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CONSUMER DEMAND AND PRODUCTION OF ORGANICS IN THE EU

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This paper delineates trends in European demand for organic products, particularly for poultry and livestock. Although, on average, the price of organic products is twice that of conventionally grown food, excess demand still exists within Europe. There are, however, several challenges ahead in order to meet this demand including further development of agricultural systems that allow for certification of products on the basis of animal welfare, environmental stewardship, ethics, and employment conditions.

Key words: European Union (EU); organic production; consumer demand; regulatory policy.

This paper will discuss organic livestock production in Europe with examples specifically from the poultry and livestock sectors. Although organic farming constitutes a small part of the total agricultural production and regulatory activity in Europe, consumers have demonstrated a strong demand for organic produce. Likewise, consumer organizations and lobbying groups are pushing for more regulation. Essentially, consumers are driving European Union policies with respect to organic farming, and are concerned with two issues on product quality. First, consumers perceive organic products as an important symbol of their standard of living and as more socially acceptable than products produced through conventional procedures. Second, consumers view the organic production system as better for the environment and animal welfare. Both of these views are important to the EU policy on organic production.

Regulatory History

The first recognition of organic farming in legislation was in 1980 by France, which was later amended in 1988 to include policy on production modes. In 1991, the EU became involved in creating organic production legislation, the first legislation was Council Regulation (EEC) 2092/91 which defined organic crop production and certification. The EU passed Council Regulation (EEC) 2078/92, which stated that organic farming is part of an agri-environmental production program. This legislation created a link between organic farming and global agricultural policy in the European Union.

In 1999, the EU introduced legislation that brought organic farming closer to rural development goals through Common Agricultural Policy (CAP) reform; also defining what constitutes organic farming practices and cultivation methods. European Council Regulation 1804/99 defined organic animal production. Essentially, consumers waited for 18 years before legislation was enacted to

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ensure the integrity of organic crop and animal production.

Codes Of Practice And Segregation Rules

European Union organic crop production policies and organic animal production policies are important to each other, as animal and livestock are dependent on feed derived from crops. As it is desirable to have a completely organic supply chain for livestock and dairy, EU regulations state that organic animals are only to be fed with organically produced crops. A special list of fertilizers and chemicals are provided for farmers who wish to participate in organic farming. Genetically modified organisms (GMOs) are strictly forbidden in organic products. Hence, the majority of livestock feeding takes place by grazing. Concerning animal health and reproduction practices, allopathic treatments are restricted to only curative use and artificial reproduction methods different from artificial insemination (AI) are forbidden. A farmer must use organic practices two years prior to selling products as organically grown. A governmental certification body also certifies the product as organic. After this two-year time period, producers are free to use the special EU organic label. There are also specific rules for imported products to be sold as organic.

French Versus EU Organic Production Standards

The European Council Regulation that was approved in 1999 is quite strict, and there are distinct differences between the French and European laws. With regards to poultry stock, there are no requirements at the European level, whereas the French require that a certification body must decide the maximum stock for an area. In the EU, the maximum farm area for production is restricted to 1600 square meters; in France it is 800 square meters. The EU minimum slaughter age is 81 days as opposed to the normal slaughter age of 45 days, France requires 10 more days of maturity. Other differences between the French and EU regulations for organic poultry production are listed in table 1.

Table 1: Comparison Between EU and French Regulations for Organic Poultry Production.

		Council Regulation (EEC) 1804/99	**French Specifications**
Stock		No requirement.	Agreement from a certification body needed.
Maximum Farm Buildings Area		1600 square meters.	800 square meters.
Minimum Slaughter Age		81 days.	91 days.
Feeding	***Cereals***	65% minimum.	70% minimum.
	Products from conversion area	30% maximum.	20% maximum.
	Products from conventional farming	20% maximum.	10% maximum.
	Fish meal allowed?	Yes.	No.
Treatment	***Allopathy or antibiotics***	One treatment allowed for curative purposes.	No treatment allowed.
Link to the Farm?		Yes.	Yes.

Table 2: Main Organic Certification Bodies in the European Union.

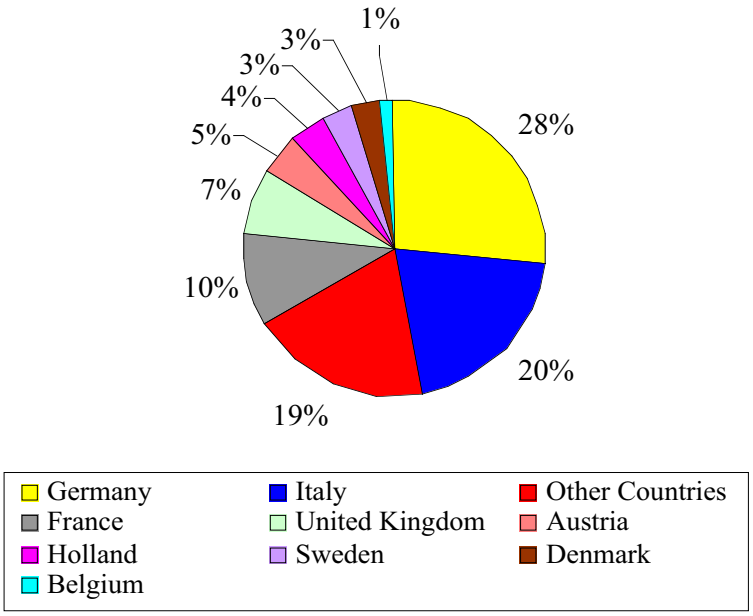
Austria	IVA
	BIOS
	BIKO
Belgium	BILK
	Ecocert
Denmark	Plant Directorate
Finland	Luomulitto
France	COFRAC
	Ecocert
	Qualite Francen
	ULASE
Germany	KOL
Greece	DIO
	SOGE
Ireland	IOFGA
Italy	AMAB
	CCPB
Luxembourg	Bio-Label
Netherlands	SKAL
Portugal	AgroBio
	Sativa
Sweden	KRAV
United Kingdom	Soil Association

Note. From Unité de Recherche sur l' Economie des Qualifications Agroalimentaires (UREQUA) database.

Main European Markets For Organic Produce

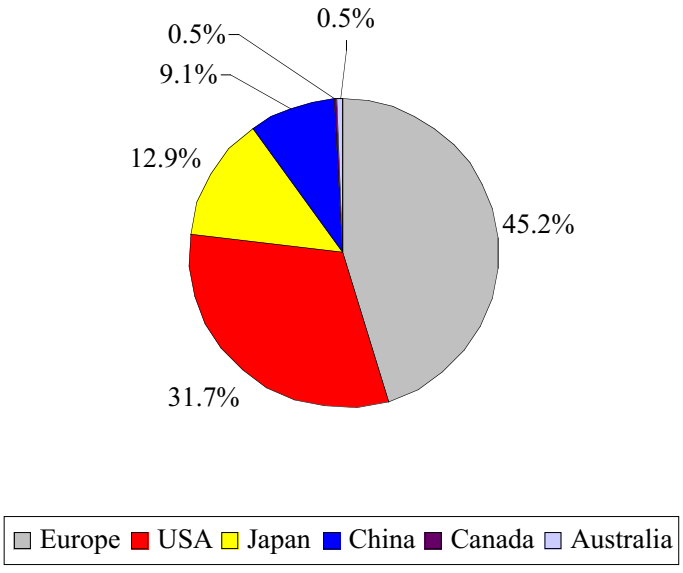
In the EU, Germany is a leading country in terms of organic production, followed by Italy and France (see figure 1). The European Union and the United States (US) are approximately at the same level of organic production, somewhere between 4 and 6 billion Euro per year, with Japan producing the third most in the world (see figure 2). With regards to worldwide organic consumption per capita, Denmark and Austria lead the way with 37.3 and 34 Euro per capita consumption per year, respectively (see figure 3).

Figure 1: The Market for Organic Products in Europe, 1999.



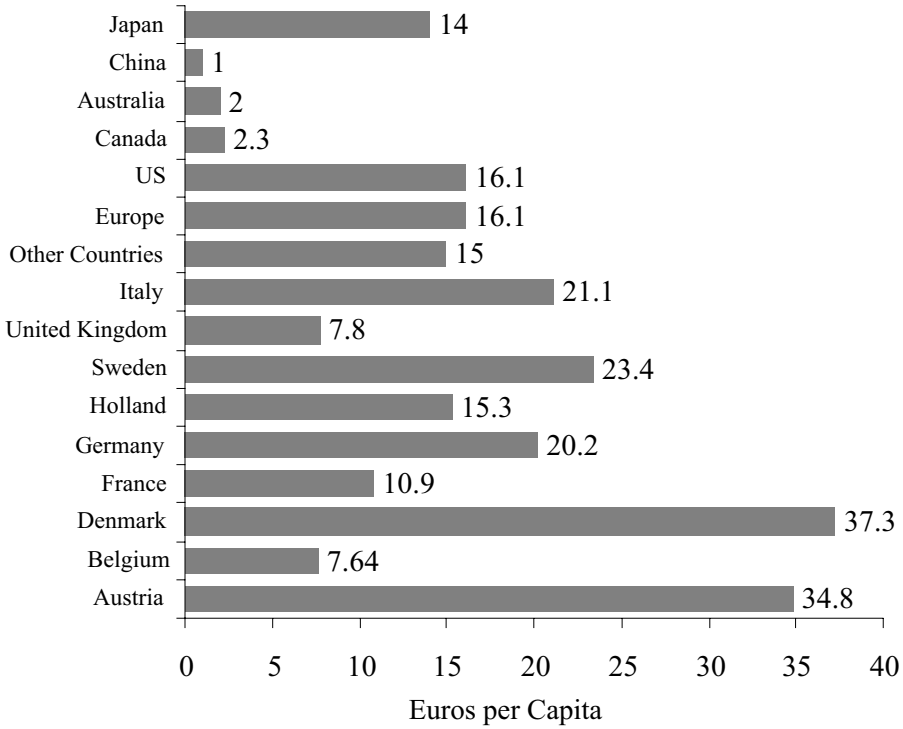
Note. Market share by country expressed as a percentage of the total market for organics—equivalent to 6.2 billion Euros.

Figure 2: The World's Market for Organic Products, 1999.



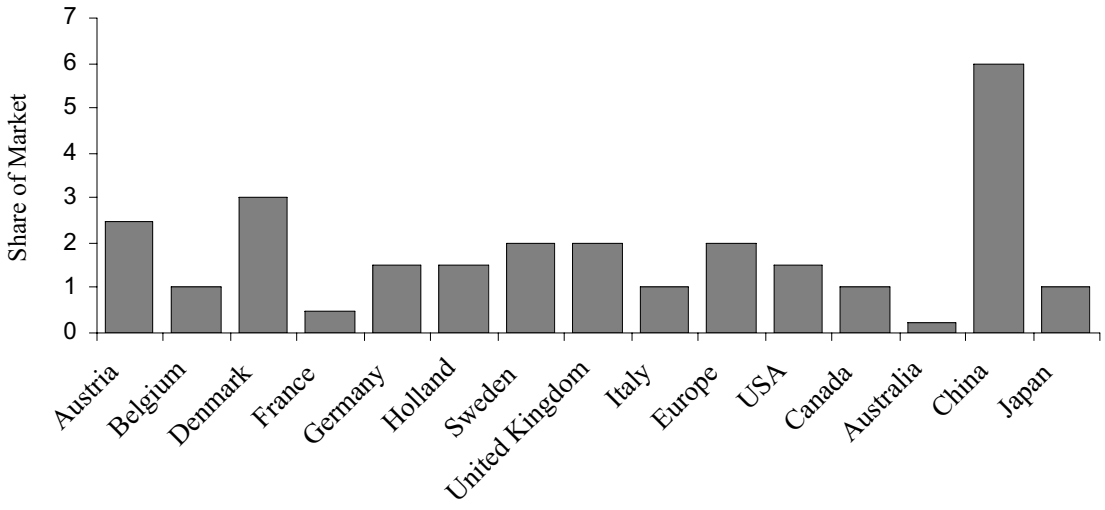
Note. Market share expressed as a percentage of the total world market for organic products—equivalent to 14.2 billion Euros.

Figure 3: Consumption of Organic Products by Country (Euros/Capita/Year).



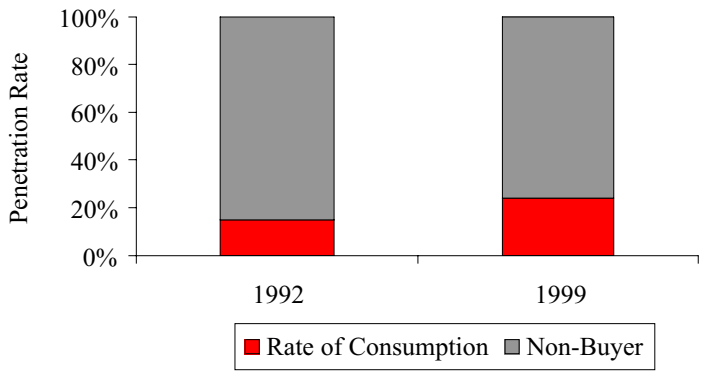
Average consumption of organics in the EU and US is approximately 16 Euros ($15) per capita per year, which can be perceived as low except when considering that only 15% of consumers have changed their eating habits to organic products. The worldwide market share for organic products is somewhere between 0.5 to 3%, but it is hard to determine this definitively as some countries, such as China, do not certify their products (see figure 4). Chinese consumption is estimated to be 6-7% currently. The average penetration rate forFrench consumers who buy organic products at least once a year has increased from 18 to 23% over the past seven years (see figure 5).

Figure 4: Market Share.



Three different types of consumers of organic products can be identified (see table 3). The first type is a consumer with nostalgic attitudes; the second is very strongly committed to buying organic products and to organic farming practices; and the third is a completely reformed consumer who is essentially an activist for organic production. This last group of consumers has surfaced since 1993, accounting for more than 50% of the total consumers of the organic market. It is expanding rapidly. There are, of course, notable differences among consumers in the different EU countries.

Figure 5: Penetration Rate in France.



Note. From "The Policy and Regulatory Environment for Organic Farming in Europe," by N. Lampkin, 1999. Stuttgart, Germany: Universitat Hohenheim, Insitut fur Landwirtschaftliche Betriebslehre. And "European Organic Production Statistics, 1993-1996," by C. Foster and N. Lampkin, 1999. Universitat Hohenheim, Insitut fur Landwirtschaftliche Betriebslehre.

Table 3: Typology of Consumers.

Nostalgic	Working Class. Mature. Believe that technical progress is bad.
Committed	Middle-aged, high incomes, well-educated. Demand for organic products. Have an interest for society. Prepared to pay for benefits of organics.
"New" Consumers	Middle Class. Demand for modern organic procedures. Food must be without residues. Limited willingness to pay.

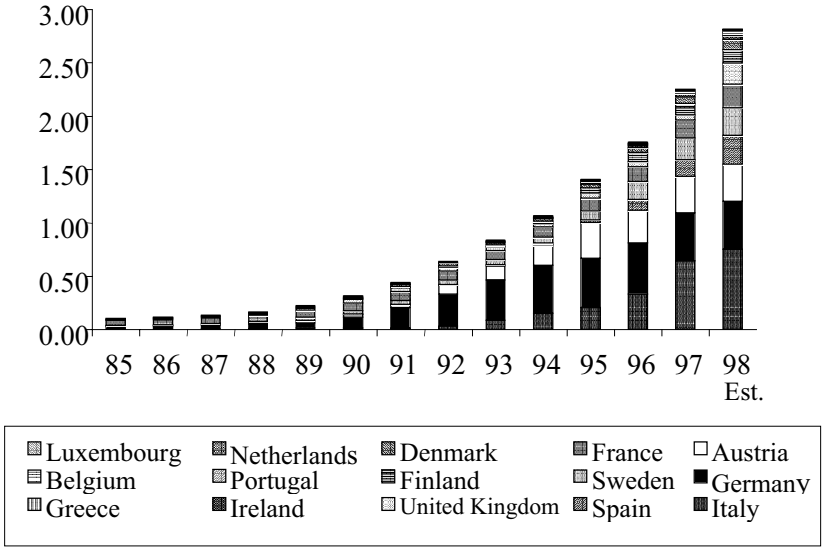
Note. From UREQUA (1998).

Organic Production Growth

Lampkin (1999) and Foster and Lampkin (1999) have shown in their studies that the total area devoted to organic farming has been expanding rapidly over the last thirty years (see figure 6). There has been a strong expansion across the EU, with Italy, Germany, and Austria seeing a very large increase in the number of organic acres. Production forecasts for organic products continue to increase following the trends in consumer demand. Traditionally, consumer demand has been greater than production, leading to a significant level of importation of organic products to Europe. Generally, these imported products come from Northern Africa and Eastern European countries.

The largest producer of organic products has always been Germany. France, on the other hand, that was a leader in organic land in 1985, has been replaced by Italy and other countries (see figure 6). The number of organized organic farms in Europe in1999 was over 100,000, whereas in 1997 there were less than 78,000, showing rapid growth (see figure 7). The number of organic farms per country in 1999 is shown in figure 8. Italy is the largest poultry producer in terms of number of farms, and Austria is second. In terms of dairy production, Germany and Denmark are the leading countries. When comparing the number of organic dairy cows to the total number of dairy cows, Austria has the highest ratio of 12% whereas Germany has only 1%. The ratios for organic pig production is lower—1% in Austria, 0.2% in Germany, and 0.5% in Finland. The poultry ratios are slightly higher, with 5% in Austria and just over 1% in France. Organic cattle production accounts for over 14% of total cattle production in Austria.

Figure 6: Certified and Policy-Supported Organic and In-Conversion Land Area (Million Hectares) in the European Union, 1985-1998.



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Present Challenges In Organic Farming

The first and most important challenge for the future of organic farming is to present a coherent and standardized development policy. Because of pressures from consumer groups, policies have often been haphazard. The European Commission is currently developing policies to support farmers in converting to organic practices. The EU faces technical as well as regulatory problems, such as research and extension policy, which remains very important. The Institut National de la Recherche Agronomique (INRA) / Unité de Recherche sur l' Economie des Qualifications Agroalimentaires (UREQUA) works to help farms convert to organic farming with special support, and also helps operators to organize relevant supply chains in order to keep a diversity of production models. Historically, operators along the supply chain have not been able to find a way of cooperating among themselves in order to successfully deliver organics to the market.

Figure 7: Number of Organic Farms in the EU, 1997-1999.

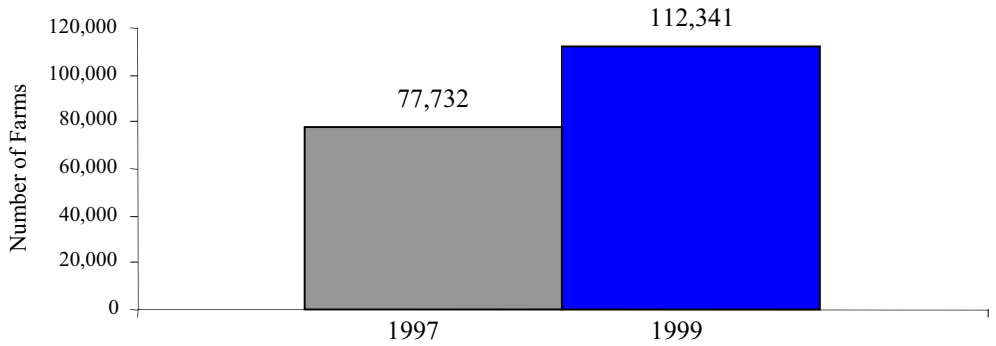
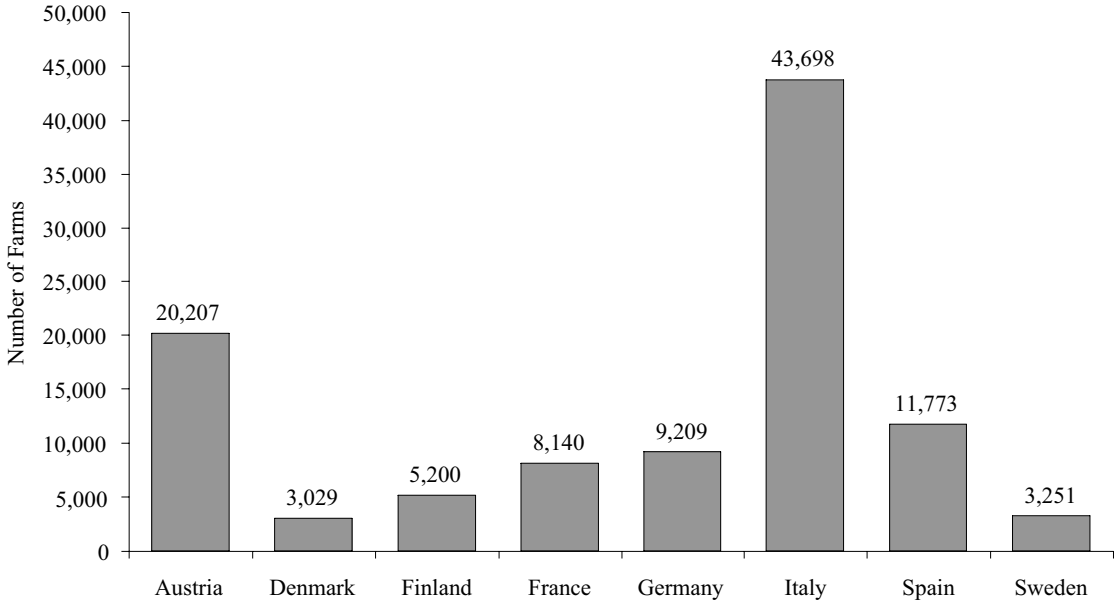


Figure 8: Number of Organic Farms in Selected EU Countries, 1999.



It is a main goal to keep a diversity of production models within the supply chain. For example, in the dairy industry, there are three production models— (1) major food firms who launch special

organic products as complements to their total product range; (2) specialized organic farms which are medium sized; and (3) small-scale firms who produce high quality products and generally have much higher production costs. The European Union is now facing a market segmentation problem where all of the types of firms can only survive if they are able to specialize in their respective market segments. The major food companies net over 4 billion Euros annually and are not specialized in organic farming. These companies have weak flexibility, in part because they have very large technical investments in high scale equipment that needs to be downgraded in order to produce organic products. Medium sized firms will net approximately 75 million Euros annually. These firms specialize in organic farming and have a wider range of organic products then the major companies that the industry can handle. They have a high degree of flexibility, which allows them to shift production and provide new products according to consumer demands. Small-scale firms will net about a one-half million Euros annually from organic produce. These firms specialize in just one organic product or group of products. The major advantage to these firms is the ability to directly sell their products to consumers.

A second important challenge for the future of organic farming is to ensure conformity and uniformity of imported products. The European beef production is expanding more rapidly than crop production, thereby, creating a need for imported animal feed. In 1998, Belgium, the Netherlands and the United Kingdom were all very large importers of cereals. Importation of large quantities of grain is a result of a deficit in protein for animal feeding in France, the Netherlands, and the UK. For example, French demand for protein to be used in animal feed has exceeded supply in each year since 1996 (see figure 9). Within this context, complete inspection and certification of imported products is needed.

A third challenge is creating sufficient value from organic farming to consumers and society. It appears that the demand from consumers is driven by those who wish to support a cleaner environment and better animal welfare practices. The European Union should strive to ensure that the organic farming in the EU is in conformity with what its citizens and consumers are demanding. Several questions are being raised. What should be the final quality standard concerning nutritional properties, hygiene, taste, production practices, standardization in characteristics, homogeneity, and marketing value of products? On average, the price of an organic product is twice that of its conventional counterpart. It appears that even at this level, excess consumer demand still exists. It is possible that expansion of production at each level of the supply chain would create economies of scale and reduce price differentials thereby satisfying a larger number of consumers.

Similar to the marketing challenge, certification of environmental stewardship is also a challenge. Generally, the EU assumes that farmers are not using fertilizers and pesticides to enhance their production, thereby producing positive environmental benefits. This however is not fully monitored; it is necessary for the EU to find ways of certifying environmental stewardship practices and assessing the true environmental benefits of these products. Other societal and consumer concerns include animal welfare issues, regional development, ethics and the employment of workers. Certification of such practices may also be necessary.

Concluding Comment

Agriculture is very important to the European Union. If food production were eliminated, it would mean that over half of the EU land area would be completely deserted. This means that if the European Union desires to retain the current populations in the sparsely populated areas, new modes of production must be developed. It must also be assured that these new modes of production can produce goods of a higher value and differentiable from conventional products.

Figure 9: Deficit in Proteins for Animal Feeding in France.

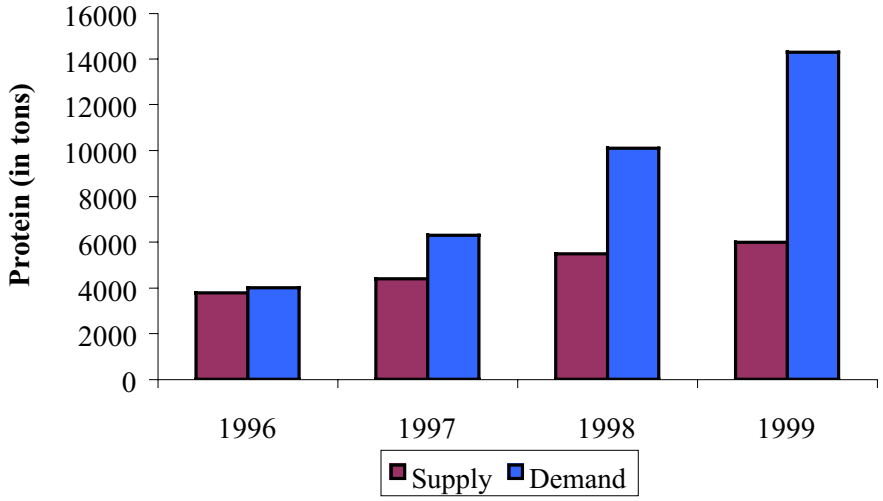


Table 4: Import of Organic Foods by Selected EU Countries, 1998.

Country	Rates of Import (expressed as a percentage)
Austria	22
Belgium	81
Denmark	34
France	23
Germany	24
Netherlands	108
Sweden	27
Switzerland	19
United Kingdom	32

Note. From Unité de Recherche sur l' Economie des Qualifications Agroalimentaires (UREQUA) database.

References

Foster, C. and Lampkin, N. (1999). European organic production statistics, 1993-1996. Universitat Hohenheim, Insitut fur Landwirtschaftliche Betriebslehre.

Lampkin, N. (1999). The policy and regulatory environment for organic farming in Europe. Stuttgart, Germany: Universitat Hohenheim, Insitut fur Landwirtschaftliche Betriebslehre.