

STUDY REGARDING THE VEGETABLES SALES IN VARIOUS DISTRIBUTION CHANNELS FROM BUCHAREST

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Abstract

The vegetables play a vital role in human diet as fresh foods sources of calories, vitamins, dietary fiber and special nutrients. Thus, the vegetables selling should be done with maximum health in order to keep them in the best possible conditions, without lead to spoiling.

The purpose of this paper is to make a detailed analysis of how vegetables are marketed and capitalised in various supermarkets, supermarkets and food markets in Bucharest. Focus was also placed on how their quality is influenced by the way they are displayed and marketed.

The vegetables selected for the sample survey were potato, onion, tomato, bean, cucumber, pepper, garlic and carrot. The selection of these commodities was based on their importance in terms of their volume of sale in the Bucharest markets.

Key words: *vegetables, standards, price, quality.*

INTRODUCTION

Vegetables occupy an important place in our food and can not be replaced-as-food value by any other aliment. The vegetables include main nutrients, such as: fats, carbohydrates, proteins, minerals and vitamins, absolutely necessary the functioning of the human body (Draghici, 2002).

So selling vegetables should be done with maximum health to keep them in the best possible conditions and without lead to spoiling.

Quality standards for fruits and vegetables on the Romanian market leave much room for improvement. Even though there is a general effort to bring Romania to EU standards, progress is slow, but steady. The overall tendency is to improve quality and meet sector-relevant standards, a tendency to which both authorities and economic agents adhere (Ministry of Economic Affairs, 2009).

Consumers are becoming better informed with regard to quality standards and their own rights, and are putting pressure on traders to improve the quality of their products. Frequent inspections, awareness campaigns, legal developments and the market entry of

professional, high quality players are leading the market in the right direction (Ministry of Economic Affairs, 2009).

According with Romanian legislation in force from 2002 any trader no matter if wholesaler or retailer must make the following information available at visible place (<http://old.madr.ro>):

- general: name of the producer and packing company, variety, quality and quantity,
- specific: for fruits and vegetables that were treated will mention “product treated by ionization” or “product treated with ionic radiations”.

Marketing and sales to the public are the most important functions at the retail level. The structure of the retail trade for fruit and vegetables offers the consumer the possibility to make a choice from various points of sale, the most important being (Dumitrescu, 2009):

- specialized fruit and vegetables shops;
- hyper / supermarkets;
- open-air markets;
- producers / farmers.

As Romanian consumers generally give importance to the origin of the products they purchase, as well as the price or quality of goods there is a split in retailing between specialised retailers and non-specialised

retailers (such as supermarkets) which have a considerable bargaining strength when negotiating prices with suppliers and wholesalers (Ministry of Economic Affairs, 2009).

In Romania fruit and vegetable production is very much focussed on small scale, family units and a high proportion of fruit and vegetable production is retained on farms for home consumption or sold directly to consumers, through street (peasant) markets (Department for Agriculture, Nature and Food Quality of the Embassy of the Kingdom of the Netherlands, 2010).

In 2011 Romania imported *vegetables* with a total value of 152 million EUR (of which almost 29.4 million EUR of tomatoes and 26,1 million EUR of potatoes) while vegetable exports stood at 53 million EUR. Most of the imports originated from Turkey (27.6%), followed by the Netherlands (11.4%), Italy (10%), Poland (7.2%) and Belgium (6.7%) (www.faostat.org).

MATERIALS AND METHODS

In the quality standards of fresh fruits and vegetables, the quality concept is determined by the commercial aspect of the fresh produce offered for sale, by their visual (freshness, size, shape and color) and conditioning (sorting, packaging, labeling and presentation) characteristics.

Fresh vegetables for consumption should be marketed in packages on which the origin of the product, the name of the packer, the variety, the quantity and the quality group are legibly marked in a visible position.

The purpose of this paper is to make a detailed analysis of how vegetables are marketed and capitalized in various hypermarkets, supermarkets and food markets in Bucharest. Focus is also placed on how their quality is influenced by the way they are displayed and marketed.

The study was based on the following steps:

- analyze the distribution systems and circuits for vegetables;
- study and analyze the fresh vegetables sold in agrifood markets in Bucharest;
- study and analyze the fresh vegetables sold in various supermarkets in Bucharest;

- study and analyze the fresh vegetables sold in hypermarkets in Bucharest.

The following vegetables were selected for the sample survey: potato, onion, tomato, bean, cucumber, pepper, garlic and carrot.

The selection of these commodities was based on their importance in terms of their volume of sale in the Bucharest whole sale markets.

RESULTS AND DISCUSSIONS

The quality concept for fruit and vegetables is a complex notion, which can be analyzed under the following aspects: agronomic, commercial, organoleptic, nutritional and health.

In this context, the study revealed that in hypermarkets three types of onions were sold: yellow, red and water onion - all of them produced in Romania. The produce was sold in bulk, on self-service basis and prices ranged between RON 2.09 and 4.29, depending on the variety. Regarding the use-by period, this was not displayed. The same produce, with yellow and red varieties, but packed in 2 kg bags, was found in supermarkets, but the country of origin was Germany and the price was lower compared to the Romanian onions (RON 2.99/2 kg).

The produce was displayed in more attractive way, the sachets being placed in carton and separately labeled.

The same kind of onion was found in agrifood markets, the price ranging between RON 1.85 and 2.00 per kg.

But in this case the country of origin, the quality, the size and the use-by period were not specified.

Concerning the marketing of potatoes within various distribution networks, it resulted that most potato tubers were imported and in only one hypermarket there were found potatoes produced in Romania. Also, in most cases, the information on the quality and size of potatoes was missing.

Only in case of potatoes packed in 2.5 kg mesh bags and produced in Romania all mandatory labeling elements were mentioned (Table 1). Also, it can be noted that the street sale of potatoes is made sometimes around markets, directly from cars, without the hygiene conditions being met. This produce is most

often weighted in an incorrect manner. There is no guarantee in terms of freshness and quality.

Table 1. Aspects regarding potato sales in various distribution channels

Distribution channel	Country of origin	Price (RON)/kg	Variety	Quality	Packing mode	Size
Hypermarket	The Netherlands	2.39	-	-	bulk	-
	Romania	1.79	-	-	5 kg bag	-
	Turkey	2.1	-	-	-	-
	Romania	2.8	-	1	2.5 kg bag	50
	France	2.29	-	1	bulk	-
Supermarket	France	2.79	-	1	bulk	-
	Turkey	2.49	-	1	bulk	-
Agrifood market	-	1.70	white potato	-	bulk	-
	-	1.60	red potato	-	bulk	-

Regarding the marketing of tomatoes in various types of stores, it can be said that this was in most cases produced in Turkey and belonged to first category of quality (Table 2). The price ranged from RON 5.78 to 14.95, depending on the variety (Figure 1).

Table 2. Aspects regarding tomato sales in various distribution channels

Distribution channel	Country of origin	Price (RON)/kg	Variety	Quality	Packing mode	Size
Hypermarket	Turkey	5.78	-	-	bulk	-
	Turkey	14.95	Cherry tomatoes	1	bulk	-
	Turkey	8.00	Cherry tomatoes	1	Plastic small dish 500 g	-
	Spain	15.45	Cherry tomatoes	1	Plastic cup	-
	Italy	6.70	-	-	bulk	-
Supermarket	Spain	6.69	-	-	casserole	-
	Turkey	2.49	-	1	casserole	27/32
Agrifood market	-	7.99	-	-	bulk	-
	-	6.99	-	-	bulk	-



Figure 1. Tomatoes sold in the food market and supermarket

In agrifood markets, the same deficiencies were registered as in case of potatoes and onions, i.e. the information on the country of origin,

quality class and size was missing. The price ranged between RON 4.9 and 5.9/kg.

Regarding the marketing of carrots, it was observed that they were produced in Romania, were sold in 1 kg bags or in bulk and the price ranged between RON 1.7 and 3.6/kg.

Both in major commercial networks and marketplaces, deficiencies were registered in terms of quality category, i.e. this information was missing in all stores. In agrifood markets, carrots display situation is much different compared to supermarkets, i.e. in many of these markets there are no labels mentioning the country of origin or the quality class, and the packaging was often improper and improvised.

Regarding the peppers sold across various sale networks, 4 types of peppers were distinguished, namely:

- elongated sweet peppers (sharp);
- square sweet peppers (splay);
- square taper sweet peppers (peg);
- flat sweet peppers (bell pepper).

In hypermarkets and supermarkets, large quantities of California Giant pepper variety, with different colors (red, orange, yellow), were met. This variety has a longer storage period and is resistant to repeated handling and disease attack. The pepper fruits were packed in carton boxes.

Kapia red pepper is sold both in bulk or in packages. This variety was met in all three shopping centers.

Bianca sweet pepper was met in all three shopping centers, in bulk.

In hypermarkets and supermarkets, the pepper fruits can be met in bulk or in crates and in casserole. The peppers were also displayed in transparent plastic bags.

The display method directly influences the quality of the product and its storage period. Unlike bulk produce, the produce packed in casseroles with a protective film has a longer marketing period, because it prevents the water evaporation.

The commercial spaces such hypermarkets provided the consumers with the necessary information on the quality categories of the produce. For bulk produce, the quality category is displayed on the stands containing that sort of pepper fruits, while for the packed produce, the quality category is showed on the packaging label (Figure 2).



Figure 2. Pepper sold in supermarkets

Peppers sold in hypermarkets and supermarkets are produced in countries like Turkey and Spain and belong to the 1st quality class. The prices ranged between RON 9.99 and 12.99.

In shopping centers such as mini markets or agrifood markets, the information on the quality category of the produce is not provided to consumers. Only the name, the price and sometimes the country of origin of the produce are specified.

Regarding the quality, it can be noticed that in some stores, there were peppers stored in bulk that showed signs of attack by gray mold (*Botrytis cinerea*) or rotting of the tips, which can lead to infection of the entire mass of fruits. The cucumbers were both marketed in bulk, on kilogram basis and packed in vacuum plastic bags. They were produced in countries like Turkey (cornichon) and Romania (Fabio) and belonged to the first class of quality. The prices ranged between RON 9.99 and 12.99 at cornichon and RON 2.99/piece at Fabio.

In large retail chains, bean was sold both in bulk and in 1 kg bags. The countries of origin are various: Romania, China, Ethiopia, Poland and Hungary. The prices ranged between RON 9.99 and 13/kg. Regarding the bean sold in agrifood markets, it was produced in Romania and was sold in bulk, the sale price being higher than the price from hypermarkets (RON 14.99 - 15.00/kg).

The study showed that the garlic was marketed in various forms, namely:

- dry bulbs, in bulk;
- dry bulbs packed in individual packages of 450 g, which are large meshes;
- green garlic, in bundles of 3, 5, 8 or even 10 pieces;
- green garlic, in bulk.

In large supermarkets, the garlic came from countries like Spain and China. The prices ranged between RON 11.99 and 12.99/kg and

the garlic belonged to the first class of quality. It should be noticed that in case of garlic marketed in bulk, there were bulbs showing signs of attack by gray rot.

In agrifood markets, garlic was sold either in bulk or as bundles of 10-20 dry bulbs tied up with a rope. The country of origin was Romania, the price ranged between RON 13.50 and 14/kg, but the information on the quality was missing.

CONCLUSIONS

The study led to the following conclusions:

1. All three categories of stores are included in important retail chains for fresh fruits and vegetables. The weight of these chains changes depending on the season.
2. The study revealed that agrifood markets are an important retail chain for the local produce. But within those, a set of deficiencies regarding the information about the country of origin, the class of quality and the size of marketed vegetables, as well as the prices sometimes higher than in the large retail chains were identified.
3. Regarding the large retail chains, most of the fresh sold vegetables are imported. The reason is related to the requirements on the produce imposed by these chains: aspect, calibration and packaging, prompt delivery, which typically takes place every other day, permanent availability of the produce from the offer and complete range of products. Often these requirements can not be met by local producers.

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