

To whom it may concern,

Guatemala City, April 2021

Licores de Guatemala is a leader in the production and distribution of the finest aged rums and other spirits of the highest quality, in both the national and international markets. Their quality is endorsed by quality system certificates such as ISO 9001:2000; ISO 14000; HACCP/ISO 22000 and other certificates along its production line, which is operated by Ingenio Tululá S.A. (ITSA) and Destilería de Alcoholes y Rones S.A. (DARSA).

Between May 2020 and March 2021, we developed, in conjunction with London Consulting Group, the "Relacionando y Desarollo Organizaciones" (Linking and Developing Organizations) project. The project consisted of consolidating the synergies between ITSA and DARSA, with a focus on maximizing their combined profitability. This included implementing Plantation Management, Harvesting, Growing, Transportation, Workshop, Extraction and Production of honey and sugar processes in ITSA; and implementing Production, Maintenance, and Inventory processes related to the production of alcohol, at DARSA.

Some of the project's most significant results were:

## **Equalization and Optimization ITSA & DARSA**

- Designing an equalization financial model in order to facilitate decision that led to maximum combined profitability.
- Designing and developing a corporate bonus model which focused on integration and synergies.
- Designing and implementing synergies into the structures that are shared by both companies.
- Enabling the Racking Line, which eliminated transportation of raw materials from ITSA.
- Increasing the pounds of vapor from ITSA to the distillery by 65%.

## INGENIO TULULÁ S.A. (ITSA)

## **Plantation Management**

- 25% reduction in labor cost per hectare for pre-harvested irrigation work.
- 28% reduction in labor cost per hectare for post-harvested irrigation work.
- 15% reduction in labor cost per hectare for fertilization work.
- 68% reduction in labor cost per hectare for weed control.
- 1.6% increase in tons of cane per hectare (TCH).
- 4% reduction in labor costs per hectare.

## Harvesting, Growing and Transportation

- 15.4% increase in mechanized harvesting.
- 18.8% increase in bulk harvesting.
- 17.2% increase in the efficiency of the rented harvesters.
- 42.8% increase in the gathering machines' daily productivity.
- 5.9% increase in tons of heads per day.
- 9.6% increase in tons per worker per day.
- 9% reduction in the cane's freshness.
- 700% increase in the amount of cane collected from the field.
- 2% reduction in the cost of harvesting.
- 28% reduction in the harvesters' rental costs.
- 12% reduction in the cane acquisition cost to suppliers.

## Workshop

- 36% reduction in the mean time to repair (MTTR).
- 46% increase in the mean time between failures (MTBF).



• 1% increase in the harvesters' availability.

#### **Extraction and Production**

- 1% increase in the mill's effectiveness.
- 11% reduction in total losses.
- 1.2% reduction in pol in the bagasse.
- 32% reduction in total downtime.

# DESTILERÍA DE ALCOHOLES Y RONES S.A. (DARSA)

#### Production

- 2% increase in the Alcohol's OEE.
- 2% reduction in Non-Conforming Products.
- 1.3% increase in the Fermentation's Efficiency.
- 22% reduction in unscheduled downtime.
- 31% reduction in the ethylic alcohol's pounds of vapor.
- 10% increase in the furnaces' performance.
- 6% reduction in overtime.

### Maintenance

- 68% reduction in the maintenance's response servicing time.
- 63% increase in the compliance to the maintenance plan.
- 77% reduction in open work orders.
- 44% reduction in the furnaces' mean time to repair (MTTR).
- 200% increase in the furnaces' mean time between failures (MTBF).

### Inventory

- 2.3% increase in the Molasses' Inventory Reliability.
- 2.3% increase in the Standard Honey's Inventory Reliability.

During the project, we achieved important improvements to the work systems, the organizations' cultures, and their integration. The financial benefits achieved during the project due to the implemented solutions generated a return on investment of **4**: **1** by March 2021, with a forecasted annualized **ROI of 11 to 1**.

We highly recommend London Consulting Group as a highly professional consulting company which has an excellent work methodology and a continuous focus on achieving results.

Sincerely

Luis Ibáñez Guillen

General Manager Licores de Guatemala