Organic agriculture as a tool of landscape management - can we learn from history?

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Abstract

Achievements of intensive farming have brought environmental and social problems, connected to a decline of mixed farm systems. Organic farming is often presented and understood as an optimal solution for this situation, because of its maximum reliance on self-regulating agro-ecosystems, locally or farm-derived resources, and the management of ecological and biological processes. Organic farming systems may also result in reductions of crop and livestock yields, which together with a rapidly growing demand for organic foodstuffs is understood as a way of solving the problem of agricultural overproduction. This contribution deals with the concept of organic farming in the sense of J. Thirsk's major phases of agricultural development. A historical analysis can identify the driving forces of diversification and its rebirth as a mainstream movement. Organic agriculture began its existence as a typical marginal approach in the 1920s and 1930s. It was the situation of the late 1990s, which made many European governments understand organic agriculture as a driving sector of farming. It is becoming more evident that the interest in conversion to organic methods is mainly market- and subsidy-driven. This means that such a system can guarantee some

environmental benefits of organic farming, which can be easily controlled by inspection bodies (e.g. reduction of agrochemical use, animal welfare). But other benefits (including landscape and nature conservation) may be endangered by a growing market demand. This is illustrated by the present situation in international trade of organic products.

Introduction

During the last two hundred years, and particularly since the middle of the 20th century, farming in developed countries has been remarkably successful at increasing food production. These considerable achievements have caused environmental and social problems, mainly connected to the decline of mixed farm systems with a high level of crop, animal and landscape diversity. The list of problems include high amounts of agrochemicals used, resulting in environmental pollution; high dependence on external inputs; reduced diversity of landscape features, fauna and flora; decline of the quality of life in many, especially marginal, rural areas (Lowe et al. 1997, Pretty 1998, Ryzskowski, Jankowiak 2002). A problem of its own is the agricultural overproduction of highly subsidised agricultural systems in the countries of European Union (Gardner 1996, OECD 2001).

Organic agriculture - a solution?

Organic farming is often presented and understood as an optimal solution for this situation. This because of its ideally maximum reliance on self-regulating agro-ecosystems, locally or farm-derived resources, and the management of

ecological and biological processes. This can be illustrated by a short quotation of Sue Stolton et al. (2000:6):

"Organic agriculture (OA) relies largely on locally available resources and is dependent upon maintaining ecological balances and developing biological processes to their optimum. The protection of soil and environment is fundamental to organic farmers (...). OA encompasses agricultural systems that promote environmentally, socially and economically sound production. These systems take local soil fertility as a key to successful production. By respecting the natural capacity of plants, animals and the landscape, OA aims to optimise quality in all aspects of agriculture and the environment."

Apart from being less dependent on external inputs, OA is often seen as a means of attaining environmentally friendly landscape management, especially in the marginal regions of rural Europe and protected areas (Lampkin 1990, Pretty 1998, Alföldi et al. 2000, Compagnoni 2000). Agriculture there cannot successfully compete with regions with more favourable soil or climate conditions and it is mainly understood as an element of multifunctional landscape (Helming, Wiggering 2003). The only international body regulating organic farming, The International Federation of Organic Agriculture Movements (IFOAM) requires in its basic standards for OA to "maintain the genetic diversity of the agricultural systems and its surroundings, including the protection of plant and wildlife habitats;(...) consider the wider social and ecological impact of the farming system" (IFOAM 2003). Unfortunatelly, the weak point of these requirements is the fact, that contrary to other part of the OA regulations, these requirements are very difficult to express in exact terms of regulations, which can be controlled, assessed, and certified.

Organic farming systems may also result in reductions of crop and livestock yields, which together with a rapidly growing demand for organic foodstuffs (FAO/ITC/CTA 2001) is understood as an environmentally, economically, and

socially desirable way of solving the problem of agricultural overproduction in the industrialised countries. After a period of a rather reserved attitude, since about 1995 organic farming has received considerable political and financial support across Europe (Conford 2001, Ryzskowski, Jankowiak 2002).

Old theme, long neglected...

It can be assumed that the expectations described above, which are derived from the present rapid growth of areas under organic management (at least in Europe) or even more from the high consumer demand for organic products (FAO/ITC/CTA 2001, IFOAM 2003), are too high for the following reasons.

British agricultural historian Joan Thirsk presents in the remarkable book "Alternative Agriculture – A History" (Thirsk 1997) major phases of agricultural development. These can be expressed in terms of "specialisation in periods of mainstream agriculture" and "diversification in phases of alternative agriculture", and result in a situation when what is called "alternative agriculture" in fact dominates the scene. A historical analysis can identify the driving forces of diversification (economics is always the main one) and its rebirth as a mainstream movement, and it may offer many similarities in what is often considered a new situation but in fact it is an old theme, long neglected.

OA began its existence as a typical marginal approach in the 1920s and 1930s (Conford 2001), and lasted this way for quite long period, despite the launching of the International Federation of Organic Agriculture Movements in the 1970s. It was the situation of the late 1990s in the EU, which made many European governments understand OA as a driving sector of farming. Both the

German and Dutch governemetrs have set a gola for OA to reach 10 percent of the agricultural lands, and to extend to to other commodities such as flowers (IFOAM 2003, van den Bulk 2003). Also on the non-European level the importance of OA is finally appreciated by FAO (2002), stating that "OA could become a realistic alternative to traditional agriculture over the next thirty years, at least at the local level".

From the perspective of Thirsk's phases of agricultural development this situation is equal to a point where the importance of mainstream agriculture is being gradually, at least partly replaced by the alternative of OA. Nevertheless it is becoming more and more evident that an interest in conversion to organic methods is mainly market- and subsidy-driven. Present extensive subsidy schemes of the EU supporting the move towards environmentally benign technologies, including OA, can result in a system which can guarantee some environmental benefits of farming, easily controlled by inspection bodies (e.g. reduction of agrochemical use, animal welfare). But the other benefits (including landscape and nature conservation) may be endangered by this trend and by the growing market demand. Why? Because the second part of Thirsk's periods of development is forgotten – in the gradually establishing situation of the well organised OA, the strong market orientation is in contradiction to the phase of "diversification" represented by agricultural cooperation and group and farmer partnerships. The system of OA subsidies can be seen as a source of its instability, and in fact the true unsustainability (Ulčák, Pall 2003). This is because farmers, whose main incentive for adopting organic methods were subsidies, are likely to return to their original routine immediatellin case of a change of the official subsidising policy. That such a change can occur, is expressed in the WTO debate on non-tariff barriers in global agricultural trade (Mahé 1997), where present European concern about the environment and ethics in agricultural production is seen only as a way to justify the new protectionism against free trade.

The present well recorded boom of consumer demand for organic products also means a growing interest of supermarkets in being able to offer a broad range of organic products. In contrast to the customers of small whole-food shops, customers in supermarkets are less likely to accept the seasonal availability of fresh products, thus creating a growing demand for imported organic products. This results in a higher environmental burden caused by fossil fuel consumption and transport, packaging and storage costs.

Consequences for landscape and nature conservation

The main conclusion derived from the above described situation is that the present period of OA growth is based on economic reasoning. The Danish rural sociologist P. Kaltoft (1999), in her review of various ethics and views of nature among organic farmers, identifies this trend as a growing "modern, rational approach to organic farming". This is in contradiction to the assumptions generally shared by rural sociologists, nature conservationists and often by the general public, that it is the rising environmental awareness of farmers, which moves agriculture slowly towards the environmentally preferred model. As Tovey (1997a) states, it is often the nature conservationists, who argue that OA is the best way of landscape management and who believe that farmers follow their reasoning. But what remains forgotten is the fact that the absolute majority of farmers perceive their role as food producers and the farm as an economic, profitable unit, NOT as a mean of nature conservation. As was stated by an organic farmer, who has been

involved in a project with strong environmental benefits in the Moravian part of the White Carpathians region (Ulčák et al, 2000) since 1997: "It is surely important to protect nature. But nothing should go too far...". This short statement summarises his seven years of experience with involvement in the project and his opinion about the assumptions frequently stated by conservationists, despite the fact that himself he is one of the founders of the project. A similar attitude was expressed by an Irish farmer, interviewed about the conservation policy and quoted by Tovey (1997b:154): "I don't think it is right at all. It's against the farmer's nature. The land is there to produce food. We're producing too much now, I suppose, but a lot of the world still can't buy food. I suppose that's the problem".

Conclusion

The present opinion about the motivation of organic farmers is that their relationship towards the nature and use of natural resources in rural space is very much shaped by the demands of the public and by the goals set by conservation experts. In this article it is argued that this opinion, often shared both by experts and the public, does not consider the importance of the farmer's self-understanding as a good economic manager, which can undermine the interest of rural landscape conservation.

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