

**BIOLOGICAL AGRICULTURE IN GREECE:
CONSTRAINTS AND OPPORTUNITIES FOR DEVELOPMENT**

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Introduction

Organic agriculture or biological agriculture, as it is called in Greece, does not account to more than 0.63% of the national agricultural output. But since the last food crisis (winter 2000) caused by the sudden re-appearance of the "mad-cow disease" in Europe, it has gained a new developmental momentum. The Greek press, although no incident of the Bovine Spongiform Encephalopathy has been recorded so far within the national borders, covered this last food crisis extensively and devoted much space on the risks to human health, which were considered almost innate to the conventional agro-food system, and to the associated consumption and dietary patterns.

In this historical conjuncture, biological agriculture entered the public debate through the mass media as the most immediate and radical solution to the industrial system of food production, which had lost its reliability almost entirely. The Ministry of Agriculture was not prepared to deal with such a severe crisis in the meat sector and thus to apply competently the measures against BSE, agreed upon at EU level. Thus it rushed to support that biological agriculture, and more specifically biological stockbreeding, is the only solution that guarantees a safe and healthy way out of the problem. Even though by then, only 2000ha could be characterised as organic pasturelands according to EU Reg. 1804/99. It was months later, when the crisis was not anymore on the cover page, and public interest moved to other "hot" issues, that the Minister of Agriculture himself gave a more balanced view of his real intentions towards the future of biological agriculture. In his own words: "We want to shift the producers' attention mainly to integrated agriculture. We do not exclude biological products but our target is the quality of all products because on this matter we will be tested by the markets" (Anomeritis 2001).

In the following presentation I will first try to describe the current state of biological agriculture in Greece, and secondly to estimate the constraints and

opportunities it faces as an alternative mode of production/consumption in the framework of contemporary EU rural development policies (Lowe and Brouwer 2000).

A brief background of Greek biological agriculture

The first cultivations based on biological agricultural practices took place in Greece in the beginning of the 1980s. These first attempts (cultivation of olive trees, vineyards, vegetables etc.) were small in scale and restricted to a few producers, mostly amateurs. Their products rarely reached the commercial market. Mostly they aimed to satisfy their own consumption needs. But soon more systematic programmes of biological agriculture followed, organised on an entrepreneurial basis.

Amongst them the most important was the one of the Union of Agricultural Cooperatives of Egialia, 9 members of which started in 1982 the biological cultivation of Corinthian raisin, covering 13 ha of land. Their annual production was 30 tons, all of which was exported to the Netherlands.

In 1988 the first organised biological cultivation of olive trees started in Mani (specifically, the Messinian Mani, in the south-east of Peloponissos) by a group of 8 producers on an area of 10 ha. Again, the annual production of olive oil and olive fruits was exported to the market of biological products of Central Europe.

In Northern and Central Greece, the first steps towards a systematic agricultural production were recorded in 1985 in the community (NUTS 5) of Neochori, on the mountain Pilio, where a variety of aromatic herbs were cultivated. Further up, in the prefecture (NUTS 3) of Ncousa in Western Macedonia, a farmholding family established a vineyard of 10 ha. in 1989. In 1990, annual arable cultivations started at the Yiannitsa prefecture, while the following year, in the prefecture of Imathia, a group of 15 farmers produced cereals, tomatoes, legumes, almonds, apricots, cherries, plums etc., on a 30 ha area. At about the same period, equally important efforts (i.e., citrus and olive trees) began in Skala Laconias, in Argolida (citrus trees), at Lassithi on the island of Crete (vegetables and bananas), at Chania on the island of Crete (olive trees), in the prefecture of Xanthi in East Macedonia (vine and vegetables), and in the prefecture of Serres in Central Macedonia (wheat and vegetables) (Vlontakis et al. 1999).

Apart from these pioneering efforts, the organisation of biological producers makes its first but decisive steps in parallel with the institutional recognition of biological agriculture by the state agencies in charge, namely the Ministry of Agriculture. The Society of Greece's Ecological Agriculture (SOGA), a non-profit organisation, is founded in 1985, it publishes a journal called "Viokallergies" ("Biocultures"), it becomes a member of the international organisation IFOAM, and it has as its declared objective to "restore communication between scientists and farmers who are interested in biological agriculture".

In the next five years different agencies appear throughout Greece, such as the Action Network for Pesticides, the Laboratory of Ecological Practice, as well as local initiatives for the first successful exports. In 1990-1992 the Ministry of Agriculture, at its headquarters, appoints the responsibility for the implementation of EU Regulation 2092/91 to the newly established Office for Biological Products.

The year 1993 marks the starting point for the systematic inventory of cultivations, the control of productive procedure, and the certification and labelling of the products under the aforementioned Regulation “on the biological mode of producing agricultural products and the relevant indications on agricultural products and types of food”. In the same year, the inspection and certifying organisation DIO, (after the name of goddess Demetra’s daughter --the ancient goddess of agriculture) is founded. “SOGE” and “Physiologiki” are, so far, the other two inspection and certifying agencies recognised by the MoA. By 1993 the Union of Professional Biocultivators of Greece is founded, and the (state-sponsored) Panhellenic Confederation of the Agricultural Co-operatives Union starts to organise seminars and workshops for the information of producers in biological agriculture. Finally, in completing this rather schematic historical sketch, a landmark in the development of Greek biological agriculture proves to be its inclusion among the schemes subsidised under the institutional framework of the agri-environmental EU Regulation 2078/92. I will come to this very important development later on.

Beopoulos has given useful insight information concerning the social background of these early days of Greek biological agriculture (Beopoulos 1997). First, he observes that the farmers introducing small-scale biological agriculture in Greece are with rare exceptions foreigners coming mostly from northern European countries and inspired by the principles of biodynamic agriculture. Also they are well educated and of urban origin. The ideology of these pioneers will come soon in contrast with the objectives promoted by the first programme on the “professional training of young farmers on issues of organic agriculture and development”, organised by the municipality of Giannitsa (see above) and the General Secretariat of Young Generation (Ministry of Culture).

This programme was addressed to young farmers willing to practice biological agriculture as “their sole profession for living”. This ideological conflict is a constant theme of debate run in parallel with the increasing socio-economic importance of biological agriculture. In a widely read paper H. Tovey (1997) discusses from this angle the institutionalisation of Irish organic agriculture.

Nobody can deny the importance of this ideological issue but in a more recent contribution to this debate it has been shown, rather convincingly, that institutionalisation may also be seen from a different perspective. According to J. Michelsen (2001), “since mainstream agricultural institutions represent the established and culturally conditioned rules and routines of agriculture, and

organic represents change, what is at issue with the institutionalisation of organic farming is its ability to grow in importance and weight within the agricultural sector but at the same time to maintain its distinctiveness”.

I will come to this crucial point again when discussing the recent interventions of the Greek state to re-organise the formal procedures certifying biological agriculture but for the time I turn again to the dawn of biological agriculture in my country to further underline the role foreigners played at that period. Because in the case of biological cultivation of Corinthian raisin in Egialia, it was a Dutch firm that motivated traditional farmers to produce for exports by offering them higher prices in comparison to local market. Also in the “success story” of Messinian Mani the determinant actor was an Austrian processor/exporter who offered 20% higher prices, to those asked for the conventional olive oil, for the biological product.

Furthermore, in both cases, as again Beopoulos notices, the shift to biological production was favoured, from an agronomical point of view, as the cultivation of olive trees and vineyards continue in these areas to employ traditional practices and apply minimal inputs. So the environmental impacts of these cultivations are kept in low levels and the required transitional period to biological farming is not so long.

All these show that the first attempts for marketable biological production, initiated by external to local communities actors, were based on minimal adjustments of pre-existing agricultural practices and the incentives offered to farmers were mainly of economic nature. Although one is difficult to deny the contribution of these pioneering projects to the recognition of biological agriculture as a realistic alternative path to conventional agricultural modernisation there is no doubt that farmers were motivated more by the economic terms of their agreement with the exporting agencies than to their concern for improving environmental conditions. This problem became more apparent when the implementation of EU Regulation 2078/92 caused a rapid jump to the number of farmers (and the occupied cultivated area) interested to apply biological methods of production.

The impact of agri-environmental policy to the expansion of biological agriculture

The cultivation of agricultural areas with biological methods, at national level, did not occupy more than 200 ha before 1990. As the following Table 1 shows, two were the most noticeable leaps forwarding the expansion of biological agriculture in Greece.

The first is associated with the introduction of a certification system according to EU Regulation 2092/91 and the second, with the financial support offered to farmers when the so-called agri-environmental EU Regulation 2078/92 was

implemented. Greece implemented four programmes, these were: (a) Reduction of Nitrogen-pollution from agricultural sources in Thessaly plain (b) Longterm set-aside in exploitation of agricultural sources in Thessaly plain (c) Conservation of endangered breeds of animals and (d) Organic farming (see Map in Appendix). Their corresponding shares of total budget of 33,544,196 ECUs were 42.7%, 34.6%, 2.1%, 20.4%. At EU level certification was in many countries introduced about the same time as EU support to farmers was introduced. In these instances it is difficult to separate the effects of EU certification and support given by agri-environmental measures. In the Greek case this is not very difficult, as certification was introduced with a delay of two years, in 1993, and support followed three years later. The table below shows the development of biological agriculture in Greece from 1993 to 1999.

Table 1. The development of biological agriculture in Greece 1993-1999

Year	1993	1994	1995	1996	1997	1998	1999
Hectares	700**	1,182.2	2,400.9	5,269	10,221.5	15,848	21,000*
% Cultivated area	0.01	0.03	0.07	0.15	0.31	0.47	0.63*
% Growth	-	70	102	119	94	52	33*
Number off farm holdings	250**	477	700**	1,065	2,263	4,231	n.a.
% total farm holdings	0.03	0.06	0.08	0.12	0.25	0.48	n.a.
% Growth	-	91	46	52	112	86	n.a.

Source: Ministry of Agriculture, Inspection and Certification Organisations

*MoA's estimations

**DIO's estimations

It is evident in the data shown in the above Table that the largest increase (119%) of land cultivated biologically occurred in 1996, when EU Regulation 2078/92 was implemented for the first time in Greece. The next two years this rate of growth was steadily reduced. Nevertheless, as an absolute figure, the land annually added to the biologically cultivated areas increases substantially (about 5,000 ha per year).

Still, in comparison to the other EU members, Greece lags behind with a 0.63% of the total agricultural land covered by biological cultivations. The same can be said when comparing the number of biological farmers with the total number of farms in

each country. As the relative numbers of farms vary from less than 0.5% in several countries to nearly 10% in Sweden and Austria, Greece finds itself to the lower position (0,48%).

Although generally, and in contrast to all Nordic and German speaking countries, whether EU members or not, the Mediterranean countries' share of organic farmers is very low, with the exception of Italy, which has a high share of organic farms.

Greek experts on the field blame for the observed slow down in the development of biological agriculture, the policies followed by the Ministry of Agriculture on the design and implementation of Reg. 2078/92. According to them (Anastasiadis et al. 2000), the MoA not only delayed the implementation of Reg. 2078/92 but also distributed the eligible area of subsidised biological agriculture to 200 ha per prefecture, restricting thus the dynamic development already shown in certain areas.

I will insist on the views of these experts. First, they belong to DIO, i.e., the largest¹, officially recognised by the MoA, non-profit organisation for the inspection and certification of biological products. Second, its founding members were involved in the Greek ecological movement since early 1980s. Therefore, not surprisingly, they often act as an environmental NGO by organising seminars, workshops, and press conferences (recently about the BSE crisis), and by publishing books and a bi-monthly journal on ecological issues of wider interest (e.g., on GMOs, on air-spraying pesticides, etc). Despite all these activities, DIO's collaboration with the MoA was rarely uncloudy.

DIO has participated since 1994 (a year after its foundation) in meetings organised by the MoA's Directorate of Spatial Planning and Environmental Protection (DSPEP) concerning the design of the "biological agriculture" horizontal scheme under Reg. 2078/92. During these early meetings², they disagreed with several issues proposed by the administration. Amongst them were the total budget allocated to biological agriculture, the aforementioned segmentation of biological agriculture into zones, and the estimated cost of production for biological products for which, as the DIO admits, neither they nor the MoA had anything more than scanty empirical approximations.

Furthermore, they offered their services as consultants in preparing the documents an applicant should submit to state authorities in order to be considered eligible for participation in the biological agriculture scheme of Reg. 2078/92. According to their opinion, the MoA did not follow their advice, but instead adopted a much more bureaucratic procedure. DIO also found inadequate the amount of land scheduled for support by the programme of biological agriculture. During the first three years (1995,1996,1997) of implementation this

¹ DIO controls more than 60% of the biologically cultivated areas

² For more details, see Louloudis et al, 2001

reached 6,000 ha. For the next three years (1998,1999, 2000) the programme, which had been approved by the EC on May 1998, provided support for a total of 14,000 ha. But since last summer, again, according to DIO, because of the delays, the incompetence, and the lack of communicative strategies of the MoA, only 3,000 ha of the above scheduled area had been put under the support scheme of the agri-environmental Regulation, although biological production had reached by then (July 2000) a total of 20,000 ha (Sgouros 2000).

The mistrust of DIO and the other two inspection and certifying organisations against the MoA policies was intensified on January 2001. The reason was a Ministerial Decision for the revision of the System for Inspection and Certification of Biological Products without any previous discussion with the interested social and private agents. The main points of this Decision were: a) the restriction of the officially recognised certifying organisations only to inspection responsibilities, b) the assignment of certifying procedures to the newly founded OPEGEP (Greek abbreviation for the Organisation for the Certification and Inspection of Agricultural Products), and c) the establishment of an obligatory label given by OPEGEP and the prohibition of any other national label for biological products.

According to a press release (January 30, 2001) signed by all three organisations, the Ministerial Decision reflects the intentions of the “most conservative departments of the Ministry of Agriculture” by which it is attempted the institutionalisation of “a statist and simultaneously monopoly system”.

In this system the three organisations saw the violation of national and Union’s law (provisions for Standardisation of Product Certification EN-45011 and EU Reg. 2092/91) by “restricting the responsibilities, autonomy, and independence of the existing social agents of inspection and certification, with the ultimate aim to push them out of business to the benefit of a heavily state-sponsored public organisation, OPEGEP”. The main role of OPEGEP as a public agent, they supported, was to introduce the approval and to supervise the proper function of the certifying organisations according to EN-45011 and Reg. 2091/92 norms, while the responsibility for the function of the whole system remains to the MoA. This is not exactly accurate, as for the certification EN-45011 responsible is the National Board of Accreditation. After many protests the MoA promised to withdraw the Ministerial Decision and modify it in the near future, taking in consideration the above objections and suggestions of the certifying organisations.

This incidence reflects, I believe, the modus operandi of the Greek public administration system, and reveals certain discontinuities in the interaction between state agencies and the environmental NGOs or other private agencies, which intervene in the agricultural policy domain. It is true that during the last decade interactions between state agencies and NGOs are characterised by some mobility, but without an elimination of the traditional mistrust both parties harbour for each other.

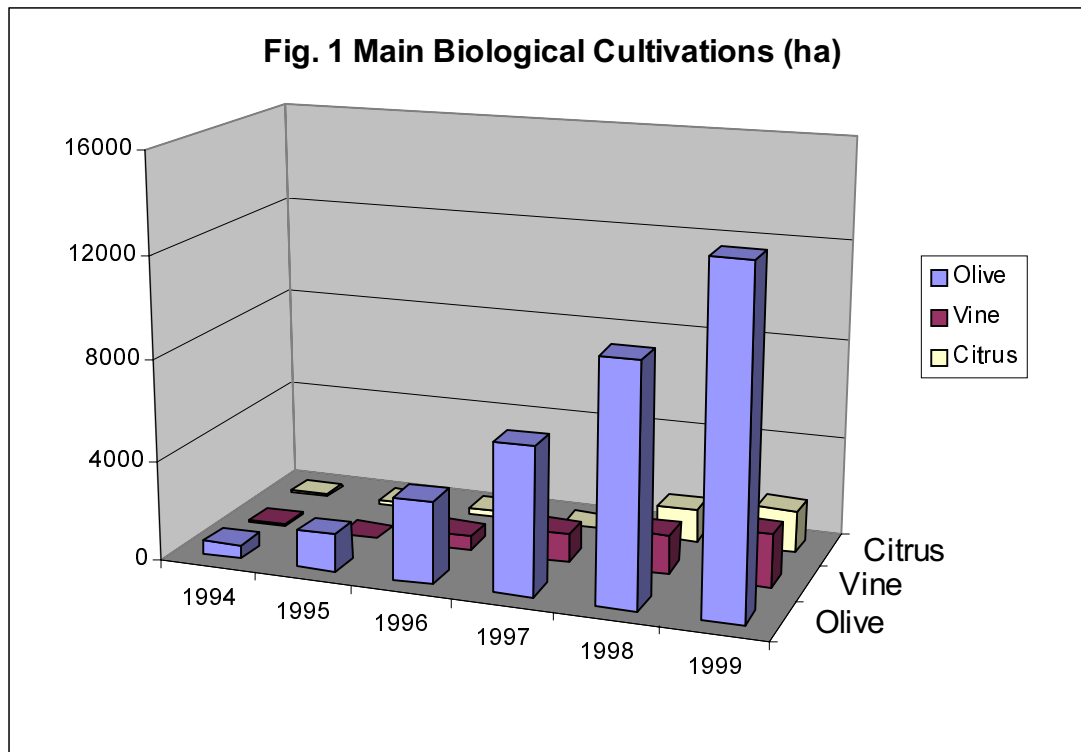
In terms of a broader consideration, this lack of a working relationship increases the isolation of the public sector from social actors and the society of farmers at large, thus aggravating their rather hostile attitude towards ongoing changes of the CAP since 1992. For this situation, both parties, I believe, bear some, but certainly not equal responsibility.

The disagreement presented above proves undoubtedly that the centralised bureaucratic structure of public administration which, in addition, suffers from inter- and intra- ministerial fragmentation and lack of communication, is still not overcome. The MoA, although more collaborative now with NGOs than it used to be, as DIO itself does not deny, is still reluctant to accept environmental NGOs as reliable partners in shaping policies of major economic and political importance.

It is not accidental that a committee constituted by representatives of NGOs, Universities and research institutes, as well as co-operatives and professional farming organisations, established by the MoA soon after the start of EU Reg.2078/92 implementation to monitor and evaluate its progress, has never worked. Even more, the new set of measures approved this year by the MoA in the framework of the Agenda 2000 agreements, were designed and finalised in a typical top-down approach, without any previous discussion or consultation with the aforementioned committee. In regard to the other side of the relationship of mistrust, i.e., the NGOs and inspection/certifying organisations, one should note that certain weaknesses are apparent in the way these social agencies conceive their role in the elaboration and implementation of a sound biological agricultural policy under the umbrella of a post-1992 agri-environmental institutional framework. I will discuss this issue in connection to some particularities, which characterise the development of biological agriculture in Greece.

Particularities of biological agriculture development in Greece

Greek biological agriculture developed unevenly considering the area of land certain cultivations occupy and its geographical distribution. Three cultivations, as Figure 1 shows, account nearly for 82% of the occupied areas. These are olive trees (63.8%), vines (10%) and citrus trees (8.1%). A similar picture is depicted in Table 2, which summarises the distribution of biological cultivations per region up to the end of 1999, and Fig. 2 in which the distribution of biological cultivations per prefecture appears. Two are the main conclusions. First, only three regions, namely Peloponissos, West Greece, Crete and only 10 out of 54 prefectures account for nearly 60% and 64% respectively of the total agricultural land covered with biological cultivations.



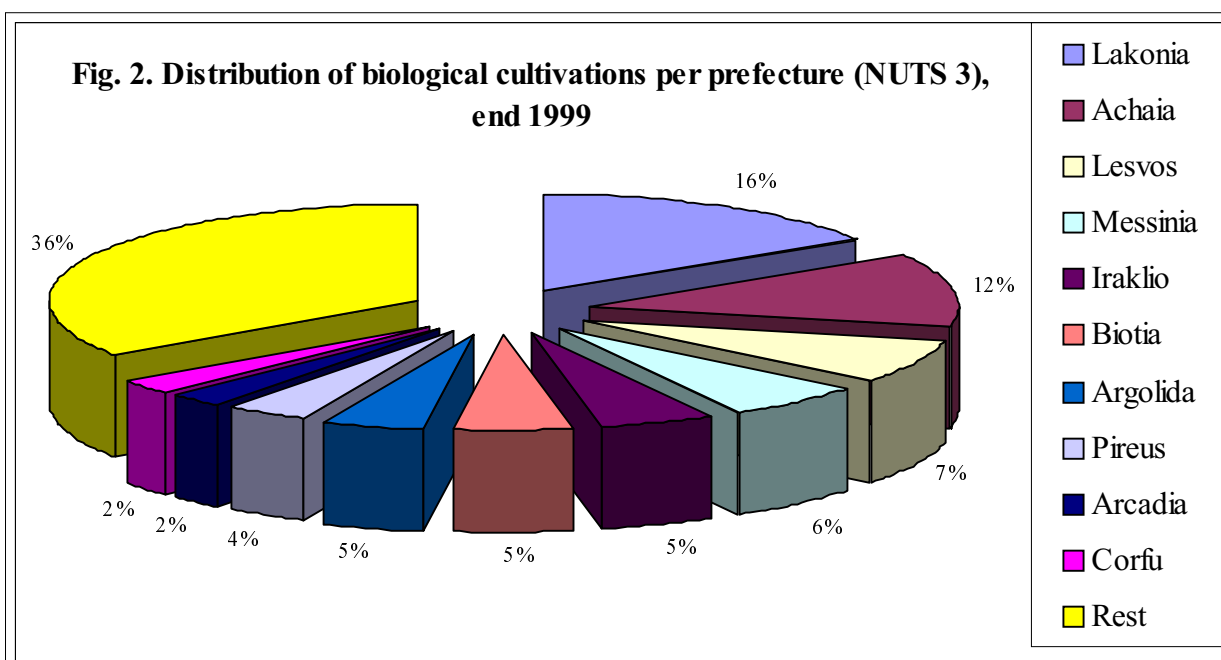
Source: Ministry of Agriculture, Inspection and Certification Organisations
DIO's Estimations

Second, from this total sum of biologically cultivated land, according to DIO's data set (restricted to areas controlled and inspected by them), only 31.8%, that is 3,284.2 ha can be labelled and thus marketed as "biological product" receiving prices corresponding to their highest cost of production. This is especially important for exports since foreign markets require products which are fully biological and the quantities offered for that purpose are too small. Products belonging to the transitional stage 1 and 2 (both bears a single label) amounting to almost 52% of the total cultivated areas can not reach a sufficient level of prices restricting themselves in the national market. For the so-called "under control" products, which accounts for almost 16% of the total there is no market outlet as they are still on the under control stage (less than 12 months in the process to get into biological cultivation) they are not entitled to a label. Consequently the total amount of biological products having access to markets and more importantly to international ones are quite limited.

Table 2. Distribution of biological cultivations (in ha) per region (NUTS 2), end 1999

Regions	Biological product	Transitional Stage.1	Transitional Stage.2	Under Control	Total Sum	%
East Macedonia And Thrace	17.2	7.4	50	90.4	165.1	1.6
Attiki	90.7	46.7	324.6	106.4	568.4	5.5
North Aegean	228.8	159.6	339.9	161.8	890.1	8.6
West Greece	623	573	290.4	149.8	1636.2	15.8
West Macedonia	7.5	8.7	23.9	10.9	51.1	0.5
Ipiros	14.7	64.5	22.8	212.7	314.6	3.0
Thessaly	71.4	67.1	67.5	37.7	243.7	2.4
Ionian Islands	274.4	50.4	132.6	44.8	502.1	4.8
Central Macedonia	90.1	60.7	53.5	154.6	358.9	3.5
Crete	314	283.6	417.6	114.8	1129.9	10.9
South Aegean	50.6	15.4	25.3	23.9	115.3	1.1
Peloponissos	1116.9	595.4	1307.7	481.3	3501.3	33.9
Central Greece	384.7	208.8	170.6	82.1	846.1	8.2
Total sum	3284.2	2141.2	3226.3	1674.1	10325.8	100

Source: DIO's estimations restricted to areas controlled and inspected by them.



Source: DIO's estimations restricted to areas controlled and inspected by them.

The data presented above allow a better understanding of Greek biological production particularities. According to experience gained so far, three factors play a decisive role in the development of biological agriculture in Greece. These are: technological know-how, economic support and market. For some experts on the field, although these factors are interrelated, technological know-how seems to weight more than the others (Sgouros 1999). In the case of olive tree cultivation Greek entomologists have gain international recognition and experience in the use of different traps against the main pest of the tree, *Dacus oleae*.

Furthermore, as it was referred before, one of the first attempts to produce biological product on an entrepreneurial scale starts in 1986 at the region of Peloponissos (Messinian Mani) by an Austrian processor and merchant exporting olive oil to West and Central Europe. Since then, as a result, a quite substantial technical expertise has been gained since then concerning a cultivation which in its traditional version is a typical example of low inputs, extensive type Mediterranean farming system. This Austrian processor, who has migrated to Mani and lives there, organised and trained local producers to biological cultivation and undertook the processing and marketing of the final product. Nowadays olive oil of Messinian Mani has gained a reputation in European markets and now attempts to penetrate in the other side of the Atlantic.

Financial support through EU Reg. 2078/92 seems to play only a complementary role to this success, and this cannot be underestimated especially in the cases of marginal farmholdings. Marginality in these areas mainly results from the small size (50% with no more than 2 ha) and high fragmentation (in average 10 plots per cultivated unit) of farmholdings. Financial support could be of great importance to less favoured areas. As an indication, it should be stressed that in one semi-mountainous (height 500 m.) community, Saidona, where the pest *Dacus Oleae* (because of the height) does not affect olive fruits, only 5 farmers are non participants to the scheme. The rest (63 or the 46% of the total number of biological cultivators at the prefecture) occupy 82 ha or the 30% of the total land of biological olive cultivation at the prefecture of Messinia (Christofilopoulos 1998). Similarly, in the island of Paxoi (Ionian Sea) biological cultivation of olive trees occupies 12% of the total agriculturally utilised area.

Conclusively, I think that olive biological production in Greece is a perfect example showing that a working interrelation of technical knowledge, economic support and competent marketing are the prerequisites for the establishment of a competitive alternative route to conventional agricultural modernisation.

To some extent the same can be said for biological vine cultivation. Out of the three productive orientations, winemaking, table consumption and currants, the last one have built up a significant tradition as first attempts started back at 1982

in Egialia. During all these years agronomic knowledge improved while a satisfactory to both parties (the local Co-operatives Union and a Dutch firm) commercial agreement has worked well.

The expansion of winemaking varieties of vine was mainly supported by state agencies (MoA and National Organisation for Small/Medium Enterprises and Artisan) providing economic incentives for building new wineries under the sole, in practice, prerequisite that they will process biological products. Other reasons accounting for this expansion was the particularly high compensation per ha given to the participants of the Reg 2078/98 scheme for biological vine cultivation. But above all, I think, the most important factor is the strong will of winemaking (often) "petty producers" to improve the quality of their raw material. This meant a better knowledge of the agronomic practices applied on the vineyard combined with the objective set by them for lower yields of the highest quality.

In the case of citrus trees biological cultivation, its expansion can be explained on the basis of the unusually high support initially offered to this production-maybe because of the severe market crisis the sector was facing under Reg. 2078/92 scheme for biological agriculture. Until 1998 no significant commercial activity had been taken place but since then and because a substantial volume of production was already available for disposal, remarkable exports to Western Europe begun in satisfactory prices. So aid schemes, in that case, played the role of subsidising the formation of a size of production big enough to make possible commercial activities in comparably higher prices than the ones achieved by conventional cultivation.

But not only success stories are interesting. Cotton, the vanguard of modern Greek agriculture with more than 400,000 ha of (highly subsidised) conventional production accounts for only 0.9% of the total area biologically cultivated in Greece. Why this poor performance? Attempts started as early as 1990 in East Macedonia and Thrace region. But between 1996-1998 biological cotton produced in Greece did not find a market to be sold and the whole enterprise was abandoned.

A number of reasons could explain this failure. Among them the target set from the beginning was to attain in short time big volumes of production without paying enough attention to farmers information and the consultation of experienced experts. The foreign merchant who, with his local representatives, undertook the responsibility to organise biological cotton production in a commercial scale, failed to meet the requirements of such an innovative project (Fantermissen 1998).

Another attempt in the prefecture of Viotia (Central Greece) started by a German firm in 1994 on 262.5 ha offering better prices for biological cotton and technical aid to the 76 participants of the project. Although no significant technical problems appeared, with the exception of weed management most, farmers did not conform to their obligations set by the inspection and certification organisation and the

product remained unsold (Yiataas 1998). The whole project was abandoned in 1997. To my interpretation, the main reason behind this failure is, in both cases, not only bad management and poor informative practices followed by the organising agencies, but also the unusually high subsidies secured to conventional cotton production, for almost more than two decades now, without any cross compliance requirement for damaging the environment.

To this end, I would like to underline that the rate of biological agriculture development in Greece is slower than expected because of many factors and not exclusively because of state policies as the majority of biological cultivators and people of the inspection and certification organisations tend to believe.

Notwithstanding the validity of these claims, the responsibilities of the MoA remains intact. But we should also bring into the picture some other factors influencing the expansion of biological agriculture. One of these, I think, is of paramount importance. To put it in few words, agricultural policy network (policy makers, politicians, organised professional interests, co-operatives, individual farmers) in Greece lacks a cohesive and consistent vision of post-1992 rural development. In the case of agri-environmental policy, the delays in submission and approval of schemes led to their limited implementation and, as a result, to limited absorption of the allocated resources.

The objectives regarding cultivated areas have remained very limited. Numbers of farm holdings and their land that has been included in the schemes is, compared with that of the other member-states, exceptionally small. So, it is very difficult to accept that so far the Greek agricultural sector would be influenced by agri-environmental policy. The MoA began to enact AEP more because they were considered as supplementary source of income for farmers than because the Ministry was convinced of the necessity of such programs. Farmers considered AEP as a solution to the difficulties they were encountered with the cut of subsidies for certain products (i.e. cotton) (Louloudis et al 2000).

On the other side, the situation of environmental NGOs is not any better. Biological agriculture supporters encounter Reg.2078/92 as if it refers almost exclusively to the biological agriculture scheme. Thus their assessment of the recent shift of the CAP towards agricultural practices compatible with the protection of the environment concerns mainly the implementation of biological farming practices.

Furthermore, the expected outcomes from the implementation of the Regulation account mainly to the development of biological agriculture at the European level. This, I believe, is a rather narrow view on the broader trends in the "greening" of the CAP. A prominent example of this attitude is their relative indifference about extremely important EU environmental policies concerning the rural space. Implementation of environmental Directives 92/43 (Habitat Directive) and 91/676 (Nitrates Directive) has suffered in Greece at the hands of a bureaucratic

worldview. The success of these highly important Directives for a reconceptualisation of rural space and the role of farmers in it is dependent on their integration with agri-environmental policies (e.g. Reg. 2078/92). The political process for such an integration is still lagging and for this delay the whole agricultural policy network is responsible, not only the state apparatus.

Concluding remarks

Judging from the hectarage it covers, biological agriculture in Greece is still a marginal activity. But under the combined effects of recent food crises, which have discredited the conventional agro-food chain, and the post 1992 change of CAP architecture for building up a more sustainable rural development, biological agriculture becomes a promising way out of the impasse both producers and consumers face these days.

There is an additional reason for this optimism. Social and private actors either as producers or processors seem to undertake an important role on the formation of the first links between biological production and the market. This is all too important as in Greece, at least for the last three decades, development and modernisation of agriculture was almost exclusively led and patronised by the state. In the case of biological agriculture the first producers mainly of urban origin and well educated were also the defenders of a new relation between man and nature, an alternative "way of life", based on conservation and sustainability principles.

Given that, in early 1980s, these ideas were marginal to Greek society some Europeans either as individuals or as businessmen not only supported this ideology but also showed that these pioneering attempts in agriculture could have an economic interest. Representatives of the private sector performed, in some cases, the role of driving force for the development of biological farming even before EU set regulatory norms for it. So they collaborated with the central and regional headquarters of the MoA in order to get things done and to overcome certain bureaucratic obstacles. Introduction of EU Regulation 2092/91 obliged a rather indifferent if not hostile state to respond with delay to the establishment of an office in its headquarters for planning and monitoring the implementation of the above regulation. On the other hand the MoA motivated the foundation of the first inspection and certifying organisations as well as a professional society of biological cultivators.

It is not unimportant to note current or former members of the weak but nonetheless existing ecological movement played first roles in these initiatives. These organisations beyond the dissemination of technical and administrative information across the country played a crucial, though not always decisive, role to the institutionalisation of biological agriculture, as the responsible state agencies remained and, to some extent, are still reluctant to collaborate with them.

Institutionalisation became a controversial issue in the aftermath of 1995, when biological agriculture was included among the horizontal schemes subsidised by Reg. 2078/92. The sudden increase in the number of farmers and cultivated areas along with the culminating crises of the conventional food system raised the interest of the state to put a more firm control on this new agricultural activity and especially on the procedures followed for inspecting and certifying its products under the auspices of Reg. 2092/91.

According to latest information the areas of responsibility between state's agency OPEGEP and the private/non profit organisations officially entitled to inspection and certification of biological products seem to have been arranged following an agreement between the interested parts. But tension may reappear, as important details on the labelling and the marketing of biological products still remain unsolved. Most likely, the MoA and its traditional allies in the agricultural policy network would not consent easily to the distinctiveness of biological farming, as the latter will grow in importance and weight within the agricultural sector. This means that a lot should be done from the biological farming community towards a better organisation and representation of its collective interests on all levels, from the farmer to the society, the state, the market via the general agricultural institutions.

The historical record of biological farming in Greece points out three interrelated developmental factors. Scientific-technological knowledge, state support, market access. Biological agriculture developed in specific crops (e.g. olive trees) and geographical areas where (e.g. Peloponissos) the transition from conventional to biological production was not a difficult process since, in certain communities, the traditional olive cultivation was not far from the standards set by EU norms and significant scientific-technical and empirical knowledge has been accumulated over the years concerning the same cultivation.

State support is considered as the driving force behind the recent expansion of biological farming. I would argue that a more detailed interdisciplinary study (addressing technical, socio-economic and cultural issues) is needed here because in a case by case study the impact of subsidies differs greatly. Olive cultivation in Mani would have expanded even without subsidies while the latter were necessary for the survival initially and the expansion, later on, of citrus plantations. On the other hand, the case of cotton shows that existing high subsidies for conventional farming had detrimental effects on the attempted conversion to biological farming.

In the main text I have argued that state support was essential for the survival in certain cases (e.g. olive trees cultivation in the region of Southern Peloponissos) of marginal farmholdings). I would have add here that since the introduction of EU Regulation 1804/1999 in last August, which sets the norms for biological animal production, a tremendous challenge for the development of sheep and goats

sector exists especially in those areas which are considered as marginal. Areas under low intensity systems (mostly in LFAs) occupy 5,600 mio ha out of the 9,183.3 mio ha of the total land surface under agriculture. In these areas almost 70% of the total population (about 14 million heads) of sheep and goat breed under low intensity systems. Provided that adequate technical (biologically produced stockfeed availability, genetic improvement, better nutritional and hygienic standards, proper slaughterhouses, farmers' training e.t.c.) and financial support are offered by the state the conversion of these systems to biological ones is a promising perspective for the overall development of LFAs. An additional advantage, at least for some of these areas, is the existence of local markets for meat products of high quality and demand as the bonds of urbanised consumers with their village of origin remain live and strong.

Market access is the new major challenge for biological farming in Greece. Volumes of production are small, number of processors is less than 100 (but increasing) and farmers' collaboration is minimal. Adaptation to conditions prevailing in biological farming (as it is almost impossible to find 100 producers at the same locale) of EU Regulation 2200/91, supporting "producers groups", could result to significantly lower cost of production and improve access to market and terms of trade for biological products.

Finally, education, training and information are urgently??? needed not only on technical or administrative issues but also for the understanding by all parts concerned that biological farming should be an integral part of the new EU rural development policy (Reg. 1257/1999 but also Dir. 92/43, Dir. 91/676) and not another way of supporting farmers income. Funding of agri-environmental measures raised from about 34 mio ECUs (1992-1999) to 400 mio EURO (2000-2006). With this money a lot can be done. The informal network of agri-environmental policy which has already been established through the links of certain officers of the MoA with members of academia, NGOs, private consultants, producers and businessmen should address the current technical or, more importantly, the future strategic concerns of the expanding field of rural policies.

From a public administrative standpoint the performance of the MoA should be upgraded. DSPEP and Office for Biological Products personnel should be doubled at the very least and improve their co-ordination with the Ministry of Environment Spatial Planning and Public Works responsible for the important EU directives on "habitats" and "nitrates pollution". Collaboration with extension officers at prefectural level should be strengthened, thus obliterating its current bureaucratic character. The committee monitoring agri-environmental policy progress should be convened as soon as possible. Last but not least, the political leadership of the MoA should intervene actively to shape national expectations of agri-environmental policies. I consider it as an advantage that in biological farming, par excellence, the social and private actors involved constitute a civil society very keen to collaborate with state agencies in order to promote their common interests.

References

- Anastasiadis M., Kiriazopoulou A., Laskari F. and S. Sgouros (2000) File: Biological Agriculture. DIO Journal for ecological agriculture. 13-January, February, March-pp. 21-27 (in Greek)
- Anomeritis G. (2001) Interview to the newspaper I Kathimerini 8.4.2001 (in Greek)
- Beopoulos N. (1997) Environment and economic development in the agricultural space: the contribution of biological agriculture. The Greek Review of Social Research, 92-93 (A'-B') pp. 183-204 (in Greek)
- Christofilopoulos N. (1998) Implementation of EU Regulation 2078/92 in the prefecture of Messinia. DIO Journal for ecological agriculture 7-July, August, September-pp 31-36 (in Greek)
- Fantersmissen N. (1998) Biological cultivation of cotton in the prefecture of Rodopi. The history of a drama with a "biological" background. DIO Journal for ecological agriculture. 47-49 (in Greek)
- Koutsouris A., Alexopoulos G. and Kantaros I (2001) Biological Agriculture. Present Situation and presuppositions for development. A study in the framework of Programme RIS+ of Sterea Ellada's Region. Institute of Regional Development (co-ordinator), Panteio University pp. 27-38
- Louloudis L. Arachoviti E. and D. Papadopoulos (2001) Interaction Between State and non-state Actors in the Implementation of the CAP Agri-environmental Measures, in K. Eder and M. Kousis (eds) Environmental Politics in Southern Europe. Actors, Institutions and Discourses in an Europeanising Society. Kluwer Academic Publishers (Dordrecht, Boston, London) pp. 277-298
- Louloudis L. Beopoulos, N. and G. Vlachos (2000) Greece: Late Implementation of Agri-Environmental Policy, in H. Buller, G. A. Wilson and A. Holl (eds) Agri-Environmental Policy in European Union. Ashgate pp. 71-94
- Lowe P., Brouwer F. (2000) Agenda 2000: A Wasted Opportunity? in F. Brouwer and P. Lowe (eds.) CAP Regimes and the European Countryside. CABI Publishing pp.321-334
- Michelsen J. (2001) Recent Development and Political Acceptance og Orгнаic farming in Europe. Sociologia Ruralis 41 (1) pp. 3-20
- Sgouros S. (1999) The development of biological agriculture. DIO Journal for ecological agriculture. 9-January, February, March-pp 29-40

Sgouros S. (2000) The state inhibits biological agriculture. DIO Journal for ecological agriculture, 15-July, August, September-pp. 41-45 (in Greek)

Tovey H. (1997) Food, Environmentalism and rural sociology. On the organic farming movement in Ireland. Sociologia Ruralis 37 (1) pp. 21-37

Vlontakis G., Desyllas M. and M. Mpisti (2000) Elements of Biological Agriculture. Ministry of National Education and Religions. Educational Institute. Organisation for the Publication of Education Books, pp. 43-53 (in Greek)

Yiatas K. (1998) The production of biological cotton on Viotia. DIO Journal for ecological agriculture. 6-April, May, June-pp. 44-46 (in Greek)

APPENDIX

Map. Agri-environmental schemes implemented in Greece under EU Regulation 2078/92



Source: Louloudis et al., 2000

