

Organic Farming in Austria



Come and surf into ecoland
<http://www.bmlf.gv.at>

BUNDESMINISTERIUM FÜR  LAND- UND FORSTWIRTSCHAFT
Das Lebensministerium





Ladies and Gentlemen,

One of the most important trends of recent decades in Austria was the strong development of environmental awareness. This is shown in particular by the widespread participation in the Agri-Environmental Programme available for Austrian agriculture since the accession to the EU in 1995. About 70% of all domestic farms and 90% of Austria's utilized agricultural area take part in this programme. By doing so, agricultural enterprises make an unrenouncable contribution to the protection of environment and biodiversity.

Organic farming is part and drawing card of this development as it is by far the most important positive example of the ecoland Austria. Almost one in ten Austrian farmers practises organic farming. Austrian agriculture is prepared to continue this path consistently in cooperation with processing enterprises and commerce. However, consumers as well have to make their contribution in order to guarantee the success of this development. Agricultural policy is responsible for creating the relevant framework conditions.

A handwritten signature in blue ink, appearing to read 'W. Molterer'.

Wilhelm Molterer
Federal Minister
of Agriculture and Forestry

CONTENTS

WHAT DOES “ORGANIC” MEAN?

What does “organic” mean?	4
What are organic farmers allowed to do?	5
Are additives allowed?	8
How can a farmer become “organic”?	9
Why do consumers buy organic products?	10

LEGAL ISSUES

Which rules apply?	12
Controls	15
Sanctions	17
Labelling	17

FACTS AND FIGURES

Almost 1 in 10 farmers is an organic farmer	20
Size of organic farms	21
Where do most organic farmers live?	21
Production data	23
Austria in comparison	24

REVIEW AND FUTURE PROSPECTS

Why is organic farming so successful?	26
Associations and labels	29
What will the future bring for organic farming?	32

QUESTIONS & ANSWERS

34

IMPRINT

Editor

Federal Ministry of
Agriculture and Forestry, A-1012 Vienna, Stubenring 1

Editing

Public Relations Division,
Karin Tischler

Printing

AV-Druck GmbH, A-1141 Vienna, Sturzgasse 1a

Pictures

BMLF, FAO, HOPI, Schima, Fladl

© Federal Ministry of Agriculture and Forestry, May 1999

Translation: Chief executive Department B1

2nd revised edition

Special edition of the magazine “Förderungsdienst” series 1d/1999

WHAT DOES “ORGANIC” MEAN?

Organic farming is the most environmentally compatible form of agriculture. Yet organic means more than just farming without synthetic chemicals. A holistic philosophy and a farming cycle as complete as possible, with a diversified structure, are the principles and prerequisites for successful organic farming. Natural water and soil resources are treated with care so that they remain available to future generations.

Organic farming, therefore, is a holistic approach which takes into account the following principles:

- ❖ **Lowest possible use of external energy sources**
organic agriculture, for example, excludes the use of artificial fertilisers, the production of which consumes large amounts of energy
- ❖ **Utilisation of natural self-regulating mechanisms**
by means of diversified crop rotation, use of beneficial species ...
- ❖ **Nourishment of the soil instead of the plants**
Soil nutrients are activated through careful soil cultivation and the application of compost
- ❖ **Fullest farming cycles possible**
Farm waste products are recycled, such as compost or organic manure, (dung, muck, animal slurry); if possible, no additional agricultural inputs are purchased
- ❖ **Protection of environmental resources**
By taking all these principles into account, organic farming can guarantee an environmentally sensitive treatment of nature.

WHAT ARE ORGANIC FARMERS ALLOWED TO DO?

To remain true to the holistic approach of organic farming, organic farmers must consider the various procedures on their farm more carefully than their convention-



al fellow-farmers do. They must economise considerably in their use of natural resources. An EU regulation defines in detail what an organic farmer is allowed to do in plant growing, while the **Codex Alimentarius Austriacus**, the Austrian food codex, regulates organic animal husbandry.

Plant growing

Organic farmers are concerned with increasing the activity of soil life with various measures so as to preserve the **natural equilibrium** and the fertility of the soil. They achieve this by preserving the biodiversity of species used in crop rotation and by planting sufficient quantities of legumes (clover-lucerne mixture, beans, peas, soybean ...) that increase nitrogen content of the soil, which is then available to subsequent cultures. Organic farmers do not apply highly soluble artificial fertilisers but rather apply **organic fertilisers** instead, that is, dung, muck,

animal slurry, and compost. Arable farms without livestock are particularly dependent on the cultivation of legumes in crop rotation, and in addition to that they can fertilise their fields with compost.

Pest, diseases, and weeds are not controlled by using synthetic chemical pesticides, but they are kept at bay by supporting ecological equilibria. Weeds for example are only removed mechanically. If pesticides prove absolutely necessary, natural pesticides are applied such as mineral powder, oils in fruit cultivation or sulphur in viticulture. In the same manner, beneficial species such as predatory



mites are used in weed control. Organic farmers try to create favourable conditions for these species e. g. by planting hedgerow.

Animal husbandry

Organic animal husbandry also entails a series of rules: in principle, organic farmers keep only as many animals as they can nourish with fodder from their own farm. Since the Austrian food codex limits animal stocks to two livestock units (e. g. two cows or twelve porkers) per hectare of farm land, intensive breeding in organic farming is ruled out.

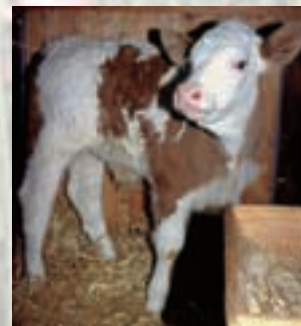
The animals must be given **sufficient space** that is dry, soft, and warm. Fully-slatted floors are forbidden, since they are considered unsuitable for animals. Animals must

be allowed to **graze or turned out to run** for at least **180 days a year**.

Moreover, there are minimum standards for lighting and ventilation of stables.

Breeding of cattle, porkers, laying hens, and calves is regulated among other things by the criteria set down in the **Tiergerechtheitsindex** (TGI – Index of animal compatibility) which defines the breeding conditions compatible with each species and constitutes a part of the **Codex Alimentarius Austriacus**, the Austrian food codex. The TGI takes into account the following criteria: sufficient space for movement, social contact, suitability of soil, light conditions, air, and noise, as well as intensity of supervision. The farmers are rated for each individual criterion. Organic farmers must reach a certain number of points. If they do not reach the minimum number of points for a specific criterion, they can compensate for that deficit by achieving a higher number of points for another criterion.

For example: if a farmer's stall is too small, he can compensate for the deficit by turning out the animals for exercise and grazing more often. Nevertheless, TGI ratings also feature minimum limits which must be observed in any case.



Feeding: Animals must be fed only with organic fodder – if possible from the farmer's own production. If additional fodder needs to be purchased, it must also come from organic farming. In case this is not possible, up to 15 % of the fodder can be the product of non-organic farming. Purchasing of basal

feed (e. g. hay or grass) from conventional farming, however, is only allowed in emergency situations.

The Austrian food codex, however, defines exactly which fodder can be purchased from non-organic farming. The use of performance-increasing fodder and prophylactic administration of antibiotics are strictly forbidden.



Should the animals become ill, natural curative methods such as homeopathy or acupuncture must be applied whenever possible.

ARE ADDITIVES ALLOWED?

Basically, organic goods must be the product of **organic farming to 100 %**. Since it is impossible, however, to supply all raw materials in the appropriate quality, up to 5 % of the ingredients used can be the product of conventional farming. In order for a product to be marketed as “organic”, **at least 95 %** of its agricultural ingredients must come from organic farming. (By the way, a complete list of the permissible ingredients of conventional origin can be found in the corresponding EU Regulation. These include dates, cocoa, honey, wild rice, or lemon juice).

Furthermore, the Regulation on organic farming features a small list of ingredients of non-agricultural origin which can also be used. These include for example ascorbic acid as preservative, pectin as a jellying agent, or guar gum as thickener.

Flavourings or synthetic colour additives are forbidden.

HOW CAN A FARMER BECOME “ORGANIC”?

In order for a farm to label its products as “organic”, it must conclude a contract with an official control agency for organic products. This control agency registers the farm with the foodstuff authority and after a certain transitional period grants the farm the permission to label its products as “organic”.

Extension plays an important role

Comprehensive extension and training plays a particularly important role in organic farming. So it is for example a prerequisite to pass a conversion course in order to be eligible for a subsidy for organic farmers.

Farmers who want to convert to organic farming are therefore recommended to contact for a first consultation the District Chambers of Agriculture or the services for organic farmers of the Provincial Chambers of Agriculture. The associations of



organic farmers and the Chambers of Agriculture offer extension in the field of conversion directly on the farm or conversion courses, training, and excursions. In some Federal Provinces working parties of farmers are intensively supported by special advisors. This applies for example to the fields of organic vegetable growing, organic fruit growing, and organic pig keeping.

WHY DO CONSUMERS BUY ORGANIC PRODUCTS?

On the one hand, organic products mean **healthy nutrition** produced without using artificial chemical pesticides, longer storage life for winter vegetable, and more flavour. On the other hand, an increasing number of consumers are becoming aware of their **responsibility toward the environment and animals**. When consuming organic products, they are confident that animals are kept in a way compatible to their species and that they themselves are making an important contribution to a sound and diversified countryside. Consumers can be sure that even in future genetic engineering will not be applied in the production of organic foodstuffs.

Which organic products do consumers prefer?

Approximately 54 % of Austrian consumers buy – at least occasionally – organic foods. The most popular among these products are fruits and vegetables (79 % of



all households that consume organic products), followed by milk and dairy products (65 %), and meat and sausages (61 %).

Where do they buy?

Most Austrians buy organic products in supermarkets (approximately 80 % of the total sales of organic products). There are, however, some product-specific differences: in the case of fruits and vegetables, as well as meat and sausages, the largest portion of these sales takes place **ex-farm**. Sales of milk and dairy products are evenly distributed among supermarkets and farms. With meat and sausages, direct deliveries by the farmers themselves also account for a significant share of total sales. Soybean products, cereals, and baked goods are mostly purchased in organic food stores, alternative product shops, or farmers' markets. An increasing number of organic farmers is also offering organic party services. For more information, contact ARGE Biolandbau, tel. +43 1 403 70 50.

Bio-shopping in internet

Recently organic products can also be ordered via internet. The platform for it is made available by the Federal Ministry of Agriculture and Forestry on its homepage. You will find valuable information on organic farming under www.biobauern.at or www.bioclub.at. For example the addresses of 1,500 organic farmers – categorised according to regions and offer a comprehensive encyclopaedia on organic farming and many other things. We have composed a selection of questions and answers from the Internet-Bio-Lexikon (encyclopaedia on organic farming) from page 34 on.

WHICH RULES APPLY?

Pioneer role

Austria was the first country in the world to set official guidelines for organic farming. In 1983, the first decrees in this respect were issued by the Federal Ministry for Health and Environmental Protection. In 1989, these were included as Chapter A 8 in the **Codex Alimentarius Austriacus** (Austrian food codex), and in 1991, Austria was the first nation to define regulations for the organic production of animal products.



Ever since Austria joined the European Economic Area in July 1994, the **Council Regulation** (EEC) 2092/91 on organic production of agricultural products has also applied to Austria. The Regulation defines production, labelling, and inspection rules for plants. The Regulation cannot be amended or limited in its scope by national legislation. Since, however, no rules were defined for organic animal production, the rules of the **Austrian Food Codex** continue to apply.

A change with respect to national provisions could be brought about by the planned EU Regulation on organic animal products. Read more about it in the next chapter.



For animal products, the rules of the Austrian Food Codex are complemented by provisions set down in the Austrian TGI (Index for animal-compatibility), which defines breeding conditions compatible with each species (see page 7).

EU Regulation for organic animal products

A Council Regulation is currently under development which is to amend Regulation 2092/91 on organic production of agricultural products and add rules for animal products from organic farming. The rules will cover areas from feeding and husbandry to the pharmaceutical treatment of animals. Furthermore, the draft includes a ban on the use of genetically engineered organisms. The EU Regulation on organic animal products will probably even be enacted in 1999.

Besides the draft of the Regulation provides for the possibility of more stringent national provisions – not only for the animal, but also for the plant sector. This means that those provisions of the Austrian Food Codex which are more stringent than the EU provisions would become effective again in the plant sector – and would also remain valid in the animal sector. Every EU country would then have – to a smaller extent though – again different provisions.



Additional guidelines of associations

If an organic farm is a member of one of various farming associations for organic farming, it must also comply with even stricter guidelines set by the corresponding association.

CONTROLS

Independent control agencies

Organic farms are monitored by **independent control agencies** that must be approved by the governor of each Federal Province. The activities of control agencies are in turn monitored by the federal food administration. Apart from a **complete annual inspection** of each farm, control agencies also carry out inspections **without notice**.

During these inspections, agencies check e. g. whether farmers are using unauthorised fertilisers or sprays, whether animals are turned out frequently enough for exercise, or whether farmers purchased unauthorised seeds.



Controls of organic farms apply to the **entire production process**. This means that not only organic farmers but also processing companies are scrutinised: Agencies control, for example, whether these companies exceed the permissible 5 % limit for ingredients from non-organic farming or whether prohibited additives are used.

Naturally, both farmers and processing enterprises must keep records of their activities: farmers, for example must record all purchased agricultural inputs or present cultivation plans for the subsequent year. Processing companies must keep account of their purchases and sales (= quantity control).

AMA controls

If a farmer receives subsidies for organic farming – this applies to 95 % of all organic farmers in Austria – the AMA, the agency of the Ministry of Agriculture in charge of handling subsidies carries out additional controls to make sure that the farmer fully complies with the guidelines in connection with subsidies.

Associations and trade chains

A little bit more than half of the organic farms in Austria are members of organic farming associations. Being a member of such an association, a farmer must comply with even stricter guidelines than those stipulated in the corresponding EU Regulation or in the Codex Alimentarius Austriacus. This gives a farmer the right to use the association's label for his products. In such a case, the control agency mentioned above also inspects the farmer's enterprise for compliance with specific association guidelines.

If a product also bears the label of a trade chain for organic products, this guarantees that additional measures have been taken to assure quality.



SANCTIONS

In case control officials really detect irregularities with a farmer who does not comply with the guidelines governing organic farming, **rigorous sanctions** will follow, depending on how serious the violation is: the farmer may lose the license to sell the product in question or he may lose the general permission to label his goods organic.



Moreover, he must perhaps **repay the subsidies** he was granted for organic farming, which may lead to severe financial consequences.

LABELLING

In Austria, the labelling “**aus biologischer Landwirtschaft**“ (organic farming product) is authorised. Instead of “biologisch” (organic), producers may also label their goods as “organisch-biologisch” (organic-biologic), “biologisch-dynamisch” (organic-dynamic), or “ökologisch” (ecological). In addition to these labels, the term “Bio” (organic) can be used. The term used in Germany is “aus ökologischem Landbau” (from ecological farming). Con-

sumers should not be deceived by terms such as for example “naturnah” (close to nature). The guarantee that the packaging really contains an organic product is only given with the types of labels named above.

Apart from the label, packaging must also feature the control number of the corresponding control agency.

An organic product may bear the “aus biologischer Landwirtschaft” label only **if at least 95 % of its ingredients come from organic farming.**



Another limit was set – as prescribed in Regulation 2092/91 – **at 70 %**: If only 70 % of the ingredients of a product such as muesli are organic (e. g. cereal flakes, dry fruits), it is permitted to make reference to organic

farming on the label with the sales designation, however, clear mention must be made to indicate that only 70 % of the ingredients are the product of organic farming. In the case of less than 70 % no reference to organic farming may be made on the label with the designation of the product.

AMA - organic label – security at first glance

In order to make sure that the consumer can identify at first glance organic products the AMA Marketing I.I.c. has created the AMA organic label. This label exists in two variations. It applies to both forms that the product has to be made completely of raw materials from organic farming. There are only a few exceptions, where minimal tolerances from non-organic farming are accepted.



The AMA label **without** indication of origin does not give any reference to the regional origin. This is for example the case with organic products, which consist of various components of raw materials, the individual raw materials being produced in different countries. This label is often used for organic products, in particular fresh products such as fruit and vegetables, which originate in different seasons from different countries.

In the case of the AMA organic label **with** indication of origin "Austria" all raw materials must originate at 100 % from Austria, if they can be produced in our country. If this is not the case the share of components of raw materials, which cannot be produced in Austria may not exceed the tolerance limit of one third. An example: It applies to banana yoghurt that the organic milk must originate at 100 % from Austria, whereas the organic bananas, which make up about 7 % may originate from another country.



ALMOST 1 IN 10 FARMERS IS AN ORGANIC FARMER

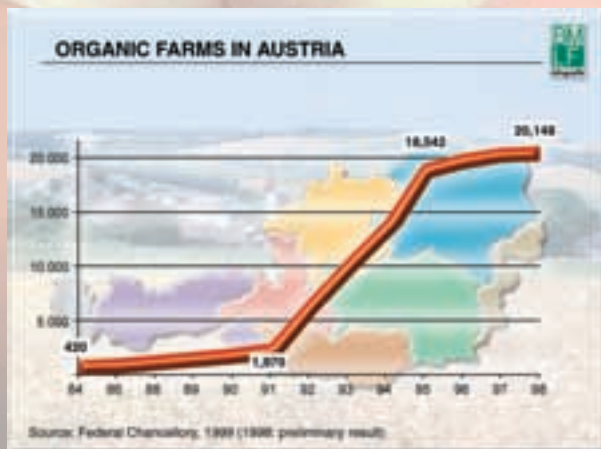
Currently there are 20,148 organic farmers in Austria (preliminary figures for 1998, as of April 1999), that is, about 9 % of all Austrian farmers. Approximately 10 % of



the utilized agricultural area is cultivated according to organic criteria.

In 1998, a total of 18,700 organic farmers received state subsidies

for organic farming in connection with the ÖPUL the Austrian Environmental Programme.



SIZE OF ORGANIC FARMS

The **average size** of (subsidised) organic farms is **14 hectares** of farm land, the size of an average conventional farm in Austria. Approximately 37 % of them own between 10 and 20 hectares of arable land. 18 % of organic farms manage less than 10 ha of arable land, and 44 % more than 20 ha.



WHERE DO MOST ORGANIC FARMERS LIVE?

The largest farming areas managed according to organic criteria are located in the Federal Provinces of Styria, Lower Austria, Tyrol, Salzburg, Carinthia, and Upper Austria. Tyrol and Salzburg have the largest share of non-associated farms, the so-called "codex farms".



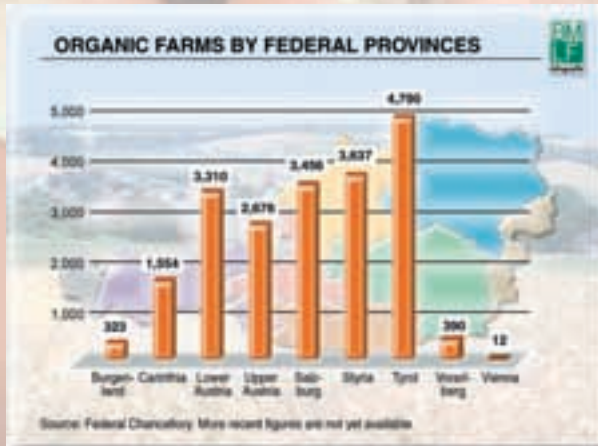
According to these data, the fastest development of organic farming in Austria took place above all in **the west-**



ern part of the country and in grassland areas. The reason behind this is obvious: grassland management in Austria is traditionally extensive, making it more easily convertible to organic farming than intensively managed arable land and specialty crops.

PRODUCTION DATA

Since most organic farms are located in mountain areas where livestock management is predominant, the most frequent organic products are **milk and beef**. There is even an oversupply for these two products. Therefore, only 40 % of organic milk is sold as such. 60 % of the entire organic milk output are sold as conventionally produced milk.



The largest portion of **organic cereal**, mostly wheat, rye, and spelt, is produced in Lower Austria, Burgenland, and Upper Austria. Two thirds of that output are used as fodder and only one third is processed as food cereal.

On the other hand, there is **insufficient supply of organic pork**. Organic pig keeping requires a considerable conversion effort, so that only a few farmers have converted to organic pig keeping so far. Demand for **chicken** also by far exceeds supply, since mainly slow-growing species are used, which are more suitable for organic

keeping. Retro-breeding will be necessary. Organic **fruits and vegetables** are also not produced in sufficient quantities to cover current demand.

AUSTRIA IN COMPARISON

With an organic farm percentage of 9 % (20,148) of all agricultural enterprises, and 10 % of utilized agricultural area under organic farming (345,375 ha), Austria ranks in relative terms first among European countries in this sector.



According to absolute figures Italy has got in the meantime the most organic farms in Europe (30,844). However, if you compare the size Italian organic farmers manage on average only about 1 ha of utilized agricultural area, whereas Austrian organic farmers manage about 14 ha (see also page 21). Germany has 8,184 organic

farmers, followed by France with 4,784 and Finland with 4,381.

In Italy only 1.24 % of all farmers are organic farmers, who manage 4 % of the total utilised agricultural area, in Germany there are 1.44 % organic farmers (2.25 % of the area), in France 0.65 % (0.55 % of the area), in Finland 4.34 % (4.76 % of the area), in Sweden 3.03 % (3.7 % of the area).

ORGANIC FARMS IN EUROPE

	1994	1995	1996	1997
Austria	13,321	18,542	19,433	19,996
Belgium	168	193	228	291
Germany	5,866	6,642	7,353	8,184
Denmark	677	1,050	1,166	1,617
Spain	909	1,042	2,161	3,526
Finland	1,818	2,793	4,452	4,381
France	3,556	3,538	3,854	4,784
Great Britain	715	828	865	1,026
Greece	469	568	1,065	2,514
Ireland	198	378	696	808
Italy	8,597	10,630	17,279	30,844
Luxembourg	12	19	20	23
Netherlands	512	561	656	810
Portugal	213	331	250	278
Sweden	1,675	2,446	2,712	2,701
Switzerland	1,630	2,121	3,721	4,278
Czech Republic	187	176	168	185
Norway	551	728	946	1,310
EU members	38,706	49,561	62,190	81,783

Source: Foster, Lampkin, March 1999

WHY IS ORGANIC FARMING SO SUCCESSFUL?

The first organic farm in Austria already converted to this method in 1927. The “organic-dynamic” production on these farms was based on the findings of Rudolf Steiner, a researcher and founder of anthroposophy. In the 40s, the “organic-biologic” method by Hans Müller was then applied more frequently.

(In contrast to farms which apply organic-biologic methods, organic-dynamic farming, for example takes into account the constellation of the stars.)

Until well into the 80s, however, few farmers applied organic methods. The boom in organic farming took place in the late 80s. Just to compare: in 1988, Austria counted 880 organic farmers; ten

years later, this number has increased by a factor of more than 20.

The great success of organic products in Austria can be attributed to the following factors:

1. Subsidies for organic farmers

Since 1991, Austria grants subsidies for organic farming. The introduction of this form of government aid was a major contribution in restructuring agriculture on the basis of ecological and social criteria. After joining the EU, Austria was able to further increase aid to organic farmers through Regulation 2078/92. In 1997, Austria's organic farmers received ATS 850 million from the ÖPUL environment program as compensation for their ecological con-



tribution. Almost half of the money was provided by the European Union and the rest was divided among the Federal Government and the Provinces at a ratio of 60:40.

2. Trade chains join in

Apart from government aid, a major impulse was given to the rapid development of organic farming by large trade chains which began marketing organic products in 1995. For the first time, large portions of the population were able to purchase products of organic farming in stores other than in specialised organic shops frequented by

staunch eco-fans. This clearly demonstrates the Austrian philosophy: contrary to many other European countries, organic products in Austria were not meant to become only niche products. The objective was rather to make this most ecologically compatible form of land use as widespread as possible, in order to ensure that the good quality of soil, water and air will be preserved sustainably.

3. Ecological awareness among consumers



Although government aid for organic farmers and the decision of supermarkets to include organic goods in their product range constitute the major reasons for the overwhelming success of organic farming in Austria, one should not forget what made this success possible at all: the ecological awareness of consumers. It was their readiness to contribute to a better environment

and to accept higher prices for organic products that encouraged the trade chains to begin selling organic products in the first place.

ASSOCIATIONS AND LABELS

Little more than half of Austria's organic farms are members of various organic farming associations. Their commitment, their marketing efforts, and the advice given to their members helped turn organic products in Austria into a success story.



Approximately 90 % of all organic farmers organised in associations are members of "Ernte für das Leben" (harvest for life), the largest Austrian organic farming association. Once becoming a member, organic farmers can market their products under the label of their association.

Two umbrella organisations exist:

- ❖ ARGE Biolandbau (Association for the promotion of organic farming) and
- ❖ ÖIG (Austrian interest group for organic farming)

The trade marks of the Austrian organic farming associations:



WHAT WILL THE FUTURE BRING FOR ORGANIC FARMING?



Despite the strong increase in the number of organic farms in recent years, even in Austria unlimited growth does not seem to be possible: in the meantime, growth rates have dropped significantly. Between 1994 and 1995, the number of organic farms rose by 39 %, yet from 1995 to 1996 the increase was 5 %, and a mere 2 % in the subsequent year.

What can we do to ensure Austria's and Europe's successful development in the future?

The production of organic goods is more expensive since it involves higher labour, as well as fodder and stable costs. Therefore, it is very important to keep **compensations provided by the environmental program** and which help cover these additional costs at least at current levels. **Trade and processing companies**, however, must also compensate for higher production costs, e. g. by paying farmers a bonus on the production price of organic products. Even **consumers**

need to be aware of their responsibility because it is only when they demand more organic products and are prepared to reward the additional effort by paying higher prices that the success story of organic farming will continue.

The task of producers, processing and trade companies is to support consumers through information.

At the same time, efforts must be made to **reduce production costs**. This can be achieved, for example, by combining different areas into **organic regions** in order to cut the cost of logistics (e. g. in the collection of milk). An excellent example of such an approach is the Federal Province of Salzburg, where more than a third of farmers, particularly in alpine regions, produce according to organic criteria.



Of course, the role of **research** must not be underestimated. Policies in this field must focus on creating impulses for obtaining more scientific findings to expand organic farming.

This is a selection of questions and answers (partly abridged) from the internet lexicon on organic farming. You will find answers to more than 200 questions under www.biobauern.at or www.bioclub.at.

What does species-compatible animal husbandry mean in organic farming?

Animals are our fellow creatures with highly developed senses and many physical and social needs. In organic farming animals are living in smaller stocks, have more room in the stable, and can move regularly outdoors all over the year. The animals are fed by our organic farmers



with organic fodder. Prophylactic administration of antibiotics and the use of performance-increasing medications are generally prohibited in organic farming and the animals are not fed with these substances. A species-compatible form of animal husbandry,

which offers the animals sufficient room to move and supplies them with organic fodder enables the animals to live a healthy life without stress.

What is the Tiergerechtheitsindex (TGI) (index of compatibility with the requirements of animals)?

In order to ensure that animals are kept in a way which is compatible with the requirements of the respective species a special evaluation system the so-called Tierge-

rechtheitsindex (index of compatibility with the requirements of animals) has been introduced in organic farming. This index applies to cattle, calves, fattening pigs and laying hen farming. The species-compatible animal husbandry is examined and evaluated by means of a point system. Organic farms must reach at least 21 TGI-points in order to be entitled to call their animal husbandry species-compatible. However, in the case of a new construction or a reconstruction of stables at least 24 TGI-points have to be reached.

What is crop rotation in organic arable farming?

Fields, on which the same fruit is grown over a period of many years lose their natural fertility. Therefore a diversified cultivation of crops, a crop rotation, is necessary. For only if a plant which needs many nutrients from the soil, is followed by a plant with a lower nutrient demand, the soil is not being exhausted and remains fertile. So in organic farming cereals are not grown at the same place for many years, but the 'demanding' cereals are followed by a leaf crop such as sunflower or pumpkins. The crop rotation fulfils another important task as far as pests and weeds are concerned. If the soils are healthy, pests and weeds occur by far less frequently.



How is the fertilisation carried out in organic farming?

Fertilisation means for our organic farmers to supply the soil organisms with all those nutrients that they



need for their health and fertility. In order not to destroy the soil organisms, our organic farmers refrain in general from using chemical-synthetic sprays and use organic manure such as compost, dung, liquid manure or slurry. Another form of fertilisation in organic arable farming is the so-called 'green manuring'. Some plants, such as for example clover can supply the soil with energy through their roots. By cultivating these plants the soil is supplied with important nutrients. Low-soluble fertilisers such as for example phosphorus and potash may be used as well in organic farming, but only in case of need and with the approval of the control agency and the association of organic farmers. In the case of lack of mineral substances the soils are also supplied with mineral powders and lime in organic arable farming. What is important for all forms of fertilisation in organic arable farming and in organic farming as a whole is that the soils are kept healthy and fertile in a sustainable way.

How is pest control carried out in organic arable farming?

As organic farming as a whole organic arable farming refrains also from using chemical-synthetic substances as

a means of pest control. As a severe pest infestation is mostly due to mistakes in soil management, our organic farmers are working in a preventive way and pay attention to the right selection of the location of fields, to the right soil tillage and a diverse and well-balanced plant cultivation. This organic way of farming contributes considerably to the fact that pests are kept within limits. Nature offers great help in pest control. Every pest has mostly a natural antagonist, a so-called beneficial organism, which lives on pests. Therefore organic farmers protect the natural habitats of beneficial organisms and offer them for example nesting places and hedge-rows. Only if all natural methods are exploited are the few not chemical-synthetic plant protectants employed in organic arable farming. Among the plant protectants which are permitted in organic arable farming there are sulphur and copper.



How is weed control carried out in organic arable farming?

In organic farming weeds are not only considered to be negative, their advantages are seen as well. They serve as hiding places and habitats for beneficial animals, which live on pests. Therefore weeds are called secondary herbs or associate flora in organic farming. By working preventively our organic farmers demonstrate that weeds can be brought under control even without chemical-synthetic sprays: With the right selection of location of fields, healthy

seeds, the right time for sowing and a well-balanced crop rotation a severe weed infestation is avoided in organic arable farming. Should there still be too many weeds they are removed mechanically or manually.

Are there also greenhouses in organic farming?



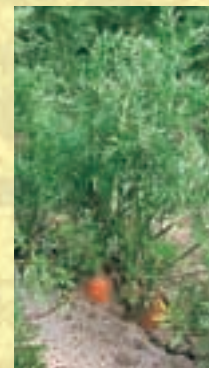
In organic vegetable growing greenhouses exist as well, however, the provisions differ considerably from those for conventional vegetable growing. So greenhouses are neither heated, nor is artificial light used according to the

guidelines of the farming association for organic farmers 'ERNTTE für das Leben' (Harvest for a Better Life). In winter the cultivated areas may only be kept free from frost. As far as the fertilisation of soils and weed control are concerned the same guidelines apply as for organic vegetable growing as a whole, which means a general prohibition of all chemical-synthetic fertilisers and pesticides.

What are the correct designations for organic food?

Many a food producer decks oneself with borrowed plumes and tries to declare his foodstuffs as organic. Fortunately it is not difficult to distinguish genuine organic foodstuffs from false ones. According to the Austrian Food Code (Codex Alimentarius Austriacus) only the following designations are permitted for organic foodstuffs 'aus biologischem Anbau' (from organic cultivation),

'aus biologischem Landbau' (from organic farming) and 'aus biologischer Landwirtschaft' (from organic agriculture). The word 'biologisch' (organic) can also be replaced by or supplemented with the following designations 'ökologisch' (ecological), 'organisch-biologisch' (organic-biological), 'biologisch dynamisch' (organic-dynamic). In addition to these terms the word BIO (bio) can also be used, for example 'Bio-Weizen - aus kontrolliert biologischem Anbau' (bio-wheat from controlled organic cultivation).



That an organic product originates from organic farming and contains only the permitted additives can also be seen from the fact that it has been controlled by an authorised control agency. Then the product is marked with the control agency number, For example: AT-N-01.BIO, AT for Austria, N for Lower Austria, 01 is the control agency number (in this case controlled by the control agency 'Austria Bio Garantie') and BIO for controlled organic product.

Attention: Non-organic are products with the following designations: 'naturnah' (close to nature) 'umweltschonend' (environmentally friendly), 'kontrolliert integriert' (controlled-in-tegrated), 'Chemiefrei' (free from chemistry) and 'alternativ' (alternative).

Are organic vegetables more nutritious?

In principle the nutrient content of vegetables depends very much on the respective vegetable variety. But in particular organic vegetables originating from soils which

have been under organic farming for many years can be more nutritious. This is for example demonstrated by a 12-years comparative study which was carried out by Professor Werner Schuphan. On average the organic vegetables contained 18 % more protein, 28 % more vitamin C and 19 % more total sugar. Furthermore the organic vegetables contained 77 % more iron and 10 % more calcium.

What is the ‘Escalope Certificate of Origin’?



In particular as far as buying meat is concerned it has become more and more important for consumers to be exactly informed about the origin of the meat they are buying. Therefore organic farming has established a control system of its own: the

‘Escalope Certificate of Origin’. By means of the ‘Escalope Certificate of Origin’ every consumer can now control exactly the origin of the organic meat and trace ‘his’ escalope back to the organic farm.

What does control mean in organic farming?

‘Confidence is good, control is better’, goes an old, a little bit suspicious saying, which applies of course also to our foodstuffs. In order to ensure that there is no place for charlatans and that consumers are not deceived, but get guaranteed organic food a comprehensive control system exists for the whole field of organic farming. Inspections of all organic farms and processing enterprises are carried out at least once a year in order to check the compliance with the legal provisions on organic farming.

Are there any sanctions imposed, if the legal provisions are not complied with?

Should the legal provisions on organic farming not be complied with sufficiently on a farm, the control agencies and the Food Authority would react with sanctions. These sanctions range from an admonition in the case of minor offences to a prohibition to sell organic products. The ultimate consequence may be the revocation of the recognition as organic farm.

How long does the conversion to organic farming take?

For the whole field of plant production a period of at least 2 years is provided by law, in order to be recognised as organic farm. In the field of animal husbandry shorter conversion periods are possible as well, if all provisions on species-compatible animal husbandry are exactly complied with.

Which legal provisions lay down rules for organic farming?

In Austria organic farming is regulated by two national provisions: Organic plant production and the production of foodstuffs of plant origin are laid down in EU Regulation No 2092/91 ‘on organic production of agricultural pro-



ducts'. Species-compatible animal husbandry, feeding, and organic food of animal origin are regulated by the Austrian Food Code, the Codex Alimentarius Austriacus, Chapter A 8, subchapter B 'agricultural products of animal origin.

Why is genetic engineering rejected in organic farming?

Organic farmers keep their animals in a way which is compatible with the requirements of the respective species, protect the environment and preserve it sustainably. Interferences with nature, without exactly knowing their consequences are therefore not part of the philosophy behind organic farming, neither is the production of foodstuffs whose consequences on humans are by no means scientifically explored yet. Therefore organic farming rejects decidedly the use of genetic engineering in the field of agriculture and pleads very much for not exposing man and environment to unnecessary risks.

Is a sufficient nutrition of the world population possible without genetic engineering?

The argument that a sufficient food supply of the world population would only be possible with technical aids was already used by representatives of the pesticides industry decades ago. As we can see today the hunger in the world has only slightly decreased due to the use of pesticides, and genetic engineering is not a guarantee for a sufficient nutrition of the world popu-



lation either. For the problem of hunger is not due to the existing quantity of food, but rather due to lacking political, economic, and ecological concepts. One of the problems is that a major part of the world population cannot afford the sufficiently available food any longer. The reasons for the hunger in the world are multifarious and complex. Simple answers should rather make us sceptical.

Why are organic foodstuffs more expensive?

The reason for it is the way of organic farming as such. So animals are mostly living in smaller stocks in organic farming, they have more room to move in the stable and can move regularly



outdoors all over the year. Moreover the animals are fed by our organic farmers with organic, and thus more expensive food. One of the principles of organic farming is that the animals are not demanded to achieve maximum performance under great stress. In concrete terms this means slower growth of the animals and at the same time more expenditure of work. Similar things can be said about organic plant growing for the production of foodstuffs of plant origin: Whether in arable farming, vegetable growing, or fruit growing, our organic farmers refrain in general from using any chemical-synthetic fertilisers and pesticides. Therefore the yields are lower and the expenditure on labour is more. However, if you consider that by means of organic farming environmental damage

is avoided, organic foodstuffs are not necessarily more expensive at a second glance.



Which organic farming associations are members of the umbrella organisation 'ARGE Bio-Landbau' (Association for the Promotion of Organic Farming)?

At the moment the following seven organic farming associations are members of the umbrella organisation ARGE Bio-Landbau (Association for the Promotion of Organic Farming):

- ❖ ERNTE für das Leben (Harvest for a Better Life) – association of farmers practising organic-biological farming in Austria
- ❖ Biolandwirtschaft Ennstal (Organic farming Ennstal)
- ❖ Österreichischer Demeter-Bund – Austrian Demeter-Bund Association for biological-dynamic foodstuff quality,
- ❖ ORBI – Association for the promotion of a healthy farming community
- ❖ Freiland Verband

- ❖ BAF – (Association of organic arable farms in Austria)
- ❖ Hofmarke – (umbrella organisation for organic farming and direct marketing)

Which organic associations are members of the umbrella organisation 'Austrian interest group for organic farming - ÖIG?'

The following organic associations are united within the ÖIG:

- ❖ Erde & Saat (earth & seed)
- ❖ Dinatur – association for progressive, controlled organic farming
- ❖ Kopra – consumer-producer working party
- ❖ Verein organisch-biologischer Landbau Weinviertel (association for organic-biological farming Weinviertel)
- ❖ Gemeinschaft Pannonische Region (Association Pannonian Region)

How can I find an organic farmer in my neighbourhood?

You can search in internet under www.bmlf.biobauern.at or www.bioclub.at or you can phone the Bio Club, the service agency for consumers. The Bio Club can be reached under the following number: (+43 1) 7114/221314. Of course you can also contact directly organic associations. Their addresses are as follows:



ARGE Bio-Landbau

Wickenburggasse 14/9, 1080 Wien
tel. (+43 1) 403 70 50, fax (+43 1) 402 78 00
e-mail arge.biolandbau@ris.at

ERNTE für das Leben Österreich

Europaplatz 4, 4020 Linz
tel. (+43 732) 65 48 84, fax (+43 732) 65 48 84-40
e-mail ernte@ris.at

ERNTE für das Leben Burgenland

Hauptstrasse 69/8, 7350 Oberpullendorf
tel. (+43 2612) 436 42, fax (+43 2612) 436 42-40
e-mail ernte.bgld@bnet.co.at

ERNTE für das Leben Niederösterreich/Wien

Norbertinumstrasse 9, 3013 Tullnerbach
tel. (+43 2233) 565 22, fax (+43 2233) 565 22-10
e-mail ernte.noe@magnet.at

ERNTE für das Leben Oberösterreich

Auf der Gugl 3, 4020 Linz
tel. (+43 732) 69 02-420, fax (+43 732) 69 02-478
e-mail ernte-ooe@magnet.at

ERNTE für das Leben Salzburg

Schwarzstrasse 19, 5024 Salzburg
tel. (+43 662) 87 05 71-42, fax (+43 662) 87 05 71-27
e-mail ernte.sbg@magnet.at

ERNTE für das Leben Tirol

Brixnerstrasse 1, 6020 Innsbruck
tel. (+43 512) 59 29-343, fax (+43 512) 59 29-238
e-mail ernte.tirol@netway.at

ERNTE für das Leben Vorarlberg

Montfortstrasse 9-11; 6900 Bregenz
tel. (+43 5574) 469 30, fax (+43 5574) 525 50
e-mail ernte.vlbg@magnet.at

ERNTE für das Leben Kärnten

Gasometergasse 2, 9020 Klagenfurt
tel. (+43 463) 332 63, fax (+43 463) 332 63-15
e-mail ernte-kaernten@magnet.at

ERNTE für das Leben Steiermark

Hamerlinggasse 3, 8011 Graz
tel. (+43 316) 80 50-260, fax (+43 316) 80 50-316
e-mail schnuderl@lk-stmk.at

Österreichischer Demeter Bund

Hietzinger Kai 127/2/31, 1130 Wien
tel. (+43 1) 879 47 01, fax (+43 1) 879 47 22

Förderungsgemeinschaft für gesundes Bauerntum

ORBI
Nöbauerstrasse 22, 4060 Leonding
tel. (+43 732) 67 53 63

Biolandwirtschaft Ennstal

8950 Stainach 160
tel. (+43 3682) 285-306, fax (+43 3682) 285-615

**Verein der biologisch wirtschaftenden Ackerbau-
betriebe BAF**

2164 Gut Prerau
tel. (+43 2523) 84 12, fax (+43 2523) 84 12

Freiland Verband

Wickenburggasse 14/9, 1080 Wien
tel. (+43 1) 408 88 09, fax (+43 1) 402 78 00
e-mail freiland@ins.at

Hofmarke

Hausmanning 43, 4560 Kirchdorf
tel./fax (+43 7582) 610 17
e-mail hofmarke@gmx.net

Österreichischen Interessensgemeinschaft für Biologische Landwirtschaft ÖIG

Schlag 14, 2871 Zöbern
tel. (+43 2642) 86 51-19, fax (+43 2642) 86 53-20

Erde und Saat

Mairing 3, 4141 Pfarrkirchen i. M.
tel. (+43 7286) 75 17, fax (+43 7286) 73 96

DINATUR

Schlag 14, 2871 Zöbern
tel. (+43 2642) 86 53-19, fax (+43 2642) 86 53-20

Konsumenten-Produzenten-Arbeitsgemeinschaft KOPRA

Hirschgraben 15, 6800 Feldkirch
tel. (+43 5522) 796 87

Verein organisch biologischer Landbau Weinviertel

2053 Peigarten 52
tel. (+43 2944) 82 63