

ORGANIC FARMING IN GREECE AND TURKEY WITH SPECIAL EMPHASIS ON POLICY EXTENSION AND MARKETING

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Organic agricultural production in both countries, Turkey and Greece has started in the 1980s under the guidance of commercial firms based in the European Union (EU). A common characteristic of both Greek and Turkish agriculture is that there is a large variety of crops in certain geographical regions where the chemical input use is relatively low when compared to most of the EU members. Low levels of input use in certain crops, facilitated the introduction of organic agricultural production methods in both countries. Another common characteristic of Greek and Turkish agriculture, the small-scaled enterprises, practicing organic farming for two distinguished reasons. In the case of Turkey there is an alternative to increase the welfare of resource-poor enterprises. In the case of Greece the small size of organic farms is due to that it is practiced to a large extent by part time farmers. Existing production technologies and small-scaled farm structure show a potential for further expansion of organic agricultural practices in these countries.

In discussing the opportunities for further expansion of organic agriculture, particular emphasis should be given to the existing policy framework and the marketing and extension activities. Farmers' decision to embark into organic agriculture partly depends on the existing marketing opportunities of organic products. Another also important factor that affects the adoption and expansion of organic agriculture is extension.

The objective of the paper is to present the current situation on organic farming. Discussion will put particular emphasis

ABSTRACT

The current situation of organic farming in Greece and Turkey is described with an emphasis on policy extension and marketing of organic products. Organic farming first appeared in the mid 1980s in both countries, while large proportion of organic production is exported mainly to the European Union. Lack of specific policy framework and information and technology transfer from the conventional extension services, is another common characteristic of the sector in both countries. Although organic farming initially has appeared in regions or/and crops with relatively low input demands, in Greece has expanded to areas where chemicals were intensively used recently due to the CAP adoption. Such a response may be also attributed to the environmental degradation and increasing both farmers and consumer awareness concerning organic farming practices. Following the CAP reform and the recent GATT agreements, organic farming in Greece appears as an alternative production method with the potential of an extra income and with positive effects on the environment, whereas in Turkey, it is a good opportunity to increase exports and provides an additional income to the marginal producers.

RÉSUMÉ

Ce travail fournit une description de la situation actuelle de l'agriculture biologique en Grèce et en Turquie. On souligne, en particulier, l'importance de l'extension de la politique et la commercialisation des produits biologiques. L'agriculture biologique a paru pour la première fois vers la moitié des années '80 dans les deux pays; la plupart des produits biologiques sont exportés vers l'Union Européenne. Le manque d'une politique spécifique et de transfert d'information et de technologie depuis les services traditionnels de vulgarisation, est une autre caractéristique commune de ce secteur dans les deux pays. Même si l'agriculture biologique a paru initialement dans les régions et/ou pour les cultures peu exigeantes en entrants, en Grèce elle s'est répandue vers les régions où les produits chimiques étaient intensément utilisés et ceci à la suite de l'adoption de la PAC. Une telle réponse pourrait être aussi attribuée à la dégradation environnementale et à une plus grande prise de conscience de la part des agriculteurs et des consommateurs vis-à-vis des produits de l'agriculture biologique en Grèce se pose en tant que méthode de production alternative offrant des potentialités de revenu supplémentaire et produisant des effets positifs sur l'environnement, tandis qu'en Turquie, elle est une bonne opportunité pour augmenter les exportations et assurer un revenu additionnel aux producteurs marginaux.

to extension and marketing and policy implications for the sector.

ORGANIC FARMING IN GREECE AND TURKEY

Although organic farming was historically practiced in certain crops in some regions in Greece, conventional farmers started to be interested in it only in the mid 1980s. Olive oil was the first organic product that was exported to the European markets. Since then, Greece has produced a variety of organic products either for export markets or domestic consumption (**table 1**). Now a variety of organic products is produced across the country within a wide range of climatic conditions. The regional distribution of organic farms of organic farms shows a concentration of the farms in the South of Greece. This is explained by the large number of olive trees cultivated in that region (**table 2**).

According to data published by the Greek Ministry of Agriculture (1994), 455 organic producers exist in Greece, most of whom (38.02%), are olive oil producers operating in Peloponnissos.

In South Greece with Mainland and Evia island included, there is 69.96 percent of the

total organic land of Greece. The total cultivated land under organic farming during the same year, 1994 was 135.480 hectares and represents 0.034% of the total Greek agricultural land.

Olive trees and olive oil trees represent 51.5 percent of the total cultivated land under organic farming. Olive trees were grown on mountains since the ancient period in Greece and even now a large proportion of Greek production is produced by such trees, without the use of modern technologies (ie. machinery fertilizers, chemicals, pesticides, irrigation). Thus it is easier to produce organic olives/olive oil than any other product and this production is easier in Greece than any other country.

Greece is ranked fifth among its European partners as far as

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Table 1 Organic farming in Greece (1994).

Type of Cultivation	Cultivated Area (ha)	Share in Total Area Under Organic Cultivation (%)
Olive trees for olive oil	67.996	50.2
Cotton	37.885	27.9
Cereals	4.380	3.2
Citrus species	4.045	3.0
Dry Corinthian raisins	3.885	2.9
Vineyards for wine	3.665	2.7
Fruit trees	2.545	1.9
Edible olives	2.010	1.5
Vegetables	2.041	1.5
Pistachio trees	1.490	1.1
Set aside	1.610	1.2
Kiwis	1.115	0.8
Grazing	1.055	0.8
Legumes	0.650	0.4
Herbs	0.240	0.2
Tomatoes for processing	0.190	0.2
Floriculture	0.060	0.1
Total	135.480	100

Source: Greek Ministry of Agriculture.

Table 2 Regional distribution of organic farms in Greece (1994).

Regions of Greece	Number of organic farmers	Land under organic cultivation (ha)	Share in Total Land Under Organic Cultivation (%)	Share in Total Agricultural Land (%)
Municipality of Attica	4	17.20	1.26	0.017
Main Land and Evia Islands	77	273.80	20.20	0.051
Peloponnissos	173	656.60	48.48	0.096
Thraci	89	146.05	10.78	0.048
Macedonia	18	53.60	3.95	0.004
Thessalia	14	35.10	2.60	0.007
Ipiros	1	0.30	0.02	0.000
Ionian Islands	50	108.20	7.98	0.136
Aegean Islands	10	17.55	1.30	0.008
Creta	19	46.40	3.43	0.014
Total	455	1354.80	100.00	0.034

Source: Greek Ministry of Agriculture.

the number of organic farms is concerned, while she is the last, on the scale of the percentage agricultural land devoted to organic farming. This is the result of the structure of agricultural holdings in Greece where the average size of farms is very low (3.59 ha), and it is spread in many plots in different places.

There are two motivating factors for the farmers to get involved in organic agriculture in Greece. High price expectation attract conventional farmers into organic farming, since organic products get a price premium, in export markets in particular. Data collected from a field survey show that there is also another type of motivation which is related to the farmers' personal views, beliefs and ideology. Environment protection and consumption of "clean" agricultural products are strong enough reasons for many conventional farmers in Greece to embark into organic farming.

Organic farmers in Greece are relatively of a young age and high educational level. From the same above mentioned survey which contacted in 1995 among 11 farmers representing 80 percent of the members of PHYSIOLOGIKI (1), show that the average age of organic farmers is forty years old. In addition more than half of the farmers questioned are university and college graduates. One third of them are part time farmers and the rest are either professional farmers or farming is their main source of income.

(1) One of the three Inspection and Certification Organization in Greece.

(2) DIE Turkish statistical Service.

It is also worth noting that most farmers of the sample produce both, conventional products and organic products. Annual crops represent 56.06 percent of their total area under organic farming while perennial crops cover the rest 43.94 percent. From the area under annual crops, cereals cover 56 percent and cotton 10 percent. Vegetables, peas, beans, oil seeds, corn, melons, watermelons, sunflower, soya, and courgettes cover the remaining area. Organic kiwi trees cover 81.34 percent of the total land of perennial crops under organic cultivation. Plums, cherries and peaches are some other organic fruits produced in Greece. These figures differ when aggregated across the country (table 1) Annual crops cover 35.5 percent, mainly covered by cotton (27.9 percent) while perennial crops represent 64.5 percent of which olive oil trees cover 51.7 percent.

Organic agricultural practices in Turkey dates back to the mid 1980s as well. EU based importing companies introduced organic agriculture to the Turkish farmers. During the following years, Turkish exporting companies started to enter into the organic markets. According to the data provided by the Association of Organic Agricultural Movements in Turkey (ETO, 1994), there are 21 products currently labelled and marketed as organic. The entire production is exported to Europe through contracts. The market for organic products is growing, particularly in Europe (Ozcan and Bostancy, 1992).

Table 3, summarizes the current situation of organic agricultural production in Turkey.

Organic agricultural land has a very small share in the total area sown. According to the 1993 figures, total cultivated area in Turkey, including cultivated area of crops, vegetables, vineyards, orchards and olive groves is 22.630.000 hectares (DIE (2)). This implies that organic crops makes up approximately 0.023% of the total cultivated area.

EXTENSION

Organic farming practices need special attention by the extension services. Data from the conducted survey suggest that state extension service, which is a traditional system of extension in Greece, does not appear to be an important source of information for the organic farmers in Greece. The main source of information for the organic farmers are of printed material in general.

Table 3 Organic agricultural products in Turkey (1994).

Type of Cultivation	Region	Number of Farmers	Cultivated Area (hectares)
Peanuts	Adiyaman	15	25
Pears	Afyon, Kayseri, Nevsehir	15	15
Sunflower	Ordu	1	1
Wheat	Afyon, K. Maras	18	135
Walnuts	Afyon, K. Maras	33	90
Pistachios	Izmir, Manisa	20	80
Tomatoes	Manisa	10	20
Apples	Afyon, Kayseri, Nevsehir	15	20
Plums	Afyon	10	15
Dry Beans	Afyon	15	8
Nuts	Ordu, Rize, Trabzon	492	1559
Opium Seed	Afyon	10	10
Apricots	Malatya, Nevsehir	148	371
Chick Peas	K. Maras, Manisa	28	220
Cotton	Afyon, K. Maras, Manisa, Mugla, Urfa	41	280
Rice	Ordu	1	1
Sesame	Manisa	20	300
Grapes	Manisa, Yzmir	325	1019
Sour Cherries	Afyon	5	20
Figs	Afyon	403	877
Wild Apricots	Malatya, Nevsehir	80	150
Total		1705	5216

Source: Association of Organic Agricultural Movements (ETO).

Other organic farmers is the second major source of information. The third is specialized seminars and meetings. Organized vocational training is ranked as the least popular source of information for organic farmers in Greece.

Only recently a specialized office on organic farming was established in the Greek Ministry of Agriculture in Athens. Its role is mainly to administer the CAP accompanying measures on organic farming. Nevertheless none of the farmers in the sample of the field survey mentioned earlier in this paper, (seemed to be aware of its existence and hence benefited from such an establishment.

Organic farming is not an "old fashioned" farming practice. In order to be successfully implemented and extended, potential organic farmers need specialized knowledge and up to date information. The farmer himself, local farmers' organizations, agricultural cooperatives⁽³⁾ and the agricultural ministry have important roles for the success of the organic farming.

Special attention should be given also to the Inspection and Certification Organizations. There are three domestic organizations, named SOYE, DIO and PHYSIOLOGIKI as well as several foreign ones operating in Greece. They provide information, technical assistance and guidance and usually facilitate the exportation of the inspected products.

The Turkish case

Although low input agriculture is a future prospect, efforts to introduce non-conventional methods, such as organic agriculture, requires immediate attention by the extension services. The concept of non-conventional agriculture is new for Turkey. Traditionally, the efforts of the Turkish Extension Service have concentrated on increasing yields through intensive input use. This tradition is typical for most developing countries since World War II.

Changing values concerning the protection of the environment leads to make radical changes in the concept of extension services. The required changes in extension services are associated with the content of extension advice, targeting, in-service training and attitudes towards indigenous knowledge (Garforth, 1993; Kumuk, 1995).

Currently, the Turkish Extension System is defined as "**Conventional**". The term conventional, implies, **research centred, supply dominated, top-down and publicly provided**. Since the current understanding of extension in Turkey stresses on yield increase, the extension service recommends intensive use of inputs. The Extension Service does not particularly emphasize on introducing low input or non-conventional agricultural systems since such concepts are fairly new to them.

It is observed that the private sector is more active than the public sector in introducing low input agricultural production systems to the Turkish agriculture. Private firms, through contracts, give extension advice on organic agricultural methods and provide marketing opportunities for organic products. Further expansion of organic agriculture in Turkey needs the involvement of the public sector as well as private firms. Current public extension technology packages that are aimed to increasing yields are in conflict with the privately provided technological advice. To diminish such conflicts, public extension services should be more fully involved in providing low input extension advice particularly to **resource poor farmers** who are often not the direct beneficiaries of the existing research and extension activities in Turkey. If organic farming is considered as a tool to increase the welfare level of the resource poor farmers, research and extension should be focused **On-Farm Experiment and Farming Systems Research**. This would give an opportunity to public research

and extension services to produce and disseminate technology packages that meet the needs of the resource poor farmers.

MARKETING AND POLICY OF ORGANIC PRODUCTS

Increasing consumer awareness is an important marketing issue in organic agriculture. Constraining factors for the expansion of organic farming is the lack of financial support during the first stages of transformation of the farms from conventional to organic. Another important constraining factor is marketing.

Organic products are either exported, or consumed locally mostly through non-conventional marketing channels in Greece. With the exception of few specialized shops, a couple in Athens and one in Thessaloniki, no place exists where the consumers are able to find a variety of organic products throughout the year.

Organic products are mainly sold on farm or to the nearby towns. There are few specialized fairs in Athens and Thessaloniki to promote the marketing of organic products. Open markets is another possible outlet. However, the consumer is suspicious due to lack of a certification label. Organic products sometimes cannot all be sold through the non-conventional marketing channels for several reasons. The producers need to sell the surplus product through conventional marketing channels in order to get a price premium for their products. Although the farmers questioned in the survey, admit that organic products deserve and sometimes get a better price in the local markets, many times are sold at the same time as the conventional ones due to the low domestic demand.

Whereas the demand for organic products in the local markets is increasing and the consumer is willing to pay an extra price, it seems that the producer of organic products in Greece is not in the position to exploit such perspective. EU funds provided to the sector through the (EEC) No. 2092/91 Regulation, cannot be used to develop the production and marketing of organic products. The farmer still believes that "it is his job to produce, but selling the product is someone else's job". That explains the success of the foreign firms in exporting Greek organic products.

It should also be noticed that the application of the LEADER initiative of EU in Greece, proved to be both flexible and successful in particular as far as its part on organic farming is concerned. Both farmers and other agencies became aware and eventually greatly utilized the funds of LEADER. However both lack of concrete policy framework specially designated to the mountainous and less favoured regions of EU and information transfer, prohibit these areas from developing their cooperative advantage to produce organic products.

Contract Farming (CF) is an important coordinating mechanism in the marketing of organic products in Turkey. Under contract, the marketing firm provides guidelines for production and offers a buying price to the farmer. In other words, the farmer bears the production risk while the marketing firm bears the marketing and pricing risk. If the farmer complies with the production technology that is specified in the contract, the firm is responsible to buy the product at the pre-specified price. The price is determined according to the price of conventional product with similar quality on the market. Often, a price premium is offered to the farmer by the trading firm to compensate any losses due to decrease in

(3) There is one organic farmers' cooperative called BIOTOP, under the Union of Agricultural Cooperatives of Alexandria, which works with close collaboration with PHYSIOLOGIKI.



yields or increase in production costs.

One of the principal advantage of CF is that the producers receive a price premium and they have a secure market for their products. This advantage is particularly useful for the resource poor farmers who already use low levels of yield increasing chemical inputs.

An important marketing issue is the presence of consumers in the market who are willing to buy organic products with a price premium. Organic markets are growing rapidly in Europe due to increasing consumer awareness on environmental problems (Marland, 1989; Ertem, 1993). However a domestic market for organic products in Turkey does not exist. Organic production solely for exporting purposes is a factor that constraints further expansion of organic production in this country. To have more producers get involved in organic agriculture, the market for organic products should be expanded to cover the domestic markets.

DISCUSSION - POLICY PROPOSALS

An important marketing issue is the inspection and certification of the organic products. Exporting and importing firms in Turkey use the EU standards and provide organic certification through foreign inspection and certification firms. If the products are to be marketed at the domestic markets as well, domestic certification firms should be established and standards for organic products compatible with the EU standards should be adopted. In developing a domestic market, efforts should be concentrated to focus on target consumer groups who are willing to buy high quality products, such as organic products, with a price premium. After a stable consumer segment is established, it is likely that more producers would get involved in organic agriculture.

Although the production technique of a variety of products, such as olive oil, nuts, grapes, figs, apricots, sesame, cotton, cereals raisins and citrus, as organic appears to be relatively easy in both countries, for more demanding crops, the cultivation practices and the specialized production techniques and inputs are not easily accessible by the average producer. The later is particularly important since the organic farmer, especially in Turkey is usually a marginal producer, traditionally reserved to new technology and therefore risk averse. This is not always the case in Greece where there are organic farmers who are both involved in the conventional and organic production of agricultural products at the same time. They are familiar with complex agricultural technology, more than the average educated and they have easy access to any source of printed material and general information concerning organic farming.

Public extension services in both countries have to undergo

radical changes in order to develop information channels and be able to supply organic farmers with the necessary information, currently provided by private export firms or certain Inspection and Certification Organizations.

Export markets especially to EU are the main outlets of the organic products in both countries. Contractual arrangements between the producers and the exporting firms are the desired form of agreement especially in the case of Turkey. Among the reasons there are, the lack or the fragmented marketing channels and the imperfect diffusion of information among the consumers about the desired characteristics of organic products.

Increasing organic agricultural production and expanding to other agricultural crops is nevertheless a realistic target. This is because in the case of Turkey additional income would be earned by the resource-poor farmers provided that proper marketing and extension methods are applied along with the local market development. In the case of Greece certain isolated mountainous areas traditionally cultivated with low chemical inputs could be further developed, provided that the favourable policy framework and local and export markets would be fully exploited. In addition there is the extra benefit of the environment protection especially in areas where CAP has encouraged highly intensive farming practices. It is also necessary to stress the need of utilization of the EU funds designated to the sector and strengthen the role of the Inspection and Certification Organizations, in order to guarantee the quality to the local and export markets. ●

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