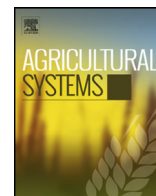




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Organic agriculture values and practices in Portugal and Italy

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ABSTRACT

Most definitions of organic farming emphasise a holistic approach that combines quality production with sustainable practices and positive impact on resource conservation, biodiversity and animal welfare. Its founding values were also connected to small-scale production, minimisation of external inputs use, diversification and short market circuits. In the last two decades, organic farming has grown very rapidly, resulting in the subordination of its values to market forces. There has been a greater specialisation, an increase of scale, the involvement of large multinational corporations and the inclusion in global trade. This conventionalisation process and the connected certification standards, primarily focussed on banning the use of pesticides and chemical fertilisers, may weaken the vision of organic farming as a more sustainable alternative to conventional farming.

This paper aims to identify the factors that influence the choice of organic farmers for more sustainable practices that go beyond the strict limits imposed by certification. A probabilistic model was estimated using survey data collected from 352 Italian and Portuguese certified organic farmers. The results show that women and farmers longest engaged in organic farming are more likely to adopt sustainable practices. They also indicate that farm size, land ownership, the existence of some types of complementary activities and the sources of information used by farmers affect the adoption of such practices.

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1. Introduction

It cannot be said that the concept of organic agriculture is fully consolidated. There are several perspectives that offer different insights, may vary over time and are, in general, not reconcilable. The work of [Alrøe and Noe \(2008\)](#) is based on the comparison of three perspectives that, according to them, are sufficiently distinct to capture much of the heterogeneity involved in what organic agriculture is and what makes it move, namely, organic agriculture seen as an alternative in opposition to the mainstream; organic agriculture seen as a self-organising system based on common organic values; and organic agriculture seen as a market opportunity. The first and third perspectives are in general incompatible, while the second has points of contact and rupture with the other two.

Other authors use different typologies. For instance, [Fairweather \(1999\)](#) suggests that organic farmers can be of at least four types: Organic Hopefuls, Frustrated, Pragmatic, and Committed, each having a shared viewpoint but giving expression to it in different ways.

Leaving aside more radical views, we are particularly interested in the dialectics of preservation of a system based on common values and the integration in the global market.

According to [Padel et al. \(2009\)](#), the organic agriculture movement is value-based by tradition and core values influence both theory and practice. Those authors show, through an extensive literature review, that there is not substantial dissonance between definitions among authors and organisations involved in organic farming. The core values, as they are described in the [IFOAM \(2005\)](#), specifically the Principles of Health, Ecology, Justice and Precaution, are, in whole or in part, present in most definitions of organic farming. As an example, [FAO/WHO \(1999\)](#) defines organic agriculture as a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. The European regulation¹ also incorporates these principles in its definition of organic farming by stating that it is an overall system that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method that simultaneously fulfils the needs of a specific market by delivering public goods, contributing both to the protection of the environment and animal welfare as well as to rural development.

Given that in both theoretical and political discourses the basic values of organic farming are relatively consensual, the challenge

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¹ Council Regulation (EC) No 834/2007 of 28 June 2007.

remains to understand how it can grow, incorporate new actors and technologies and integrate global markets without losing internal coherence and without deeply departing from these core values, since in the market perspective organic farming is no more than a label based on standards that specify conditions of production, processing, certification and control, designed to meet the needs of a market niche that values these features. The existence of alternatives is something positive for the market and in this perspective certification is a key element in organic agriculture.

From the perspective of common values, the existence of certification can also be advantageous because, as stated by [Alrøe and Noe \(2008\)](#), it allows for greater consumer participation in the re-production of a shared meaning of organic farming through their consumption choices. In this sense, the adjustment between principles and rules is the central concern, while the market is interested in principles only if they can be used for labelling purposes.

What holds in practice, as described by some authors ([Darnhofer et al., 2010](#); [Lockie et al., 2006](#); [Padel, 2007](#); [Padel et al., 2009](#)), is that it is very difficult to abide by the values and principles set up in certification standards because there is no single and exact interpretation of these values and because some of them, such as holism and ecological sensitivity, are difficult to capture through indicators that can be used in control and certification procedures. In the case of the European legislation, although most values of organic farming are mentioned, their transposition to the certification rules is only partial. Issues related to biodiversity, nutrient recycling and social values are practically excluded. Standards are almost limited to identifying allowed and prohibited substances at the expense of control over the process, which tends to lead to simple input substitution and to the loss of agricultural practices, such as crop rotation and fallow, that are more sustainable but also more costly. The result is a form of agriculture which is called organic, but only differs from conventional farming because it uses inputs that are allowed by organic standards ([Allen and Kovach, 2000](#); [Constance et al., 2008](#)).

There is, therefore, from the perspective of common values, the fear that the failure to incorporate these values and their meaning in the regulation will give rise to the erosion of standards and practices of organic farming. This is the more likely to happen the more anonymous and globalised the market is. Hence it is clear that certified organic farming by itself does not guarantee that farmers are using sustainable practices, as suggested by [Guthman \(2004\)](#). In the context of the research project that supported the present study, sustainability is assessed based on participation and diversity at three system levels: the cropping system, the farm and the chain from breeder to farmer (plant breeding and legal aspects) and to consumer (the food supply system).

This process of rapprochement of organic farming to conventional farming has been called conventionalisation. According to [Buck et al. \(1997\)](#), pioneers in its study, conventionalisation tendencies include larger-scale production units, industrialised monocropping, increased mechanisation, hired labour, vertical integration, production contracts, regional specialisation, mass marketing, and globalisation, the latest being perceptible in the transformation over the past two decades of the organic agrofood system from a loosely coordinated local network of producers and consumers to a system of formally regulated trade which links socially and spatially distant sites of production and consumption ([Raynolds, 2004](#)). As a result organic farming moves away from its ecological matrix, its values and transformative potential.

The conventionalisation hypothesis and its empirical study have been addressed by several researchers in different parts of the world. A comprehensive review of the literature may be found in [Constance et al. \(2008\)](#) and [Darnhofer et al. \(2010\)](#). For the European case we highlight the work of [Banks and Marsden \(2001\)](#), [Best \(2008\)](#), [De Wit and Verhoog \(2007\)](#), [Luetchford and Pratt \(2010\)](#), [Lynggaard](#)

(2001), and [Zagata \(2009\)](#) for, respectively, the UK, Denmark and Belgium, the Netherlands, Germany, Spain and the Czech Republic. From these studies it can be concluded that, although some symptoms of conventionalisation of organic production start to appear in Europe, it does not seem to be the dominant trend for now. However, even if conventionalisation of organic farming in Europe is not evident, one must recognise that the same does not happen at the distribution level. Similar to what happens in the conventional food retail sector, supermarkets are now the main outlet for organic food ([Banks and Marsden, 2001](#)).

From a political point of view, conventionalisation can be problematic since, as remarked by [Darnhofer et al. \(2010\)](#), organic agriculture has benefited from public support to reward farmers for the public goods they produce. In fact, most EU countries offer under Axis 2 of their rural development programmes specific area payments for organic farming and some of them have also implemented policy measures addressing organic farming under Axis 1 and Axis 3. Such policies make less sense as organic farming increasingly resembles its conventional counterpart. On the other hand, as mentioned by one of the referees, consumer support and willingness to pay for organic products may also be threatened.

It therefore seems clear that having its production certified as organic does not guarantee that a farm is sustainable and has a positive impact on resource conservation, biodiversity and animal welfare. Any system classified as organic can be as very intensive in the sense that it can rely heavily on external inputs. As stated by [Padel et al. \(2009\)](#), the practice is not always in line with the fundamental principles of organic farming. This mostly affects agro-ecological system values such as biodiversity and nutrient recycling as well as engagement in social concerns. With this in mind and using as starting point the conventionalisation hypothesis, this study seeks to identify the profile of organic farmers more likely to adopt practices that are consistent with the values of organic farming. Drawing upon the estimation of an empirical model based on a survey conducted in two European countries where this issue has not been deeply addressed, Portugal and Italy, the authors investigate how a set of dependent variables related to farmers, farming system, and social network determines the probability of a certified organic farm being in line with the core principles of organic farming, the latter being measured in terms of crop diversity, reliance on internal inputs and engagement in local markets.

2. Methods

2.1. Data

The following analysis is based on a survey of 352 certified organic farmers, 182 Italian and 170 Portuguese, held between 2010 and 2012, using a fully structured questionnaire. The data used in this paper were originally collected as part of a larger research project with a different focus. Several survey methods were applied. In Italy most of the data was collected through personal interviews, combined with telephone interviews. In Portugal, the survey was mainly administered online. The list of all certified organic farms was compiled using address data supplied by the government authorities concerned with organic certification. To start with, Portuguese organic farming organisations were contacted by e-mail to be informed about the research project and the objectives of the survey and be asked to disseminate information to their members about the survey and the stated objectives. Then an e-mail was sent directly, thanking farmers for their participation and including more details about the purpose of the study, a link to the questionnaire and some filling instructions.

The questionnaire focussed on different aspects of farmers, farm structure (including acreage, main crops and livestock), varieties and

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