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‘The Triple Bottom Line’: Examining EU Support for Organic Agriculture

With Examples from Italian Wine Producers

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By Kimberly M. Biagini

A thesis presented in partial fulfillment of the requirements for completion  
Of the Bachelor of Arts degree in International Studies  
Croft Institute for International Studies  
Sally McDonnell Barksdale Honors College  
The University of Mississippi

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# Chapter 1: Theoretical Framework: Agriculture and Economic Development

## I. Research Questions

The objective of my thesis is to determine what factors are important in the EU's decision to support organic agriculture. Organic agriculture is a method of production distinct from conventional practices of industrial agriculture. While industrial agriculture has made it possible to feed the world's growing population, it has also created numerous social, environmental and economic problems. Two of the most grievous offences have been biodiversity losses and increasing chemical pollution, especially nitrogen and phosphorus.

Organic agriculture seeks to reduce the impact of farming on the natural world while preserving the historical diversity of plant species. In fact the organic movement is not so much a development of new principles and technologies, as the adaptation of pre-industrial methods of agricultural production to meet the new needs of producers and consumers. Organic farmers use the natural inputs and processes to grow natural products. They cultivate what grows best on their land, often local plant varieties. They avoid the use of manufactured chemicals. As the organic movement has grown in the last century, it has become interwoven with all sectors of society. Political institutions such as the European Commission provide subsidies and regulations to develop organic practices. Many organic products offer a link to a cultural past by preserving local gastronomic heritage.

A growing demand has created a market for organic products where none existed before. In Italy alone the amount of organically farmed crop area has risen from 418,000 hectares in

1999 to 822,000 hectares in 2010, a 96.7% increase (Eurostat 2011). Italy is one of the largest producers of organic products in Europe, possibly due to the fact that organic farms are usually family operations and businesses in Italy, agricultural and otherwise, have historically been family-run enterprises. Italians have the knowledge and skills necessary to produce organically, and now there is a market with growing opportunities for their products.

My goal is to conceptualize EU support for organic agriculture by examining the role of the organic movement in the context of the influence on rural development, environmental preservation, and economic profitability, using Italian organic vineyards as an example. These three factors together are referred to in business as the 'triple bottom line' for measuring sustainability. I will do so by answering the following questions: How does organic agriculture affect the economy and society in and around the Italian farms analyzed in this study? What specific policies affect the movement in Europe? Is organic agriculture a sustainable method of production, with or without direct support by the EU? In synthesis I seek to answer an encompassing question: is organic agriculture worth supporting? Answering these research questions, an argument will emerge that organic agriculture is key supporter of the socioeconomic integrity of rural communities, helping them to diversify economic activities and protect the environment and landscapes, which in turn increases tourism. Because a large percentage of the EU territory and population is considered rural, supporting their development is crucial.<sup>1</sup> The case studies presented here show that organic farming is one element of a broader development model including tourism and other economic activities beneficial to the community, and thus subsidies to farms leverage much larger socioeconomic effects than simply allowing farmers to sell at reduced prices.

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<sup>1</sup> Agriculture and Rural Development. (2008, April 18). *Rural Development Policy 2007-2013*. Retrieved December 6, 2011, from European Commission homepage: [http://ec.europa.eu/agriculture/rurdev/index\\_en.htm](http://ec.europa.eu/agriculture/rurdev/index_en.htm)



## II. Literature Review

To get a better understanding of the potential of organic agriculture, it is beneficial to view it within the theoretical framework of an economic theory. This thesis examines the emergence of the organic movement, which is really the original system of agricultural production, in the framework of evolutionary economics leading up to the idea of the triple bottom line. The marketing of organic goods has created a niche market for the products, which has certain implications of profit and sustainability.

Joseph Schumpeter was the first economist to propose the idea of "creative destruction." He wrote, "The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates." New goods and production methods and markets replace or "destroy" the old ones. Furthermore, he writes that price is not the only factor to be considered in product competition. "Quality competition and sales effort" can be of equal or greater importance. He does, however, point out that small retailers face more threat from large box stores than from other small retailers because of pricing abilities. (Schumpeter 1942). In this framework, organic goods are interesting because the method of production is old, much older than the industrial method, but the market is new and so the theory is still relevant.

Kenneth Boulding adds an interesting argument to the discussion of evolutionary economics when he talks about "shelters" for old technologies. In nature, "a species threatened with decline in its niche often retreats to some protected habitat where the decline is arrested, sometimes for a very long time, from which it sometimes emerges again when conditions are favorable." Likewise an old technology may be all but eradicated by a new one, but still survive

if a small group of people continue to utilize it. Furthermore, Boulding says that demand for the emerging technology will decrease or disappear if consumers discover negative side effects. The exploitation and abuse of natural and human resources by industrial agriculture is one reason for the growth in the market for organic goods.

For every product in a market economy, “survival always consists of finding a niche.” (Boulding 1981). That niche may be one of eco-friendliness and sustainability, if there is adequate demand for such products. Boulding says that the history of the world shows a bias toward niches, “that is, in the number, complexity, and capacity of human artifacts with which we are surrounded.” A world of almost 7 billion people obviously contains an unimaginably varied array of tastes and preferences for which small, specific niches may cater. (Boulding 1981). Boulding differs from other economists on his view of the driving force behind production. He says, “It is not ‘labor’ that produces a commodity or product, as Marx and indeed Adam Smith and Ricardo thought, but human knowledge and know-how, operating through institutions which enable this know-how to capture energy and rearrange materials.” (Boulding 1981). Knowledge and know-how as factors of production can be interpreted as being ideas and concepts which lead to technological innovation and increased productivity; however, human knowledge is also that which dictates the best method of production not only for maximum output, but for minimum harm to society and the environment.

That knowledge already exists in the organic movement, as traditional farming methods have existed for thousands of years. This does not mean organic farming cannot be considered innovative in the sense of evolutionary economics. Economist J. Stanley Metcalfe wrote, “The creation of novelty involves guided variation within perceptions of a limited set of possibilities. Innovations are never entirely novel; they are always prefigured in some of their dimensions.”

(Metcalf 1998). Organic farming is both traditional and innovative; farmers continue to develop technologies and techniques that are efficient and environmentally harmless.

Boulding also noted the challenges facing agriculture dependent on fossil fuels, which are limited and decreasing. His analysis of the problem was that high energy and fertilizer costs would discourage their usage, increasing the requirement for labor which would decrease productivity in other sectors of the economy. His solution was the development of biomass as an energy source. (Boulding 1981). This is indeed a reality for some organic farms. However the disadvantage of fossil fuel usage is not limited to its price tag. As economist Brian Milani states, “[Petrochemicals] became the basic feedstock for a new breed of materials that become problematic for the health of both humans and ecosystems.” That goes for industrial production as a whole, not just in the agriculture sector. It is also indicative of a much larger problem. According to Milani, industrialism in general is marked by an excess of production or “production for production’s sake.” This leads to what Milani calls the “Waste Economy,” in which large numbers of resources are exploited in order to increase production and profits, even when demand does not call for it. The overuse of resources caused a scarcity, which then increased the value of whatever was produced. In terms of “resource productivity, from this perspective, industrial technology is quite inefficient.” (Milani 2000).

Milani’s answer to the problems of industrialism is eco-production, which works with nature instead of against it, drawing inspiration from its systems and using the least amount of resources. (Milani 2000). Once again, the emphasis is placed on knowledge, in this case “sophisticated scientific knowledge of nature, coupled with traditional local knowledge, to benignly harness the natural productivity of ecosystems without harming them.” (Milani 2000). Milani sees the path to regenerative, sustainable practices as necessary and ultimately

unavoidable for the economy as a whole. Organic agriculture is simply a step in the right direction.

The right direction is what businessman John Elkington called ‘the triple bottom line, focusing on economic prosperity, environmental quality... and social justice’ (Elkington 1998). Businesses tend to focus solely on the aspect of economic prosperity through profit maximization. This narrow vision is often achieved at the expense of the other two objectives. Companies seek out the cheapest input or method of production, lowering costs to improve returns even when that means causing significant damage to the environment or society. Even businesses for whom the environment is their business do not fully respect it. Industrial agriculture pollutes the water, destroys biodiversity, and is one of the largest contributors to greenhouse gas emissions. These abuses affect society two-fold; first, they harm shared natural resources. Second, since the effects reach far beyond the confines of the farm, society often incurs the cost of remedying the situation. Organic agriculture, instead, is founded on the principle of environmental conservation. It avoids the use of chemicals and pesticides, instead managing challenges through understanding and utilization of natural processes. The social aspect of organic farming is coming into focus more in recent years, with researchers examining how this method of production affects the communities in which it takes place. Two benefits that stand out are rural development through increased economic activity and diversification as well as preservation of rural culture and traditions.

Organic agriculture is innovative and sustainable but the question remains: can it be profitable? Steven Blank and Gary Thompson analyzed the organic niche market within the framework of the Schumpeterian model of growth and creative destruction through three stages. In the “monopoly stage,” the first producer enters the market with high prices and low consumer

awareness. In the “oligopoly stage,” more producers enter the market. Products differentiate based on qualities, eventually becoming standardized. Firms promote the differences of their organic products from conventional products instead of other similar products within the niche. Consumers become more aware of products. As profits increase, more firms enter the market. In the “competitive stage,” the key factor is the spread of information. "A successful niche is one in which suppliers are able to convince sufficient numbers of consumers that there are attributes of the new product that are different and more desirable than those of the conventional product." The increased consumer demand for higher quality products means more firms enter the market, increasing supply and decreasing price. Conventional products, now thought of as lower quality, see less demand, less supply and less profit, encouraging them to adopt organic practices. (Blank & Thompson 2004). In theory, according to the Schumpeterian model, organic could become the norm.

Transitioning from niche to norm may not be ideal for producers, as Blank and Thompson explain that “the very fact that some growers do not want their niche to become the norm indicates that they are aware of and may have experienced the narrowing profit margin that come from increased competition in market segments.” (Blank & Thompson 2004). If Blank and Thompson are correct, and organic agriculture has the ability to replace conventional agriculture but lacks the desire to produce at that capacity, then they are cohesive with the rest of the literature. The innovation in technology could replace the existing forms, as was argued by Schumpeter, Boulding, and Metcalfe; simultaneously, it is a method of eco-production which respects the environment and avoids production for production’s sake.

Within the organic market, much of the current literature covers the reasons that consumers purchase organic products. Crescimanno, Ficani and Guccione (2002) profiled the

average organic consumer in Italy as young, upper middle class, and living in a large Northern city. Most organic products in Italy are sold through specialized retail stores instead of large supermarkets. They identify being knowledgeable about organic products as a motivator to purchase. (Crescimanno et al. 2002). A study by Azucena Gracia and Tiziana de Magistris also found that knowledgeable consumers were more likely to buy organic products. The Southern Italians profiled in the study were also more likely to buy organic if the perceived health benefits were greater and if the consumer had a higher income. Consumers were more likely to buy organic products on a regular basis if they believed the products to be of higher quality and better for the environment. Increased prices negatively affected the decision to buy organic products. In the cases of both the occasional consumer and regular consumer, knowledge about organic products was a significant factor in the decision to buy. (Gracia & de Magistris 2008).

### **III. Methodology**

The first question I seek to answer is: how does organic agriculture affect the society and economy in and around the Italian farms analyzed in this study? I will first look at the environmental conditions that influenced the beginnings of movement. Even though organic agriculture has existed since the very first crops were planted and harvested, it was not considered a 'movement' until fairly recently. As a movement, certain features and trends have emerged that not only characterize organic agriculture, but also shape the way it is viewed by the general public. Many people view organic agriculture as a 'countermovement' or an alternative to industrial agriculture. In this respect, I will compare the two systems to explain what exactly organic agriculture is opposing and how. This will show the environmental benefits of organic agriculture. Next I will examine current literature on sustainable development in rural



communities and organic agriculture as a model for development. In the European Union, 56% of the population and 91% of the territory is considered rural.<sup>2</sup> Identifying ways to promote prosperity and conservation in these communities that make up such a significant portion of EU society is an important goal of the Union as a whole. Factors influencing development include increasing economic activity and diversifying rural economies while preserving local heritage and traditions. Organic agriculture is identified as a suitable method for development because it incorporates these economic and cultural aspects. To support these claims I will give a quantitative analysis of the market for organic goods in Europe, particularly in regards to the effect of subsidies. Since the organic sector is a small niche in the food and beverage market for the European Union as a whole, it is important to analyze the effect of subsidies for organic food products in relation to those for conventional goods to better understand market position. The result of this analysis will show that in addition to protecting the environment and aiding in rural development, organic agriculture shows economic profitability.

Italy makes for an interesting case study of the relationship between organic agriculture and rural development. It has consistently been the largest producer of organic goods in the EU, and can act as an example for the development model described in the previous chapter. I will discuss the Italian marketplace for organic goods through production, distribution, consumption, and institutional support. I will then present three specific cases of the marketplaces in two Italian regions, Tuscany and Piedmont, for organic wine. Organic wine has many of the attributes associated with organic goods that will be discussed in preceding chapter, such as a link to gastronomic heritage. Tuscany and Piedmont are two of the most important wine-growing regions in Italy. Interviews with several farmers in both regions support the conclusions of the preceding body of research: organic agriculture is a viable method of sustainable rural

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<sup>2</sup> Agriculture and Rural Development. (2008, April 18).

development. It will also show that farms are aided by subsidies granted by the EU and administered regional authorities. Policies in Italy are discussed as a subset of EU policies, which will segue into the following chapter's discussion on EU policies.

The next question I will answer is: what specific policies affect the organic movement in Europe? The European Union spends about half its budget each year on agricultural policy and has shown increasing support for organic production. I will examine five particular policies of the last 20 years to find the reasons for support as well as the monetary value of support given. Despite common EU policies, the organic movement has not seen the same progress across Member States. I will include a review of literature on what conditions have negatively impacted the organic market in nations.

In conclusion I will answer the main question: is organic agriculture an sustainable method of production, with or without direct support by the EU? To answer this question, I refer back to Elkington's idea of the triple bottom line of economic profitability, environmental protection, and social welfare. The example of the Italian farms confirms Elkington's argument that profitability is just one piece of a broader economic model. Rather than focusing solely on farms' profitability, support from the EU allows them to diversify their economic activities and do things they would not be able to do if they were solely profit driven. The stewardship of the land creates preconditions for tourism and preservation of local heritage. Therefore government support is warranted to promote community socioeconomic well-being and ensure a sustainable environment for future generations.



## **Chapter 2: The Organic Role in Rural Development: Environmental and Socioeconomic Aspects**

The triple bottom line of business sustainability is the protection of the environment, the promotion of social welfare, and economic profitability. From the very beginning of its existence as a cohesive movement, organic agriculture has focused on the first objective listed of environmental conservation. It greatly reduces the use of chemical inputs, thereby greatly reducing the amount of pollution and degradation as a consequence. In order to control pests and increase fertility, organic farmers must have an intimate knowledge of the land and its ecosystems to compensate for the lack of pesticides and fertilizers. Administering the land through natural mechanisms promotes biodiversity, another important aspect of environmental conservation.

Recently the scope of focus on research of organic agriculture benefits has expanding to include effects on rural society including the preservation of rural tradition and landscapes, increasing economic prosperity, and diversifying economic activity. The Common Agricultural Policy of the EU is based on two pillars: promoting production to maintain adequate food supplies and promoting rural development. The emphasis on increasing production is one of the reasons for the growth in wasteful industrial agriculture that currently hinders EU economic efficiency. By focusing instead on programs designed to incorporate other activities into farming enterprises, it is possible to increase prosperity without increasing production to the point of excess. In addition to aiding in economic progress, rural development programs also recognize and strive to preserve diverse rural heritages as distinct features of European identity. Establishing the positive effects of organic agriculture on rural development is essential to understanding whether or not the sector merits EU support.

## I. The Organic Movement

### 1. *Origins of the movement*

Industrialized agriculture has only been a feature of world food production for less than 200 years. Alternatively, organic agriculture in the strictest sense as a chemical-free method has existed for thousands of years. It was the system before the advent of industrialism, and it has reemerged as a solution to the problems of chemical over-usage. The International Federation of Organic Agriculture Movements (IFOAM) defines organic agriculture as:

a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

Organic agriculture as a movement began in the 1940s, with the aim of treating a farm as an "organic or whole system, integrating soil, crops, animals, and society." (Lotter 61). Prior to the emergence of the movement, there was a general feeling in several European countries that industrial farming practices, particularly heavy chemical usage, were disrupting soil fertility and food quality as well as eroding rural lifestyles and traditions (Vogt 2007). Sir Albert Howard of

Great Britain is widely credited with having started the international organic movement in the 1930s and 40s. His postulated that the degradation of soil quality led to poor plant health, which in turn affected human health. He argued that utilizing “peasant modes of agriculture” instead of industrial methods would correct soil fertility and improve biodiversity (Barton 2001). The movement continued to grow in Great Britain and spread throughout Europe. In 1972, IFOAM was founded to provide a network of information sharing amongst organic producers in different countries.

## 2. *A reaction against industrialism*

As previously stated, the development of the organic agricultural movement was largely a reaction against the industrialization of food production systems. There are several aspects that organic producers find particularly troubling. One prominent feature of industrialism is repetition. One factory worker stands in one place and performs the same task multiple times without deviation. Translated into the agricultural realm, this becomes monocropping. One plant species is designated to a specific area to make planting and sowing easier. Efficiency leads to profitability, and monocrop lands quickly became highly productive after implementation (Machado 2009). Just like a worker who tires of a repetitive task, the faculties of the land are strained by prolonged redundancy.

Another problem is the use of chemicals. Industrial agriculture employs a heavy use of fertilizers to ensure high crop yields. However, not all of the input into the soil is absorbed by the plants, and the excess nitrogen can contaminate water supplies. It can be absorbed into ground water or run off by irrigation or flooding, and find its way into marine ecosystems. The nutrients cause a drastic increase in the population of algae which eventually leads to a decrease in the

oxygen level of the water, suffocating marine life. The area becomes known as a "dead zone." There were 146 known dead zones in 2005 (Dybas 554). In 2008, there were more than 400 (Diaz 2008). Because dead zones occur near coastlines, they adversely affect the livelihood of fishermen who make living from catching shrimp and coastal fish. Because of the intense agriculture along the Mississippi River, the dead zone at the mouth of the Gulf of Mexico is the second largest in the world. Tellingly, the dead zone in the Black Sea almost disappeared when fertilizer use along the Danube River was drastically reduced (Dybas 2005).

Pesticides are used to combat natural threats to plants. They kill off insects, fungi, weeds, and just about any undesirable biological organism that could tamper with food production. They are also accelerators in the evolutionary process of insects. They destroy most of the population, leaving behind those that survive to reproduce and pass on resistance to their offspring. There was a 2400% increase in the number of known pesticide-resistant insect species between 1950 and 1990, from less than 20 to more than 500 (Horrigan et al 2002). As a result, new pesticides must constantly be developed. In 2006, there were more than 800 registered pesticides in the European Union (Carvalho 2006). The effects of these chemicals ripple throughout the ecosystem. Reduced insect populations mean less or contaminated food for birds and other predators. The near-eradication of one pest gives another group room to expand, affecting other crops. Humans are also exposed to pesticides through produce consumption or direct handling of the substances as farm workers.

Everyone is exposed to pesticides to some degree. At least since the publication of *Silent Spring* (Carson) in 1962, which described the danger of pesticide DDT to animal and human health, there has been increasing concern over the possible side effects of agricultural chemical

use.<sup>3</sup> Those who work directly with them may be exposed to high levels in short spans while an average person, through consumption of treated produce, is exposed to low levels over an extended period of time. Many studies have been conducted as to the effects of pesticides on human health, with findings including "elevated cancer risks and disruption of the body's reproductive, immune, endocrine, and nervous systems" (Horrigan et al 2002). Several studies have found that while farmers tend to be healthier than the general population, they are also more prone to certain types of cancers, possibly from pesticide usage (Steingraber 1997, Pobel et al 1998). Increased risks of Parkinson's Disease and infertility have been linked to high exposure to pesticides.

The exact effect of industrial agriculture on rural communities is difficult to quantify. Because it is chemical-intensive, the need for labor is reduced. Those who are not needed become unemployed or leave to find work in the city, resulting in a significant drop in rural populations (Kimbrell 2002). Along with this population loss come a loss of rural culture and traditions. For those who stay behind, farming may become less of a relationship with the land and more of a position within a corporate entity, especially in the case of farming technology. One of the forefront issues organic farmers and consumers take with industrial agriculture is the development of genetically modified organisms (GMOs). Perhaps the most famous example is that of the Monsanto Company. They engineer seeds to be resistant to certain pesticides, ones that they also produce. Since pesticides spread easily from farm to farm, any seed not produced by Monsanto is likely to be destroyed by their products. Therefore farmers have little choice but

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<sup>3</sup> Immediate critics of the book argued that discontinuing DDT usage would not only reduce food supply, but also increase the occurrence of malaria because the chemical was used to kill disease-carrying mosquitoes (Krupke 17). Indeed in the years following the publication of the book, the incidences of malaria in at least one country, India, did increase dramatically. This was not, however, due to the cessation of DDT usage, but rather because the mosquito population had built up immunity and eventually became comprised of only strong, DDT-resistant insects. While pesticide application initially reduced the number of malaria cases per year from several millions to tens of thousands, that number escalated to tens of millions in the second half of the 20th century (Pimentel 754).

to purchase seeds from Monsanto, which are patented. Farmers cannot save and reuse seeds, as has been done throughout history, because of the special technology. Monsanto prosecutes those found who violate the patent, sometimes including those who did not purchase seeds, but whose fields were contaminated without their knowledge (Kimbrell 2002).

### 3. *The organic answer*

At the beginning of the organic movement, the primary objective was environmental conservation, particularly in regards to soil quality. Instead of using fertilizer, organic farmers use organic compost or manure to replenish soil nutrients. They also often utilize a system of intercropping or polycropping, which is planting more than one crop in the same area. Different plants need nutrients from the soil in differing quantities to grow. In properly planned polycrop ecosystems, the nutrient usage of one plant can be offset by the addition of nutrients by another, such as the addition of nitrogen by legumes (Altieri 1983). Furthermore, the interaction of several plant species can increase the nutrient absorption of each species. Intercropping between wheat and corn or soybean has been proven to increase absorption of nitrogen and phosphorous, which are essential to plant growth (Fusuo and Li 2003). Polycropping also helps to deter pests. Plant-specific insects and diseases have a harder time finding and spreading amongst vulnerable targets. Predators that help control pest populations are supported by the diverse ecosystem. (Machado 2009). Studies have shown that mixing various crops reduces the occurrence of mildew and disease among species. Furthermore when additional plant varieties cover the soil, there is less room for weeds to infiltrate (Altieri 1983).

As the organic movement has grown, its mission has expanded to include not only environmental concerns but also the quality of life in rural areas. Recent scholarly literature has



discussed the concept of 'sustainable development' in rural areas. If organic agriculture can function as a method of sustainable development, it will not only control environmental damage but also improve the economic standing of the local area. The following sections will examine the sustainable potential of organic farming for rural development, using Italy as a model.

## II. 'Ingredients of Sustainable Development'

Agronomist Patrizia Pugliese describes the prominent feature of organic agriculture as the belief that every part of the production process, from minerals to humans, is viewed within the context of the whole. Everything plays an interconnected role to produce a reasonable amount without damaging resources. She lists the four 'ingredients' of sustainable rural development as innovation, conservation, participation, and integration. Organic agriculture is a way to combine these concepts for the betterment of society (Pugliese 2001).

### I. *Innovation*

The first ingredient is innovation. This is particularly important in organic agriculture because it is closely linked with production methods of the pre-industrial age, making it is easy to see the movement as a purely history-oriented one. In fact, the organic sector is constantly evolving with the spread of information between farms, regions, and countries. Because of the local nature of the farming system, reliant on inherited knowledge and local resources, innovation often comes in the form of management and marketing techniques instead of changes in production methodology. The combination of local flavor with innovative growth sustains what Pugliese refers to as the 'rural competitive advantage,' that being "natural amenities,

cultural traditions, unstressful rhythms of life, genuine food, unpolluted environment, closer interpersonal relationships” (Pugliese 2001).

Marketing channels are an important aspect of innovation in the organic niche. While supermarkets are the most common outlets for food products, organic products also utilize smaller, more local venues such as farmers’ markets or direct on-site sales. These ‘short food supply chains’ are important since they require a high level of contact, allowing for an increased transfer of information from producer and consumer to promote ‘quality food products’ such as organic (Renting et al 2003). The increase in public awareness of food production techniques through news reporting and documentaries such as *Food, Inc.* has created a demand for transparency on the part of producers and distributors. Organic farmers are often the distributors of their own product. The proximity of producer and consumer in a short food supply chain opens a dialogue whereby information can be exchanged about environmental and health concerns. As opposed to the anonymity of conventional food purchasing, alternative food networks establish a connection being what is being consumed and how it is produced, communicating the specific qualities and processes that make a particular product unique. Renting et al describe these networks as being either directly face-to-face, proximate by utilizing like-minded group setting such as cooperatives, and extended whereby the distance for distribution is great but the information communicated from producer to consumer nevertheless establishes a connection product and method of production. The innovative aspect of these supply networks comes in the determination, implementation, and communication of ideals.



## 2. *Conservation*

The second ingredient is conservation. Obviously the primary objective of organic agriculture is environmental conservation, shown through a rejection of chemicals and promotion of biodiversity. However, organic agriculture takes conservation a step further by also preserving rural heritage by using local resources and making traditional products. (Pugliese 2001). Italy is a particularly good example of this commitment to rural identity and diversity because of the fame of its regional products, such as Parmesan cheese from Emilia-Romagna or Chianti wine from Tuscany. Pugliese notes that in Italy, awareness of typical local products is increased through special labeling while cultural events promote the values of organic food and rural traditions (2001). One such cultural event in Italy is the *sagra*, a local festival celebrating a particular product or dish such as strawberries or lasagna (Fiumerodo 2008). There are more than a hundred of these events throughout Italy, and they range in scale from simple churchyard community meals with music and dancing to weekend-long productions with sporting events and pageantry. The festivals highlight the diversity of each community in that the culinary feature of the event is specific to its locality and takes place in rhythm with the natural agricultural cycle of the product. A larger, more global audience is becoming attuned to these culturally educational festivities as they are increasingly featured in travel guides and blogs.

## 3. *Participation*

The third ingredient of sustainable development is participation. Pugliese describes organic agriculture as a “people-centered development model” (2001). The necessity for human involvement takes place on an individual as well as a community level. For production, labor is

required to do the work that is typically done by chemicals in industrial agriculture. Farmers and farm workers must be able to think critically and use their own intimate knowledge of the land and natural processes to control pests and maintain acceptable levels of production instead of following the instructions provided by agrochemical manufacturers. Since the organic sector is a small and growing niche, creative marketing techniques must be designed and implemented to educate consumers and promote the products. Since the principles of environmentally friendly organic products also encompass preservation of local and rural heritage, it is fitting that local people with personal experience in these traditions should be involved in their production and marketing.

#### 4. *Integration*

The last ingredient is integration. As organic agriculture develops, so do other related activities in business, tourism, and craftsmanship. Italy is one of the most popular sites for agritourism in Europe. Farm stays are popular vacation destinations, with urban residents looking to romantic ideals of farm life as a retreat from city stress (Nilsson 2002). *Agriturismo* in Italy are farms that offer accommodation and meals with food produced on site. Regulations differ between regions, particularly regarding building requirements (Nilsson 2002). For example farmers must obtain special licenses to operate an agriturismo, and in several regions the structure itself cannot be built. Business must be conducted from a renovated structure already existing on the property. The standard of accommodation is wholly dependent on the individual farm, ranging from simple bed and breakfasts to hotel-quality luxury. They may provide lodging only or include homemade meals and cultural activities such wine-tastings or lessons about organic principles. Operators are also able to share their knowledge of the local

culture and customs. Agriturismo guests are often able to purchase the farms products on-site directly, utilizing another marketing channel for agriculture by bringing the consumer to the producer instead of the other way around. To ensure that agriculture remains central to the agritourism business, income from tourism must be less than 50% of the agricultural income (Nilsson 2002). In addition to the income generated by these additional activities, the interaction between farmers and guests during these holidays is important in communicating the values and benefits of farming activities to the general population. This is especially significant in the case of organic farming, in which it is important for customers to understand the principles of the movement in order to promote consumption (Naspetti et al 2008).

### **III. Economic Results: A Sector Small but Profitable**

The preceding section described how organic agriculture can be seen as a model for rural development; such a model is only plausible if it is economically viable, and so the following the following section examines the profitability of the organic sector. This overview of the market for organic goods in the EU is an attempt to quantitatively examine the effect of EU support on the organic sector and determine if organic agriculture is an economically sustainable method of production, with and without direct support by the EU. The framework of conventional production being the inescapable reality of the vast market majority and heavily subsidized itself, it is impossible not to analyze the markets by comparison. This comparison is made on the basis of subsidy amounts, costs, price, profit, and market share. In synthesis, the result of the comparison will show if subsidies are vital to survival and furthermore if organic agriculture meets the economic aspect of the triple bottom line and is worth supporting in the current market climate.

## 1. *Subsidies*

In 2006, EU support specifically geared towards organic agriculture totaled €55 million. The CAP as a whole was worth €50 billion, making organic specific support 1.32% of the total. The total EU budget during this time was €107 billion, making organic specific farming support .61% of the total budget (European Commission). Notably, this funding came from the 'agri-environment' budget of the CAP for rural development activities such as economic diversification. Organic agriculture support constituted 17.2% of this €3.83 billion budget.

Organic farms can also receive support that is not organic specific from the CAP. To compare with conventional subsidies, the average payment to an organic farm is €438 per hectare per year as opposed to €355 per hectare per year for a conventional farm. It is important to remember that a significant component of the organic payment comes from the agri-environment budget. Without this component, subsidies would reduce to €275 per hectare per year for organic farms and €310 per hectare per year for conventional farms. This shows that support for organic farming is largely geared toward rural development and not solely increasing food output (European Commission).

## 2. *Costs*

Costs compared to conventional farms vary depending on location, crop type, and type of cost. Variable costs that include seeds, fertilizers, and other inputs are generally 30-40%. Fixed costs such as wages and machinery can be up to 45% higher. Overall, costs are either the same or are even lower due to less input use (Offermann and Nieberg 2000). This is only true after the

farm has established an organic operating system; costs of converting to organic production are high due to the need to adopt strict guidelines and certification.

It is important to keep in mind that conventional farms receive subsidies specifically to aid in production, lowering their overall costs whereas organic subsidies are meant for activities other than production, making their costs comparably higher. These effects on costs are hard to quantify and are not reflected in the statistics. Additionally, the environmental costs of conventional production are externalized, meaning that the individual farms generally do not incur the costs of essentially cleaning up their own messes of pollution or other harms to the environment. One modest estimate puts the cost of conventional agriculture effects on the environment at €166-€204 per hectare per year (UN Environment Program 2011). Instead these costs are redirected to society. Since the offending farms do not have to cover these costs, they can make the price of their food artificially lower than it should be if the farms themselves had to account for damage control costs. Costs are also expected to rise as the cost of certain inputs derived from fossil fuels rises.

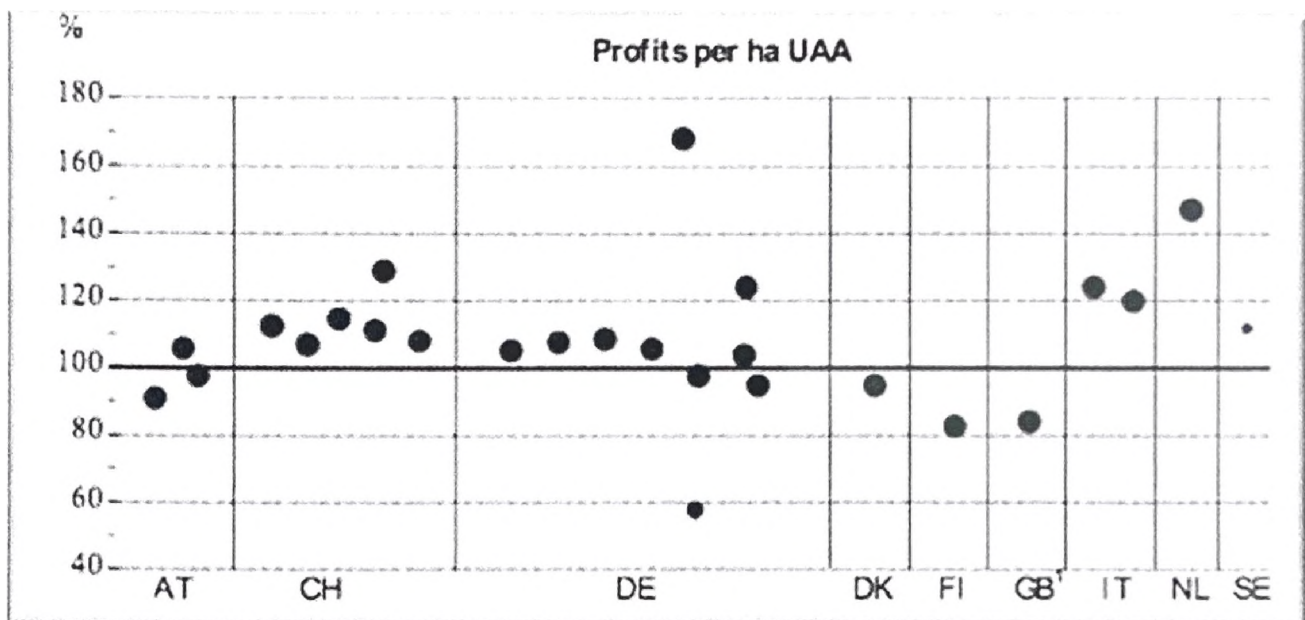
### 3. *Price*

Prices of organic products are generally higher than conventional products, although the level of difference depends heavily on the type of product and the country of the market. Levels of price difference further vary depending on outlet, with the price of products sold directly from the farm being much closer to those of conventional products. Price premiums for organic products fall between 0% and 200% in increase of conventional prices, with most premiums being less than 25%. Significant shares of products are sold at conventional prices (UN Environment Program 2011, Offermann 2009).

#### 4. Profit

As cost and profit depend on factors such as location and crop type, so does profit. All of the literature suggests that organic agriculture produces a lower yield, but due to reduced costs or higher premiums, they are more profitable. The following graph from a study in 2000 showed that organic farms in Europe were often as profitable as conventional counterparts with slight variations.

Figure 1 – Organic Farm Profit as a Percentage of Conventional



Source: Offerman and Nieberg, 2000.

Again, it is important to note the variability among products and areas of production. For some organic producers, the profit margin of organic farming is smaller than that of conventional. A statement from Roberto Semino, one of the farmers from Piedmont interviewed in the case study, confirms this claim. He was the only interview subject who engaged in



conventional agriculture before switching to organic. He said his organic wine is the same price as conventionally produced wine but his costs of producing are higher, making his income from wine sales less than it was previously. He makes additional income through diversified activities on his farm, particularly an agriturismo and restaurant.

## 5. *Market Share*

Expressing the size of the organic food market as a percentage of the whole is nearly impossible because of a lack of data from individual countries and differences in reporting between countries. There was a meeting of representatives from 10 European countries in March 2012 who are developing a project called Organic Data Network to find a way to effectively collect and report organic market data, but this information will not be available for some time. (Kreuzer 2012). According a report by the European Commission, market sizes in individual Member States range from .2% to 7% (2010).

## IV. **Conclusion**

Farming plays a vital role in rural communities. Organic farming in particular acts as a protector of natural resources, reducing the detrimental health and environmental effects of industrial agriculture and the cost of their management to society. Extending into the realm of economics, it has the potential to foster rural development. The market analysis showed that profitability of organic farms is dependent on lower costs and higher prices, partly because it must compete with heavily subsidized conventional products that do not take externalized costs into account. Organic farms are profitable in the current economic scenario, but profitability is only a fraction of the socioeconomic impact of organic agriculture because it also allows the

commercialization of rural culture and heritage. It preserves them by being faithful to sustainable methods in the production of traditional local products, and then it markets these products either back to the local community or beyond to tourists or even the international marketplace, educating consumers about the culture attached to the product. Farms can engage in other activities to diversify their own incomes as well as generate more interest in the surrounding community. The key to promoting economic development from an organic standpoint is the communication of values through the establishment of a connection between producer and consumer. The following chapter will show how one of the largest European producers of organic products, Italy, can be seen as an example of this model for development and how the country has implemented and supported EU policies concerning organic agriculture.



## Chapter 3: The Case Studies: Italian Organic Viticulture

Organic agriculture is important for the future of the environment and can play a crucial role in rural development. Italy is used here as a specific example in order to get a better understanding of the development model described in the previous chapter. Italy is the model for this paper because it is consistently the largest or second largest producer of organic goods in Europe and one of the top five largest in the world. The market characteristics will be discussed first, which is one of the largest markets in Europe for organic goods. However, lands cultivated organically and organic producers in Italy, though numerous, make up a small fraction of total production. Likewise, though the market is large, per capita spending remains low. Therefore, exporting becomes an important activity for the Italian organic sector. After a discussion of the market conditions, three case studies will be presented to examine the socioeconomic role of an organic farm in a community. These farms benefit from subsidies and favorable policies implemented by regional authorities in Italy; these policies are a subset of EU policies that will be discussed in the following chapter.

The case studies in Italian organic viticulture support the associations of organic agriculture and rural development. Organic viticulture was chosen as a case study because it's a particularly interesting aspect of the movement in Italy due to a strong cultural association with wine both at home and as seen from abroad. As the wine market has intensified since 1990 with globalization and the entrance of the 'New World'<sup>4</sup> wine producers into the market (Hussain 2008), it is important to find new customers, new methods of promotion, and new niches to fill. Organic agriculture has found a niche with supportive politicians and eco-conscious consumers,

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<sup>4</sup> New World wine producers refer to the countries of Chile, Australia, New Zealand, USA, Argentina, and South Africa. Old World wine producers are Italy, France, Spain, and Germany.

as well as consumers of quality products. The niche for organic wine is small but growing. There are online as well as physical retailers specializing in organic wines. The EU passed a law in February of 2012 allowing for the identification of “organic wine” on labels instead of “wine made from organic grapes,” a step that acknowledged the market presence of organic wine. In a world of reds, whites, and rosés, ‘green’ wine is finding its place.

## **I. The Italian Model Characteristics**

### **1. *Production***

In 2010, Italy cultivated a total of 1,113,000 hectares of land organically, making it second only to Spain in the EU. A total of 47,663 producers took part in this cultivation, more than any other EU nation. Main crops include grains, olives, fruits, vines, citrus, and vegetables (Foreign Agricultural Service 2010).

### **2. *Distribution***

Organic products in Italy are distributed through conventional outlets such as independent wholesalers, supermarket chains, and specialty stores. There are more than 1,100 independent specialized organic shops throughout Italy, with the largest concentration in the North, which also has higher incomes and higher rates of consumption of organic goods. These shops specialize in service to customers by providing knowledge and advice of their extensive product ranges. Supermarkets specifically carrying only organic products have been appearing since 1992. All of the largest conventional supermarkets are now not only carrying organic

products, but have also developed their own organic product lines. However, the increased convenience of grocery store organic purchase is offset by the sacrifice of service of knowledgeable sales people. Unlike most European countries, supermarkets are not the primary distribution channels in Italy. Specialty shops make up 40% of the market (Kilcher et al 2011).

There are alternative distribution channels, the profitability of which is hard to quantify given a lack of organizational structure and accurate record keeping. These outlets include direct on-site sales, or 'farm gate sales,' and farmers markets, which constrain distribution to locals and tourists. Agriturismi are included in this category, with over 1,200 organic farms spread throughout the country promoting organic values, with many utilizing local, organic products in meal preparations and conducting on site sales. 360 restaurants also serve organic food (Kilcher et al 2011). The cafeterias where children are served organic meals are seen as an innovative distribution channel called 'organic catering' and educate children to become consumers in the future (Bocchi 2008).

### 3. *Consumption*

Consumption of organic goods in Italy has been on the rise for years and is currently valued around 3 billion euro. (Foreign Agricultural Service 2010). One study found that most consumers are in the North, where incomes are typically higher. The biggest organic consumer groups are women, educated, large Northern or Central city inhabitants, and those with higher incomes. Italians were described as having high product awareness; that is, they could identify some aspect value of the organic movement. However, they had low product knowledge when it came to characteristics of the product or identifying features of the label. The study concluded that the organic market would benefit from increased demand by educating consumers as to how

organic processes differ from conventional. Lower prices and better distribution were also identified as having potential positive impacts on demand (Naspetti 2008).

Despite the growth trend, Italy continues to be a net exporter of organic goods abroad, particular processed goods. This can partially accounted by foreign demand for Italian agricultural products, which are often viewed as unique to the region of production, such as certain types of wine, olive oil, or cheese. About 33% of the market for Italian organic products comes from exports (Kilcher et al 2011). Italy is the largest European exporter of organic wine, with the United States and Canada purchasing more than 50% of exports (Naspetti et al 2008). Important trade partners for the import of Italian organic products are Germany, Switzerland, the UK, and Japan. Germany and the UK have large organic markets while the organic market shard in Switzerland is among the highest in the EU (IFOAM 2006).

Due to a lack of data, assessing the exact profitability of the organic market is extremely difficult. However this does not detract from the value of the sector as a development model since profit is a small portion of the impact of organic agriculture on rural development, as stated in the previous chapter.

## **II. The Farms**

In the summer of 2011, the author of this thesis spent a total of 11 weeks conducting a participatory observation study of organic farms in Italy including three vineyards; two in the region of Piedmont and one in the region of Tuscany. The two regions selected to be case studies were chosen because they are the two most famous wine-producing regions of Italy. Tuscany has Chianti and Brunello di Montalcino; Piedmont produces Barolo and Barbaresco. While these are the most famous representations of their respective areas, many other wines in

each region are considered of high quality and are designated with the strictly regulated *Denominazione di Origine Controllata e Garantita* (DOCG)<sup>5</sup> status. The farms included in the study were chosen randomly from a list provided by the World Wide Opportunities on Organic Farms organization, wherein volunteers exchange labor for room, board, and learning opportunities.

*Case One: La Vecchia Posta, Avolasca, Piedmont*

*“I produce organically for my health and that of the consumers, and for a more balanced use of the land.” – Roberto Semino*

Roberto and Annemie Semino manage this 9-hectare farm halfway between Genoa and Milan, where they cultivate grapes for wine and fruits and vegetables for their own consumption as well as to use in their restaurant. Roberto was a conventional farmer before converting to organic agriculture in 1990. Annemie is a Belgian who met Roberto during a vacation in Italy. They were married and she moved to Avolasca where she lives with him and their son Matteo. They sell their wine from their home to guests in the restaurant and agriturismo as well as filling orders taken on their website. One of their wines in particular Il Selvaggio is made from the grape Timorasso, a variety specific to their region in the Tortonesi hills of Piedmont. All five of their wines are recognized as *Denominazione di Origine Controllata*<sup>6</sup>. Mr. Semino stated that since organic wines are the same price as conventionally produced wines in Italy, but the cost of

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<sup>5</sup> Controlled Designation of Origin Guaranteed is the highest rating in an EU system of controlling a product's region of production, method of production, and level of quality.

<sup>6</sup> Controlled Designation of Origin is the second highest rating in an EU system of controlling a product's region of production, method of production, and level of quality.

producing organically is greater, the income from organic production is inferior. He receives a subsidy of €3,000 a year, which is disbursed by the region of Piedmont based on the number of hectares and crops cultivated. A farm union helps with the application process.

### *Case Two: Tenuta Antica, Cessole, Piedmont*

*“I produce organically to find quality and respect the natural.” – Mauro Molteni*

Mauro and Maria Pia Molteni were once employees of an American information technology company before deciding to settle and work in the countryside where they live in a large restored farmhouse, the most common type of agriturismo structure in Italy. The farmhouse of Tenuta Antica was built in the 18<sup>th</sup> century. They have two children, a rarity for modern Italian families. Their farm is 7 hectares, 2.1 of which are vineyards. They have been cultivating organically since 2002. Mr. Molteni left the corporate world for good in 2009, and now the entire family is devoted to the agricultural activities, the agriturismo, and the restaurant. Ms. Molteni occasionally gives classes on biodynamic gardening to interested guests in the agriturismo.

They currently produce around 5,000 bottles of wine a year with intent to increase that number to 10,000 in the next two or three years. Over half of the current production is sold through the restaurant. Of their two wines, one is recognized as *DOCG* and the other is recognized as *DOC*. The produce they cultivate is used in the restaurant of their agriturismo where Mrs. Molteni’s mother prepares traditional dishes of their region, known as the Langhe, which is one of the most renowned culinary regions in Italy. They also make preserves from



their hazelnuts, strawberries, and vegetables. They are also aided by a labor union in receiving subsidies from the region of Piedmont for €2,000 a year.

*Case Three: Basile Azienda Agricola Biologica, Cinigiano, Tuscany*

*“I produce organically to create safe and natural products. To avoid degradation.” – Giovan Battista Basile*

Giovan Battista Basile is the proprietor of this farm along with his wife Ilaria. Like the Molteni family of Tenuta Antica, they also have two children. Originally from Naples, they moved to Tuscany in 1999 for the purpose of owning and operating an organic vineyard. Their home on the farm was built exclusively from stones found on the property. The farm is 34 hectares of mostly vineyards, which they have been cultivating organically since they moved to Tuscany. Their wines are typical varieties of the region, particularly Sangiovese and Merlot. Out of their three wines, one is recognized and identified as a *DOC* and all three have won several awards from wine rating agencies. They sell some of their products in Italy, but avoid supermarkets to maintain price levels. Mr. Basile attends trade fairs to promote his wines, which he also exports to the UK and the United States. Instead of applying to the region of Tuscany for subsidies, Mr. Basile presents an idea for a specific plan in a competition. If he wins, he receives financing for the project from the EU. Additionally, Mrs. Basile works as a lawyer in a nearby town. They say they enjoy life in Tuscany, although they do miss the bread from back home.

## IV. Analysis

The case studies highlight themes from the previous chapter. Both La Vecchia Posta and Tenuta Antica clearly feature the ingredients of sustainable development through conservation not only of the environment, but also of the heritage of the area by promoting gastronomic traditions with their wines and menus. All three producers utilize innovative channels of distribution whether they are direct on-site sales, online sales, or the use of specialty stores and exporters. Each one also integrates farming into other activities, whether those are agritourism, on-site restaurants, or professional careers in the community. They are closely tied to the communities in which they reside by being stewards of environmental resources as well as increasing and diversifying the economic activity of the area. Subsidies play an important role in the supporting the activities of the farm. The following section discusses how these support measures are implemented on a regional basis within Italy through policies that represent a subset of EU policies.

## III. Italian Policy Implementation

### 1. *Coming Together*

In the decade prior to 1993, Italian organic farmers were just beginning to form a society of producers to establish a forum for exchanging ideas. In 1983, discussions at the Cos'è Biologico<sup>7</sup> conference in Rome focused on the need for common production methods and a certification process. A commission of small groups of farmers was established, taking its name from the event. It published the Italian Organic Agriculture Standards, based on the IFOAM

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<sup>7</sup> English translation: What is Organic?



Basic Standards, in 1986. Two years later the Associazione italiana per l'agricoltura biologica<sup>8</sup> (AIAB) was formed to oversee adoption of the standards. Discussion turned from common standards and certification to policies, promotion, marketing, and experimentation. The organic movement in Italy in that time was loosely organized, but had no official recognition by the national government (IFOAM 2006).

## 2. *Adopting EU Regulations*

Without an already-existing protocol, Italy largely adopted EU policies as its own. The guidelines of Regulation EEC 2092/91 became national law, and Italy currently adheres to the updated guidelines of Regulation EC 834/2007 for production, processing, labeling, inspection and distribution. In dealing with government subsidies, farm unions are very engaged in acting as mediators for contract agreements and payments. In some countries aid is higher for conversion to organic farming than it is for continuance, but in most regions of Italy the rates are equal to discourage entry by those only seeking subsidy payments (Lampkin et al 1999). Initially implementation of policies was impeded by an inefficient allocation of budget as funds were spread across the territory without regard to agricultural differences, resulting in underpaying profitable areas and overpaying where funds were not as useful. As authority was decentralized and the 21 regions were given more autonomy in enacting programs, the organic sector responded favorably (European Commission 1998). Both the number of firms and the number of hectares cultivated organically experienced very high rates of growth in the first decade after the onset of EU legislation of organic policy. Numbers dipped from 2002 to 2004 due to a decrease in subsidies for organic farms. Growth resumed with EU funding for rural

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<sup>8</sup> English translation: Italian Association for Organic Agriculture

development in 2005 (Foreign Agricultural Service 2008), even though all payment rates have been reduced since 2004 (Schwarz et al 2010).

### 3. *National Policies*

Individual Member States have a good deal of autonomy in implementing national organic agricultural policies, so long as they fit within the EU framework of regulations. An interesting aspect of Italian policy towards the organic sector is that the most significant policies relate to consumption. For example on the national level, the 2000 Italian Finance Law required public administration and hospital cafeterias to include organic food in their catering. The gesture established public support for the organic movement, even though there is no punishment for disregarding the law (Foreign Agricultural Service 2008). The region of Emilia-Romagna passed a supplementary law requiring meals in primary schools to be 100% organic while meals in secondary schools, universities, and hospitals must be at least 35% organic. From 2000 to 2010, there was a 673% increase in the number of school cafeterias serving organic meals (Foreign Agricultural Service 2011).

### 4. *Regional Policies*

For many European countries and Italy especially, national policies are foregone and regional regulations are given more weight. Regional policies differ in part because local food production differs greatly, contributing to the tradition of regional cuisine. For example, Piedmont has a payment system in place for hazelnut producers that does not exist in Tuscany. Tuscany has a similarly unique policy for olive producers. For those crops that are grown in both regions, payment rates are very similar. Organic vineyards, for example, are eligible for up

to €630 per hectare in Piedmont and up to €650 per hectare in Tuscany. While neither region has a maximum size limit for farms to qualify for aid, they differ considerably in the minimum size limit (Schwarz et al 2010). Both regions require farms to be certified according to the guidelines set by EC 834/2007. Both regions have individual regional laws called ‘Bollettino Ufficiale’ that cite Regulation EEC 2092/91 as the basis for their own legislation. Definitions for what is organic are taken from the European definition and are therefore the same. Regional legislative differences instead take the form of setting up producer associations and governing bodies, registering producers, and establishing the process of applying for aid.

#### **IV. Conclusion**

The case studies support the findings of the previous chapters, namely that organic agriculture is a sustainable system that promotes rural development through economic diversification and benefits society as a whole through environmental conservation. Subsidies fulfill some of the objectives set out by Community legislation that will be discussed in the next chapter, such as stabilizing the income of organic farmers that is foregone by choosing to produce organically and thereby reducing the cost of environmental degradation to society. They encourage farmers to consider social costs that are usually overlooked in the effort to increase profit. Subsidies based on EU legislation and implemented by regional authorities also help develop specific goals, as in the case of Basile Azienda Agricola Biologica. This is not a case of subsidies allowing inefficient companies to stay in business but rather a means of allowing businesses to maintain practices and stewardship of the land that is generally lost in purely profit driven and production-based farming. In this manner, they meet the objectives of EU policies to be discussed in the following chapter.

## Chapter 4: EU Policy Support of Organic Agriculture

As shown in previous chapters, organic agriculture is a method of environmental conservation and rural development. The government of the EU is cognizant of this fact and has responded with supporting legislation over the last 20 years. The following section will describe the evolution of these policies. In keeping with the idea of the triple bottom line, a production system cannot be deemed sustainable if it is not profitable. A quantitative examination of the organic market will attempt to show its level of economic viability within the EU as a whole in the framework of the vastly predominant conventional market.

### I. EU Policies

Agriculture has been a focus of European policy-making for as long as the union has existed throughout its stages of evolution. Initially, importance was placed heavily on securing an adequate supply of food. The result was not only an excess supply, but also a great deal of damage to natural resources. Towards the end of the 20<sup>th</sup> century, politicians on national and international levels in Europe recognized the growing presence of the organic movement in the marketplace and its potential benefits to society to counteract the harmful effects of industrial agriculture. The movement was heterogeneous across European nations; some had defined rules and organized trade associations while others had loose affiliations of producers with no standardized guidelines. The lack of consistency among producers and production methods led to misinformation and consumer confusion, which in turn hurt the legitimacy of the organic sector as a whole. The European Union's policy towards organic agriculture over the last twenty years has mainly centered on defining what organic is for producers and effectively identifying those

products for consumers. Furthermore, the most recent policies have focused on the need to support rural communities, comprising more than 56% of the population of the European Union (European Union).

Agricultural policy over the last 50 years shows an evolution from production incentives to environmental and community preservation. Regulation EEC 2092/91 was the first piece of legislation added to the CAP in dealing with organic agriculture, and primarily provided definitions for clarification of what is organic. Regulation EEC 2078/92 set up a program to financially support the sector. As the niche continued to grow, additional regulations for production and marketing were outlined in Regulation EC 834/2007. Regulation EC 1698/2005 addressed the issue of rural development, and organic production was mentioned as a way to improve rural economies. The construction of policies at the EU level set guidelines for implementation by each country individually in order to tailor more specifically to their unique situations. The increased support of organic agriculture at the EU and national levels over the last twenty years shows that politicians recognize the potential of the sector for environmental conservation and rural development.

### *1. History of Agricultural Policy*

One of the most notable and controversial policies of the European Union is the Common Agricultural Policy, which accounts for half of the union's yearly budget. It came into effect in the early 1960s with the objectives to increase agricultural productivity, raise farmer incomes, and provide food at reasonable prices to consumers. Since the implementation, the policy has faced harsh criticism, both domestically and from the international community. In the early days of its existence, the CAP accounted for two-thirds of the EU's budget and now comprises just

under half of the budget. Despite the decrease in percentage, the actual value of the program has steadily increased and now stands at approximately €55 billion. To achieve its objectives, the CAP used a wide array of procedures. One of the most popular was setting the price of certain agricultural goods close to the prices of Germany, the highest in the region (Howarth 2000). The EU protected domestic farmers from the competition of foreign suppliers looking to capitalize on higher prices by imposing import restrictions through tariffs and quality standards. The promise of high prices and low outside competition encouraged farmers to produce as much as possible. The high output system of industrial agriculture led to overproduction, creating inefficiency and waste in the State, as it bought excess and subsidized exports to maintain prices. In order to achieve the maximum output, chemical inputs had to increase in number and intensity. Large areas of land were cleared to increase cultivation. More oil was needed to fuel machines for planting, maintaining, and harvesting. As economist Richard Howarth said about these factors, “All have caused environmental damage and some posed threats to human health” (2000). Furthermore, Howarth states, economists shared environmentalists concerns with the outcomes of this policy since this form of production not only damaged natural resources but also wasted scarce resources. The need for an alternative, sustainable system for agriculture became more and more evident.

## 2. *Regulation EEC 2092/91*

In 1990, the issue of organic agriculture had the attention of the European Economic Community. The EEC saw a growing demand for organic products and set out to establish regulations for their production, thereby protecting consumers and promoting an official position of support for organic agriculture and its responsible stewardship of natural resources.

Regulation EEC 2092/91 on organic production of agricultural products states that the reasons for this legislation include protecting consumers from false labels, protecting producers by improving credibility, and reducing the detrimental environmental effects of conventional agriculture. The protocols for production include a ban on the use of genetically modified organisms and strict limitations on chemical usage. The legislation states that soil fertility is to be maintained through the use of legumes, manure, and organic material. Pests are to be controlled by plant species selection, natural enemies, crop rotation, and flame weeding. Farms and products are subject to evaluation by inspection bodies, and products must be in sealed packages and clearly labeled to identify the producer and inspection agency. Regulation EEC 2092/91 set the guidelines for legitimizing the organic sector, but there was need for further legislation in order to implement these newly established standards.

### 3. *Regulation EEC 2078/92*

With the definitions set by Regulation EEC 2092/91, the Community sought a way to financially support organic farming throughout the Member States. A framework was built for implementing an 'agri-environment program' in Regulation EEC 2078/92, encompassing policies to support organic farming (Lampkin et al 1999). This piece of legislation provided an aid scheme to facilitate Community agricultural goals as well as stabilize farmer incomes. Such goals included reducing the polluting effects of farming and protecting the environment, rural landscape, natural resources, and biodiversity. The framework provides aid from the Community for the reduction of chemical usage, the introduction and continuance of organic methods, the maintenance of the countryside, the upkeep of abandoned farmland, and the management of land for public use and leisure. The rationale behind the aid payments is that sustainable agriculture



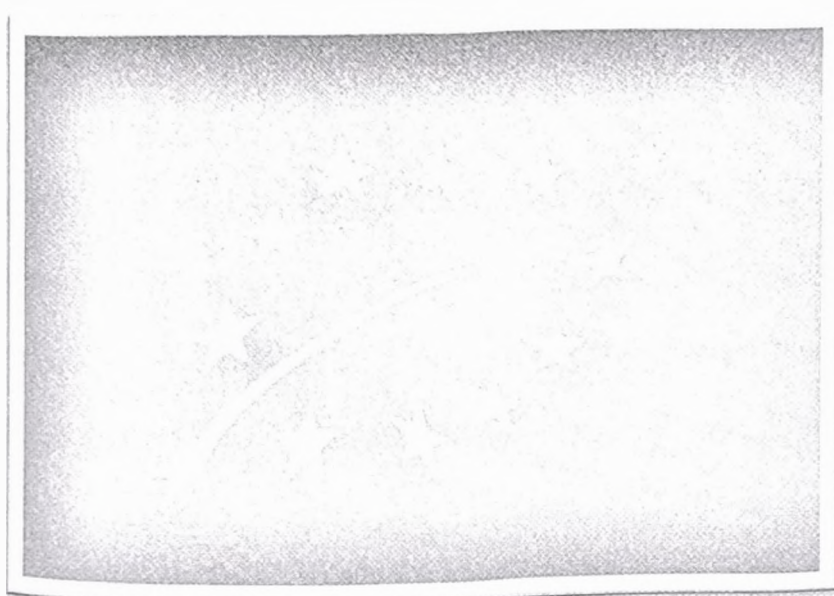
greatly reduces the cost of environmental degradation caused by industrial agriculture, which is normally absorbed by society as a whole since the effects quickly spread far and wide. Since organic farmers protect the environment and may accrue additional costs in doing so, the government sees fit to transfer some income to them through aid programs. The allocation of funds for the programs is left to individual members to administer throughout their territory, taking regional environmental differences into consideration. Ideally aid programs would be comprehensive in fulfilling all goals laid out by the framework, but they may concentrate specifically on individual ones. Article 4 establishes maximum amounts of aid per hectare depending on the type of crop, and Article 8 states that the Community will finance 50% of determined aid. Because administration was left to individual countries, and in many cases authority was subsequently further divided among internal regions, implementation differs vastly among the participating countries. The influence of EU policy on the Italian organic market will be discussed later in this chapter.

#### 4. *Regulation EC 834/2007*

As the organic agriculture niche continued to grow, the European Union saw fit to update and expand concerning legislation to include rules for processing and marketing of products. In 2007, Regulation EEC 2092/91 was repealed and replaced by Regulation EC 834/2007. Regulation EEC 2092/91 was important for defining organic farming and setting basic guidelines for production methods, and Regulation EC 834/2007 built upon those requirements and added provisions for processed food such as wine. The legislation presented the objectives for organic farming as establishing a sustainable agricultural system and producing high quality products. It set forth detailed rules for the production, processing, and distribution of organic goods. Other

objectives outlined include the use of local renewable energy sources and adhering to a strict control system. One major aspect of this legislation was the strict requirement system for labeling products as ‘organic,’ ‘eco,’ or ‘bio,’ (EC 2007). Because the winemaking process was not defined in legislation, wines could be labeled as ‘wine made from organic grown grapes’ but not explicitly ‘organic wine.’ If the requirements were met, products were eligible to bear the Community organic production logo or a national or private logo, though usage was not required. The use of the logo became required in 2010 with Regulation EC 271/2010. A competition was held among art and design students within EU Member States, and popular vote on a website chose the winning design, shown in Figure 1 (EC 2010). The compulsory use of the logo is meant to increase consumer trust in organic products by making them more uniformly identifiable throughout the EU while facilitating promotion and advertising on the part of producers.

**Figure 2 – EU Organic Logo**



## 5. *Regulation EC 1698/2005*

The main purpose of Regulation EEC 2078/92 was not organic policies but agri-environment programs, which encompassed and affected organic agricultural policies. Likewise the focus of Regulation EC 1698/2005 is on rural development, but it has implications for organic farming. The principal objectives of this legislation are stated as improving the competitiveness of agriculture, improving the environment and countryside, improving rural quality of life and rural economic diversification. One specifically mentioned method of improving rural economies is through “targeting quality, organic products” for farm investment aid (EC 2005). This aid materializes in the form of conversion of land to organic farming, diversifying farming incomes with activities such as tourism, subsidizing organic certification, and promoting quality products. As with the previous legislation promoting aid to rural areas, the implementation of Regulation EC 1698/2005 varied greatly among Member States.

## 6. *Shortcomings*

Early policies concerning organic agriculture faced the primary problem as initial policies concerning agriculture as a whole: excessive focus on production. Because organic farming can be more costly than its conventional counterpart, particularly in the early stages, overproduction that leads to falling prices significantly reduces profit to the farmer. National sovereignty in managing the organic sector has contributed to very different levels of production and consumption among Member States. These discrepancies provide interesting insights into the possible problems any organic market could potentially face. For example in the United Kingdom, organic policy focused on production incentives and increasing total land area.

Overall growth in production and consumption was positive but disproportionate. As a result, farmers saw a shrinking profit margin as supply outpaced demand (Smith and Marsden 2004). According to Smith and Marsden, two factors may have contributed to the unsatisfactory performance of the British organic sector: inappropriate marketing schemes and insufficient attention to the total food supply chain. The focus on market growth relied too heavily on increasing production, which was one of the problems of conventional agriculture to be rectified. In fact, the Community legislation on rural development specifically cites production reduction as a means to achieving market balance. Therefore, it is necessary to address the values of the consumer and devise strategies to increase demand for organic products. It is important that consumers view organic products as part of a lifestyle instead of “just another [quality] food category” to justify purchasing if products are sold at premium prices (Smith and Marsden 2004). Furthermore, a conventional supermarket may not be the appropriate distribution outlet for organic products, where large quantity requirements are accompanied by a cost-price squeeze. The EU has responded to the problem of disproportionate supply to demand growth ratio by focusing more attention on product promotion and consumer education in recent legislation.

## **II. Conclusion**

EU and Italian national policy was nonexistent thirty years ago. The organic movement was beginning to take shape in Italy through a loosely organized confederation of producers looking to share information in the 1980s. A decade later the EEC officially recognized the legitimacy of organic agriculture and began defining and regulating its activities. Without an

existing formal framework of its own, Italy adopted the guidelines set by the Community unchanged as her own. Implementation of said policies is the responsibility primarily of the individual regions within the nation. The local nature of policy implementation is appropriate for organic agriculture, which as previously discussed is a highly localized activity, requiring an intimate and thorough knowledge of the land of a locale and the methods that are most suitable to production in that specific environment. It would be difficult if not impossible for a centralized bureaucracy to understand or administer to the needs of small rural producers. However, EU and national policies are important for educating consumers and providing a general cohesive definition of what it means to be organic. As environmental conservation and rural development become increasingly important, the role of national and supranational policies will be important in setting the discourse for organic agriculture. It is important that it remains a method of environmental protection and cultural preservation and avoids the fallacy of its conventional counterpart that more is always better, leading to overproduction, inefficiency, and waste.

## Chapter 5: Concluding Remarks: Meeting the Triple Bottom Line

In regards to the profitability of organic agriculture, profit from organic farming is dependent on low costs and high prices because of a lower sales volume. The comparatively lower profit margin of the organic sector at conventional prices is due in part to profits of conventional farms being artificially high as a result of production-based subsidies and externalized costs. The unfair advantage of conventional farms could be enough to warrant government support for an alternate system. Subsidies to organic agriculture, however, play a much more important role than increasing farmers' profit margins. Many farmers supplement their farming income with other economic activities, and therefore farmers' profits represent a portion of a broader economy based especially on tourism and on the preservation of rural communities. They also support practices of stewardship of the land that industrial agriculture overlooks, contributing to the pleasant environment of rural communities that is essential for attracting tourists. Therefore subsidies to organic agriculture leverage much broader socioeconomic impacts simply increasing profit, as conventionally thought.

The fact that organic agriculture can be and is profitable, but that its importance does not rest solely on profit potential is an important component of its identification as a sustainable system. As Elkington stated, a sustainable business must meet a triple bottom line of economic profitability, social welfare, and ecologic conservation. Simply being profitable is not enough. It is for this reason that organic agriculture, which for so long lay dormant during the rise of exceedingly productive industrial agriculture, has re-emerged as a growing niche in opposition to the environmental and social disregard of its conventional counterpart. The case studies of the Italian organic farms confirm Elkington's argument by showing that when subsidies affect

farmer practices instead of solely striving to increase profit, the positive effects resonate throughout a broad socioeconomic spectrum by preserving local heritage and increasing stewardship of the land, which in turn boosts tourism. Organic agriculture has shown economic viability whilst aiding the development of rural society, preserving rural cultures, and protecting the environment. Therefore, the less than 1% of the European Union budget that specifically goes to organic agriculture is a sound investment in a sector that meets the triple bottom line of success economically, socially, and ecologically.



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