Overview of case studies: Peru

Case Study: DanPer
(May 2011)
Content

- Examples of application of the ISO methodology to SMEs
  - Company in the agri-food business

- Credits
  - INDECOPI Project team: Ms. Rosario Uria (Project leader), Mr. Santiago Davila, Mr. Rodolfo Tupayachi, Mr. Juan de la Cruz, Ms. Patricia Castro
  - Mr. Daniele Gerundino, Strategic Adviser to the ISO Secretary-General
The company – DanPer

- The company focuses on the agro-industrial production of preserved asparagus, artichokes, red peppers, and vegetables in general, as well as fresh and frozen vegetables, with great success.

- Company mission: to be a reliable supplier of consistent quality, world leaders in the agro-industrial products and related services, committed creators of value for our clients, employees, suppliers and shareholders, and the promoters of the continuous and healthy growth of our society.
Industry value chain

SUPPLIERS

- Crops – owned fields
- Crops – external suppliers
- Materials and products
- Manufacturing of preserved products
- Fresh vegetables processing
- Frozen vegetables processing

CUSTOMERS

- Major International retailers
- International food producers
- Others

= In scope

Case study: DanPer
Scope of the study

- DanPer was selected by INDECOPI and the Standardization and Non-tariff Barriers Surveillance Commission of Peru as an exemplary case to shed light on the impacts of standards on the Peruvian asparagus sector (along with the logistics consortium Civil Association Frío Aéreo, which covers a specific segment of the industry value chain)

- The analysis is therefore focused on the assessment of the standards contribution to DanPer’s asparagus business, which represent about 50% of its revenue.
Analysis of the Standards Impact

- The company has a library of approximately 100 technical standards and regulations, primarily for agricultural good practices, *HACCP* (Hazard Analysis Critical Control Point), hygiène et sécurité des aliments. It also maintains an integrated management system (quality, environment, occupational health and safety, social responsibility).

- Based on preliminary analysis (supported by the Standards Impact Map) the business functions most significantly impacted by standards are:
  - Marketing and sales
  - Field operations (harvesting and collecting)
  - Production
  - Research and development
The Company Value Chain

Strategic process

- Board of Directors
- Integrated Management System

Support process

- Management & administration
- Research & development
- Human resources
- Process control
- Procurement
- Quality system

Execution process

- Customer requirement
- Marketing & sales
- Production planning
- Harvesting/Collecting
- Production/Packing
- Outbound logistic

= Focus of the analysis

Case study: DanPer
Marketing & Sales (1)

- The company exports almost 100%. The target markets and the buyers serving them are extremely demanding in terms of: Safety, traceability, quality, continual improvement

- Conformity to standards and certification against major standards (e.g. ISO 9001, HACCP, Global GAP, etc.) is considered critical because it:
  - Supports customers’ perception of the company’s commitment to quality and good practices, and
  - Helps to build customer confidence (and, in some cases, to respond to specific customers’ requirements)

- Heads of different business functions had consistent estimates of the impact of standards on the company’s strong sales growth
Marketing & Sales (2)

- Estimated impact of standards on the company’s sales growth: **50%**. Here follows the calculation of the EBIT impact.

- Step 1: The total company sales increased from USD 62,34 million in 2007 to USD 89,610 million in 2010. This represents a USD 27,27 million difference. Assuming for simplicity a linear growth over the three years, this represents an average annual sales increase of USD 9,09 million.

- Step 2: Considering the average gross profits* for the period (23,6 %), this gives an annual gross profit average of USD 2,14 million per year. Asparagus exports account for approximately 50 % of that amount, i.e. USD 1,07 million.

- Step 3: The contribution from standards is then estimated in 50% of 1,07 million USD – i.e. a contribution of USD 536,8 thousand to the company annual EBIT.

* The annual average gross profit for the period 2007-2010, 23,6 %, was estimated on the basis of the average gross profits of competitors comparable in size to DanPer.
Research and development (1)

- The use of standards by this business function has had a seminal impact, supporting the conception of new ways to improve production processes or to create new product lines. In addition, using standards has made it easier to design new products according to international requirements and/or to adapt products to customer requirements in a shorter time.

- Of the five KOIs identified for this business function, only one could be assessed, number of new products accepted by customers over the number of products offered by DanPer. The assessment was conducted as indicated below.
Research and development (2)

- The overall sales value of new products in 2007 was only USD 17,035, but reached USD 1,03 million in 2010. An increase of USD 1,01 million or, assuming a linear growth, an annual increase of USD 338,2 thousand

- Based on the average gross profit margin (23,6 %) this represents an annual contribution of USD 79,9 thousand to the total company gross-profit

- The asparagus business represent 50 % of the total, therefore the annual contribution to gross profits derived from asparagus can be estimated at USD 39,9 thousand

**NOTE:** this contribution has been considered as a specific “correcting factor” to the average growth in gross-profits, and summed-up.
Production (1)

- ISO 9001:2000 was introduced in 2001 and has had a significant impact on the re-design of the company processes and continual improvement.

- The Production business function monitors strictly the following KPIs:
  - Productivity (Total volume of production/labor)
  - Efficiency of production (total finished products/raw materials entering into the process)
  - Cost of labor
  - Customer complaints
  - Deviations from process (amount of Waste – non conformant products)
Production (2)

- Production’s continual improvement has generated efficiency gains estimated in about 88 thousand USD per year, but only the labour cost saving deriving from improved planning 71,4 thousand USD has been considered incremental to the average gross-profit already accounted to the marketing and sales function.
Field operations (1)

- Production’s continual Four key operational indicators (KOI) are considered for this business function, but only one, *field productivity*, could be assessed.

- The volume of asparagus harvested and ranked as top quality (this is the only crop used for fresh products) increased from 1.2 MT in 2007 to 4.4 MT in 2010. A difference of 3.2 MT, contributing to an annual gross-profit increase of USD 805 thousand.

- According to DanPer managers, the use of standards in field operations (notably NTP 209.402, NTP 011.109, HACCP, OHSAS 18001, SA 8000, and others) has been an important catalyst to achieve this result.
Field operations (2)

- Throughout the assessment process, it was estimated that the use of standards contributed about 40% to the results, i.e. an average contribution of USD 321,9 thousand to the company’s annual gross profits.

- This contribution, however, is considered fully embedded in the average gross-profit growth considered for the marketing and sales function.
### Standards EBIT impact of the selected business functions

<table>
<thead>
<tr>
<th>Business functions</th>
<th>EBIT impact (in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing and sales</td>
<td>536,8 USD</td>
</tr>
<tr>
<td>Production</td>
<td>71,4 USD</td>
</tr>
<tr>
<td>Research and development</td>
<td>39,9 USD</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>648,2 USD</strong></td>
</tr>
</tbody>
</table>

- This corresponds to **0.72%** of the total company turnover (approx. 90 million USD) or **1.7%** of the turnover derived from asparagus.
Thank you for your attention!

http://www.iso.org