

Issue Relating to the Production and Sale of Milk Products to SC Helvetika Milk SRL Pecica, Arad County

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Abstract

Food quality and human health influences contemporary life. Today more than ever, quality products to be safe in terms of food to meet the needs and innocuity became major values for all producers, processors, distributors, especially for food consumers who are becoming more aware that their health depends on the quality of the food they consume. The paper recently a case study in a Romanian company in the dairy industry and the manufacture of dairy products, and all commercial operations the object of transaction milk and milk products, a small company that combines managed but we consider traditionalism (the products we offer to the market) modernism (European requirements, quick marketing, producer - client relationship etc). This paper analyzes the emergence and development aspects of the company, implementing and upgrading production technology, issues related to the introduction of quality management, promotion and sale of products, customer relations, etc. We believe that SC HELVETICA MILK SRL, the constant concern of food safety, raw material procurement stage till marketing - customer satisfaction by offering quality products and thereby ensure customer loyalty. In conclusion, we believe the company is a successful example of business succes Romanian food industry.

Keywords: business, dairy industry, food industry, food safety, quality,

1. Introduction

Romanian food industry has a number of features, the most significant may be considered:

- is in the vast majority composed of SMEs;
- the products obtained are very diverse and often production methods rely more on traditional systems than on technology;
- small businesses often lack of resources, personnel, time for research and innovation medium enterprises are more innovative, adopt new technologies faster, but due to limited resources, rarely engage in activities research and development;
- the sector produce safe and healthy food but the EU requirements in matters of food safety and refurbishment problems led to the closure of numerous organizations active in this sector [1].

2. Materials and methods

In the context described above, the paper makes an analysis of microeconomic direction analysing internal data from the SC Pecica Helvetika Milk SRL, a small firm in the field of production and marketing of dairy products.

Based on the synthesis, processing and interpretation of internal data, the paper includes an analysis of the production and recovery of dairy products in the company mentioned.

3. Results and discussion

Human life directly depends on the quality of the food. Today more than ever, quality products to be safe in terms of food to meet the demands of replacement needs and major values or all producers, processors, distributors and ultimately consumers of food.

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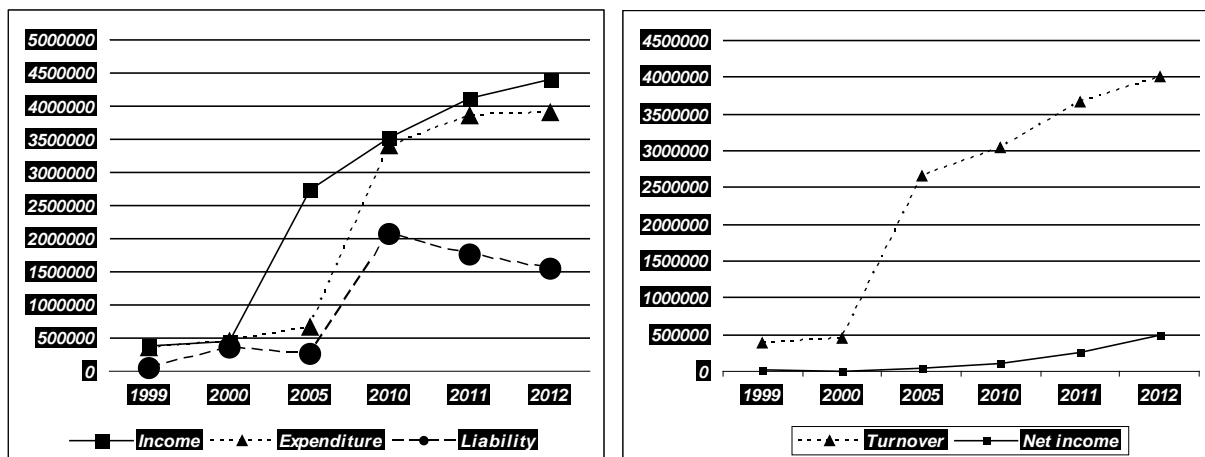
Implementation and compliance with global and European regulations concerning quality and food safety have become imperative now that the globalization of markets has become an obvious fact, when the supply of basic needs is done all over the world and traditional relationship based on trust between producers became increasingly subdued.

SC "Helvetica Milk" S.R, L. was founded in 1994 by associating SC "Helvetika" S.R.L. with domestic investors. Funding initial investment in 1994, was realized from own money and a bank loan.

Associates agreed that the activity of the company is production of milk and other processed dairy

products as well as all commercial operations having as their object of transaction milk and milk products. After repayment, in 1998 the company bought the land and space related in which they operates their activity of 10,500 m² of which 220 m² specially equipped with all the necessary dependencies.

The unit is equipped with the following facilities: room cleaning (packaging equipment), dressing room with toilets, cold room, laboratory factories, warehouses, offices. The analysis of financial ratios of the company for the period 1999 -2012 highlights the positive evolution of the business, and therefore strengthen its position in the local market.



Source: Internal data SC HELVETICA MILK SRL

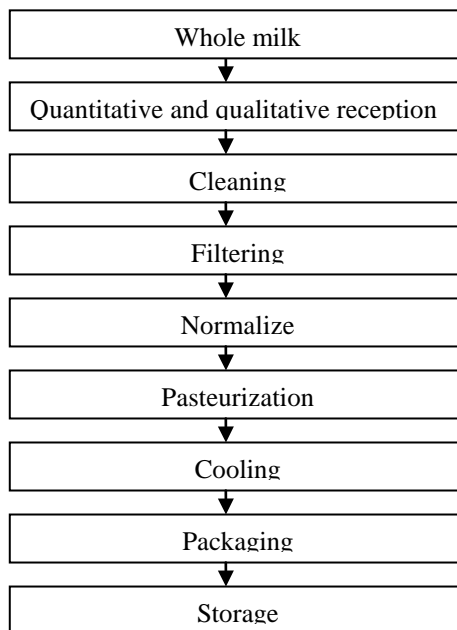
Figure 1. Analysis of financial indicators of SC HELVETICA MILK SRL

Analysis of production at the company SC "Helvetica Milk" Ltd., since its establishment and until 2012 pointed out that in the beginning the production was focused on manufacturing pasteurized milk consumption and normalized to a percentage of 2.5% fat, fresh cream and sour cream delivered bulk for restaurants and cafeterias. Lately as a result of investments, diversified production, so now the manufacturing program includes products acidophilus (yogurt, sana, buttermilk), milk, cheese (cheese, fresh cheese), sour cream, fresh cream.

To demonstrate the authenticity of the traditional recipes used exemplify technological flow of

drinking milk. Milk processing installation with a processing capacity of drinking milk and derivatives 8,000 liters / day, includes a whole set of machinery and equipment required for processing milk flow from receiving to packaging in plastic bags. She was purchased from a company in Hungary who installed it, and assuring appropriate service.

Stages through which the milk consumed in the process of industrialization in SC Helvetica Milk SRL are: milk reception, cleaning, filtering, normalization, pasteurizing, cooling, packaging and storage of milk.



Source: Merce Iuliana Ioana (2007), milk and dairy products market in Romania, Timisoara, Romania, inside sources SC Helvetica SRL Pecica

Figure 2 Industrialization milk SC Helvetika SRL Pecica

Milk **reception** is designed to verify the organoleptic properties, physico-chemical and microbiological specifications of the raw material [2]. In this whole raw milk operations is analyzed organoleptin examination and physical – chemical examination.

Organoleptic examination aiming appearance must be fluid milk, white homogeneous, slightly yellowish specific pleasant smell and taste of fresh milk.

Examination physical - chemical which causes: the density of the milk by means of hydrometers which is allowed under 1.029 kg / l, by means of titration acidity of the milk to a reference solution is allowed to max. 190 Turner, the fat content determined by the butirometric method , degree of contamination is determined by comparing the washer that was done with a standard filter, microbiological exam test is done by outlining reductase from microbiological properties of milk. [3]

Because the quality of the raw material has a decisive role in the development of technological process and in making appropriate product quality, special attention is given to quality of milk [4].

Raw milk is milk with the requirements and veterinary regulations in force. Currently, the purchase of raw milk is made of 50% from the

private sector under contracts between the company and suppliers and 50% on imports of whole milk. This year the company purchased approximately 8,000 such establishments hl / day, raw milk, collection being made by its own tank. [3]

Cleaning and filtering is performed to remove milk mechanical impurities contained in the mass. This is done using two filters mounted in the suction tank for milk reception.

Normalizing milk to ensure consistent quality and food value of drinking milk, its fat content is brought to a certain value (1.8% fat, 3.2% fat). The normalization is done by mixing in the tank of normalization of a proportion of skim milk with whole milk so that the milk fat content to be the desired use.

Through butirometric method is determined the normalized milk fat percentage. Normalization is done by skimming through a centrifugal separator to obtain skim milk with which to be able to normalize milk. After degreasing determining the fat content of milk by means of butirometric method. [3]

Pasteurized milk is the operation which aims to destroy pathogenic bacteria and saprophytic flora of most pollution, to stabilize the inactive enzyme in milk for a period of at least 48 hours. Pasteurization is into a heat exchanger plates.

By the movement of counter-current heat milk to a temperature of 85 - 87°C, the milk is brought to a temperature of 82 - 85°C and kept for 5 seconds followed by a sudden cooling it to +4°C. The process is automated, and the water temperature and of the milk is permanently controlled by temperature transducers of the automation system, numeric display and thermography.

Also the cooling water temperature is controlled and displayed by a digital display system. Water cooling is done using a refrigeration system. [3]

Cooling and storage is performed to inhibit the development and propagation of remaining microorganisms remaining after pasteurization. This use of the cooling milk at a temperature of between 2 and 5 ° C.

Cooled milk is stored in insulated tanks that are made from materials that do not react with milk (steel, stainless steel, aluminum, enameled steel) can be easily cleaned and disinfected, and at an outdoor temperature of 25-30 ° C, the temperature milk stored 24 hours this does not increase by more than 1 to 2 ° C. [5].

Packaging and storage Packaging is for a machine type Polipack packed in polyethylene bags, carrying automatic dosing. After packing the bags are placed in plastic crates and stored in cold room temperature 0 - 5°C. The warranty period is 48 hours [3].

Implementation and continuous improvement of quality management system and food safety and achievement of technical support needed to sustain the system adopted became urgent requirement for SC HELVETICA MILK SRL, the company has spared nothing to ensure healthy and tasty products that make them available to the general public.

The recovery of manufactured products into the SC Helvetika Milk SRL starts all of the qualitative characteristics of the company's products.

The products are made from milk collected as the first buyer of individual suppliers (farms and agricultural holdings) in proportion of 50% and the remaining 50% of milk imported from EU countries. Source of raw milk into the processing unit, at the level of 2012 is shown in the table below.

Table 1. Raw milk entered the unit SC Helvetika Milk SRL 2012

| | UM | Amount | Average fat content -% | Average protein content -% |
|---|----|--------|------------------------|----------------------------|
| 1. Cow milk of which: | HI | 9968 | 3.8 | 3.2 |
| - Collected as the first buyer from individual suppliers (farms and agricultural exploitations) | HI | 4996 | 3.87 | 3.2 |
| 2. Milk imported from which | HI | 4972 | 3.73 | 3.2 |
| - full | HI | 4972 | 3.73 | 3.2 |
| - Of which EU countries * | HI | 4972 | 3.73 | 3.2 |

Source: Internal data SC Helvetika Milk SRL, * EU member countries: Austria, Bulgaria, Belgium, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, UK, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Hungary.

By phase the company refurbished and modernized the production unit, production is focused on drinking milk and fresh products - products with high recovery and immediate marketing, of which the main products obtained are semi-skimmed drinking milk, cream, sour milk and cheese according to the table below.

SC Helvetika Milk SRL has no national distribution. Because of the fact that products do not contain additives, shelf life is small, which means that the finished products to be recovered quickly through our own distribution network to a total of 200 units with specific food locally in the county of Arad and Timis County (Timisoara).

The most effective way to increase sales is the quality and storage characteristics of the products in time, which appreciated by consumers. Advertising and publicity are local, in the press and media TV radio and through regular competitions organized by advertisers, promotions, participation in various humanitarian company, sponsorships etc. Complaints and product withdrawals (if they occur) is solved according to SR EN ISO 9001 standards: 2001 and EN ISO 22000: 2005 which are implemented. The labeling is done according to the law in force, the graph line unit for all products.

Table 2. Dairy products production at SC Helvetika SRL 2012

| | UM | Amount | Average fat content -% | Average protein content -% |
|---|----|--------|------------------------|----------------------------|
| Production of fresh dairy products | | | | |
| Drinking milk pasteurized half-skimmed | hl | 4224 | 1.8 | 3.2 |
| Consumption cream with fat content <= 29% | kg | 37630 | 25 | 0.3 |
| Consumption cream with fat content > 29% | kg | 17468 | 30.95 | 0.3 |
| Acidified milk (yoghurt, drinking yoghurt, buttermilk and others) | kg | 367873 | 3.75 | 3.5 |
| - no additives | kg | 367873 | 3.75 | 3.5 |
| Cheese - total, of which | kg | 9862 | 20.51 | 15 |
| - Only cheese from cow's milk | kg | 9862 | 20.51 | 15 |
| - Soft cheeses | kg | 4909 | 23 | 15 |
| - Fresh cheeses | kg | 4953 | 14 | 15 |
| - processed cheese | kg | 1380 | 12 | 15 |

Source: Internal data SC Helvetika Milk SRL

Basic principles around which is built the entire activity in SC HELVETICA MILK S.R.L. are:

- the quality objectives and policy implementation and strict compliance with food safety legislation.
- SR EN ISO 9001 standards: 2001 and EN ISO 22000: 2005,
- providing ongoing training of employees in all aspects of the required quality and food safety system,
- providing and continuously improving quality of products provided, maintaining hygiene and safety
- all existing channels of communication partners (suppliers, customers, employees) to harmonize relations with them and develop a good image as a company.

Compliance with the requirements the Integrated Management System (Quality and food safety) provides a framework for improving activities by:

- Reporting by each employee of any non-conformances raised during activity in order to remove them;
- Eliminating the causes that lead to reducing the costs of non-quality non-conformances;
- Continuous training and motivation of staff to raise the professional level of the supply organization;
- Regular analysis of data for continuous improvement activities within the firm;

4. Conclusions

- European and Romanian food industry faces many organizational issues, access to raw materials, fragmentation, economic crisis, reducing some categories of dairy products etc.
- SC HELVETICA MILK SRL by production activity and increasing the competitiveness of the market capitalization of the organization,
- the constant concern of food safety provides customer satisfaction and satisfaction is determined by the quality and safety of products, which is part of the organizational culture of the company.
- the preservation and improvement of the quality characteristics of the products is carried largely and customer loyalty.

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