

THE ADVENT OF ORGANIC FARMING MODELS: ANALYSIS OF THE CURRENT SITUATION AND PERSPECTIVES IN BRAZIL

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Abstract

This text analyses the development of organic farming in Brazil. It shows the great variability of social models of organic production recognised by Brazilian Law: organic, agroecological, ecological or biodynamic agriculture, permaculture etc.. It depicts how the political and social concerns in the spheres of family farming and environment caused the reorganisation of production systems, in the agricultural practices and in the new relationships with the market and with natural resources. Based on interviews with farmers and stakeholders involved in the development of various organic systems, we qualified the related models of production as well as the related social and cultural values. We also present some aspects of the historical roots of this agroecological movement and the way family farmers adapt to the new challenges of ecological production.

Introduction

Organic farming (OF) exemplifies the on-going ecologisation process of agriculture. Studying this process means exploring the procedures contemporary societies adopt to respond to the environmental problematic of development dynamics. Such procedures are not only related to production and consumers' social practices but also to the choices of different economic and social stakeholders involved in ecological networks. They also result from the increased public awareness of environmental problems and of the hazards of artificially produced food (Abreu, 2002). In Brazil, the debate on agriculture and environment began in the 70s, following the publication of "Silent Spring" (Carson, 1968). This work affected public opinion and helped expand the environmentalist movements. It also contributed to knocking down a prevailing cultural vision of unlimited growth and to generating conditions that would make the establishment of new relationships between environment and agriculture possible.

In Brazil, the development of OF, especially in the last three decades, entailed the growth of organic production in both internal and external markets. With a cultivated area of 842,000 ha, this sector represents a market that almost reached USD 1 billion, in 2003. 19,000 certified organic properties and 174 certified organic farms plants are scattered throughout the country. Brazilian OF, which grows at an annual rate of 20%, has already a significant presence in the domestic market and is clearly expected to expand its international market share. OF concerns not only family agriculture but also large companies. The growing demand for organic products is related to the fact that domestic and foreign consumers are increasingly concerned about the quality of foods and the impacts of agriculture on the environment. This expansion can also be attributed to the development of a market that is fairer to both producers and consumers, in addition to creating jobs.

There is an important diversity of types of OF in Brazil today. Beyond the mere obligation to substitute chemicals by other inputs respecting certain specifications, multiple interpretations of OF (collective values, fair trade, territorial entities) and of signs (labels, logos, certification systems) have appeared, ratified by Federal Law 10.831 of Dec. 2003. Certification is also diverse and contributes to new values and production models (Ruhlmann, 2003; Seppänen and Helenius, 2004). It can be individual, collective (allowing to reduce the certification costs by 10) or even "participative" with the "Ecovida" network (Oliveira and Santos, 2004). Is this diversity of expressions related to the dynamics of development of OF in Brazil? Or does it result from the translation of foreign fundamentals and references in terms of certification (IFOAM or ISO65)? This raises the problem of the meaning this range of agricultural models can take: survival condition for some small producers, abandonment of "poisons or biocides" in production and/or ecologization of agriculture; social aspects and emergence of new systems of values; new relations to

oneself (food, family health) and consumers; professional legitimisation and reduction of the inequalities. We intend to explore briefly such models and try to interpret their meaning.

Methodology

The approach taken was twofold. On the one hand, it was based on literature reviews, direct interviews with research workers whose PhD thesis was dedicated to organic farming in Brazil and with agents involved in the development of permaculture or biodynamic agriculture (namely in experiments and training sessions for farmers), information collected through participation in organic networks and subsequent visits to organic farms and market places in the States of Santa Catarina and Paraná. Concerning certification, we visited the IBD Center (Biodynamic Institute for Rural Development, Botucatu, operating on the international level) and interviewed two former chairpersons from AAO (Association of Organic Agriculture, São Paulo, operating on the federal and state levels) as well as managers from Ecocert (Florianópolis, SC), ACOPA (Association of Organic Consumers in Paraná) and AOPA (Association of Organic Producers in Paraná, Curitiba). On the other hand, we carried out research and field work in a rural area of the São Paulo State, with case studies in different organic farms and organisations. In this new organic green belt (Ibiúna), we gradually identified and conducted interviews with key persons and active OF organisations: technical and political officers, organic inspectors, group leaders and farmers. A total of 25 people were interviewed and 20 of them were affiliated with social organisations (Bellon and Abreu, 2005). The questions differed according to the people being interviewed. As for technical officers, we focussed on their activities and relationships with organic farmers, as well as on their description of the OF universe. The certifying inspectors we encountered worked either for the IBD or for the AAO. We analysed group dynamics and operation, marketing channels and certification processes.

Results and discussion

Models of organic farming

An ecologization process of agriculture in Brazil emerged in the mid-90s as a social movement in search of a new ecological model of production where OF and its potentials were felt as the "ideal type" or prototype of agriculture (Sylvander & Bellon, 2003). Despite controversies and the different trends of the models of ecological production, we adopted those proposed by the Organic Law (Brazil, 2003), which joins different alternative models of agricultural production under the name of Organic Agriculture. From an empirical viewpoint, we noticed that the production systems are being rethought and that farmers are organising themselves or are already organised to convert their production systems and to search for innovative markets (Bellon & Abreu, 2005). These models of OF can be described in a comprehensive way (Table 1).

Table 1: Characterisation of organic farming models

Organic Farming Model	Relation to the market	Production and certification	Social and cultural values
Agro-ecological	Solidarity (fair prices); Direct sale; Interactions among farmers and with consumers	Confidence and validation for the communities. Organisation in core groups and networks of farmers	Autonomy and Diversity; Fraternity; Cooperation; Socio-technical interaction.
Organic	Experience and Interaction; Emphasis on visual quality for supermarkets.	Crop planning; Technical assistance and third party certification, Collective or individual	Economic Reality Technology; Human health Soil and plant care
Biodynamic	Specific stores; Anthroposophy network.	Brazilian Institute of Biodynamics (IBD); Demeter label.	Holism; Spiritual dimension; Cooperation; Fraternity;
Permaculture	Direct selling; Exchange;	Land care and land use planning; Crop-animal interactions Recognition by Ecovida	Respect; Justice; Long term projects; Living and habitat; Cooperation and interactions.

In Brazil, the logic of the strictly speaking organic model is based on the economical calculation (or accumulation), the use of technology and entrepreneurial management, although the latter is usually executed by members of the family. Nevertheless, the reference to the organic model does not mean that all organic farmers prefer the same system of values (relationships to the land and heritage, to the techniques, to the market and the global society) or have the same expectations as for their future. Their distinctiveness should be taken into consideration, that is, the deadlock or rupture situations that do or do not allow them to put their strategies into practice. Temporal and socio-cultural heritage analyses should also be included. Differently from that of the organic farmers, the behaviour and systems of value of farmers involved in the agroecological, biodynamic and permaculture models are underpinned by humanistic, truly ecological ethics, although they really differ among them.

Organic horticulture in small farms from São Paulo Metropolitan Area

The organic model of production is well represented in the State of São Paulo. The Ibiúna region, the green belt of the great São Paulo Metropolitan Area, for instance, reveals a certain originality and represents a significant contribution to the Brazilian horticultural production, estimated in 3,000 ha (Ishimura, 2003). Its OF(s) are dynamic and new markets are exploited (supermarkets in medium cities), whereas a first driving initiative consisted in conquering the metropolis supermarkets by privileging the visual quality of their products. Other forms of organisation were identified (Bellon & Abreu, 2005). For instance, APPRI (Association of Small Rural Producers from Ibiúna) is close to OF but targets other consumers, in a relation between the countryside and the city. The countryside-city relation is redefined in Ibiúna, which, strictly speaking, is not a periurban area (between 50 and 100 km from the metropolis). This results from a double movement: the delocalization of the green belts and the creation of new proximity or territorial entities. Hints for processing and interpreting the data collected were also proposed during this research on the technical level; questions of horticultural production planning and its environmental assessment with tools developed for modes of production other than OF were also discussed. Actually, these tools underestimate the facts that crop diversification and the consumption of environment are present in certain models of OF. One challenge consists in testing the congruence of the various forms of organisation of OF as compared to the producers' trajectories and practices. Field visits allowed us to understand how difficult it is for the organic farmers (in particular, in the region of Ibiúna, São Paulo) to enforce the requirements of the IBD norms (based on European norms). Another obstacle is the cost of certification for the farmers and the appropriation of the organic product added value by the large-scale distributors. This resulted in the search of alternative forms of certification and distribution (direct sale to consumers).

Heritage and innovation in OF

The diversity of the social production forms can be interpreted as part of the heritage of European models, adapted to the Brazilian conditions. They co-exist with other original forms settled under the specific conditions of the local context. OF is also promoted by political organisations committed with the construction of a new model of society, claiming equity and justice and thus involved in social transformation. Thus, organic agriculture does not have the same meaning as in some regions in a few other countries, where organic agriculture emerged from the counterculture and movements against the consumption society (Brandenburg, 2002). We also rescue and revitalise the cultural heritage of the local communities that direct their production to multiple markets including innovative forms of relationship between producers and consumers (Karan, 2001).

To better explore these agricultural alternatives, we should identify and characterise the devices in which such agricultures are expressed and network them. This prospect was evoked in several opportunities during work meetings with Embrapa colleagues. A network of organic farms was recently built up in the State of São Paulo, animated by Embrapa Meio Ambiente (MCT/MDA/Embrapa, 2004). A methodological deepening is necessary to apprehend these various practices. Since they raise new theoretical and methodological issues and challenges that are already contributing to redefine the discipline contents of agriculture professionals, these activities introduce innovation in and enhance the Embrapa's process of scientific knowledge generation.

Discussion and conclusions

We suggest that the agroecological model is more frequently found in Southern Brazil because of the strong dynamics of the social movement of agriculture ecologization. This was based on solid community roots with a strong political dimension, supported by the implementation of environmental measures (landcare,

forest conservation and development...) and consolidated by the emergence of local agroecological networks. It is probably a result not only of the cultural heritage of the European alternative models but also of a huge work of environmental preservation backed by public policies (soil and biodiversity preservation, this base has probably constituted the seeds to build agricultural alternatives). We can question to what extent this model, so present in Southern Brazil, may be concretely considered as relevant for the development of Brazilian family farming? It expresses itself in all the alternative movements aimed at combining food autonomy, better income and respect of the natural or ecological environment limits. The organic model of production is also well represented in the State of São Paulo, where it shares its territorial space with the other models mentioned.

In Brazil, most organic producers (organic, agroecological, permaculture) have settled in small land structures and the production strategies are oriented towards family subsistence and to the sale on multiple markets. These include their socio-economical reproduction and the need to respect the limits of the environment. Such issues thus led us to think of and define new, innovative forms of market and of relating to the environment and society. Transition to a new model of development goes through the adoption of measures and policies to strengthen OF. In Brazil, the ecological crisis in agriculture can be explained by the debate incited between environmentalists and advocates of a technical and productivist agriculture, settled through an ambiguous game of immediate and circumstantial interests. As for the future of organic agriculture in Brazil, various programs aim at strengthening the initiatives to support the transition from traditional agriculture to sustainable models. A credit line that stimulates projects of agroecological production which favours the proper handling of the natural resources, resulting in better income and quality of life to small farmers should be enhanced. In fact, the last events seem to indicate that the Brazilian government intends to promote a change to support the development of agroecological and organic production as a way of stimulating family farming. The results here presented are the fruits of the first step of a research that must necessarily be more comprehensive when it comes to development of OF. The scientific cooperation with INRA/France will allow us to perform a comparative analysis and deeper study, articulating case studies with global analyses.

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