

# SUSTAINABLE DEVELOPMENT AS A SOLUTION TO AGRICULTURAL COMPETITIVENESS: THE CASE OF GREECE IN THE ERA OF EUROPEAN INTEGRATION

Athanasios PAPAGEORGIOU

Technological Educational Institute of Kalamata, Faculty of Agricultural Technology, Department of Crop Production, Antikalamos, 24100 Kalamata, GREECE, ath.papageorgiou@teikal.gr

## ABSTRACT

The liberalization of international trade, due to the elimination of market barriers between countries within the context of economic unions, like the European Union (EU) and the expansion of globalization have caused increased competitiveness, at both geographical and sector level. European Commission documents state competitiveness as a continuous rise in the standards of living of a nation or region, a definition which combines competitiveness with sustainability and social goals. Although, one of the EU integration objectives is the sustainable rise in the standards of living of a nation, in the case of Greece this seems to be quite problematic. In a long term basis, the Common Agricultural Policy application found country's agriculture unprepared and weak to face the new market conditions. The Greek economic crisis can be considered as an opportunity to redefine country's entire development strategy. As far as the agricultural sector is concerned, this re-establishment could use the principles of sustainability, showing proper respect to the economical, social and environmental characteristics of the regions.

**Keywords:** agricultural competitiveness, European integration, standards of living, sustainable development, trade balance.

## INTRODUCTION

The liberalization of international trade, due to the elimination of market barriers between countries, within the context of economic unions, like the European Union (EU) and the preferential trade agreements have caused the expansion of globalization and increased competitiveness, at both a geographical and a sector level. Concepts such as: growth, productivity, effectiveness and competitiveness have acquired a new dimension for the production sectors. Furthermore, the more open an economy is, the more the dual nature of competitiveness, domestic and international, is reinforced (Gopinath, et al., 1997).

A number of definitions regarding competitiveness and its measurement tools have been proposed, depending on the level of analysis, i.e. country or region, industry, firm and product level. For some researchers, competitiveness is seen as the ability to perform well (Buckley, et al., 1988), while for others it is the generation and maintenance of a comparative advantage of a country (Castorina and Monypenny, 2007). Besides the above, competitiveness is also defined as the management of decisions and processes taking into account the interests of society (Krugman, 1995). Scholars of international competitiveness analyze the relationships between growth and the trade balance of an open economy, trying at the same time to identify

their determining factors (Abbott and Bredahl, 1992; Buckley, et al., 1988; Fagerberg, 1988; Porter, 1990).

In relation to the agricultural sector, the definition, the factors and the measurement indexes of competitiveness are continuously under revision. The trend towards freer trade has increased the clarity of world price signals and international markets. This has resulted in increasing the importance of the comparative advantage within the framework (Kennedy and Rosson, 2002). Likewise, Abbott and Thompson (1987) point out that "a properly formulated theory of agricultural comparative advantage should provide a framework for evaluation of self-sufficiency policies and the agriculture versus industry debate". However, during the recent years, the particular conditions that dominate the sector (fluctuation of product prices, etc) have limited the usefulness of this tool, due to the need for more protectionist policies.

In low-income countries, such as Greece before its accession to the European Economic Community (EEC), development planners were continuously confronted with the issue of whether to export agricultural products, import them, or strive for food self-sufficiency. However, such a dilemma was never seriously faced in Greece. Since 1962, when Greece was associated to the EEC, the country was exposed to international economic interests and no policy was implemented to restrict their expansion. The accession of Greece to the EEC in 1981 marks the beginning of the complete opening of the Greek economy to globalization and the international politico-economic system.

However, because of the bidirectional influences which arise between countries in a fully open and globalized cosmopolitan society, the question of who benefits more ultimately arises. Is there convergence or divergence of societies and welfare of their citizens? To which extent can a country stay exposed? Should there some safeguards perhaps be included?

The liberalization of the external trade of Greece was progressively implemented since 1986, that is, after the expiry of the transitional period of the country's accession to the Common Market and was completed in 1994. From 1994 onwards, the Greek economy operates within a system of full freedom in regards to international trade exchange, capital flow and the financial system. Previously, it was characterized by a system of export subsidies, import tariffs, controls and restrictions on banking, and other barriers to international trade (Dimelis, 2004).

If one of the EEC integration objectives is a sustained rise in the living standards of a country, which is an objective that is linked to competitiveness as well as to sustainable development, in the case of Greece this seems to be totally temporary and extrinsic. The EU capital inflows and the growth of economic activity after the country's accession did not contribute to the growth of the productivity and competitiveness of the economy. A large part of incomes was a consequence of lending and when this ceased, all the weaknesses of the Greek production system were revealed. According to Eurostat, since 2007, when the Greek GDP per capita, based on purchasing power parity, was at its highest level (96% of the EU average), the GDP per capita has continuously fallen and in 2011 it was 82% of the EU average.

As far as agriculture is concerned, the implementation of the Common Agricultural Policy (CAP) found the country unprepared and weak to face the new market conditions. Because of intrinsic weaknesses, such as in livestock production, and the limited flexibility of many crop productions, the position of Greek products

deteriorated not only globally but also, in the domestic market. The rise of living standards due to the increase of income of the Greek consumer contributed to the increase of imports which consequently brought about a market upheaval. The price increase of a large number of products due to the increase of their production costs but also due to their matching with average European prices reduced their international competitiveness. Exports were limited to a small number of products or had to be subsidized. Furthermore, every effort for food self-sufficiency, as in livestock products, was inhibited because of their high production costs. The Greek market constituted a small but easily accessible market for the disposal of EU products.

The aim of this study is to present the strengths and weaknesses of Greek agriculture through the investigation of its international competitiveness from the country's accession to the EEC in 1981 up to 2010. We intend to show the inadequacies of the existing policies and the necessity of a new approach of sustainable development, closer to the principles of an endogenous agricultural and rural development.

The Greek economic crisis can be considered as an opportunity to redefine the country's entire development strategy. This redefinition could use the principles of sustainability, showing proper respect to the economic, social and environmental characteristics of the regions. As a result, agriculture will correspond better to the potential of the regions, and more generally to the needs of the Greek society, as well as become less dependent on international interventions.

This study consists of three parts. The first part is concerned with the theoretical framework and methodology. The second part presents the results of our research in which by using time series data on the foreign trade of the country from Eurostat we analyze the country's agricultural competitiveness. The third part discusses the potential of sustainable development of the sector within the context of the economic crisis that the country is experiencing in recent years.

## THEORETICAL FRAMEWORK

### **The Diversity of Approaches in Defining Competitiveness**

In the beginning, the notion of competitiveness was used to demonstrate the ability of a firm or an industry to cope with the competition of its opponents. Later on, such notion was of a wider application both at the level of centralized policy formation, even at the level of the EU (European Commission, 1993), and in the form of an index measuring the ability of local economic systems: "regional competitiveness" (Bristow, 2005). The European Commission (EC) views the improvement of competitiveness in Europe's less favoured areas as vital to "social cohesion" (Kitson, et al., 2004).

Although the notion of a competitive business is to a large extent straightforward, there is still no persuasive theory to explain national competitiveness. The Aldington Report (1985 cited in Buckley et al, 1988, p. 176) notes that "the definition of competitiveness for a nation must similarly be tied to its ability to generate the resources required to meet its national needs". Landau (1992 cited in Harrison, Kennedy, 1997, p. 15) defines a nation's competitiveness "as the ability to sustain an acceptable growth rate and real standard of living for their citizens while efficiently providing employment without reducing the growth potential and standard of living for future generations". EC (2009) documents state accordingly: "competitiveness is

understood to mean a sustained rise in the standards of living of a nation or region and as low a level of involuntary unemployment as possible" (EC, 2009). These definitions combine competitiveness with sustainability and social goals.

The European Competitiveness Report (2009) reviews the EU's overall competitiveness performance as well as the external and internal aspects of competitiveness. External aspects concern the international presence of production sectors whose main goal is the maintenance and increase of their export market share. In particular, this report explores the external dimension of competitiveness by analyzing the consequences of recent developments among the BRIC countries (Brazil, Russia, India and China) in the global arena. Internal aspects are related to the shaping of productivity at a European level and the factors that influence this, such as: the role of migration, the extent to and conditions under which training can boost productivity, with a particular emphasis on the role of Information and Communication Technologies (ICT) as a magnifier of training benefits, and the role of product and labor market regulations in influencing ICT investment (EC, 2009).

Scott and Lodge (1985 cited in Buckley et al, 1988, p. 177) remark that "national competitiveness refers to a country's ability to create, produce, distribute and/or service products in international trade while earning rising returns on its resources". This approach, which to some extent is adapted by the EU as well, links competitiveness with the international competitiveness of a country. The most widely used approach is the one which focuses on the detrimental effects of growth in Relative unit labor costs (RULC). If the RULC of a country increases more than that of other country, this will result in the reduction of the share which is held by both domestic and international markets, hindering economic growth and increasing unemployment (Fagerberg, 1988).

On the other hand, there is an approach of national competitiveness to which productivity is a crucial parameter. Porter (1990) observes that "defining national competitiveness as achieving a trade surplus or balanced trade per se is inappropriate. The expansion of exports because of low wages and a weak currency ... may bring trade into balance or surplus but lowers the nation's standard of living". However, he also takes into consideration that "the principal goal of a nation is to produce a high and rising standard of living for its citizens. The ability to do so depends on the productivity with which a nation's labor and capital are employed. ... Competitiveness also does not mean jobs. It is the type of jobs, not just the ability to employ citizens at low wages that is decisive for economic prosperity". Finally, Porter draws attention to the fact that "the only meaningful concept of competitiveness at the national level is productivity".

Krugman (1994) states that "trying to define the competitiveness of a nation is much more problematic than defining that of a corporation". He supports the idea that competitiveness at country level does not exist as a concept because "countries do not go out of business". The prosperity of a country is an internal matter which depends on the increase of its productivity. This will allow, through the strengthening of its involvement in international trade, to increase its imports and thus its prosperity. He claims that "international trade is not about competition, it is about mutually beneficial exchange" and emphasizes the importance of the comparative advantage of countries (Krugman, 1993).

The level of national employment, its growth rate and the standard of living in an economy, however, depend on the competitiveness of firms and industries.

Regarding the competitiveness of an economic sector, such as agriculture and the food sector, the focal point of interest is the level and the fluctuations of the trade balance and/or the performance of the relevant industries. Sharples and Milham (1990 cited in Abbott and Bredahl, 1992, p. 4) view that “being competitive is the ... ability to deliver goods and services at the time, place and form sought by overseas buyers at prices as good as or better than those of other potential suppliers whilst earning at least opportunity cost returns on resources employed”.

If we are to examine the competitiveness of firms, this concept can be defined as the immediate and future ability of, and opportunities for, entrepreneurs to profitably design, produce and market value worldwide whose price and non-price qualities form a more attractive package than those of foreign and domestic competitors (Buckley, et al., 1988), via competitive cost and product differentiation (Harrison and Kennedy, 1997).

Porter (1998), in his analysis on the importance of clusters, mentions that “modern competition depends on productivity, not on access to inputs or the scale of individual enterprises”. He stresses that important is not where a business operates but how, adding thus elements of business organization in the analysis of the long-term course of competitiveness.

At an international level, competitiveness measures whether a commodity can compete with similar goods in the international market, given the costs incurred in the production process (Mubarik, 2004). If a product is competitive, then it can co-exist with the imports of a country and/or can be exported. By contrast, if the product is not competitive, then it needs protection from imports, its export potential is low and only if it is subsidized, can the competitiveness of such a product improve in relation to its price.

International competitiveness has a dynamic and changeable meaning. The importance of long-term competitiveness as well as the dynamics of a comparative advantage of countries is analyzed (Trail and da Silva, 1996). In a long term basis, competitiveness should be maintained at a satisfactory level and the large majority of competitiveness theories underline that investments and R & D are crucial for sustaining and improving the competitive advantage of countries (Aiginger, 2004; Fabricio, et al., 2007; Fagerberg, 1988). Thus, there is a constant need and obligation for technological improvements. The role of government is to ensure a competitive economic environment to provide the public with goods and infrastructure that private firms cannot supply, and to set regulations to ensure the health and safety of its population and environment (Abbott and Bredahl, 1992; Porter, 1990).

Fagerberg (1988) notes that “factors related to technology and capacity are indeed very important for medium and long run differences across countries in growth of market shares and GDP, while cost-competitiveness plays a more limited role than commonly assumed”. He develops a model of international competitiveness which relates growth in market share to three sets of factors: the ability to compete in technology, in price, and in delivery.

Harrison and Kennedy (1997) underline that “technology, attributes of purchased inputs, production economies, product differentiation and external factors are the five primary sources of competitiveness”, which influence firm’s performance. As the firm gains advantage in various sources of competitiveness, relative market share and profits increase.



There are three main parameters that measure competitiveness: cost, price and quality. "Cost competitiveness" is often used as a measure of competitiveness at industry and firm level. The general principle is that the lower the cost an industry/firm incurs, the more competitive they will be. It should be noted that for a small country such as Greece, this is perhaps the most appropriate measurement indicator of competitiveness. Given the often limited amount of products in offer, Greece cannot affect substantially their prices in the international market. Furthermore, the fact that these products are not sufficiently diversified does not also allow for a diversification in prices. On the other hand, while the production cost allows us to have some idea of the comparative positioning of the sectors among countries, it fails to include their performance. A firm/industry can be cost competitive but fail to earn satisfactory returns as a result of poor market positioning or product image (Buckley, et al., 1988; Fagerberg, 1988).

The most common indicator of measuring competitiveness is "price competitiveness". It is clearly related to cost competitiveness, and therefore, this measurement also plays an important role in determining the location of production. Such measure gives an indication of an industry/product's potential for competitiveness, but gives no insight into how they turn such potential into performance. A company may be price competitive, but through "poor product quality / brand image / market servicing / product positioning" may be unable to turn such potential into sales and profits (Buckley, et al., 1988).

Another indicator of competitiveness is "quality competitiveness". Competing on price is not necessarily the best form of competition. In the case of many Mediterranean products and food where quality is thought to be a key competitive element of products, selling at a lower price may be an inappropriate strategy to follow (Sassi, 2006). So price can also act as an indicator of quality and consequently lower prices may suggest poorer quality and thus deter sales.

### **Methodological Approach**

Regarding the agricultural sector, the measurement tools of its competitiveness are production growth, productivity and international competitiveness (Mubarik, 2004). In spite of this, due to the difficulty of measuring the above, the tool which is widely used is international competitiveness. This is expressed by the ability of a country to deliver products in a competitive price, better quality and differentiated in comparison to the competition. The competitiveness of an export country is usually measured by taking into account two criteria: price competitiveness and performance competitiveness, which includes quality competitiveness (Lipchitz, 2006).

The approach to competitiveness that follows is based on Greek foreign trade data and includes the period from the country's accession to the EEC in 1981 until 2010. We do not include the period before the accession of Greece to the EEC for two reasons. The first one is related to the fact that the comparison between the two periods, before and after the accession, shows great discrepancies in regards to the growth dimension of the agricultural sector and its dynamics due to the European capital inflows. The second reason concerns the trends of product prices and their impact on competitiveness. The year of 1981 was the beginning of the gradual increase of product prices in order to match these with the European average. This increase played an instrumental role in the development of the production of food and agricultural products, altering market conditions and dynamics. It also affected decision making of farms and agro-industries.

Following the hypothesis that the trade balance of a country provides us with a comprehensive account of its competitiveness, in both the domestic and international market, we present the fluctuations of the trade balance of the main categories of food and agricultural products on a five-year basis. This presentation is based on deflated prices, i.e. in Euro (€), so we can have a more objective view of this growth. The factors that have determined the dynamics of the international competitiveness of products are analyzed in order to obtain a more comprehensive perspective of their function and to be able to put forward an applicable proposal of strategy development. In our analysis there is specific reference to the change, due to rising incomes, of Greek consumer behavior and how this determined the deficit we observe.

## GREEK AGRICULTURAL COMPETITIVENESS

### The Trade Balance

From 1981 onwards, the year of the accession of Greece to the EEC, the Greek socio-economic system started undergoing a process of European integration. However, it was not something new for the Greek society as already since 1962, the year of the country's association with the Common Market its production system had already begun a process of adaptation, which was interrupted, though, during the period of the military dictatorship (1967–1974). Nevertheless, the European integration of the country began to have a multifaceted impact, which ultimately marked the opening up of Greece to globalization.

Apart from economic integration that in Dalloz dictionary (1992) is defined as “an economic arrangement between different regions marked by the reduction or elimination of trade barriers and the coordination of monetary and fiscal policies”, Greece also experienced a strong sense of social integration. According to Parsons, social integration is expressed as the degree of conformity in the behavior of individuals or subgroups so a collectivity or a cohesive social body can be achieved (Dalloz, 1992). The latter eventually led to the differentiation of attitude of a large majority of Greeks. However, the rise of living standards due to the intensification of trade, the large capital import from European funds as well as the trend towards modernization which characterizes the Greek European integration instead of reflecting a convergence “that consumer behavior in different areas, such as their productive sectors and economic structures will become more and more alike, and that developed and developing worlds will eventually achieve some stable similarities” (Wilk, 1998), it is closer to the cultural imperialism hypothesis which depends on the idea of the South imitating the North and the poor imitating the rich.

During the last twenty years, the Greek Net national disposal income (NNDI) per capita almost tripled. Specifically, it rose from 5,500 € in 1991 to 17,745 € in 2008. However, in 2010 it fell to 16,289 € because of the economic crisis. Despite this income increase, the Greek production system was not able to capitalize on the opportunities that came about thanks to the rise of living standards and consumption. It was also not able to take advantage of the new conditions that emerged from the country's EU membership due to its very important structural and systemic weaknesses. Greece is characterized by “inflexible structures” (Giannitsis, et al., 2009), which do not permit the country to follow the growth and development pace of other Member-States.

Greece holds a comparative advantage in services and especially in tourism and shipping. However, the surplus in the balance of services increased by the surplus of capital transfers, due to the large number of Greek immigrants but also to the subsidies from the European funds, is entirely offset by the growing deficit in the trade balance and income balance (Dimelis, 2004). The current account balance remains always in deficit. The trade balance deficit reflects the lack of a comparative advantage in the production of a large number of products, while the income deficit is mainly derived from high interest and dividend payments to foreign citizens.

Table 1. Food and agricultural trade balance of Greece (millions of Euro)

Products	1981	1986	1991	1996	2001	2006	2010
Live animals	-1.4	-11.5	-44.1	-48.9	-77.3	-83.1	-65.7
Meat & edible meat offal	-43.1	-231.0	-339.0	-564.6	-682.0	-1,088.4	-950.9
Dairy produce & Bird eggs	-33.1	-143.2	-219.4	-302.5	-386.7	-452.4	-452.1
Fish & Crustaceans	-9.3	-24.7	-38.5	-54.8	-44.2	37.5	191.0
Cereals	9.6	-4.7	83.8	-109.2	-183.2	-278.9	-156.2
Fruit & Vegetables	100.9	311.9	499.9	565.0	784.9	548.6	822.3
Sugars and Honey	-11.2	1.6	2.1	-38.6	-15.9	-50.8	-93.3
Coffee, Cocoa, Tea & Spices	-14.3	-58.7	-68.6	-156.4	-149.5	-265.7	-284.3
Animal feed	0.4	-5.0	-49.8	-109.7	-190.3	-254.4	-327.5
Other foods	-2.2	-12.7	-62.2	-139.3	-118.6	-191.4	-437.9
Beverages & Spirits	3.4	8.3	-65.3	-43.6	-198.9	-274.1	-170.8
Tobacco & substitutes	24.3	67.8	134.8	192.2	144.1	62.3	125.2
Oil seeds & Oleaginous	-0.4	-3.5	-50.3	-105.9	-111.0	-75.2	-138.9
Veg. textile fibres	-10.2	-53.5	42.2	323.8	287.9	320.4	413.8
Fertilizers	-6.1	-4.6	-30.0	-53.7	-58.7	-93.5	-128.8
Animal or vegetable fats & oils	1.8	78.7	17.5	428.7	199.5	314.9	3.2
Products of the milling Industry	42.3	79.3	-0.8	0.0	-2.3	-3.0	-41.5
Food and agricultural products	36.7	-82.2	-328.5	-384.2	-1,032.7	-2,182.2	-1,951.5
Total *	-750.8	-2,325.2	-6,871.8	-11,246.8	-20,163.9	-33,565.0	-31,775.5

Source: Data provided by Eurostat

\* : Trade balance of all products

During the period 1981–2010, the trade balance of the country recorded a significant decline as did the agricultural trade balance, which from positive became negative



(Table 1). Specifically, between 1981 and 2010 the total trade balance fell from -750.8 millions of Euro to -31,775.5 millions of Euro (in 2006, before the onset of the economic crisis, the deficit recorded its highest value, i.e., -33,565 millions of Euro), which shows that the deficit multiplied by nearly 43 times. Correspondingly, the food and agricultural trade balance moved from a surplus in 1981 (€ 36.65 millions) to a deficit (-34.80 millions of Euro) in 1982, one year after the accession. This deficit continued to escalate (-2,446.16 million of Euro in 2009), coming to a halt only last year (2010) because of the economic crisis and the fall in demand which brought about a decrease in imports (-1,951.48 millions of Euro).

Since the 90's, the competitiveness of products was burdened by dramatic changes. More specifically, from 1994 onwards the Greek economy was functioning in a context of full liberalization in regards to trade with other countries. This is in contrast with the previous situation of export subsidies, import duties, etc. Furthermore, since 2001, when Greece joined the Euro zone, it eliminated any possibility of a national currency and monetary policy.

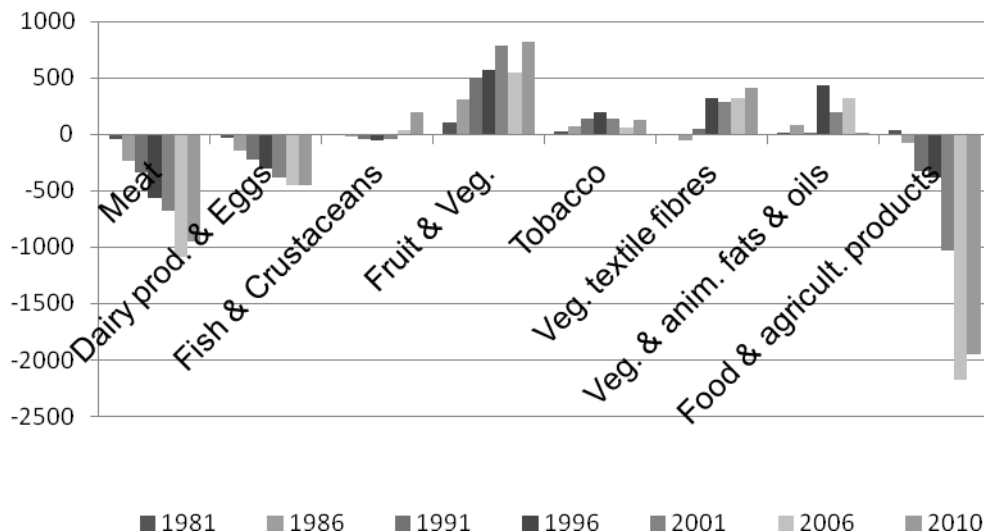
Table 1 show that products can be distributed into three groups:

1. The first group consists of Mediterranean products which has been part of the production tradition of Greece for centuries and whose trade balance was and remains in surplus. These products include fruit and vegetables, tobacco, oils and fats – with olive oil being the main product of the last category. The industry of processing and preservation of fruit and vegetables as well as of other food products are among the pivotal sectors of the export performance of the country. On the other hand, it should be mentioned that tobacco and vegetable textile fibers were EU subsidized products and that a large share of exports is addressed to third country markets.
2. The second group concerns products whose trade balance significantly declined due to changes in the consumption behavior of Greeks. This group can be divided into two sub-categories:
  - Products whose trade deficit decreased more than 20 times:  
These are related to commodities which satisfy the national demand for livestock products, cereals, beverages, oil seeds but also fertilizers. In regards to livestock products, the negative trade balance is associated with raw materials for the livestock production of the country, such as live animals and animal feed, human consumption and the demand of agro-industries. It is worth noting that the deficit of animal feed increased a staggering 350 times.
  - Products whose trade balance declined but at a much lower rate:  
These products include sugar, honey, coffee, milling industry products, dairy produce and bird eggs.
3. The last group concerns aquaculture products whose trade balance shifted from a deficit to a surplus. After 2000, this group shows a positive trade balance and is becoming a strategically important industry for the Greek economy.

What seems to have played a key role in the deterioration of the trade balance is not so much the difficulty of exporting products but the spectacular increase of imports. During the last twenty years while the value of exports almost doubled, the value of imports multiplied two and a half times. In 2010 the value of imports (48,055.063 millions of Euro) was triple that of the value of exports (16,279.551 millions of Euro).

The sense of deprivation that Greek society had experienced throughout the period after World War II in conjunction with growth and the increasing income of its residents thanks to the country's accession to the EEC, created quite a positive framework for changing the consumption patterns of Greeks. Bourdier (1979) states that goods also have the function of signaling the lifestyle of consumers, they mirror social status. This appears to be important for the Greeks.

Figure 1. The food and agricultural trade balance of Greece



Influenced by a strong immigration wave and urbanization, former residents of rural areas display an intense desire for upward social mobility and recognition at their new locations of residence. The change of their consumption patterns gives them the feeling that they can succeed in their social quest (Papageorgiou, 2010). What is happening in the case of the Greeks seems to be what Tomlinson (1991 cited in Wilk, 1998, p. 316) calls as the cultural imperialism hypothesis: "the combination of Western control of mass media and improved advertising along with human natural impulses to improve their lives by seeking leisure and luxury will lead new consumers to emulate or directly imitate those of the developed North".

The European social integration of Greeks, taking the form of a consumption convergence, had also a dramatic impact on their dietary choices and habits. The remarkable increase in the consumption of red meat can be only read as a sign of social advancement. In the case of Greek society, as many food studies show, "commensalism - whether in the form of daily meals, life event celebrations and commemorations - involves multiple meanings of consumption: the partaking of food as a moral, as well as an oral and visual, event" (Pennell, 1999).

All these changes caused demand to exceed the production capacity of certain industries. As a result, imports increased their market share at the expense of local suppliers (Faberberg, 1988).

In short, the trade balance deficit is due both to the increased demand of Greek consumers, which exceeded the production capacity of the local economy and therefore increased imports, and to the structure of imports in relation to exports. We mainly import expensive livestock and of high value-added products and we export

cheaper vegetable products. The trade balance was also encumbered by the application of the Community preferential trade agreement and the increase of imports of expensive products from the EU compared to cheaper third country ones which we used to import before our accession (Maraveyas et Duquenne, 1994).

## GREEK AGRICULTURAL INTEGRATION AND AGRICULTURAL SUSTAINABILITY

### **Subsidized Anarchy: Milking the EU cash cow**

The accession of Greece to the EEC and its European integration had two main objectives. The first one was political and concerned with the empowerment of its democratic institutions, since the country had only recently exited a 7-year dictatorship. The second one was socio-economic related to economic growth and thus to the improvement of the living standards and prosperity of its citizens.

If we were to accept one of the most simplified definitions of integration by which the term means “the grouping, unification, connection, or coordination of previously separate elements to form a coherent whole” (Daloz, 1992), we understand that the integration of Greece was quite problematic. Few production sectors adapted to the European conditions, recording long-term growth. In an enlarged Europe, coherence for an industry implies convergence – convergence in productivity, growth, and efficiency which are all elements that enhance international competitiveness.

As we have already seen, the only agricultural products which are not problematic are the traditional ones of the Greek land or the well adapted to the Greek coastline, like fruit and vegetables, olive oil, and aquaculture products, respectively. The unsuccessful integration of the larger part of the Greek agricultural production system is proven by the increased deficit of their trade balance as well as the limited self-sufficiency rate of the Greek market. Data from the Ministry of Agriculture demonstrates that in recent years the Greek production of pulses and red meat covers 30% of domestic demand, soft wheat 63%, pork meat 41%, etc.

In Greece, the agricultural sector was always viewed as synonymous to poverty and misery. During the early 50's, the rural population accounted for 60% of the total population of the country. These people were barely managing to survive because there were no large fertile plains. Even after 1970 when the rural population had significantly declined because of rural – urban and international immigration, agriculture was considered as a shrinking sector. The last fifty years have witnessed a decrease in the percentage of the active agricultural population from 36% during the 60s to 11.3% in 2008 (Hellenic Statistical Authority, Greece in Figures, 2010).

Between 1980 and 2007, the agricultural Gross national product (GNP) declined from 16.3% to 6.8% of the GNP of the country. Agricultural policy was always shaped by the tendency of downgrading its importance. This attitude did not change even after joining the EEC. Greek political leadership was unable to enrich the developmental strategy with parameter of a multidimensional approach, which the new conditions required.

The agricultural sector was regarded as the Eden of the patronage system for the reproduction of party power. The political exploitation of farmers was facilitated by the possibility of providing income subsidies, often by using non-transparent practices. The deterioration of the problems led to repeated transient income payments without, however, addressing these problems seriously. The result was that these problems

became more and more perplexing. There was a constant mismatch between the actual problems and the implemented policies (Nikolaidis, 2010).

From the point of view of the farmers, the association agreement between Greece and the EEC in 1962 and the country's accession in 1981 created a state of euphoria because of the abolishment of barriers that had not allowed Greek products to enter the international markets. For a period of about 30 years (1965–1995), farms became highly mechanized and specialized, as well as heavily dependent on fossil fuels, borrowed capital and chemical fertilizers and pesticides (productivist agriculture). However, since the late 80s we observe the first symptoms of excessive intensification and specialization of Greek agriculture. Its connection with the mechanisms of the CAP supports producers' income with either agricultural price policies or subsidies, reinforced the optimism of producers concerning profit making, but this is not justified by their dynamism per se and the strategy concerning improvement of quality and product differentiation.

Moreover, the production structure deteriorated due to the expansion of heavily subsidized, non-competitive crops. A characteristic example is the cultivation of textile fibers, which, despite their high production cost, manage to have a surplus trade balance through export subsidies. The impact of the subsidy system was so negative for the development of the Greek production structure - which abandoned the cultivation of native species and crops - that we can talk about the "subsidized underdevelopment" of Greek agriculture (Nikolaidis, 2010).

Furthermore, the cutback in private investments between 1980 and 2007 declined the gross fixed capital formation in agriculture from 7.8% to 4.0%. The irrational management of EU funds and the ineffective structural policy also appear to have played a decisive role in the decline in the competitiveness of Greek agriculture. A substantial part of the increased income was directed towards consumption and urban real estate, disregarding investments which would have improved the infrastructure of their holdings.

Beyond all forecasts, the accession of Greece to the EU did not set in motion the integration of its agricultural structures, but rather it seems to have reinforced the heterogeneities and inequalities at many levels. Often, small-scale trade, production for own consumption, contract agriculture and paid employment co-exist within the context of the same agricultural holding. Agricultural labor also becomes much more complicated, as individual or family pluriactivity of the agricultural household tends to be the norm.

Income increase and the improvement of living standards was the result of exogenous interventions in relation to the conventional Greek agricultural farming system. The advantages from the accession of Greece to the EU remained unexploited by the great majority of producers. This seems to confirm what Harrison and Kennedy (1997) had noted that "supporting domestic production at artificially high prices may detract from the competitive advantage of the nation by inhibiting the development and adoption of new technologies".

The entry of the country into the international market strengthened the increase in exports, but instead of modernizing agricultural holdings, the development observed was more quantitative than quality-linked. The farmers' interest in immediate and easy profit, made them have a short-sighted and one-dimensional consideration of the management and decision making of their holdings, frequently encumbering their dynamism and sustainability.

### **The target of agricultural sustainability**

Over the years, the farms with the greatest exposure to intensification began to face increasingly insurmountable problems. The application of modern farming methods increased the average crop yield per hectare, but the widespread use of agricultural machinery and the increase of inputs often resulted in a disproportionate increase in production costs.

Many farmers are greatly in debt, partly because of heavy investments in specialized machinery and other equipment. The same farms are associated with declining soil productivity, deteriorating environmental quality, reduced profitability and threats to human and animal health. As Petit (2011) notes “numerous producers engaged in the race of modernization thought they were running on a technological treadmill”. He is describing “a race without a finishing line to adopt new techniques and to develop their infrastructure continually, the price being a higher loan every time but an unchanged income”. Latouche (2006) also states that the repayment of the debts including interest introduces the need for constant growth and a whole range of related obligations.

It is estimated that today due to the economic crisis the Greek banks have more than 250 billions of Euro in outstanding loans. Of these, 120 billions of Euro are business loans, 115 billions mortgages and about 15 billions of Euro loans of self-employed and farmers (Txvsteam, 2011). Before joining the Euro, one of the tactics that Greek governments had often used to make farmers their allies was to write off their debts from state-controlled banks, whether owed by an individual or a cooperative organization or industry.

Productivist agriculture is an incredible waste of natural resources and a factor of intensive pollution. It is often the cause of the loss of soil organic matter and the reduction of water retention capacity. These are consequences of the increased use of irrigations and chemical fertilizers, a large part of which infiltrate the water and the underground aquifer (Latouche, 2010).

A growing cross section of people is questioning the economic, social and environmental impacts of conventional – productivist agriculture. It has become clear that the effectiveness of the productivist model depends not only on the direct cost of its methods but also on the indirect cost incurred by consumers and the ecosystem (Briel et Vilain, 1999).

We are living in a time of redefining priorities which correspond to desirable and attainable prospects of progress. There is a restructuring, that is, the production system and social relations are adapting to the change of values. Viveret (2003 cited in Latouche, 2010, p.187) proposes “reconsider wealth by appreciating it in another way”.

The economic crisis in Greece is turning more and more people back to the agricultural economy. While the unemployment rate is breaking one record after the other – in August 2011 it was 17.2%, the only production sector recording employment growth is agriculture. From 2007 onwards, the number of self-employed people in agriculture has begun to rise. In the first half of 2010, the number of farmers increased by 6.1% compared to the same period in 2009 and reached 346,700 people. The total number of people working in family farming holdings is 551,300 (Hellenic Statistical Authority, 2011).



We hope that by redefining work and their lifestyle in general, citizens experiencing the crisis will become more aware of the necessity to reassess their values, concepts and priorities. By this we mean to rethink the meaning of what growth, profit, prosperity and financial independence are and to return to forgotten values such as the simplicity of rural life.

One solution might be sustainable development. Brundtland Report (1987 cited in Burgenmeier, 2005, p. 38) defines it as “development that meets the need of the present without compromising the ability of future generations to meet their needs”. It is a process of change by which the exploitation of resources, investment orientation, technical and institutional changes are in harmony and reinforce the current and future potential to meet the needs of people.

The Association for the Taxation of financial Transactions and Aid to Citizens (ATTAC) declares that sustainable development should be “cost effective, environmentally sustainable, socially equal, democratically structured, geopolitically acceptable and culturally diversified” (Guibert, 2006).

Some researchers choose to speak about a global approach of sustainability which highlights three purposes: to overcome the North – South division, an ecological management aiming at the intergenerational transference of natural capital and an awareness of social inequalities and a new morality (Burgenmeier, 2005). Others focus on a local approach closer to the endogenous growth (Martinez, 1994 cited in Briel et Vilain, 1999, p. 52) or they speak about the “bioregion” which is an even more autonomous form of social organization: “they are natural areas where herds, plants, animals, water and people form a unique and harmonious set” (Pannikor, 1995 cited in Latouche, 2010, p. 275).

In relation to the agricultural sector, sustainability does not represent a return to pre-industrial revolution methods; rather it combines traditional conservation – minded farming techniques with modern technologies. “Sustainable systems use modern equipment, certified seed, soil and water conservation practices and the latest innovations in feeding and handling livestock. Emphasis is placed on rotating crops, building up soil, diversifying crops and livestock and controlling pests naturally” (Reganold, et al., 1990). A rational management of agriculture is imperative, based on its actual possibilities of the regions, which at the same time will preserve them from the drawbacks of conventional agriculture. The interdependence of economic, social, moral and ecological factors in rural areas requires a global approach of sustainable development which goes beyond environmental concerns.

In a time of economic crisis where economic opportunities and openings are limited, the development of sustainable agriculture, via a better collective organization and research on agro-ecology, would allow the production of more products per hour worked (Gadrey, 2010). In addition, when there is abundant labor force and limited capital, small farming displays economic superiority over a larger one. This occurs mainly because they use scarce resources to which they have access in an effective way (Petit, 2011).

In Greece, sustainable agriculture is equivalent to organic farming. The Hellenic Statistical Authority reports that in 2009 there were 23,769 organic farmers (6.9% of agricultural holdings). These figures correspond to 170,500 ha which represent 4% of the total agricultural area and of which 55.8% is arable land and 36% concerns olive groves. Because organic farming is too low compared to demand, it has great potential as a solution for the differentiation of Greek products.

## CONCLUSION

The economic integration of countries into a geographical entity optimizes their comparative advantages. Thus, the integration of Greece into the EEC and the strengthening of its economic activity led to the increase of the national income. However, it appears that its engagement in globalization eventually became a whirlwind instead of a force for long term progress. Even for traditional Mediterranean products, such as fruit, vegetables and olive products, one cannot help but wonder whether the CAP was truly necessary for these to compete in the international market. We saw that their trade surplus is declining. Only the aquaculture industry benefited.

It seems that the stronger countries of the EU benefited more from the Greek integration than Greece itself. The enforcement of competition, due to the expansion of globalization, downgrade natural and institutional differences between countries and the ones that eventually survive are the strongest.

The economic crisis slowed down development and thus allowed problems to become worse and more apparent. On the other side, the crisis is an opportunity for feedback and corrective measures to be taken. Sustainable development is a type of safety valve of local communities.

At the same time, the economic crisis sparks interest in studying issues which are beyond the scope of this study. Such issues are the competitiveness of individual products, the improvement of self-sufficiency of the Greek economy and others related to re-approaching sustainable development.

The diversity of Greek rural areas allows for the development of a plural agriculture in order to ensure the domestic and international competitiveness of Greek products by strengthening the food self-sufficiency of the country while continuing to produce competitive products for international markets.

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