

# AGRICULTURE AND ALIMENTATION FACING CONSUMERS' CHOICE

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## Abstract

Food Commerce has turned into one of the most controversial economic battlefields in humankind history, whilst the society of today is characterized by a single existential criterion, manifested from top to bottom: efficiency. Due to the distinctive features and functions of agriculture, the economic theory has a subtle approach of the efficiency concept in agriculture, compared to the other non-agricultural economic branches.

There are two theoretical approaches on efficiency in agricultural production: the first has a general meaning, overlapping the hedonistic concept, while the second one has a rather singular meaning that senses the efficiency of agricultural production, related to the extent to which it assures population's food security. In other words, agriculture, through what it produces, is effective when able to provide the necessary food to its consumers, a food that meets all essential criteria: quality, quantity and diversity.

The paper aims at developing a thorough analysis of the food offer produced by the agriculture and food industry and also at investigating the way in which the offer meets or does not meet consumers' demand, seen as increasingly concerned with the quality and origin of food.

**Keywords:** *agriculture, alimentation, local product, ecological product, consumer.*

## 1. INTRODUCTION

The food problem constitutes a major concern nowadays, both nationally and internationally, targeting mainly the most effective solutions for balancing the ratio between resources and consumption needs or, in other terms, the food security of the population.

The assessment of agriculture and perspectives of food section infers, taking into consideration and correlating three aspects: the evolution of global economy, the demographic tendencies at a worldwide scale and the environmental factors.

Firstly, the food problem is tightly connected to demographic growth, as the quantitative and qualitative evolution of the population is

determined by its feeding capacity. Even if the evolution of the human species has produced permanent changes in the alimentary behaviour, feeding manner and process of food obtaining, the question of providing a sufficient food supply from a qualitative, quantitative and structural point of view, has become an increasing concern for most countries in the world in the past 50 years. The matter has been highlighted by world food organizations such as F.A.O., O.M.S., and Codex Alimentarius Commission on numerous occasions. This very concern is the direct consequence of realizing the connection between health and access to alternative, both diverse and nourishing, sources. Under the circumstances, it should be pointed out the food evolution throughout the history of humanity, from a natural, biological product, to a more or less pure product in terms of chemical composition, physically and biochemically modified, to a complex product, more or less nutritionally improved and sometimes (according to present biotechnologies) reconstructed.

The past two centuries have been branded by the emergence of industry and thus brought an increasing food complexity by adding non-conventional products to the classical raw materials, such as ultra-processed refined substances and chemical additives which drift away from their primary purpose, namely, living products that feed living bodies. One should add to this globalization of the alimentary production which is currently occurring by now, so that one shall get to a worldwide gearing that drives the obtaining of agricultural products from where the costs are lower, after which they are simply transported to where the demand is higher or simply exists. The system in itself is extremely fragile, as any factor could affect food

transportation (e.g. increase of the energy price) or transporters' possibility to commercialize (e.g. productions affected by natural disasters and meteorological conditions) turns into a major risk of isolating entire regions, specialized in growing a single species or, worse, producing independently a small amount of the necessary food and, consequently, highly dependent on imports.

Secondly, the alimentary economy is highly cautious when it comes to unexpected changes. This system is propelled by huge economic impulses, where each component of the globalized supply chain, from the private farm to the largest food company, is created for and depends on the continuous expansion of production. The elements which dispute this chain are either removed or absorbed. The organic movement manifested in the fortieth last century as an open criticism towards the large scale food production, up to the ninetieth, was co-opted by the same system so that, currently, a significant share of organic food is being produced by the same large-scale system, at low costs and distributed by the same mammoth traders. Further on, although a segment of consumers begin to realize the perils of the present alimentary system and are demanding healthier and more environmentally-friendly products, this defiance is rather confined by the fiscal, structural and technical boundaries of the industry. Therefore, despite the fact that the companies producing food will replace (often under the pressure exerted by consumers) the harmful products with healthier/healthy ones, the latter are widely built up within clone-like production, processing, distribution, marketing and financing systems which actually conveys a compromise or a even gap between consumers' desires and the strategic and technical constraints of producers.

## 2. TRENDING THEORIES IN AGRICULTURE

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All trends and opinions which, throughout time, opposed the classical alimentary system, are now gathered by and within the ecological agriculture. We shall specify them hereafter, not

merely on behalf of the respect owed to the founders but also for the reason that, until today, they have proved operational worldwide and preserved the philosophy of clean agriculture unaltered, being thus more or less aligned to the official acknowledgment systems. We shall firstly (Toncea, 2013) speak of the one who ignited the so-called "green revolution": Rudolf STEINER in Germany, the founder of the *biodynamic agriculture* concept (Brumă, 2013), followed by Albert HOWARD in England, whose ideas laid the foundation of *organi cagriculture*, H. MÜLER in Switzerland, who fathered the concept of *organic biological agriculture*, and C. LEMAIRE and J. BOUCHER in France, creators of the *biological agriculture* (Dobay, 2005). The list of those who brought their contribution to the development of ecological agriculture also includes other representative names, such as: Johann Wolfgang GOETHE, one of Rudolf STEINER's professors, whose discoveries related to *plant and animal metamorphosis* were built upon the phenomenology which is at the very base of all agroecological systems; Ernst HAECKEL, who gave the definition of ecology and Biogenetics, according to which ontogeny repeats phylogeny; Ehrenfried PFEIFFER, one of Rudolf STEINER's disciples and co-author of the *biodynamic agriculture*; Eve BALFOUR, co-author of the *organic agriculture system*; Howard BALFOUR, who rests on crop rotation with perennial lawns, compost of vegetal leftovers, farmyard manure and permanent subsoil; Hans Peter RUSCH, co-author of the *Muller - Rusch organic biologic system*, who recommends composting of organic materials (straws, manure) at soil surface, cultivation of green fertilizers between two crops, fertilization based on silicon rocks and microbiological concentrates, such as fermented hummus; E. KOLISKO and L. KOLISKO, who wrote the study "Agriculture of Tomorrow", containing theoretical and practical ideas on biodynamic agriculture; Cloude AUBERT, author of numerous scientific papers, among which mention should be made of "L'Agriculture Biologique", a successful attempt to point out the special features of biological agriculture, or Bill MOLLISON, founder of the *permaculture* concept, which promotes the agricultural systems based

on endemic (natural, economical and social) resources.

Ecological practices can be adopted by personal belief or influenced by contemporary realities (the environmental decadence), out of appreciation towards a healthy lifestyle and, last but not least, from purely economic reasons. Whatever the reasons behind the migration towards biological agriculture, the ecologization of resources and agroalimentary products is vital for attenuating the harmful effects of the agricultural practices with a negative impact upon both environment and consumers' health. Whichever the ideals that inspired the ecological movement in the past decades, agriculture has already started to descend to a second floor in relation to the financial stimuli triggered by the European organizations, while the strive for a healthier life and environment are strongly influenced by the commercial interest and structural aspects of the market.

Ecological agriculture is present, more or less officially, worldwide, on all continents (except for Antarctica), and each country has at least one agroecological association, one or more organizations that certify the ecological activities and products and, naturally, more farms or companies which process and capitalize the agricultural products and ecological food. The area - ecologically certified according to the latest international statistical data published by FAOSTAT, IFOAM and FiBL - went up during 2007-2013 to 34.3%, which represents roughly 11 million hectares. In 2013 the 43.1 million hectare area was distributed in the following manner: Oceania -17.3 million, corresponding to 40% out of the total, Europe - 11.5 million, 27%, South America - 6.6 million, 15%, Asia - 3.4 million, 8%, North America - 3 million, 7%, and Africa - 1.2 million, 3% (Willer, Lernoud, 2015).

During the same time period, the number of ecological producers registered at global level was doubled, reaching a total of about 2 million, so that significant increases were recorded all over the world. The boom registered in Oceania is spectacular indeed, as the number of ecological producers went up by 755% between 2007 and 2013.

The medium area of ecological enterprises varies from one continent to another, ranging

from 753 hectares in Oceania to 2.14 hectares in Africa. The global average of an ecological enterprise is about 20 hectares.

Compared to the conventional agroalimentary market, the commerce of ecological food and agricultural products is rather insignificant (0.4 - 3.5% out of sales total). In Europe, ecological agriculture is in progress everywhere, the most developed countries in this respect being Italy, UK, Germany, Spain and France, while Luxembourg, Austria, Switzerland, Italy, Finland are leaders as cultivated areas out of tall agricultural areas, and Italy, Austria, Turkey, Spain and Germany occupy front positions as number of ecological (organic, biological) farms. In Romania there are verified signs of a growing ecological agriculture (IFOAM, 2008, 2009), if we are to consider the 289.251 ha cultivated in an agroecological system in 2014 (MADR, 2015) and the 14.470 economic agents who had business in ecological agriculture in 2014. Other elements refer to the export of ecological agricultural products and food, about 21 million Euros in 2010 and, naturally, to the development and diversification of the home market. At present, there are all types of possible marketing forms: storageyards of ecological products, specialized shelves in hypermarkets and specialized stores in all big cities (Bucharest, Sibiu, Timișoara, Cluj, Iași, Târgu Mureș, etc.), direct sale from the farm, up to virtual markets. The products offered cover a wide range: fresh or processed vegetables and fruits, herbal types of teas, bread, flour pasta, sheep and cow milk (fresh or processed, such as butter, feta cheese), eggs, vegetable oils, wine, processed soya products and honey.

### 3. THE DEMAND FOR ALIMENTARY PRODUCTS VERSUS THE NEW CONCEPTION ON LIFE AND CONSUMPTION

A report of the World Wide Fund for Nature Romania (WWF, 2014) asserts that "we are not what we eat; we are what we are offered to eat". Actually, this is a way of saying that people should reconsider their buying options, so the agroalimentary products should meet **our** quality standards, agree with **our** life style and respect

our consumption policy. As a matter of fact, some authors showed that the definition of quality is different in consumers and producers. In the case of consumers, quality may involve alimentary safety while, in the case of producers, it may very well represent an opportunity for boosting sales and increasing prices (Sage, 2003).

Practically, nowadays large categories of people support the idea of a rational lifestyle, as it is not merely important to satisfy our hunger or live to feed ourselves, but also to take ideological stands such as health, respect towards life in general or religious beliefs. These are the well-informed consumers of the ecological market who do not live solely to eat and regard food as a basic medicine for health maintenance or recovery (Gilg & Battershill, 1998). In the opinion of producers, this concept can refer to:

a) meeting safety demands, transparency, trust and taste of consumers;

b) reducing the course of the alimentary products from producers (farmers included) to consumers, as a main measure for providing fresh seasonal endemic foods;

c) diversification of agricultural goods and services;

d) increasing the flexibility of the value chain held by food products.

Producers willing to embrace the above-mentioned changes have found the answer in the traditionally processed foods and made marketing breakthroughs, such as: ecological products naturally processed or made according to traditional methods within farms (Gilg & Battershill, 1998).

For meeting the safety demands, transparency, trust and taste of consumers, numerous studies focused on changing the buying habits as a response to labeling products, the conclusion reached being that a shift in labeling or updating can change the perception or behavior of consumers (Loureiro, McCluskey & Mittelhammer, 2001). Most researches have attempted at investigating the relation between ecological labeling and the willingness to pay extra for such products. The obvious conclusion was that: to some extent, consumers are willing to pay the fair price, but to be convinced that the acquired products have the desired quality.

A study made by Daquet (Daquet, 1989) shows that 37.7% consumers are able to give the exact definition of an ecological product, while 21.3 % give an approximate definition. Due to the great price difference between the ecological/biological products and the conventional ones (the difference lies somewhere between 110 and 350%), one can speak of a market segmentation for bio products. Sylvander (Sylvander, 1989) divides consumers into two large segments:

✓ Permanent consumers, mainly composed of young people who live in urban areas, have university education, work in the public administration and have good knowledge of the legislation (results acknowledged in Romania *via* project PRODLECO, 2007);

✓ Young people with intermediary professions between the first segment and manual labour professions. The main reason which justifies their decision is the absence of chemical residues and a certain affinity for environmental problems. The considerable difference of price for a certain product may even result in changing of the initial buying decision, if taking into consideration the lower income of this category (PRODLECO, 2007).

Another study, developed by Crittenden (Crittenden, Crittenden, Ferrell, Ferrell, Pinney, 2011), comes up with data about four categories of consumers:

- Active consumers (permanent consumers of eco/bio products);

- Consumers of bio/farm products (who look for the authenticity of a product and return in the past);

- Dietetical consumers (in search of a remedy in case of illness or of healthier food);

- New-comers (whose motivation lies in concerns related to environmental protection, product taste, product shape, etc.).

The consumption level of ecological products within the European Union is somewhere between 3 and 13% for permanent consumers, and between 23 and 53% for occasional consumers, respectively. If we are to consider the total percentage of consumers (3%-53%), there results a high percentage of occasional consumers - potentially future permanent consumers - if there is a commercial policy of attracting more customers.

Consumers of ecological products worldwide have shown an increasing interest in all direct sales methods. The following slogan is recurrent: buy local products, ecological goods which are correctly processed (European Commission Report, 2005). We are talking about the preference of buying from small producers that often come up with local distribution solutions for a segment of consumers willing to pay extra for their products. This is known as local ecological distribution (Olteanu, 2007).

Consumption of local agricultural products is supported by two reasons:

the first relies on the increase of alimentary safety, considering that regional food production is sufficient to provide for the population of a region, thus increasing the individual alimentary safety more than employing a global system. The second one attempts at reducing the negative impact upon the environment, distributed on 3 action levels (Cowell & Parkinson, 2003):

1. avoiding long-distance transportation of food products, which results in a decrease of the fuel consumption and of the green house effect, as well;

2. reducing the destructive potential of the environment, as the production unfolds in front of consumers' eyes and any irregularity is promptly sanctioned at local level;

3. assuring better solidarity and social/economic security by developing a local network of producers and consumers.

Even if the literature of the field provides no commonly accepted definition of the notion of *local food product* (Tanasă, 2015), this is not a motif for consumers not to use products which appear (out of various reasons) as safer than imported or certified products. It is fair to assert that, at present, the term of *local agroalimentary product* induces increasing interest, and the market of these products is slowly but safely growing worldwide.

A group of Romanian researchers (Tanasă, Brumă, Doboş, 2014), in a study focused on the short agroalimentary supply circuits, mentioned three ways of interaction between producers and consumers of local products: the first refers to the possibility of the beneficiary to go to the origin point of the desired agroalimentary products; the second is represented by the agricultural

markets; the third relies on the existence of a single intermediary (co-operative stores, specialized on-line shops, supermarkets, etc). A survey made within the European Union (European Commission, 2011) highlights the fact that 55% of consumers have agreed that EU should encourage the markets and channels of local distribution, for offering more advantages and benefits to their consumers.

#### 4. CONCLUSIONS

In the opinion of the authors, food and nutrition issues of the population are more critical nowadays than those regarding the energy resources and raw materials, if we are to consider the demographical growth of the population, the cycles of food generation and alimentary evolution.

Food was the first form of fortune we got and its processing was also the first form of economic enterprise that brought not only prosperity and work demand, but also generated numerous instruments that constituted the basis of general economic development. Agriculture fathered a primary economic structure and specialization, laying the foundations of accounting, management and commerce, and, finally, of an explicit economic paradigm – capitalism.

This relation has worked both ways. The same way food production influenced the working methods in the other domains of human activity, the latter started to exert its influence upon the way we produce food. Farms started to be managed in the same manner as integrated factories which transformed the resources – seeds, food and chemical substances – into constant results of production, *i.e.* grains and meat.

Specialized stores (butcheries, bakeries, green groceries, etc.) have been assimilated into supermarkets, where one can find almost anything and which, by fusion, generate larger store chains, being thus capable of obtaining discounts from food companies (due to the large volume of sales and market share obtained), in the same way the other big dealers (cosmetics, wear) use to proceed. Due to the new era of electrical domestic appliances, which save time,

and also due to the abundance of precooked food, cooking a meal has become a rather clerk job. As a matter of fact, the sector of modern food production has turned into a miniaturization version of the industrial economy which once it inspired. Its success is owed mostly to the capacity of transforming food into a process that behaves in the same manner as any other consumer product.

This is the paradox of the agroalimentary economy and, probably, the source of most of its current problems: although the food system has developed as any other economic system, food in itself is not an economic phenomenon at its core and foundation. Food production may follow the principles of request and demand (which define the general economy), create jobs, earn from commercial trades and generate profit (substantial sometimes), but the product in itself, what finds its way onto our tables has never completely fallen under the rigors of the modern industrial model. As consumers start realizing this fact, the need for alimentary products that meet the novel requests of quality, taste and origin is being manifested. This triggers the emergence of an alternative market which offers traditional, local, handcrafted and ecological goods produced by a new generation of entrepreneurs interested in adding value to their agricultural products. They lay the foundation of a new countryside category that seeks to run their enterprises in accordance with the latest European or global agricultural demands, and take upon their shoulders the role of nature and land custodians - deeply rooted in the marketing and production strategies.

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