

Experiences regarding the development of organic farming in Germany: Problems and managing fields¹

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1. The current situation

The current picture of agriculture in Germany and West Europe is characterised by two negative relevant symptoms (Robert Bosch Stiftung 1994). These are surplus production and stress on the environment. One of the most important reasons for these negative symptoms is the so-called “technological treadmill” (Fig.1).

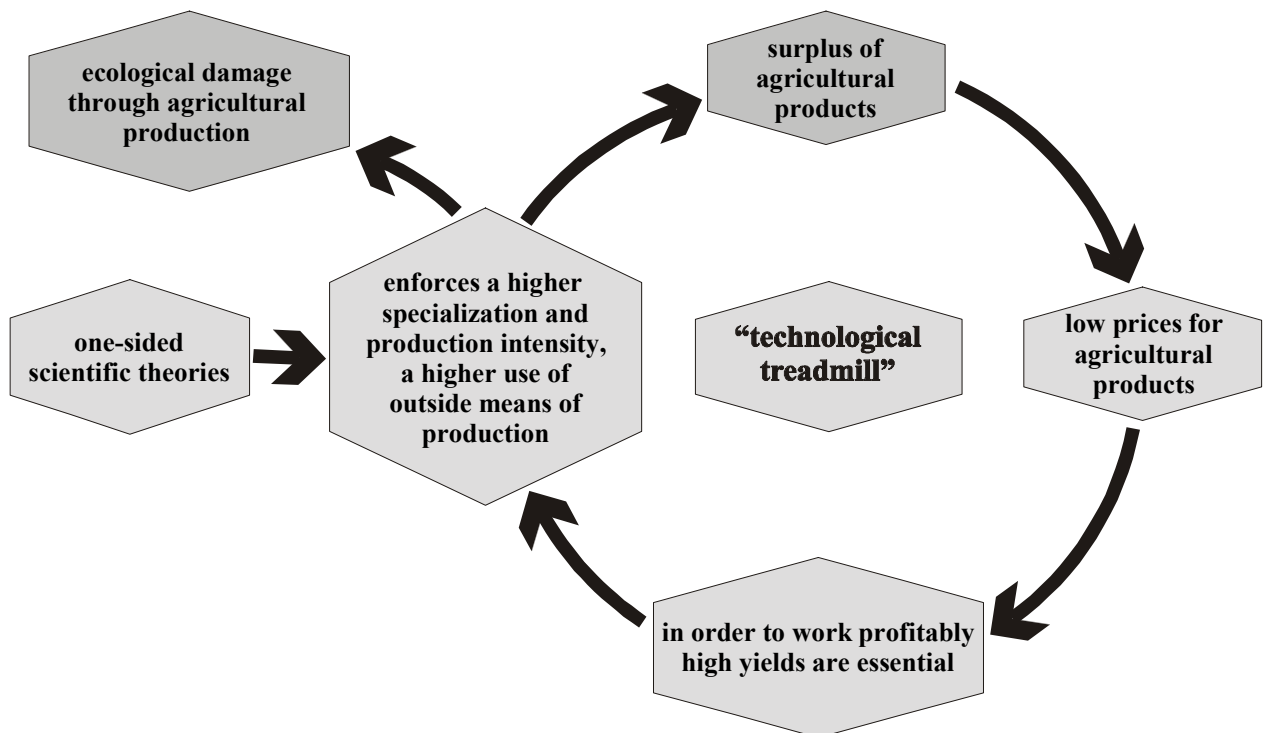


Fig. 1: Negative relevant symptoms of agriculture and their background

The “technological treadmill” is a spiral of declining prices, increasing yields and the intensification of conventional production (VOGT 1999). In order to solve agricultural problems two methods are intensively discussed and partly realised. They are the integrated farming and the organic farming. Both ways pursue nearly the same objectives namely the realisation of a many-sided, cycle-oriented and sustainable agricultural production (KELLER and WEISSKOPF 1987). Typical for integrated farming is the preference for biological, technical and chemical methods. Organic farming is characterised by the renunciation of chemical fertilizers and pesticides.

2. The Common European Agricultural Policy

With the beginning of the nineties in particular the surplus of agricultural production caused the member states of the European Union to take important steps. These steps were taken

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within the framework of the so-called Common European Agricultural Policy. Here the elaboration and passing of two laws played a very important part. First I refer to the “Council Regulation (EEC) No. 2078/92 on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of country side” (EWG 1992). The main aims of this European law are:

1. The promotion and realisation of environment-compatible practises of production, especially integrated farming and organic farming.
2. The providing stimuli for the care of landscapes and biotopes with the help of farmers as well as the fallow of formerly agriculturally used areas and
3. The payment of subsidies, in order to balance losses of farmers’ income.

The second important law that I’m referring to is the “Council Regulation (EEC) No. 2092/91 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs” (EWG 1991). The main aims of that law are:

1. The protection of consumers from deception and
2. The protection of producers in agriculture and processing industries from unfair competition.

In order to achieve these objectives the way of agricultural production and processing of products has been dictated and a control system has been defined.

The passing of the European-Union-Biological-Law has meant the political acknowledgement of organic farming in the member states of the European Union. Along with the payment of subsidies a rapid development of organic farming was produced (Fig. 2).

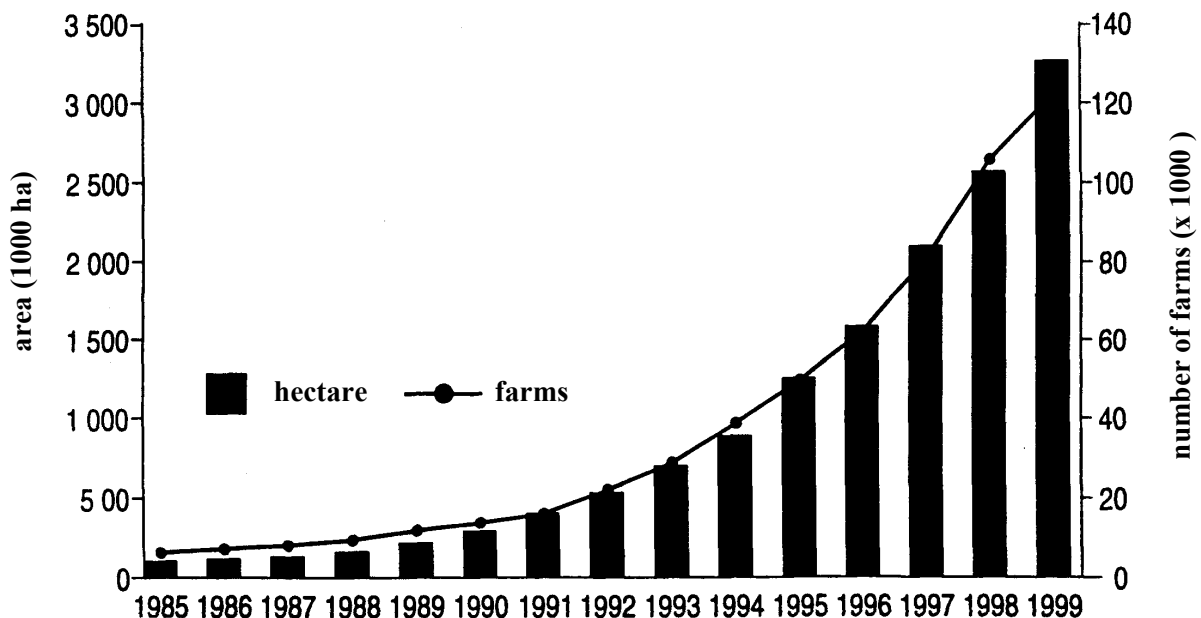


Fig. 2: Development of area and farms in the European Union (YUSSEF et al. 2000)

Since the beginning of the nineties organic farming has developed very rapidly in almost all European countries especially in the member states of the European Union. At the beginning of the year 2000 in the 15 EU-countries, its six accession countries (Estonia, Poland, Slovenia, Czech Republic, Hungary and Cyprus) and in the EFTA-countries (Iceland,

Liechtenstein, Norway and Switzerland) more than three million hectares were managed organically by more than 100 000 farms. This constitutes more than 2% of agricultural area and almost one and a half percent of the farms. Between 1986 and 1998 the land under organic management in the European Union grew by 30% every year (WILLER and YUSSEFI 2000). Of course, the East-European countries couldn't get the benefit of the European Union subsidies. Therefore organic farming has developed quite slowly in Eastern Europe (Tab.).

**Tab.: Organic Agriculture in Eastern Europe (SÖL Survey, January 2000)
(WILLER and YUSSEFI 2000)**

Land	Datum	Anzahl der Ökobetriebe	Ökofläche in Hektar	% landwirtschaftliche Nutzfläche	Gesamte landwirtschaftliche Nutzfläche in Hektar *)
Country	Date	Number of organic farms	Hectares under organic management	% of agricultural area	Total agricultural area *)
Bosnien Herzegovina / Bosnia	-	-	-	-	2.000.000
Herzegovina Bulgarien / Bulgaria	1998	-	-	-	-
Kroatien / Croatia	1998	18	120	0,01	2.312.000
Tschechische Republik / Czech Republic	1999	445	100.000	2,50	4.276.000
Estland / Estonia	1998	120	3.000	0,21	1.454.000
Georgien / Georgia	1998	-	1.000	0,03	3.071.000
Ungarn / Hungary	1998	330	21.565	0,35	6.122.000
Lettland / Latvia	1998	200	19.000	0,75	2.540.000
Litauen / Lithuania	1998	144	4.006	0,16	3.513.000
Polen / Poland	1998	181	5.546	0,03	18.707.000
Rumänien / Romania	-	-	-	-	14.798.000
Russland / Russia	1998	55	9.861	<0,01	219.609.000
Slowakien / Slovakia	1996	-	17.000	0,70	2.446.000
Slowenien / Slovenia	1999	312	3.000	0,38	788.000
Jugoslawien / Yugoslavia	1998	1.000	8.000	0,13	6.202.000

*) Daten aus / data taken from: FAO Statistical Databases <http://apps.fao.org/lim500/nph-wrap.pl?LandUse&Domain=LUI&servlet=1>

With the exception of the Czech Republic less than 1% of agriculturally used area is managed organically.

The passing of the EU- biological law has brought about some problems, too, for example

- A high density of rules for production, processing and import,
- Additional costs for supervision and
- A high demand for administration.

Therefore some farmers and entrepreneurs of processing industries shy away from converting to organic farming and organic processing or entirely give it up.

3. The AGENDA 2000

The so-called AGENDA 2000 contains the main objectives for the further development of the Common European Agricultural Policy with the beginning of the year 2000. The reasons for the creation of the AGENDA 2000 have been (Agrar-Europe 1998):

1. The enlargement of the European Union especially to East- and South East Europe,
2. A further surplus production of food,
3. A necessary reduction of subsidies for exports, to for example developing countries, and
4. A necessary decrease of the European Unions self protection against the import of cheaper agricultural products into its own territory.

A negative aspect of the AGENDA 2000 is the intensification of the agrarian structure change in the European Unions' member states. With some certainty negative effects can be expected to occur to the incomes of the traditional farmers as well as the organic farmers. It is to be expected that many more small and middle-sized farms will be given up and one can assume an increasing dependency of agriculture from policy and governmental subsidies.

Today, the European Union favours an agrarian policy of intensification and export markets!

However, the AGENDA 2000 also has positive aspects, for example an intended policy for the promotion of the rural regions and environment protection. Such services of agriculture being useful for community shall be especially promoted. They cause special efforts for the farmers, as there are the organic farming and the care of cultivated landscapes. This also means that a better payment for the protection of soils, biotopes, open waters and species should be granted.

We will see which of these intentions will be realized in the end!

4. Agrarian subsidy and environment performances

It is to be expected that in future the pressure on the justification of subsidies for farmers will increase. The governments have to justify the subsidies to the taxpayers as well as to the World Trade Organisation. The World Trade Organisation aims at a level of agrarian prices in the European Union that is oriented by the level of the world market.

More and more subsidies will have to be linked to assessable and demonstrable environment performances. Exactly here lies the strength of organic farming!

The positive effects of ecological farming on the environment have been sufficiently proven. They result from the specific quality of the agricultural production methods. Especially the so-called no cost factors of production play an important role in this case. Parts of these no cost factors are:

- The soil and its natural fertility,
- Mobilizable reserves of nutrients, e.g. with the help of mycorrhiza fungi,
- The collection of air nitrogen with the help of legumes,
- The sun power used by maximum exploitation of the growing period,
- The crop rotation for maximum exploitation of positive preceding crop effects,
- The natural self regulation of biological agrarian-eco-systems and
- The nutrient reserves of the agricultural matter cycle by effective application of farmyard manure and use of farm-inherent foodstuffs.

The maximum use of such no cost factors of production allows renouncing light soluble mineral fertilizers and pesticides. This way, the protection of soils, water and environment against residues of chemical fertilizers and pesticides occurs through the principle of “non-causing” (HACCIUS and NEUERBURG 1996).

5. Consumers’ role

The successful further development of organic farming depends essentially on the conditions created by the agrarian policy. In this context, the consumers’ needs for an intact environment and healthy nutrition, however, play a decisive role in the success of organic farming. The citizen’s willingness to pay a higher price for products of ecological farming is requested, too. We found that this willingness positively correlates with the consumers’ confidence in ecological production, their living standard and the level of formal education. In addition, the consumers’ enlightenment is of great importance. This includes knowledge of

- The special quality of ecological products,
- The value of an ecological eating culture and
- The positive environment and working market effects.

6. Development potential of organic farming

In the present time a decisive development potential of organic farming lies in its establishment in protected areas. This can be a region of nature protection, landscape protection or water protection as well as biosphere reservates. Exactly in these regions organic farming allows a unit of ecology and economy. A self-analysis in the East German federal state of Saxony showed that about 50% of the agriculturally used area is situated in such protected regions.

Furthermore, organic farming offers an alternative to the so-called social fallow and reforestation in regions called peripheral areas. Meant are such agrarian sites characterised by a long distance to the market and/or bad climatic and soil conditions. Therefore, an extension of organic farming should be managed there with the objective of maintaining the land developed and cultivated by farmers and of maintaining jobs in agriculture and associated branches.

For achieving these aims governmental expenditures are necessary, which is identical with the promotion of extensification. This is better than the wasting of tax money for the production of agrarian surpluses and for their later storage and, at worst, destruction. Furthermore, money is wasted by the so-called export subsidy. In this case, the surpluses are sold at the world market at reduced prices and therefore farmers in other countries, especially in the Third World, are ruined.

7. Managing fields

Today, wide managing fields for a successful further development of organic farming are given, for example subsidy, marketing, research, education and agricultural advisory service (LEITHOLD 1999).

Regarding the subsidy one can say that there is the necessity of adjusting it to reality. This circumstance calls for a lower area subsidy in favour of processing and marketing. The preference of the area subsidy causes a surplus of ecological products and thus a ruin of prices. That's why the positive effects of subsidy that were actually intended often disappear (HAMM 1996, 1998).

As far as marketing is concerned we strive for an increasing opening of market.

This opening of market aims at an overall, continual and many-sided supply of organic food. This way, the food retail marketing will have to play an important role. The gathering of production and supply with the help of production and/or marketing communities helps to achieve good prices.

Speaking of research this field has to be oriented by the principles of organic farming according to the EU-regulation No. 2092/91 (LINDENTHAL et al. 1996):

- Achieving closed internal and regional material cycles,
- Careful and moderate utilisation of non-renewable raw materials and energy resources,
- Strengthening and utilisation of natural self regulation mechanisms and
- Conservation or improvement of the species diversity and the diversity of the landscape.

Projects that are able to ensure an effective ecosystem-oriented further development of organic farming should get a higher priority. Further investigations have to target on the increase of ecological stability of cultivated systems and the optimisation of the socio-economical situation of organic farms. Finding solutions to the current operative problems by means of practical oriented short-term projects is of secondary importance. Central methodological criteria for the research in the field of organic farming are

- Interlocking structure of disciplines,
- Long-term initiatives,
- Side orientation,
- Practical orientation and
- Regionally related approaches.

As far as education and training is concerned, there exists the need for action of vocational training but also with regards to the training of practical persons. The installation of so-called cooperation or model farms is profitable, too.

Last but not least the need for agricultural advisory service increases with the enlargement of organic farming. An adjustment of consultation to the growing need is necessary.

8. Organic farming in Eastern Germany

Since 1990 the development of organic farming in the New Federal States of Germany has occurred very rapidly. Up to now about 200 000 ha have been managed organically by more than 1100 farms. Typical for the New Federal States is the management of organic farming on big farms (Fig. 3).

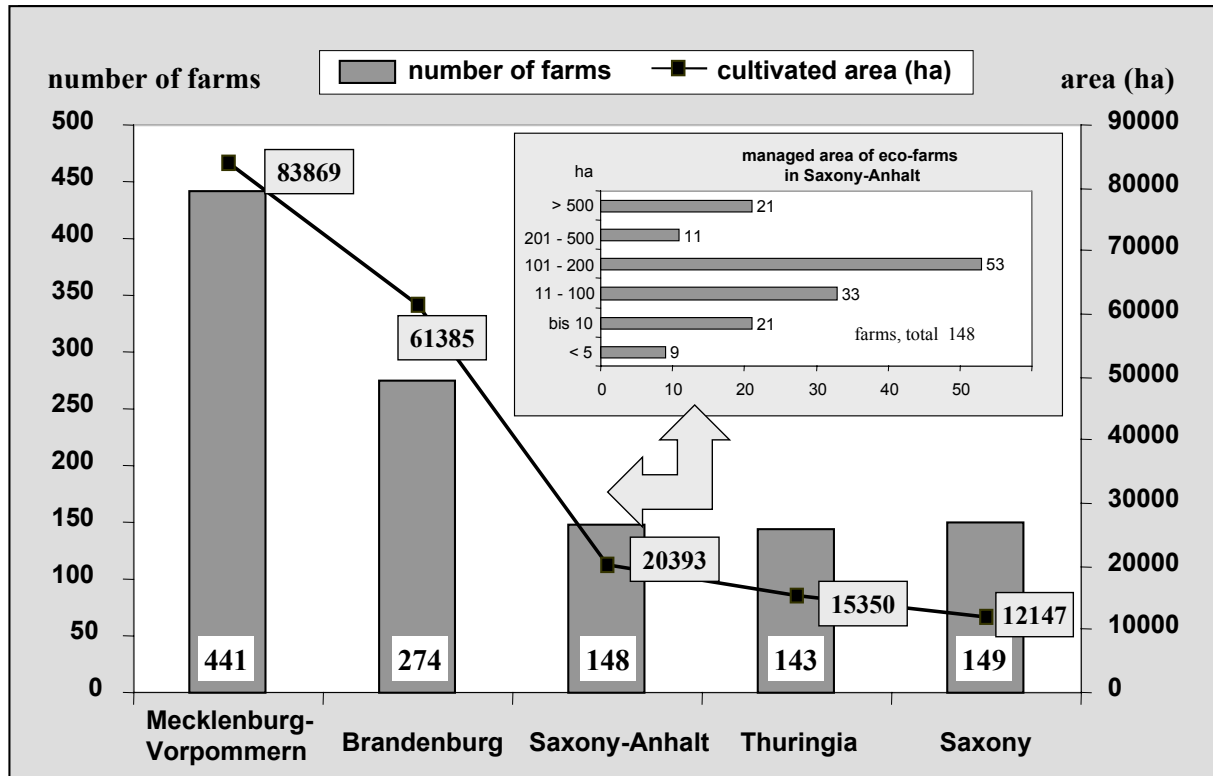


Fig. 3: Organic farming in the New Federal States of Germany (DEBRUCK 2000)

Thus, in the state of Saxony-Anhalt

- 21 farms are bigger than 500 ha,
- 11 farms have got a size between 200 and 500 ha and
- 53 farms are between 100 and 200 ha in size (DEBRUCK 2000).

There are some factors, however, which slow down the development of organic farming. Typical restrainers in Eastern Germany are often

- The farmers' insufficient experiences in the field of organic farming or
- Unclear ownership circumstances.

The latter leads to an unsatisfactory access to credits and therefore to unsatisfactory investment opportunities. The weakness of the owners' capital often also leads to an insufficient access to subsidies, because it is impossible for the farmers to raise the necessary shares of their own. Other problems are often

- Only short tenancy contracts,
- A high share of borrowed capital especially for leased farms and
- Last but not least the citizens' money shortage.

Approximately 20% of the adults are unemployed and not able to pay for expensive organic foods. Nevertheless, the organic farming has got a high development potential also in East Germany. This is to utilize due to a sensible agrarian policy.

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