



OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

21903

PROJECT UNIDO NO. US/INT/88/083 - CONTRACT N° 97/087/JP

PROGRAMME FOR THE IDENTIFICATION, FORMULATION AND PREPARATION OF INDUSTRIAL INVESTMENTS IN THE DEVELOPING COUNTRIES AGROFOOD SECTORS

REPORT OF THE PRE-STUDY OF FEASIBILITY OF THE BUSINESS PARTNERSHIP OPPORTUNITIES TO LICENSE THE PRODUCTION OF INDUSTRIAL BAKERY IN GUATEMALA.

Date:

May 1997

Company: S.T.C.I. - L'épi de blé

56, rue du vieux bourg

69126 BRINDAS (LYON) - FRANCE

Tel.: 04.78.45.37.41 - Fax: 04.78.34.04.41

E-Mail: 78453741@msn.com

Consultants: Mr Descotes Nicolas

Mr Sapey-Triomphe Jean

SUMMARY

This report concerns a study of pre-feasibilty in order to valid the opportunities to cooperate to the development of the companies P.A.N. S.A. and XELAPAN S.A in Guatemala - Central America.

P.A.N S.A. is an industrial bakery located in Guatemala-city which is the capital of the country. It employs 30 workers and has a unit of production and 5 retail shops

XELAPAN is an industrial bakery located in Quetzaltenango which is the second city of Guatemala. It employs 125 workers and has a unit of production and 8 retail shops.

The pre-study of feasibility is an analysis of the companies according to the different aspect of marketing and production.

It has been led by Mr Nicolas Descotes as baker consultant and by Mr Jean Sapey-Triomphe as cost accountancy-marketing consultant.

TABLE OF CONTENTS

| - INTRODUCTION | P. 1 |
|--|------------|
| - PRELIMINARY SECTION | P. 2 |
| - STUDY OF PRE-FEASIBILITY P.A.N. S.A | Р. 3 |
| - PRODUCTION | P. 4 |
| - Raw materials | |
| - Equipment | |
| - Current production | |
| - Process of production | P. 6 |
| - Labour organization | P. 7 |
| - Current staff | P. 7 |
| - Conclusion | P. 8 |
| - COST ACCOUNTANCY - MARKETING | P. 9 |
| - Cost price of the raw materials | P. 9 à 10 |
| - Cost price of the raw materials per recipe | |
| - Cost price of the raw materials per products | |
| - Cost price of the staff | |
| - Cost price of the renting of the premises | P. 21 |
| - Conclusion | P. 22 à 23 |
| - STUDY OF PRE-FEASIBILITY XELAPAN S.A | P. 24 |
| PRODUCTION | P. 25 |
| - Raw materials | |
| - Equipment | P. 26 |
| - Production | |
| - Organization of the work | P. 28 |
| - Training | |
| - Department pastry | |
| - Conclusion | |
| - COST ACCOUNTANCY - MARKETING | P. 31 |
| - Cost price of the raw materials | |
| - Cost price of the staff | P. 32 |
| - Organization | |
| - The network of distribution | P. 34 |
| - Qualities of the bakery products | P. 34 |
| - Plan of development | |
| - Conclusion | P. 36 |
| - FINAL SECTION | P. 37 |
| ANNIEWE | D 20 3 41 |

INTRODUCTION

Following the visit in France of a delegate of the company PAN S.A. and following the exchange of information about the company's bakery production, we agreed to carry out a prestudy of feasibility in order to definite a program of technical assistance.

The objective of this report has been to determine the strenghs and weaknesses of the company PAN S.A. in order to evaluate a programme of bakery technical assistance.

Following the visit in France of the Manager of the company XELAPAN S.A. and following the project to apply to an ECIP cooperation (European Community Investment Partnership) to develop the industrial bakery, we have carried out in Quetzaltenango-Guatemala a prestudy of feasibility in order to valid the opportunity of cooperation.

The objective of this report has been to determine the strenghs and weaknesses of the company XELAPAN in order to evaluate its potential of development on a basis of cooperation with our company.

For each company the report analyses the production in a first step and in a second step the cost accountancy and marketing.

Then, some conclusions have been reached at the end of the mission

PRELIMINARY SECTION

The market of the bakery in Guatamala is divided between the local craft bakeries who manufacture bread of low quality, and industrial bakeries who manufactures a range of bread of better quality.

The bakery points-of-sales are also very different as the local craft bakeries have often very poor display of the product as well as a poor look of the shop. The industrial bakeries points-of-sales are more sophisticated thus still below the European or American bakeries standards.

The prices of bread are very low and the points-of-sales are numerous. Then this market is very competitive.

For the two companies we remarked the necessity to differenciate by top-quality products as well as improving their network of distribution.

STUDY OF PRE-FEASIBILITY P.A.N. S.A.

The study of pre-feasibility of a cooperation partnership for the company Pan S.A. has been realised on the following basis:

The company P.A.N. S.A. began manufacturing bread one and a half year ago.

They had no knowledge of the bakery business before,

They bought the bakery equipement of an unit of production from sweden for a total cost of about one million dollars. The unit of production is quite brand-new.

Then, the workers didn't have any bakery training except the recipes and advices that were provided by the supplier of bakery equipments.

Then, the situation of the bakery business is far from the previsional expectation of turn over that were based on two elements:

- the capacity of production

333

- the bakery shops laying-out and sales methods.

The study of pre-feasibilty has been realised as an audit of the company, on the production point of vue and on the cost accountancy-marketing point of vue.

PRODUCTION

RAW MATERIALS

Ingredients:

Flour

: average quality

Salt

: average quality, water-laden, not fine enough

Sugar

: average quality, do not sweetens enough

Margarine: good quality (no adapted to flaky pastry)

Yeast

: satisfactory quality

Improving ingredients: good quality but not essential for the production

The raw materials are not of so bad quality, but it could be good to import raw materials so that to obtain a regular production and a consistent quality.

If you choose to import, we can recommend you to group the purchases with other bakeries.

(Import adviser: flour, sugar, butter, flour for special rolls)

EQUIPMENT

Bakery equipement:

1 spiral mixer

: good working order

1 planetary mixer

: good working order

1 group of dough weighing scale and

automatic buns divider

: good working order (to sell)

1 intermediate dough conveyor

: good working order (to sell)

1 automatic conical buns rounder

1 automatic buns moulder

: good working order (to sell)

: good working order (to sell)

1 automatic moulder

: good working order

1 automatic round loaf moulder

: good working order

2 final proofing chamber

: good working order

2 rotary rack oven

: good working order

1 dough sheeter

: good working order

1 cookies machine

: good working order (to sell)

1 Deep freezing chamber

: good working order (to sell)

1 freezer

: good working order

1 cool chamber

: good working order

1 ventilated cool chamber

: good working order

2 dishwashing

: good working order

Few small equipment.

Many equipment, but a large part of it is useless (in the preceding list, noted by: to sell) and the equipment as a whole is not adapted to the expected production.

CURRENT PRODUCTION

The viennoiserie products as a whole have a mediocre quality, are heavy and not very appetizing. The everyday products are very too quickly made, that are bad concerning the quality.

It seems to be necessary to create new recipes easy to realize, so that to create a new range of products adapted to the company, which will be appreciated by the consumer.

PROCESSES OF PRODUCTION

They do not exist. The rules of production are not respected, so the effects of these failings are that the quality cannot reach a satisfying standard level.

Too many yeast and a too high cooking temperature give to the products a strong yeast taste.

There is no development of the products during the cooking,

The scarification of the dough is not well done.

Then, the products are of bad quality.

It seems to be necessary to restructure all the processes of production., to adapt them for the company and its requirements of production.

PAGES ARE MISSING IN THE ORIGINAL DOCUMENT

COST ACCOUNTANCY-MARKETING

1) COST PRICE OF THE RAW MATERIALS OF THE BAKERY PRODUCTS

All the bakery products that are under 35 % of cost price of raw materials / price of sale stand in the bakery average percentage that is usually around 30 % of cost price of raw materials/price of sale.

All the other bakery products above 35 % such as
GALLETA
PANITO DULCE
CONCHITA ESPECIAL
CORTADA
MANTEQUILLA
ROYAL PEQUENO
SHECA JALEA
SHECA CORTADA
SHECA NEGRA
TOSTADO
CHAMPURRADA
CUBO GRANDE
get a too high percentage of cost price of raw materials/price of sale.

It could means that

- The price of sale of these bakery products are not at the right selling price (too cheap)
- The recipes need the use of much more raw materials than other bakery products,
- The raw materials are quite expensive for these bakery products,

In fact the three factors can be taken into account,

- for some bakery products the recipe can be ameliorated and cost-saving,
- for others the price of sales can be raised,
- and the raw materials can be bought at better price.

The strategy of the company is to sell bakery products at very cheap price, nevertheless the average cost of raw materials/ price of sale is around 48 %. That percentage is 18% higher than the bakery average percentage of 30%.

The following raw materials can be bought at better prices and quality.

- Concentrate butter
- Grass vegetaline
- Dried vegetaline
- Flour

2) COST PRICE OF THE STAFF

The staff is counted to be 125 workers and employees. And the estimated cost of the staff is about 15% of the sales turn over.

This cheap cost of the staff is a real advantage to the XELAPAN company.

The staff benefit of wages, social advantages and company cohesion is above the Guatemalan average.

The company is aware of the importance of the motivation of the staff.

One of the company objective is to develop the skills of the staff as well as a good working team spirit.

3) ORGANIZATION

The organization of the company is based on the maximum profitability of the unit of production and the delivery of fresh bakery products twice a day. The company use the 3-shift system.

There are four department managers in charge of:

- production
- Accountancy
- Human ressources
- Sales

The offices are in the same building of the unit of production.

The general manager has objectives of development for the company. A four year plan of development has been established.

4) THE NETWORK OF DISTRIBUTION

For the time being eight bakery shops are in operation. They are all located in Quetzaltenango. This number of retail point-of -sales give to the company a good fame in the town.

The sales turn over is satisfying unless there could be great amelioration in reorganization of the display of the bakery shops to push the sales.

5) QUALITIES OF THE BAKERY PRODUCTS

The quality of the bakery products are not equivalent to the standard quality as european or american bakery products.

For the time being the quality meet the basic Guatemalan consumers requirements.

But it is to notice that companies from Mexico and the United States do begin to sell bakery products in Guatemala. These companies can take big share of the market on some bakery products (example Sandwich bread).

It means that the level of bakery products will improve on the next few years.

Then the bakeries which will be able to meet these quality improvements will get the market share.

6) PLAN OF DEVELOPMENT

The plan of development of the company on 4 years is

- to develop new range of bakery products, especially sandwich bread
- to reach a total of 28 points of sales, including bakery shops in Guatemala-city
- to develop an unit of production with deep-freezing of the dough at the production unit and baking of the dough on the points of sales.

This program can be planned as follows:

Year 1997: - Pilot plant of sandwich bread

- Opening of 2 bakery shops

Year 1998: - Opening of 6 bakery shops

Year 1999 - Opening of 6 bakery shops

Year 2000 - Opening of 6 bakery shops

CONCLUSION

The company XELAPAN S.A. has reached a good level of development on its market share that is popular bread market.

In order to pass a major turning point in terms of development over the next few years, the company needs to reorganize its production and develop a marketing plan with the concept of the chain of stores.

The development of the company XELAPAN S.A. would be carried out with a technical and marketing assistance from France.

In order to maximize the cooperation with partners company and the financial potential of the project, the opportunity to cooperate through a program of the European community has been studied during this audit .

The program named European Community Investment Partnership ECIP can be applied for as soon as possible.

FINAL SECTION

Concerning the company P.A.N. S.A., the development must be lead in order to increase the level of production in a first step and in a second step the level of marketing.

According to the conclusions of the study of pre-feasibility of the production, it is obvious that a complete training of the staff concerning the processes of manufacturing is to be conducted on a short term.

Then, the cooperation with this company will be lead on the basis of a technical assistance. About the manufacturing, P.A.N. S.A. believes that they do not need marketing assistance for the time being. In our opinion, there is much to change concerning the retail shops immediately to reach a good level of turn over. The marketing assistance is to be planned for next year.

Then the following schedule has been planned:

One month of technical assistance for bakery manufacturing in 1997.

One month of marketing assistance and one month of technical assistance in 1998.

Concerning the company XELAPAN S.A., the development must be lead in order to increase the level of production as well as marketing.

Concerning production the previsional cooperation has been envisaged on the following basis:

- Development of the training of the staff to manufacture bread, viennese and sandwich bread.
- Reorganization of the workshops
- Improvment of the processes of manufacturing
- New recipes of bread and viennese products
- Creation of a pilot unit for frozen bread.

Concerning marketing, the previsional cooperation has been planned on the following basis:

- New display of the bakeries lay-out
- Development of a concept of chain of bakeries

In order to prepare the development of this programme, the companies will apply to the European Community Investment Partnership program.

As a general conclusion, all the objectives of the pre-study of feasibility have been reached, that is to say:

- Knowing better the economical environment of the Guartemalan market
- Knowing better the Guatemalan companies
- Having discussed about the different hypotheses of cooperation
- Having planned to prepare a program of cooperation

ANNEXE

COORDINATES OF THE COMPANIES:

P.A.N. S.A.

General Manager: Mr Jorge Castillo

5a, CALLE 1-68, ZONA 13

GUATEMALA-CITY - GUATEMALA Tel.: 502.472.4808 - Fax: 502.472.0851

E-Mail: jagpansa@infovia.com.gt

XELAPAN S.A.

General Manager: Mr Carlos Guzman

9a. Av. 11-82 ZONA 1

QUETZALTENANGO, GUATEMALA

C.P. 0009

6.3

Tel.: 502.761.6762 - Fax: 502.763.0759

E-Mail: xelapan@mail2.guate.net

GUATEMALA FOOD MARKET OVERVIEW

I. General Market Overview

A. Macroeconomic situation

Over the past several years Guatermala has demonstrated strong economic growth. The peace agreement between the government of president ARZU and the representatives of the guerilla were solemnly signed in Guatemala-city the 29 december 1996, ending an internal conflict of 36 years.

The government must now carry out a great program of development concerning as much the reform of the state (army, justice) as well as the reinsertion of uprooted populations and country development.

The total amount of the projects bound to the "peace program" was evaluated to 2620 M USD

A strong and fast increase of tax collection will be necessary to give the government the self-financing needed.

According to information given by the Bank of Guatemala, the economy progressed of only 3.1% in 1996. That is 1.8% less than 1995 (+4.9%).

This figure, the worst from the last 10 years, would be the result of external factors such as the strong increase of fuel and of some basic agricultural products on the world market. The fall of the coffee rate, main exportation product that affected the foreign trade and a slackened economic activity due to the raise of the Value. Added. Tax. rate, high interest rates and general insecurity.

Most of productive sectors registered positive results. Agriculture (+2.5%), industry (+1.5%) electricity and water (+9%) mining (+23%) and construction (+0.9%).

The commerce progressed of 2.3% Transports 4.5% and banking sector of 7%.

Among the agriculture products, the bananas (+9%) the cardamom (+7.4%) the vegetables, tropical fruits and flowers. The production of coffe and sugar stood at the same level as 1995. Concerning inflation, it was about 9.9% in november 1996. For the whole year the raise of prices would be about 11%. The estimation for 1997 are around 8 to 9% of inflation.

International monetary funds reached in december a new record of 843.6 M USD.

The exchange rate Dollar/Quetzal stabilize around 6 Quetzal for 1 dollar.

The foreign debt is very small and amount at end of october 1996 to 2041 M USD . 66 M less than at 31.12.95.

The improvement of tax collection (+16.6%), a better control of public expenses are at the origin of this good result.

The fiscal collection is raising (from 7.6% to 7.6%) but is still insufficient.. The estimation for the years to come are 8.6% in 1997, 10% in 1998, 11.4% in 1999 and 12% in 2000. Concerning 1997 that will be a year of economical recovery, the government estimates that the raise of Gross Domestic Product G.D.P. will be about 4 to 5% based on an increasing

capital funds and investments following the peace agreement. The growth rate should go on in 1998 (+5.1%) and 1999 (+6%).

B. Consumer-Ready Food Products Situation

<u>{</u>;\$

After setting record sales in 1995, most distributors, manufacturers and supermarket chains are reporting a significant decline in demand for consumer-ready products over the first half of 1996. Increased taxes, rising input prices and declines in consumer buying power are the major reasons for this decline in consumption. Some of this decline can be attributed to distributors increasing inventories at the end of 1995 to avoid the sales tax increase.

Demand for consumer goods generally increases in the second half of the year as more money comes available from seasonal agricultural work.

Over the next few years, consumer-ready product demand will largely depend on the government of Guatemala's ability to better its fiscal situation and increase consumer confidence in the economy.

C. Situation of the Consumer-Ready Products Market

With regional economic integration and reduced tariff levels, a wider range of well packaged and well displayed high-quality products are already available in the market. The United Sates remains the overall most important supplier of Consumer-Ready Products to Guatemala. Guatemala imported approximately \$121.0 million worth of consumer-ready products in 1995. According to the bank of Guatemala statistics, dairy products represented more than half of total consumer-ready imports valued at \$64.5 million. Snack food imports were the second most important category imported at a value of \$22.5 million. Other significant Consumer-Ready Product imports included poultry and red meats, fresh fruit and vegetables, wines and beer, breakfast cereals and pet foods.

The consumer-ready market outlook for Guatemala is very positive, in spite of expected declines in consumption in 1996. Cable T.V., the many thousands of Guatemalan's that live and work in the United States, and increasing disposable incomes, are all factors that suggest the consumer-ready product market in Guatemala will rebound and grow. There are greater efficiencies to be ad with improvements in marketing, product handling, warehouse management and quality controls. Supermarkets are beginning to invest in bettering frozen storage facilities, distribution systems and marketing programs.

Exporters must create customer loyalties and cater to changing consumer demands. Mexico, Chile, and El Salvador are three countries that see the potential in the Guatemalan consumer-ready market and are aggressively entering the market in several commodity areas.

II Consumer

Guatemala is unique to the other Central American countries in that it has a significant indigenous population. In 1995, the national Institute of Statistics reported total population at 10.6 million people of which 5.1 were indigenous. This factor creates an interesting nuance to the consumer-ready product market. Except for basic food such as meats and poultry, milk and other diary products, the indigenous population is not a traditional consumer of imported consumer-ready products. For this reason, average per capita income figures can be somewhat misleading. In 1995, per capita income was calculated at \$1,389. However, most imported consumer-ready products cater to upper and upper-middle income consumers. The per capita income of these consumers is much higher.

It is estimated that approximately 20 percent of the population is upper and upper-middle income. It is further estimated that two third of the population in GuatemalaCity or roughly 14.5 million people regularly shop in supermarkets. While quality, service and convenience are becoming more and more important to consumers, price is still an important factor in making food purchases. At the same timle U.S and European products have a slight avantage over other third country products. The typical Guatemalan consumer perceives U.S and European products as having better quality and are willing to pay more for them. However, an inflationary economy one would expect price consideration to be more important.

As in most countries in the region, women are becoming a larger percentage of the workforce. In addition, fewer households are hiring maids. This phenomenon is creating a shift in traditional food consumption patterns. Many households eat out more on average creating a significant expansion in fast food restaurants. Supermarkets have reported increases in demand for frozen food items, canned vegetables and pre-cooked poultry products. Guatemalan heads of households are looking for more economic and faster ways of feeding their families.

III Distribution systems for Consumer-Ready Food

There is a very large number of small individually owned "tiendas" that sell mostly locally produced products and limited imported goods. These stores cater to residents in the lower and middle income range throughout the country. Imported products typically stocked are powder milk, canned vegetables and beans, juices and snack items. Local food producers complain that much of the contraband trade is sold through these small stores. Next in size are local open markets. These market cater mostly to fresh produce which is locally grown. Imported fruits are also marketed here. Only the larger markets have refrigeration so no frozen or chilled products are sold here.

The vast majority of all imported consumer-ready products, if not all, is retailed through supermarkets and convenience stores. The largest largest supermarket chain controls roughly 60 percent of the supermarket retail business. This chain imports much of its consumer-ready products directly and also distributes product to other supermarket chains. The other supermarket chains buy products through wholesalers/distributors.

IV Domestic Food Processing sector

The Guatemalan consumer-ready food processing sector is diverse and competitive. It not only produces for the local market but also is a significant supplier of quality products throughout the region. Guatemala produces breakfast cereals, pasta, cookies, crackers, soups, cake mixes, bottled beverages, beer, snack foods, ice cream, canned goods and meat products to mention just a few. Clearly, there are opportunities to market food additives in Guatemala given the success of the food processing industry. Leading importing items include, no-alcoholic preparations for drinks, spices, essences, and flavorings.

V SUMMARY STATISTICS 1995

MAJOR METROPOLITAN AREAS: Seven

Guatemala-ciudad - Quetzaltenango - Escuintla - Chimaltenango - Sacatepequez - Suchitepequez - Huehuetenango

TOTAL POPULATION (Million): 10.6

POPULATION GROWTH RATE: 2.9

URBAN POPULATION (Million): 4.1

URBAN POPULATION GROWTH: 3.2

PERCENT OF FEMALE : 28.0

POPULATION EMPLOYED

PER CAPITA GROSS

31.3

DOMESTIC PRODUCT (\$.U.S.): 1,389.0

FAMILY FOOD EXPENDITURES

(U.S.Dollars/ Average per month:

5 members family) (1991) : 133.62