



Viewpoint

Organic farming without organic products

Charissis Argyropoulos^a, Maria A. Tsiafouli^{b,*}, Stefanos P. Sgardelis^b, John D. Pantis^b^a DIO-Certification Body, Ecological Park, 58300 Kria Brisi (Pella Prefecture), P.O. Box 5, Greece^b Department of Ecology, School of Biology, Aristotle University, 54124 Thessaloniki, U.P.B. 119, Greece

ARTICLE INFO

Article history:

Received 27 April 2012

Received in revised form 8 November 2012

Accepted 10 November 2012

Keywords:

Organic agriculture

Organic farmers

Organic label

Monitoring procedure

Regulation 2092/91/EEC

Subsidies

ABSTRACT

The aims of organic farming are to protect: (a) the environment, by using organic management practices that do not have the adverse effects of conventional practices, and (b) the health of consumers, by the provision of organic products. Using the Greek organic farming sector as an example, it is shown that while this sector is well-developed, it fails to provide the market with labeled organic products. While farmers follow the rules of organic management, thus achieving the first aim, products from just one third of organically managed areas are labeled, thus failing the second aim. Several phenomena indicate an unbalanced development of the organic agricultural sector in Greece, with respect to both farming and marketing. For example, organic green fodder is grown 10 times more than demanded for organic livestock farming. Furthermore, while many other products are imported to cover the country's demand for organic produce, Greek (unlabeled) organic products are sold as conventional. As also documented in most other European member states, financial support to farmers is calculated based on the amount of land being organically cultivated, rather than the overall performance of organic farms. This study highlights the importance of establishing a monitoring procedure that evaluates the performance of organic farming systems, including the outcome of labeled organic products. The development of a sustainable organic agricultural sector, where farming, marketing, economy, and knowledge are interconnected, requires the development of research toward implementing a more sophisticated approach of financing organic farming.

© 2012 Elsevier Ltd. All rights reserved.

Organic farming

The demand for safe food, in parallel to increased environmental awareness, has resulted in an increasing demand for organic products. Organic agriculture has been found to enhance soil fertility and increase biodiversity (Mäder et al., 2002). For example, one meta-analytical study, comparing conventional and organic farms, showed that the latter tend to have higher soil organic matter content and lower nutrient losses (Tuomisto et al., 2012). After conversion to organic farming, simulation models predict an increase in soil carbon sequestration in the form of soil organic matter during the first 50 years, which becomes stabilized after about 100 years (Foeroid and Høgh-Jensen, 2004). Therefore, it is expected that organic farming systems should be able to combat climate change, allowing food supplies to be secured (Jordan et al., 2009). Furthermore, Schmid and Sinabell (2006) reaffirm that organic food is not only free of chemical residues, but is also free of genetically modified organisms, with consumers receiving this second attribute for

free. Hence, organic agriculture might be considered a powerful “tool” within the framework of natural resource management, territorial development, and viable food production, which represent the three broad objectives proposed for Common Agricultural Policy (CAP) reforms after 2013 by the European Commission (2011).

Two decades ago, the European Union (EU) adopted Regulation 2092/91/EEC “on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs” to promote a holistic approach to organic farming. This regulation (along with more recent decrees, such as 2078/92/EEC and 1257/99/EC) contains two main objectives: (a) the protection of the environment via organic management practices, and (b) the protection of consumer health via the production of organic products. “Organic farming” regulations are implemented by EU Member States mainly through the provision of financial support to farmers according to the size of the cultivated organic area (Schwarz et al., 2010). There has been an increase in the areas under organic management in most EU countries, which is probably related to the direct effect of financial support on this sector.

At international level the Federation of Organic Agricultural Movements (IFOAM), driven by the principles of organic farming, which are “health”, “ecology”, “fairness” and “care”, aims at leading, uniting and assisting the organic movement and its full diversity (IFOAM, 2005). In 2008, the global share of organic area to the total

* Corresponding author. Tel.: +30 2310 998997; fax: +30 2310 998379.

E-mail addresses: prassinoktima@gmail.com (C. Argyropoulos), tsiafoul@bio.auth.gr (M.A. Tsiafouli), sgardeli@bio.auth.gr (S.P. Sgardelis), pantis@bio.auth.gr (J.D. Pantis).

utilized agricultural area (UAA) was 1.4% (35 million ha, 1.4 million organic producers); however, the EU held first place, with a share of 4.4% (Willer et al., 2008). Data about organic agriculture, such as the size of areas under organic management and the number of organic farmers, are becoming available for more countries; however, data collection and processing need improving in many cases (Willer et al., 2008; Eurostat, 2012). To the best of our knowledge, data or studies that connect organic areas to the (certified) organic products being produced are not currently available. It seems that procedures to monitor the production of subsidized organically farmed areas are absent. Hence, it remains unclear whether the strategy of subsidizing organic farming based on the amount of cultivated area alone is effective, particularly when considering the quantity of labeled organic products that are available to the market.

Greece is an important country with respect to organically cultivated land (4.1% of the total UAA in 2007), and has one of the highest rates of increasing organic areas in the EU (63% from 2005 to 2006). Furthermore, according to Willer et al. (2008), Greece is one of the 10 countries worldwide that has the largest number of organic producers. However, Greek organic products are very difficult to find in the market, and sales are extremely low compared to other countries with similar expanses of organic area (Willer and Kilcher, 2009). This contradictory finding motivated us to question whether the two goals of organic agriculture, that is the protection of the environment and the provision of organic products, are being equally fulfilled.

Organic farming in Greece

To profile the development of the Greek organic sector, we provide data about the organically cultivated areas and the number of farmers involved (Fig. 1), in addition to the main organic products (Fig. 2). Following an initial phase (1993–2003) of slow but constant increase, there was a rapid increase in organically cultivated areas (OCA) after 2004. The contribution of the OCA, as a percentage of the total cultivated area, increased from 1% in 1993 to about 4.5% after 2006. The latter percentage is close to the European average; however, if pastures are included, this figure rises to 7.2%, which is one of the highest percentages for organic land in Europe (Willer et al., 2008). The increase in OCA after 2004 is related to a substantial increase in the number of farmers entering

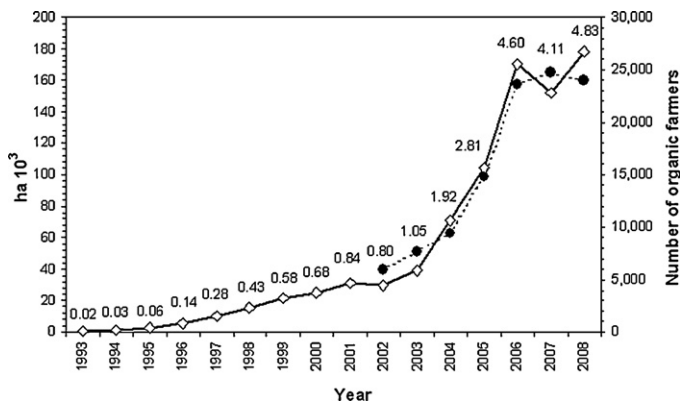


Fig. 1. Area under organic agriculture in Greece from 1993 to 2008 (diamonds) and the number of organic farmers from 2002 to 2008 (circles). Numbers above the lines indicate the percentage share of organic farming to the total utilized agricultural area (UAA) of the country (organic pastures are not taken into account here). Data: (a) 1993–2001, from the active certification bodies of DIO, Physiologiki, and BioHellas at this time, and (b) 2002–2008, from the Organic Sector of the Hellenic Ministry of Rural Development and Food (HMRDF, 2011) regarding all 11 active certification bodies. To calculate the share of organic farming over the total UAA, data were obtained from the Hellenic Statistic Authority (ELSTAT, 2011).

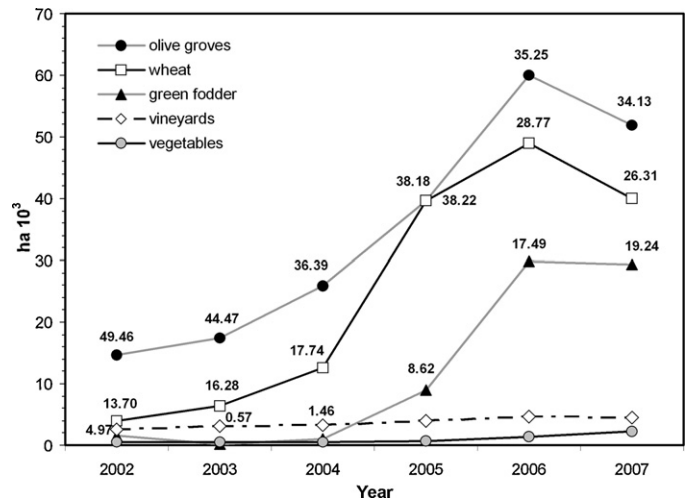


Fig. 2. Amount of area with the most important crop types in Greece from 2002 to 2007. Numbers above lines indicate the percentage contribution of the specific crop area to the total organically cultivated area in a given year. Data obtained from the DIO (2011).

the organic sector (Fig. 1; 9400 farmers in 2004 versus 24,700 farmers in 2008). Hence, the increase in area is mostly due to the entry of new farmers to the sector, rather than an area expansion of existing organic farms. This effectively changed the distribution of land allocated to different crop types in Greece (Fig. 2). While the areas allocated to vineyards and the production of vegetables remained more or less constant from 2004 to 2007, olive groves and areas allocated to wheat production increased by a factor of two and three, respectively. During the same period, the area cultivated with green fodder (mainly *Medicago sativa*) increased by a factor of 28 (data derived from HMRDF, 2011).

Based on these datasets, it is apparent that the EU policy, aiming to increase OCA, has been successfully implemented in Greece. The farmers responded positively, with 95% of subsidized and controlled areas being operated according to the rules, while their products passed the quality standards (DIO, 2011). Subsidies represent a strong tool for the implementation of policies; however, as subsidies were distributed per hectare of cultivated land, regardless of the type or the quantity of crops being produced, this strategy changed the distribution of land allocated to different crop types in Greece. The new farmers entering the sector after 2004 were mostly green fodder and wheat producers who were not much interested in obtaining the organic label for their products. In Fig. 3, we provide data about the number of farmers that passed the certification procedure and the corresponding number of farmers that applied to label their product as organic. The data are based on farmers registered with the DIO certification body. DIO controls most of the organic areas in Greece; including, 39.7% of olive groves, 19.2% wheat, 36.2% green fodder, and 53.1% vineyards, among others. These areas are distributed throughout the country; hence, the data provided here are considered representative for the organic agricultural sector of the whole the country. Thus, we consider the data as being indicative of the overall trend in Greece.

While the number of registered organic farmers increased rapidly after 2004, the number of those who applied for a label increased at a much lower rate; consequently, the proportion of farmers applying for organic labeling decreased over time. Vegetable crops obtained the greatest interest for being awarded the organic label (in over 70% of the respective areas), whereas green fodder and wheat received the lowest interest (just 13 and 18% of the respective areas) (DIO, 2011). In comparison, olive and grape producers were interested in obtaining the organic label for 40% of

Download English Version:

<https://daneshyari.com/en/article/93269>

Download Persian Version:

<https://daneshyari.com/article/93269>

[Daneshyari.com](https://daneshyari.com)