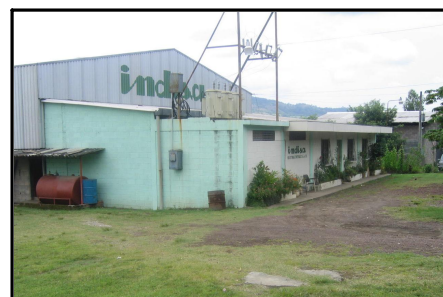


Sustainable Development in Central America and the Dominican Republic

Company: INDISA
Country: El Salvador
Project: TMF Program: Poverty reduction and environmental improvement.
A sustainable development strategy.
Year: 2005

THE COMPANY

Industrias Diversa S.A., INDISA, located in San Juan e Opico, La Libertad, started operations in 1963 with the exclusive focus on making decorations for the Christmas season. In the last years, its product portfolio has presented a major diversification, having great importance the making of plastic toys, hair pieces and metallic scrub pads among others. Currently, it has 50 employees distributed in the administrative and the production areas.



PRODUCTS



Its main products are Christmas decorations and didactic toys. They also make black hair pins and metallic scrub pads. Most of the products are made from recycled raw materials.

PROJECT DESCRIPTION




The methodology to implement the company's Sustainability Strategy 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.


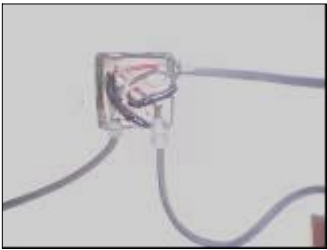


Action plans were established in each dimension as well as monitoring mechanisms and indicators to guarantee the fulfillment of the established strategic objectives.

Later on, training and technical assistance were provided to support the company in implementing the action plans. This way, it was intended to fulfill the transfer of knowledge to the organization; and the follow up was developed oriented towards the achievement of the expected results.

MOST RELEVANT RESULTS

Initial Diagnosis	Attained Improvements
ECONOMIC DIMENSION	
Financial Management	
<ul style="list-style-type: none"> ▪ No adequate inventory control is kept in the company. ▪ The company's accounting information was analyzed – aspects to be improved were found: accounts receivable, sales costs, provisions and others. 	<ul style="list-style-type: none"> ▪ Work was done with management and plant personnel to make them aware of the importance of inventories for the company. ▪ A work plan on inventory flow and distribution was made. ▪ The plant's redistribution was considered to engage in a better productive processes flow, as well as storage of already produced – or in the process- products. ▪ It was recommended to the management to do a revision on the different items, both from the perspective of record keeping as well as information validation. ▪ A tool for accounting information analysis was provided – to facilitate the interpretation by strategic and financial indicators for the management' decisions. ▪ An improvement plan with options in the short, medium and long term in financial-administrative aspects was implemented.
Productive Efficiency	
<p><i>LEAN MANUFACTURING</i></p> <ul style="list-style-type: none"> ▪ The following indexes were determined related to the lean manufacturing topic: <ul style="list-style-type: none"> ✓ Visual Factory = 19,4% ✓ Order and cleanness Index = 20% <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <p><i>QUALITY MANAGEMENT</i></p> <ul style="list-style-type: none"> ▪ There is no formal control in the process related to color. 	<ul style="list-style-type: none"> ▪ After giving recommendations for the productive process's improvement, and mostly work on the implementation of the first stage of the 5 S methodology for order and cleanness, improvements occurred in final values of the monitored indexes during the project. These are: <ul style="list-style-type: none"> ✓ Visual Factory = 36,1% ✓ Order and cleanness Index = 26,7% <div style="text-align: center; margin-top: 20px;">  </div> <ul style="list-style-type: none"> ▪ Order and cleanness is an important topic for production, for which it was recommended to keep continuous improvement at the company. ▪ The color control situation was improved – creating an injection/blowing control.

<ul style="list-style-type: none"> Records in use by the company do not establish specific spaces for waste measurement and uncomformed product. There are no formal records for all areas. 	<ul style="list-style-type: none"> The registration process was improved since company records were formalized, and the space was included to write down the reasons for incompliance with controls. Records for plastic cutting and grinders are in use; this allows keeping performance data. Formal record keeping were implemented in the company. The different control quality control concepts requested by the client or required by the company have to be incorporated.
<p>ENVIRONMENTAL DIMENSION</p>	
<p>Waste production</p>	
<ul style="list-style-type: none"> Paint loss in the hangers' machine. The oven's exit chimney for gaseous emissions is in bad structural condition, so gaseous wastes concentrate inside the plant. 	<ul style="list-style-type: none"> This was temporarily solved by placing a container for paint collection. It remains pending the machine's revision to try to stop as much as possible leakage. It was recommended to change the chimney to avoid inadequate conditions inside the plant. 
<p>Efficient water use and waste waters production</p>	
<ul style="list-style-type: none"> Problems with making the well water potable. 	<ul style="list-style-type: none"> Research was done and a report presented in which current water treatment characteristics and functions are indicated – along with data on the well water conditions in areas surrounding San Salvador. For this water's characteristics what was recommended was an inverse osmosis process – which was explained in the report. Another recommendation in this report was to do a well water physiochemical analysis to know exactly the water's composition and be able to determine adequate treatment according to the specific needs.
<p>Energy Efficiency</p>	
<ul style="list-style-type: none"> Electrical wiring is in bad condition, mostly the one in the grinding room.  <ul style="list-style-type: none"> High energy consumption – especially in electricity. 	<ul style="list-style-type: none"> This system must be checked to improve the plant's electrical wiring's efficiency, and avoid any accidents. It is recommended to monitor electrical consumption – to get a parameter which shows the implemented measures' success.

SOCIAL DIMENSION

Health and Occupational Safety	
<ul style="list-style-type: none"> ▪ Internal plant temperature is too high – resulting in an unpleasant and uncomfortable work environment. ▪ To eliminate the “edges” of the produced pieces in the blowing machines, a small knife is used and not always protection gloves are worn. ▪ Information – for workers – on labor safety aspects is lacking. ▪ The safety sheets for the chemical products used in the process to make the hangers (MSDS) were not found ▪ Chairs used by personnel in charge of making the Christmas trees branches are not adequate for the task – as it may result in accumulative back discomfort. The same happens with people in charge of washing containers before they are cut. ▪ Lack of adequate safety gear for workers. ▪ Workers are not aware of occupational safety issues. 	<ul style="list-style-type: none"> ▪ Fans and extractors’ windows must be kept opened at all times; the person in charge must be reminded. ▪ Workwomen must be insisted upon wearing gloves – as they do not wear them systematically. ▪ It is recommended to make signs which help workers to easily see and remember different aspects, care and precautions they should take. ▪ It is recommended to have this information in Spanish so that it is a quick reference in case it is needed. ▪ It is recommended to look for a chair model which avoids any lesion. This model may be made at the company or through some contest in which workers are given the option to participate with their initiatives. ▪ It is recommended to wear safety gear like gloves, masks and ear plugs. ▪ It is recommended to develop awareness among personnel about the importance of work safety in the company – for which workers and employers must contribute. It is recommended to search for trainings in the topic – maybe with the Ministry of Health.
Internal and External Social Projection	
<ul style="list-style-type: none"> ▪ There was no Positions Descriptive Handbook. ▪ There was no formal selection process. ▪ There was no formal training process. ▪ At the company, there were no initiatives regarding social development 	<ul style="list-style-type: none"> ▪ A structure for the Position Handbook was proposed – taking into account structural dependency relations, functions, formal requirements and specific skills for each position. Six complete descriptions are available, the rest remain to be done. ▪ Jointly with the Production Management, the Recruiting and Selection process was designed for the company, besides the corresponding forms for each step of the process were made. ▪ A training process was set in its fundamental steps – training needs detection, service supplier search or internal training option, training activities preparation, among others. It remains to be done the model’s validation, to register missing records, and to implement it. ▪ A conference at the management level was given about the importance of social development initiatives.

	<ul style="list-style-type: none">▪ Awareness conferences were given on the following subjects:<ul style="list-style-type: none">✓ Social responsibility: human elements and competitiveness.✓ Better human talent management at organizations✓ Our personnel healths and safety: elements to consider.✓ Society and company in the competitive context.
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PHRASE BY THE ENTREPRENEUR

“The Project, “Integral Sustainable Development Strategy” developed by CEGESTI in our company has been important and of great help in fundamental areas; for example at the warehouse there was no adequate separation of raw materials, packing, finished and in the process products. It has been through CEGESTI’s recommendations that these issues have been worked on, and today our inventories are safer and more orderly. There has also been a complete segregation between produced and distributed products versus those which are only distributed. For all these reasons and others which are no possible to be listed in this paragraph, we thank CEGESTI and each one of the consultants who with care and abilities have advised us.”

Juan Antonio Blanco
General Manager

