

Sustainable Development in Central America and the Dominican Republic

Company: PANADERÍA CORAZÓN DE ORO

Country: Nicaragua

Project: Programme Poverty Reduction and Improvement of the Environment:
An Integral Sustainable Development Strategy.

THE COMPANY

Panadería Corazón de Oro, located in the Masaya municipality, started its operations on November 15, 1924. According to its current owners Miguel Ángel Duarte and Luz Marina Chow, the company has reached great reputation and brand positioning in the Nicaraguan market. This has allowed a sustained company growth since it has been able to enter and maintain a position in the national market – commercializing products in supermarkets in Managua, Leon, Jinopote and Matagalpa.

Currently, the company employees 20 people and results in approximately 10 indirect positions.



MISSION

"We are a company with a long history dedicated to the making and selling of a large variety of bakery and pastry products. We care about our clients' enjoyment and health reason why we offer them high quality products prepared with no preservatives, nor coloring and under excellent hygiene conditions".

PRODUCTS

The company's main products are:



- Toasted butter, garlic, cheese, chili and whole wheat bread (both in buns and toasts)
- Garlic buns
- Sweetened and unsweetened cookies
- Hot dog buns
- Hamburger bun
- Buns, savory turnovers, sugar frosted crumbles
- Other varied bakery and pastry products




PROJECT DESCRIPTION

The methodology to implement the Sustainability Strategy in the company started with the conceptualizing of the sustainable development system –at which stage an internal and external organizational analysis took place to determine its sustainability profile, as well as its options for improvement in the environmental, economic and social dimensions.

Later on, a sustainability strategic work frame was established; here the organization's strategy – which includes Mission, Vision, organizational values, strategic objectives in the three mentioned dimensions, and the company's commitment to sustainable development.

Based on the strategic work frame, the action plans were defined in each dimension; and the monitoring mechanisms and indicators were established to guarantee the fulfillment of the established strategic objectives. Later on, training and technical assistance were provided to support the company in implementing the action planes. This way, it was intended to fulfill the transfer of knowledge to the organization; also, the follow up oriented towards the achievement of the expected results was developed.

MAIN OBTAINED RESULTS

Starting diagnosis	Achieved Improvements
ECONOMIC DIMENSION	
1. Value Drivers	
<ul style="list-style-type: none"> - Lack of indicators to monitor the company's financial results to make decisions about it. - Need to improve some aspects related to the accounting system (profitability control by sales point, stock control, and the register for receivable and payable accounts). 	<ul style="list-style-type: none"> - A strategic plan was developed as well as indicators to follow up on established objectives. - Personnel were trained on Economic Value Added (EVA), and on the different value drivers activities, which are part of the company's financial results. - A tool to monitor the main indicators related to value chains (growth, profitability, work capital, investments and financing) was implemented. - An action plan was defined to improve the company's value chains. - An analysis on the company's relevant accounting elements was done and recommendations on that regards were given. - Awareness regarding the importance of product diversification and added value as differentiating element in the market was accomplished. - The possibility of having new distribution channels for the products is studied in order to maximize production capacity. - The brand Corazón de Oro® is a registered trademark.
2. Good Manufacturing Practices and HACCP (Hazard Analysis and Critical Control Point)	
<ul style="list-style-type: none"> - Improvement needed in infrastructure, warehouses, hygiene, process and product. - Lack of written procedures and controls registers. - Lack of a Risk analysis and Control Point (HACCP). - Topics of food safety and innocuousness not included in the personnel's induction programs. 	<ul style="list-style-type: none"> - Plant personnel were trained on Good Manufacturing Practices – emphasizing hygiene topics.  <ul style="list-style-type: none"> - The following recommendations given to comply with Good Manufacturing Practices (GMP) were implemented: change of wooden floors to white ceramic ones in some areas, work tables were substituted for stainless steel tables, improvements in infrastructure like drains, sieve in doors and windows, construction of a warehouse for finished products, adequate distribution and location of products and raw materials in their corresponding warehouses, the electric panel was eliminated and bathrooms are being built outside the production area building. - The documentation of company's procedures and controls has continued. - Personnel's induction plan includes food safety, innocuousness, GMP and HACCP. - With the innovation program support, the HACCP implementation will continue.

ENVIRONMENTAL DIMENSION

1. Efficient use of raw materials and prevention of solid waste production

- Production of organic waste.
- Raw materials packing bags become solid waste.
- Production of bread leftovers (production and clients' returns).
- Raw materials with no specific storage area.



- Some of the people in charge of the company are negotiating a compost project in the Masaya area to rationally use the organic wastes.
- It was agreed with the raw materials supplier to buy the bags to be reused. Each bag is sold at \$0.13 USD; and approximately 150 bags are sold per month (\$20.00 USD per month).
- Ground bread is produced from the leftover bread. The product has good acceptance in the market, it also reduces the production of solid waste. Approximately a 100 lbs. of ground bread are produced each month, and each pound costs \$0.05 USD producing an earning of \$50.00 USD per month.
- The construction of a storage warehouse for raw materials was accomplished during the current remodeling.



2. Energy efficiency

- High electricity consumption by the laminating machine.
- Very damaged electric wiring and inadequate for the company's equipment.

- The use of the laminating machine was discontinued – doing the work by hand (more efficient) and resulting in electricity savings.
- The damaged electrical panel was changed as well as the whole electric wiring.

3. Adequate handling of chemicals

- Inadequate storage of chemicals.

- It is being considered in the remodeling plan to invest in a warehouse for the storage of chemicals.

4. Others

- The pastry area is very small – making it difficult to work in that area.

- The bakery area was expanded.
- An industrial size oven was purchased and installed which allows product diversification and to take advantage of the installed production capacity. The investment was \$14,000.00 USD.



SOCIAL DIMENTION

1. Occupational Safety

- There is no labor risks identifying program.



- Risks present in the plant were identified and measures recommended. The main identified risk relates to severe burns due to the handling of the oven's flame. The measure to eliminate the risk was to build a base to avoid the handling of the flame.

2. Internal and External Social Projection

- Lack of a well-structured social projection plan.
- Need to improve training, communication and the involvement of the company's human resource.



- At the managerial level, awareness of the need of social projection directed towards the community. This was achieved through workshops like: Social Entrepreneurial Responsibility, Social Management, and Change Management. Currently, some of the community's sports teams are sponsored by the company.
- Awareness of the company's responsibility regarding the products' manufacture to ensure customers' safety was also accomplished.
- Awareness of the need to improve Human Resources Management was achieved – oriented towards internal communication mechanisms and personnel's involvement in reaching objectives and opportunities of development and personal improvement for the company's personnel.
- A tool which allows customer's satisfaction assessments was designed with the objective of giving feedback to the employees about the success and opportunities to improve.

**Comment by Miguel Ángel Duarte Membreño
Proprietor**

"Our company has changed its entrepreneurial dynamic since the training and technical assistance given during the Program. Changes have been made in the entrepreneurial concepts, environments and hygienic-sanitary conditions. We hope you can continue assisting both in Nicaragua and the rest of Central American countries for everybody's benefit".



Project "Science and Technology Application to the Strengthening of the Small and Medium Size Agroalimentary Companies ((MIPYMEs) in the Rural Area of Latin America and the Caribbean", component: Nicaragua. Financed with resources from the OAS.