

POSITION AND PERSPECTIVES OF DEVELOPMENT OF THE FOOD-PROCESSING SECTOR IN MONTENEGRO

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Abstract

One of the structural characteristics of Montenegrin food production is a higher share of primary agriculture in gross domestic product than of food-processing sector. According to the data obtained from MONSTAT for 2012, food sector registered share of 1.7% in GDP. Unfavourable structure of companies and insufficient level of technical equipment also have negative effects to competitiveness of food industry. It was noticed there are shortcomings in the food quality control system. The most relevant branches of food industry are: dairy and meat industry, fruit and vegetable processing and production of beverages, and milling-bakery industry, etc. The results of poll conducted for the needs of analyzing conditions of food industry in Montenegro, show that the main priorities of food industry, for the following period are contained in raising competitiveness in terms of offering high-quality food at adequate prices and acquiring status of raw material buyer from domestic agricultural producers.

Key words: agricultural, competitiveness, development, food industry

INTRODUCTION

Montenegro has the area of 13.812 square km. According to the census from 2012, Montenegro has 620.029 inhabitants. The highest number of inhabitants lives in the Central (47.3%) and the lowest in the Coastal Region (24.0%). The largest area is in the Northern Region (52.9%) and the highest population density is in the Coastal Region (93.5 inhabitants per km²). [5] During the period 2008-2012 an evident growth of GDP and GDP per capita had been recorded until 2012, followed by a slight stagnation in 2012. The unemployment rate slightly increased and export and import growth reduced, as well as growth of foreign direct investments. Share of primary agricultural production and food industry in the GDP of around 10% emphasizes their importance for the Montenegrin economy [1]. According to the data of MONSTAT for 2012, agriculture, hunting and forestry and fishing made 237.8 million € or share in GDP of 7.7%, i.e. a growth of 3.2% was recorded. Montenegro still has a high share of agriculture, without hunting and forestry, in the GDP in comparison to EU where the primary sector has share of 1.8% in the GDP and less than

6% in the overall employment [8]. According to the MONSTAT data for 2011, gross added value for food products, beverages and tobacco in 2011 amounted to 58.9 mil €, out of which 96.4% referred to food products and beverages. According to the statistical data, number of employees in the food and beverage industry in 2008 amounted to total of 4.745 employees, whilst in 2009 this number reached 5.195 employees. However, the number of employees significantly decreased in 2012 to 3.731 employees (table 1).

Table 1. Employees by the classification area of activities, 2008-2012

Indicator	2008	2009	2010	2011	2012	2012/ 2008
Total	166,221	174,152	161,742	163,082	166,531	100.1
Processing industry	24,335	21,824	16,563	14,368	13,041	53.6
Production of food products and beverages	4,745	5,195	3,817	3,451	3,731	78.6
Production of tobacco products	940	592	242	184	205	21.8

Source: MONSTAT

The average salary of employees employed in food and beverage industry had constantly grown until 2011, but recorded a decrease in the following year by 5.6% in comparison to

the previous year. During the observed period, the highest growth was recorded with food products and beverages (73.5%) and the lowest growth was at the level of business (19.3%) (Table 2)

Table 2. Average salaries by the classification area of activities, €/employee, 2008-2012

Indicator	2008	2009	2010	2011	2012	2012/ 2008
Total	609	643	715	722	727	119.3
Processing industry	615	613	699	734	773	125.7
Production of food products and beverages	438	527	525	805	760	173.5

Source: MONSTAT

The most important branches of food industry are: dairy and meat industry, fruit and vegetable processing and wine production. Individually, dairy sector has the highest share in the agricultural value (around 23% of evaluated value). Only 15% of the primary milk production is processed in dairy plants. Production is concentrated to the Northern region. Distribution of dairy capacities is concentrated to the Central region [2]. Total domestic meat production is around 17.110 tons per year or around 40% of the total meat consumption in the country. Coverage of 100% of domestic demand is achieved only regarding the sheep and goat meat production. Out of 320 agricultural-industrial companies, around 20% of them operate in meat production [4]. Volume and value of fruit and vegetable production are estimated to around 290.000 t/ year and the total annual value is around 117 million €. The area of key importance for vegetable production is the Central Region (Zeta Valley and Malesija). The sector is much dispersed, insufficiently specialized, most production is for its own needs and surplus is placed onto the market [3]. It is estimated that around 44,000 family holdings and business entities conduct agricultural production or around 90% of the total number of family holdings [6]. There are around 100 processing plants, whereof 10 of them have a significant share and role in the market, whilst the others are of lower capacity and do not have a significant presence at the

market. Production of primary raw materials (industrial fruits and vegetables) is of limited volume due to unsolved problems regarding the buy-up, due to high prices, not standardized production, difficulties with packaging, etc. The average area of vineyards at family holdings does not exceed 0.10 ha. The total grape production is between 35.000 and 44.000 tons a year, where JSC "13. JUL - PLANTAZE" has higher share (60%) and small producers have 40%. Domestic wine production in 2010 was estimated to 17.99 million lit. Total area under vineyard amounts to 3.900 ha and production value is 34 million €. Number of registered grape and wine producers is 122. Larger entities of milling industry have the capacity whose optimum utilization could satisfy most of Montenegrin demand. The available production capacities of bakery plants fully satisfy demands of domestic consumption. Capacities of tobacco production are concentrated to one company. Production of concentrated feeds is based on imported raw materials. Montenegro has one brewery and 6 newly-constructed spring-water bottling plants, as well as several plants for production of non alcoholic beverages [7].

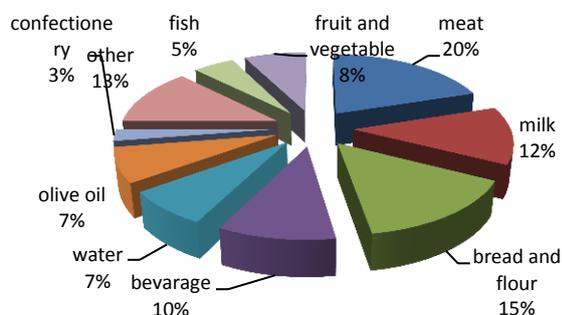
MATERIALS AND METHODS

With the aim to analyze conditions and to collect information regarding the future operations in the area of domestic food industry, a poll was conducted through cooperation between the Chamber of Commerce of Montenegro (CCMN) and the Biotechnical Faculty on the sample of 40 companies. Available data were presented in tables and graphs and growth rates and indices were used for the purpose of analyzing the trends observed developments. Available date of the Statistical Office, Ministry of Agriculture and Rural Development and the Central Bank of Montenegro were also used for the paper.

RESULTS AND DISCUSSIONS

The poll was conducted on 40 business undertakings from Montenegro. Nine companies undertook the poll in the Northern

region – 5 small, 3 medium and 1 large-sized company; in the Central region – 14 small, 9 medium and 2 large-sized companies, and in the South region – 24 small and 13 medium-sized companies. Out of 40 companies that undertook the poll, 32 operate as limited liability companies (82.5%), 7 of them are joint stock companies (17.5%) and one is a non-governmental organization (2.5%). Out of total number of companies that undertook the poll, 62.5% of companies perform only production activity, whilst 37.5% of companies possess, in addition to production facilities, the retail facilities. An overview of structure of examined companies in respect to their activities is given in the graph 1.



Graph 1. Overview of examined companies in respect to activities

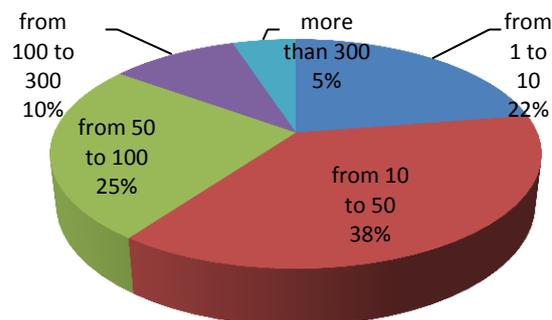
The examined companies are mostly privately owned, whereof 82.5% of them have ownership share higher than 90%. One company is state owned and one is NGO.

Before the end of 2012, 22.5% of the examined companies employed 10 workers, 37.5 companies had 10 to 50 employees, 25% of companies employed from 50 to 100 employees, while 10% of them had between 100 and 300 employees and 5% had over 500 employees (graph 2).

The total number of employees in 40 companies that undertook the poll was 5.200 employees in 2012.

Around 75% of examined subjects have obtained some of internationally recognized standards, while 25% of companies answered that they do not possess any standards. Standard ISO 9001 was obtained by 37.5%, ISO 14001 was obtained by 15%, and ISO 22000 was obtained by 15% companies. HACCP certificate was obtained by 72.5% of

examined subjects and Halal certificate was obtained by 5% of companies.



Graph 2. Structure of companies by number of employees

During the period from 2010 until 2012, 15% of examined companies registered income of over 1 million €, 80% of questioned companies had income between 1 to 10 million €, whilst only few companies (5%) had income over 10 million.

The income growth rate with the questioned companies amounted to 20% during the observed period. The main reason for growth are: increased export and opening of new retail facilities, better positioning at the market, upgraded production capacities, opening of new markets, etc. The main reasons for decreasing trend are: economic crisis, unfair competition and insufficient working capital.

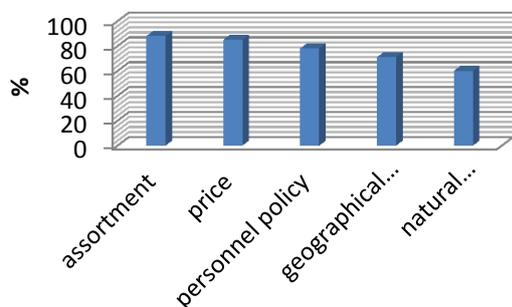
Around 50% of examined subjects expanded their product range during the analyzed period. Incomes from export contribute to total income with 28%. The largest export market for 50% of examined subjects is the CEFTA region market, respectively the markets of Serbia and Kosovo and 10% of the examined companies export to the market of the European Union and 7% of companies export to other markets. As regards to the supply of main inputs, 11% of companies supply inputs only from the domestic market. 27% of companies supply their inputs only from foreign markets, whilst 62% of companies supply inputs from domestic and foreign markets.

A very-intensive strategy of distribution on the domestic market was developed by 67% of examined subjects, 17% had a moderate-

intensive strategy, 5% had regional and 10% had local distribution. 55% of export companies conduct export to foreign markets independently, without agents or distributors from such markets. Leaders at the domestic market were 51% of examined subjects, 37% of them were companies- followers, 8% were leaders at the local market and 2% barely had access to the market.

The target group of consumers that seek for moderate price and good quality is preferred by 52% of examined companies, followed by 12% of companies that target the group of consumers that seek for supreme quality and accept high prices and 10% of companies target the group of consumers that seek for low prices and a standard quality, whilst 25% of companies did not have a specific consumer target group.

Around 85% of companies deemed to have competitive prices for their products, whilst 78% of companies considered their human resource policy as their advantage. 60% of companies answered that their natural resources are their advantage (graph 3).



Graph 3. Advantages of domestic business

During the previous five-year period, 88% of examined subjects invested into new plants and machines, while 78% of them implemented new standards (*ISO, HACCP*). Companies pointed out the following as rather significant problems: payment delays (71%), level of interest rates (48%), access to favourable loans (42%), etc.

The questioned companies plan to establish the following in the next three years; to establish a hygiene or *ISO* standard (58%), invest into new machines (43%), present new products (39%), etc. Over 90% of examined companies agree that the Government should

promote customer loyalty to domestic food producers, support export activities of domestic food companies (91%), introduce food quality schemes (certificate of origin) (87%), etc...90% of questioned companies gave a positive answer to joint presentations at fairs.

CONCLUSIONS

Relation between the primary agriculture and food industry is unsatisfactory from the aspect of its share in the GDP of Montenegro. Furthermore, lack of better vertical and horizontal connection between primary production and food industry is pronounced. Foreign trade deficit of food primarily emphasizes dependence of domestic processors from import of inputs. Regional discrepancies in terms of number of inhabitants, area and population density additionally contribute to tighter connection between domestic producers and food processors. The main characteristics of Montenegrin food sector are unsatisfactory sector structures and insufficient raw material base due to insufficient level of technological equipment, low level of product finishing and low level of market placement for a significant number of agricultural products. The most important branches of food industry are: dairy and meat industry, fruit and vegetable processing and wine production. Results of the poll implemented with the aim to analyze conditions of the Montenegrin food industry indicate that the main priorities of the food industry, as the generators of development in primary agricultural production and regional development of Montenegro in the following period are raising of competitiveness in terms of offering a high quality food with adequate prices and gaining the status of buyer of raw materials from domestic agricultural producers.

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