

# THE FACTORS WHICH INFLUENCE THE CONSUMPTION OF BIO PRODUCTS

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**Abstract:** *The consumption of ecological products is an expensive “fashion” on the international market. However, the production and processing of the raw BIO materials represent a complex problem, which demands solutions. The Romanian BIO products market has a favourable image, even though consumption represents only 1% of the total consumption. 90% of the raw materials are exported. Unfortunately, the products exported return to Romania, processed, with 4-5 times higher prices. The direction for a clean and healthier life style is designed. Its evolution will decide the future.*

**Key words:** *BIO, Organic, Ecologic, Control, Certified Quality, Health, environment protection, factors of influencing the consumption of BIO consumption.*

## 1. The Concept of Bio Products

“Bon est bio, mais c’est quoi le Bio?” Natural, good, beautiful and without pesticides....Bio is good, but what is Bio? [4]

On today’s world market, the phenomenon of consuming BIO products is “fashionable”. In fact, it is a matter of going back to natural products, without toxic additives to our bodies and to the environment.

In order to “improve the quality of life”, new technologies have been released to increase the food resources and the production soil. Unfortunately, without thinking on the long term, the body has been bombarded by substances which are heavy to our metabolism and diminish the body’s immune system.

Therefore, the modern agriculture of the 20th century has used different treatments

and technologies all over the world to increase the production in a shorter period of time. The new discoveries in the textile, cosmetic and food industries were applied on the global market. In the 19th and early 20th century, “The Modern Industry” attacked and removed “the natural market”.

As a result, in the 1940s, England started to develop Bio Agriculture, which is the basic section for Bio consumption. This agriculture counts on natural agriculture and the respect for environment has been emerged. Later, Switzerland increased its attention for the soil structure, in addition to encouraging the short circuits of distribution for BIO products. In the 1980s, Bio agriculture expanded over the ocean, especially in the USA. There, important developments have been taking place in processing and trading these products.

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In the same period of time, the first low initiatives started to take place in Austria, France and Denmark. Nevertheless, all these activities were at a low scale and small land surfaces.

The potential for the improvement and development of the Bio market was influenced by different food crises and especially by the tragic episode of the “mad cow disease”. These crises determined a new orientation for the food market. In fact, these last food crises helped Bio products to come up from the crowd. [4]

In the 1990s, the consumption of Bio products started to increase and develop as a part of the progressive and large movement of preserving and protecting the environment. Therefore, the Bio Agriculture is one of the solutions that satisfy the demand of consumers that provide products free of chemical and synthetic substances that harm our body and the environment. [2]

Ecological (Bio/Organic) products are defined as products obtained through specific natural production systems. Their quality is ensured, guaranteed and certified by a severe control. The quality of these products, and especially of the food ensures certain characteristics i.e.: lack of harming substances, high nutritional values and sensitive and natural aesthetics. The key words which define Bio products are: **healthy, certified, safe and control**. Also, the concept of these products is very important, because they go straight from the producer to the consumer. [5]

The term used for these products is different from country to country (we find Bio, organic or ecological products). Nevertheless, the concept is the same, exhibiting the same characteristics, producing conditions and guaranties for the quality. The term ECOLOGICAL PRODUCTS is used in Germany, Austria, Spain, Denmark, Holland, Portugal and

Romania. We find the term ORGANIC PRODUCT in Great Britain, and BIO PRODUCTS, in France, Italy, Belgium, Greece, and Luxemburg etc.

There are restrictions imposed concerning the quality of the soil and of the cultivation plants, which guarantees healthy products and eliminates the risk of contamination with different chemical fertilizers. These restrictions determine a higher volume of work and limit the levels of production.

In some sectors of the economy which use bio materials, the costs of BIO products are much higher than the conventional products. This is a result of using special systems and technologies that are used in the production process.

Also, we have to mention that the lack of additives and other synthetic substances determines short expiration dates for BIO food products. Everything is natural and their taste and aroma are remarkable.

## 2. How to identify Bio Products

Bio Products are obtained through special technologies. They can be recognized on the market with the help of special labels, which can confirm and ensure the quality of products. The norms and regulations of the EU Community (applied also in Romania) establish certain rules for labels and promotions in order to protect the consumer’s rights. We can distinguish the following categories of products (% of bio products):

- i) *Bio agriculture products*: are products, transformed/not transformed, which contain over 95% of BIO ingredients. These can only be labelled as BIO PRODUCTS.
- ii) *Products which contain 50-90% Bio ingredients*. For these products, the term of “BIO” is used only if they comply with the low.

iii) *Products with less than 50% of BIO ingredients.* This does not have to mention “BIO” on the label. [10]

For the products which have the right to mention “BIO” certain symbols are established for labels and package. The imported products have severe regulations concerning the control and documents which certify their BIO origin. These documents come from the exporting country and they guarantee the quality of BIO products.

On the market, we can find:

- i) *Conventional products:* use synthetic substances (additives) which help improve the production, the look and reduce the costs.
- ii) *Conventional products OGM:* are genetically modified. They contain modified genes, which give the products new proprieties: resistance to insects and diseases.
- iii) *Bio Products,* which do not contain synthetic substances that can harm the body or the environment. These products are: products without gluten, homemade products, and products made in small production, diet products.
- iv) *Gluten free products:* are products without gliadin, which is found in the surface layer of the grain. This protein can cause intolerance to certain persons.
- v) *Peasant products:* are products which are grown by persons who rent/own a small piece of land on which they grow food, in small production.
- vi) *Diet product:* are products especially for special diet (no sugar, no cholesterol).
- vii) *Light products:* are products with low content of sugar, salt or fats.
- viii) We also find on the market products “with low content of...”, “rich in ...” or “enriched”

### 3. The Bio Products Market

In 2006, the world Market of Bio products was estimated at over 30 billion USD. This includes the agriculture BIO products, which are cultivated over 31,4 mil ha from the total world agriculture surface.

In the 2007 Edition of “Bio Agriculture world; statistics and trends” Australia was recognized as the most BIO area. There are over 11, 8 mil ha used for Bio agriculture. EU is on the second place, with 6.9mil ha, which represents 3.9% from all agriculture surface. There are about 5.8 mil ha cultivated with Bio products in Latin America.

In EU, France is the biggest producer of Bio products, followed by Italy which has the highest number of BIO farms. These two countries represent 31% of the total BIO production of EU, followed by Austria, Spain and Germany.

The highest numbers of consumers of Bio products are in USA, Japan, Germany, Denmark and Switzerland, where the consumption of BIO products represents 3-6% from the entire consumption of products. In addition, there is a tendency of annual growth for consumption of BIO products of 1- 4%. These are the results of the great consumers’ interest in a cleaner, healthier and natural life style. [11]

**On the world and EU market,** we can still find a limited offer of BIO products, even though it contains all kinds of food products: agricultural products (vegetables, fruits, cereals, milk, meats, fish, honey, eggs etc.), industrialized foods (bakery, milk products, meet, wine, oil etc.) cosmetics, clothes, shoes, paintings and building materials.

**The Romanian Market** started to build up much more lately: in the 1990s. This delay is due to the necessity of changing the mentality and the life style. During this period, some efforts also have been made, in education and publicity. In 2008, only 1% (145 000 ha) of the Romanian

agricultural area were used for these special products and situated Romania on the 16th place in the world ranking. In 2008, 110 mil Euro Bio products have been made and delivered for consumption. 90% of this amount went to export, especially as raw materials. Unfortunately, these raw materials are turned back to Romania as BIO processed products, with prices 4-5 times higher. The most important problem of the Romanian market is the lack of BIO products processors. “Without the exports of the raw materials of Bio products, we could

not talk about BIO agriculture in Romania” [12]

The lack of Romanian processors forces the raw products to be exported. Only a very small percentage of Bio products are processed in Romania

In 2008, the value of exports of Bio Products was of 100mil Euro, which represents an increase of 20% comparing with 2007.

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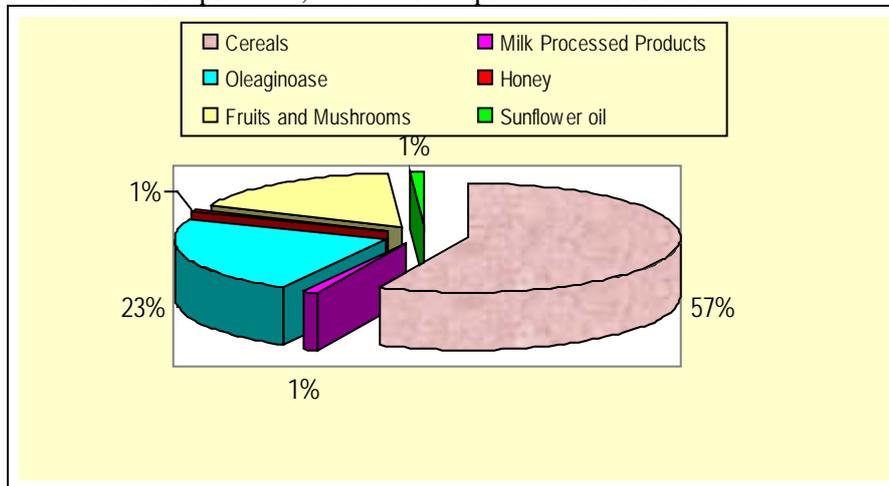


Fig. 1. *The Most Important Bio Products which were processed in Romania in 2008*

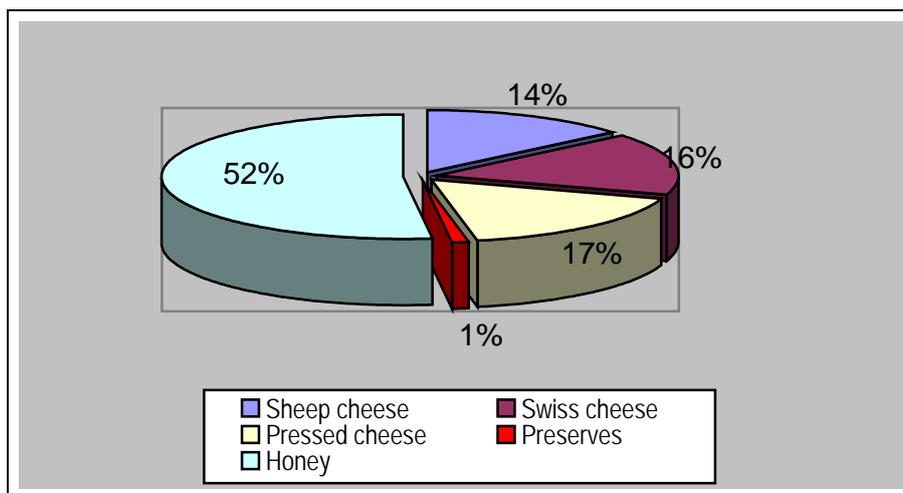


Fig. 2. *Main bio food products processed in Romania [tonnes]*

Source [www.infomina.ro](http://www.infomina.ro)

The structure of the Romanian Bio products supply does not offer a wide selection as compared to Europe. Only 1800 bio and traditional products, 3532 producers, 75 processors, 76 traders, 30 importers and 47 exporters are certified and registered in Romania. [9]

The Romanian local market for Bio products faces a lack of production, consumption and promotional strategies. Therefore the national consumption of Bio food products represents 1% of the total food consumption, as compared to 5-6% at European level (5% in Germany and 2% in Hungary).

The studies show that, in Romania, there is a lack of information and knowledge concerning the benefits of Bio products. Also, there is the idea that prices “are highly unjustified”, comparing with the conventional products. [9]

However, the Romanian BIO products markets evolve as a result of the increasing demand for export, and even locally. In 2010, 260 000 ha have been cultivated with Bio products. The results were products with a value over 165 mil Euro, including 150mil Euro from the export. On the local market, even if we talk about 45-50mil Euro Bio products market, more than 35mil Euro come from the selling of imported Bio Products (especially processed Bio products). [12]

Unfortunately, in Romania, the sales of natural/bio beauty products are not monitored. These sales represent less than 1% of the total sales of beauty products which include products such as: clothes, wine, paints or building materials, and are similar to the Bio beauty products market. However, there is an estimated yearly growth of 20%, for the next 5 years as a result of the increasing level of the costumers’ education and information.

European experts consider that Romania has a great chance to become one of the

most important producers of Bio-agriculture in Europe, due to the great quality of the soil. Therefore, they consider that 15-20% of the Romanian agriculture area can produce Bio agriculture products. [11]. Romania has a great potential of production and trade for BIO products; therefore it is an important target for investors. In European countries, the levels of consumption are high, so the annual growth is 1-2%. In Romania, there are expectations in 2011 for the annual growth of production and consumption of 20%, as compared to 2010 and also for the next 5 years. [12]

#### **4. The factors which influence the demand of Bio Products**

The activity of marketing research is the act of transforming the demand and consumption into acts of business. The needs of Bio products are changing with social-economical development. The satisfaction of these needs is strongly linked to the consumer’s purchasing power. Therefore, the evolution of demand and supply for these groups of products must be analyzed in coordination with the factors which have influencing power.

Concerning the offer of BIO Products, we have shown that it is still in the process of transformation and development. Also, it is affected by the lack of national agriculture and processing projects of Bio products. At the same time, the productions have low yield levels, with limited offers, high costs and they only represent the interests and effort of the producers.

The demand for Bio products exist in our subconscious. It is defined and formed under the influence of numerous factors:

- i) *Economical factors*: income of the consumers, the prices of Bio products compared to conventional products, inflation rate;

- ii) *Cross-cultural factors*: education, tradition and consumer behaviour;
- iii) *Psycho-social factors*: personality, personal care, group membership [1]

However, the demand for conventional products is limited by the physiologic limits of the consumers. Nevertheless, the demand for Bio products is permanent,

repetitive and increasing. Also, it is defined by a certain consumer segment of the market.

Therefore, analyzing these factors which influence the consumption of Bio products, it is necessary and it will define the direction of development, under the action of daily economical factors.

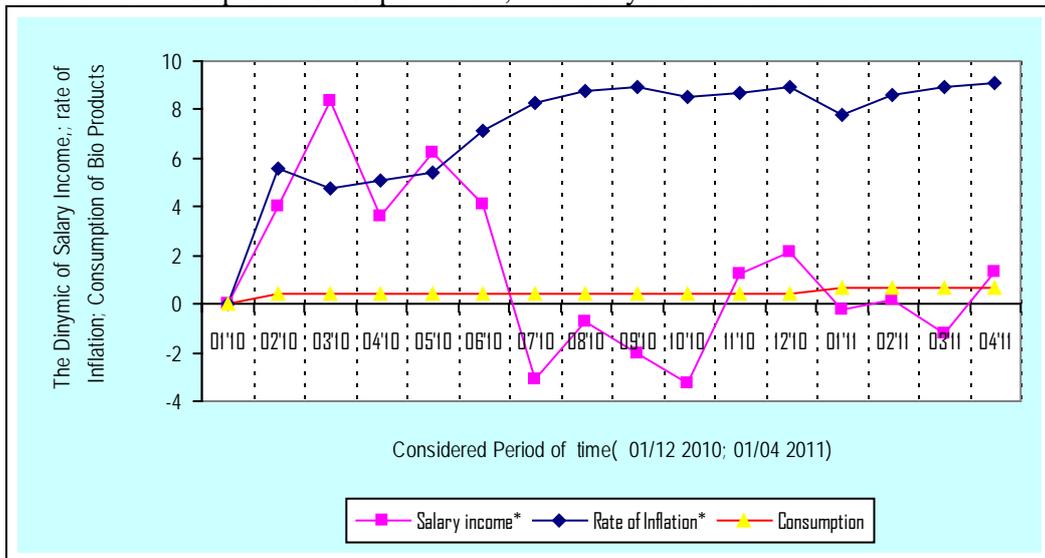


Fig. 1. The evolution of BIO products consumption and the dynamics of salary income and inflation rate  
 Note: \* Month corresponding for the last year =100

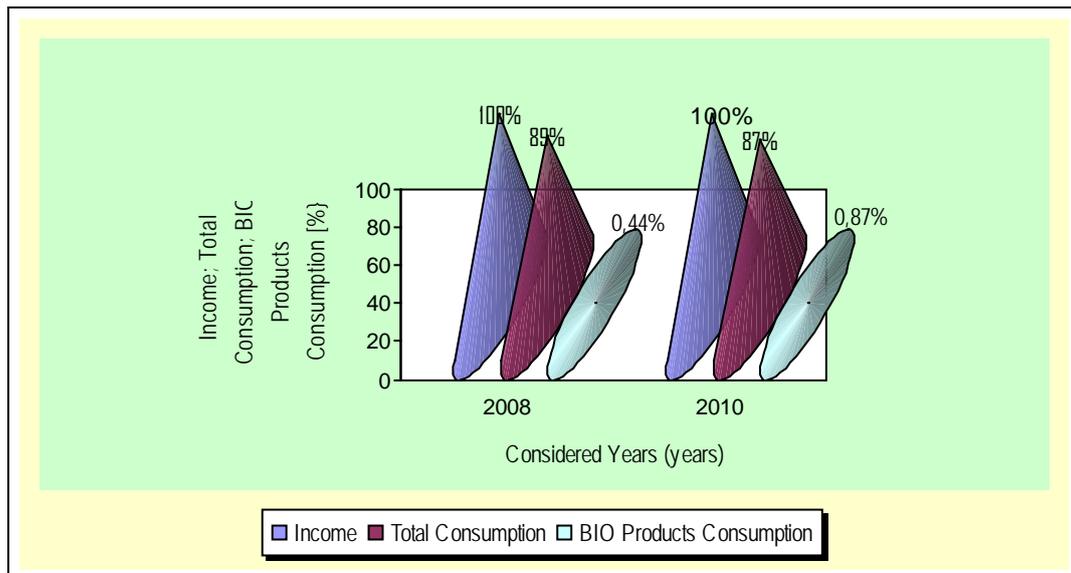


Fig. 2. The Evolution of Bio Products as compared to the Income  
 Source: INS /2009

1. For the analyzed period, as showed in graphs no. 3 and 4, we notice a growth in income until 2009, followed by a fall in 2010, but with a stagnation forecast for 2011; [8]

2. The rise in prices, based on the growth of inflation rate determined a decrease in the purchasing power.

3. The consumptions follow the incomes and represent 85-89% of incomes; in fact, the real purchasing power determines the consumer's orientation over the basic products. [8]

4. In 2010, the spending for Bio products represented only 1% of the total consumption. This can be explained by the fact that this group of products are demanded by certain consumers, with over medium incomes. [11]

5. For 2011, the evolutions of the salary income are fluctuant, with a tendency of stabilization, but lower than in the previous years. However, the dynamic of prices is still pressing over the real power of purchasing and consumption. [9, 10]

In this context, the portrait of the BIO products consumer is: a person over 30 years old, with over medium education, which understands the BIO product concept and is conscious of his health, who adopts a clean, responsible and healthy life style for himself and for the environment. In general, he has family, with children and over medium incomes.

Therefore, in 2011, the Bio products markets remain for consumers with high incomes, even though an annual growth is expected of 20% for the next 5 years.

As a result of market research, we can appreciate that cross-cultural factors are important in building this segment of consumers. The level of education determines a favourable position for BIO products in the eyes of consumers, due to the fact that they are perceived as healthier,

natural and without aggressions on our body and environment.

For generations, Romanians were consumers of natural products, which resulted from clean soil, enriched with organic fertilizers and not synthetic ones. Therefore, the traditions and old norms are reviving slowly in our behaviour, and are becoming the dream of any informed consumer. The only problems for the Romanian consumer are the prices, due to the low income level and weak purchasing power.

## 5. Conclusions

The Bio products market is continuously under development, even though it represents a small consumption comparing with conventional products.

In Romania, the Bio product market has a positive imagine and it is in continuous development. The evolution of this market is under the influence of: the economic-social development of the society and, especially, the purchasing power.

At present, the consumption of Bio products represents 1% of the total consumption. The barriers are the high prices as compared to the incomes of the consumers, followed by the small diversity of BIO products.

There are few producers and processors and 90% of the raw materials are exported. Unfortunately, the exported raw products are returning processed to Romania, with prices 4-5 times higher. However, there is a forecast of an annual growth of Bio products market, of 15-20%.

There exist numerous possibilities of developments of the Bio products market. An effort is necessary from the producers, traders and the authorities who are responsible to follow up the production and to control the public health. It is required that the government develop projects for BIO production and

educational programs for customers. Only by increasing the production and processing will the gates be opened for increasing the consumption of Bio products.

The path for a cleaner and healthier life style is determined. The future will decide its evolution.

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