons. According to the same source 80% are of organic origin and approximately 60% take shelter. The estimation is that to the 2010, the amount of sweepings reaches the 213 thousand tons. In the case of Nicaragua, according to the magazine Shipment of the Central American University (UCA) Managua produces daily near 300 tons. The generation of energy and the tendency to the rise of the prices of petroleum, constitute another great problem for the countries objective of the TTT-CADC. In Nicaragua there is a capacity of generation of 534 MW which is reduced to 343 MW by the losses of the system (magazine Shipment # 283, October 2005) this generation corresponds in 80,3% to petroleum, hydroelectric 9.7% and 9,9% to geothermic. Last studies indicate that the country could produce 1000 MW with geothermic, 1.760 MW with hydroelectric and the 200 Aeolian MW. In the case of El Salvador, it is esteemed that the demand of energetic power will grow in a 80% to the 2020. According to information of the Graphical Press (section Economy, 16 of February of 2006) in El Salvador it is in process a law of exemption of the tariffs for the introduction of goods and installation from plants to the country for the promotion of renewable energy is this lot, Aeolian or hydroelectric. In some countries like Panama, the plants that they generate up to 10 MW do not pay costs of energy transmission. In addition to the incentives, El Salvador sets out to look for exchange of debt by investment in renewable energy.

The next entrance into force of the TLC with the United States, is another factor that will affect the TTT-CADC objective countries. The treaty will put to compete more to the Central American producers with developed producers of the EU who, in addition, enjoy the subsidies that their government grants to maintain competitive prices. This will have to force the technological improvement in the production processes, transformation and distribution of foods and raw materials in general.

The previously described scene implies a high demand for technological products that they have to do with the construction of houses, development of alternative sources of energy, development of processes of food transformation and raw materials in agreed general with the conditions of the market opening and technological transference in general. Situation that will last many years representing opportunities for companies like the TTT-CADC. Also it is necessary to indicate that a similar reality is lived in the other countries of the area but that due to the launching strategy the present single plan focuses in both already mentioned.

Objectives Markets and Goals to reach

The target markets of the TTT-CADC in those countries are the following ones:

1. Municipalities or cooperation organisms (NGOs) of El Salvador and Nicaragua that support vulnerable populations and that have availability or capacity to acquire earth with which can establish joint venture where they participate with the land and the TTT-CADC with the materials and the technology. The projects can include the generation of energy with biomass.
2. Municipalities or cooperation organisms (NGOs) of El Salvador and Nicaragua that have interest in the use of the organic sweepings to produce energy from the biomass or with any other alternative form.
3. Cooperatives or similar organisms whose mission is the resolution of the housing problems that can include generation of alternative energy.
4. Gremials cooperatives or organisms that have as mission to carry out food transformation projects as much for internal commerce as for the export within the frame of the commercial opening of free trade agreement.

In these markets the TTT-CADC will reach the following goals in next years:

1. To develop two projects of 200 houses altogether combined with generation of energy with biomass in El Salvador with two municipalities and cooperation organisms.
2. To develop two projects of 220 houses combined with energy generation and micro industrial park with a municipality, an ONG and three housing cooperatives in Nicaragua.
3. To assemble an Amaranth processing plant for the nutritious food production for vulnerable sectors of El Salvador and Central America

The competition and services to supply

The products supplied by the TTT-CADC are unique in the markets of Nicaragua and El Salvador, although in both countries there are several companies that are dedicated to the construction of houses, are directed to segments that cannot be considered of social character. In case that they do it,

they construct infrahuman houses (27m² in El Salvador) what don't solve the greater problem of hording up that they the families of smaller sources face. In the case of the TTT-CADC special materials are used that lower the price of the house. In addition, the possibility of equipping to the urbanizations with its own energy plant add high value that can be translated in (1) frees to them of the dependency of petroleum and contributes to that the currencies leave the country (2) turns to the community or the commune, in the case that is a municipality, in a generating company of use and income with a capacity to return the short term investment (3) doubly contributes to solve the problem of the sweepings because uses 80% that is the organic part in energy production and the remainders of this process become manure for the plants. On the other hand, the construction of an agreed industrial park to the capacities of the settlers or the demand of the market constitutes a concept of different community that it substantially improves the standards of life of the population awarded.

In relation to the energy generation, at the moment there are no initiatives in that order. In the case of El Salvador, a company that is in charge of the handling of the solid remainders, MIDES has plans to begin to produce it, nevertheless, the origin of the company and its location in the political phantom of the country, makes doubt much of its success. Of all ways, in the case that does it, its radius of cover would be very under which always it gives space for other projects. Nevertheless, it is to make notice that the legal and political context apparently is going to favours the sprouting of projects of this type with all the advantages mentioned in previous paragraphs. The formation of industrial parks also is a virgin market in both countries. The work with approach of value chains, will allow detecting the necks of bottle in strategic nodes where technology can be introduced that impels all the chain.

Price strategy and profit

The prices of different products/services of the TTT-CADC will be below the market looking for to maintain the balance between quality and price. In the case of the housing construction, the investigations indicate that in Nicaragua the square meter cost over the \$200. Supposing that about finished the houses of social interest they reach the \$150, the TTT-CADC will look for the form of how supplying below that price. Similarly one will take control of other products. In the case of the energy generation, as one explains more ahead the houses consume 0,0016 Kilowatts by square meter. A plant of biomass to generate energy for 100 houses of 100 m² has an approximated cost of \$140,500. This investment can be recovered in five years. In each unit cost one looks for to obtain a 30% margin. These utilities share 50% with the local partner. Of 50% rest, half shares with our head office in Tucson and the rest is of the group of Central America.

Promotion and publicity

The TTT-CADC does not use commercial publicity. It has its web site where announces the products and facilitates links with the TTT of Tucson web site. The direct promotion makes the partners who visit the different target clients to offer different products/services. In the case of Nicaragua the promotional team consists of Marla Toruño and Denis Obando. For El Salvador, the team is composed by Rufino Quintanilla and Gabriel Gaitán.

Operations

TTT- CADC carries out its operations as follow:

1) Residential complexes: if one or several local partners have the land, they automatically can cover his 50% with the shared risk of the company. The TTT-CADC altogether with the TTT-USA contributes with technology, the training of the workers, the construction of the houses and the financing needs partial or totally. The cost of the square meter of the construction depends whether the TTT makes the blocks in El Salvador or Nicaragua. I could be installed a block factory to produce block TTT between \$ 0,12 - 0.18/bloque. The block is mainly sand, a little cement, a small chemical resin composition. Each block typically has 12 inches by 6 inches by 6 inches, but the moulds can be fit. The cost by meter would be by 75% of the price of market including scanning, the construction, the installation of the services and others.

The structural construction equipments are due to produce ideally by TTT-CADC (block factory), but other articles like cooks, electrical devices, plumbing must be bought locally. With respect to the sale of houses, it would be possible to be experimented with a certain type of program of the hypothecating credit that guarantees that the 99,99% of the clients are reliable, since credit program of or micro takes control of any credit, in alliance with a local financial organization. It is possible to be based on the experience already made with the construction company of PYESSE in Hermosillo (i.e., sale price of \$15,000) and of that form to determine a reasonable sale price for Central America. In case in a credit agreement, the term would not have to exceed five years. The TTT-CADC would have to be able to recover the house in case of payment and to reassign to a new buyer.

It would be ideal to found a school of construction of TTT on each country in alliance with an university that has engineering school, in where it is taught to local people to make the blocks and to construct the houses, including all the aspects of the completion of the same one (plumbing, electricity) although if the country counts with that capacity/ability, it would be very well.

The model developed by the TTT includes creating the housing complex, a social area to locate the school, church, communal or clinical house, and supermarket. In addition, agreed an industrial or commercial park to the conditions of the market.

Once the local partners have signed the agreement of society with the TTT-CADC (Industrialist Sector Partnership Agreement and the Joint Venture

Agreement) begins the house project, taking into account the local regulations for areas in donation and parks that will be within the area of the houses. In the budget a margin is left that allows to develop these spaces, but if it is the case also of constructing a commercial area and school or hospital financing looks for thinking about selling or renting those spaces to industrialists schools interested (to sell them or perhaps to rent them to the Municipality) In this case, if the local partner puts his land, will share 50% of the resulting utility, which would be expected greater due that the sale price of the square meter of commercial buildings or educational is greater than the cost of sale of a popular house.

2) Energy co-generation: The Administration of Information of Statistics of Energy of the USA indicates that a typical house of three dormitories of a family uses in average 44,000 BTU of energy by square foot of space in the house. This represents 0,016 Kilowatts by square meter of space in the house. This reflected pattern of energy consumption (significantly greater than in Latin America) but leaves itself thus for intentions of margin of error in the calculations of the projects. For 100 houses in El Salvador or Nicaragua of 100 m² would require a generation of 160 KW. Recent studies indicate that in 5 projects of co-generation with Biomass the cost rank of \$ 580 to \$ 1,210 USD / Kilowatt with an average of \$ 888 / Kilowatt. In that form the installation of a generating capacity of 160 Kilowatts would require a plant of Biomass of approximately US\$ 140,500. This \$ 140,500 typically would include the following equipment:

- Boiler and its installation
- Condenser
- System processor of the Biomass
- Shipper
- Grain silo
- Wood silo
- Steam turbine
- Work and Installation

Depending on the size and geographic cover of the project, therefore the equipment will be needed distribution that could cause that the costs rise until in a 100%.

3) Industrial Parks: as a result of the developed activities in the energy sector, the TTT has become jumbled in the establishment of industrial parks for the incubation of technology in small scale, having used internal as well as external sources in construction, energy and other technologies of infrastructure, world-wide class. An industrial park of the TTT is designed to receive between 20 and 50 small or medium companies of a certain sector. The TTT-CADC provides management training, international trade and other supports according to the case.

4) Commercial Constructions: In the last 10 years the TTT - the USA have helped to optimize the systems of commercial and industrial buildings that can be implemented (material + work) to a low cost by square meter (not including

land costs). The increases go generally of 1,350 -1,400 square meters in which several structural materials like steel are used, aluminium, materials composed of wood, materials composed of metalmatrix, specialized wood (bamboo). In the system of the building it is possible to be used variable designs patented 3D to maximize the strength and stability of the buildings whereas it reduces to the minimum use of the materials. The technology can have other uses in civil engineering (i.e., hospitals, agricultural schools, conservatories, etc), bridges and other great structures of arc.

Finance

Once one above signs the Industrial Sector Partnership Agreement and the Joint mentioned Venture Agreement, the TTT-USA initiates the process of feasibility studies and the funding process. TTT-USA manages the financing issues in a series of banks and financial organizations with which it has been having relations for some time in similar projects.

The investments programmed for next three years are the following ones:

- 1, Construction of 300 houses with co-generation of energy in El Salvador
 - a) Houses Construction\$1,500,000
 - b) Energy Generation 425,000

- 2, Desarrollo of a plant processor of Amaranth in El Salvador..... N/d

- 2, Construction of 250 houses in Nicaragua with energy generation
 - a) Construction\$1,250,000
 - c) Generation of energy with biomass.....352,000

Great total (without including the processing of the Amaranth) **US\$ 3,527,000**
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San Salvador, February 28 2006