

Organic Farming in Iceland

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1 General Information on the Situation of Agriculture in Iceland

Agricultural production is of great importance to the national economy of Iceland. The country's 4000 farmers produce sufficient food of animal origin for the population of 270.000, as well as substantial amounts of vegetables, partly in geothermally heated glasshouses. There are also some exports of agricultural products.

2 History and Development of Organic Agriculture in Iceland

Iceland is a mountainous, volcanic country of 103.300 km² just south of the Arctic Circle. Although the growing season is short and the climate is cool, there is clearly considerable potential for the development of organic agriculture. The use of agrochemicals and drugs, which increased during the latter half of the 20th century, is still low, and there is little pollution in this sparsely populated and isolated country which is free of several well-known animal and plant diseases. The standard of animal welfare is generally high. The main technical obstacles, however, are a shortage of organic fertilisers and feeds and difficulties in growing legumes such as white clover.

The pioneers of organic farming in Iceland have certainly tackled these problems with promising results, ever since the energetic Sesselja Sigmundsdóttir paved the way at her Sólheimar Farm in South Iceland after 1930. Development has been slow, and when organic farmers founded their VOR society in 1993, there were only seven organic producers, all without official certification. In 1999 some 40 farmers and processors were involved in certified organic production, which shows that this sector of agriculture is developing at a modest rate.

3 Farm Statistics

Two certification bodies, LÍV and TÚN, have been operational in the organic sector in Iceland since 1996. In 1995 seven farmers and one processor were certified as organic. Of the total of 33 farmers and nine processing companies in 1999, 75% were certified by TÚN and 25% by LÍV. Since the certifiers have not yet provided detailed farm statistics, it is estimated that in 1999 a total of 2.500 hectares were in organic cultivation, accounting for 0.6% of the total agriculturally utilised area and 0.8% of all farms in the country. In addition to the cultivated land, ten organic sheep farms utilise extensive, natural rangeland pastures for summer grazing. It should be noted that several of the organic farmers have converted specific farm activities rather than whole farms, but details on the present situation are lacking.

It is estimated that 20% of the organic farms are not bigger than 5 hectares, that 30% comprise about 10 hectares and that half of the organic farmers cultivate more than 20 hectares. These numbers only refer to cultivated land. The size of rangeland for grazing is unknown.



4 Organic Agriculture Organisations

The first organisation was VOR, the National Association of Organic Farmers, founded in Bændahöllin, the headquarters of the Farmers' Association of Iceland, on April 26, 1993. This was followed by:

- TÚN Certification Body in 1994;
- ÁFORM-Átaksverkefni Development Programme in 1995;
- LÍV - Vistfræðistofan Certification Body in 1995;
- The Ministry of Agriculture Advisory Committee on Organic Agriculture in 1996;
- The Council for Science and Technology in Organic Agriculture in 1997; and
- BIRALA - Organic Task Force in 1997.

All function at the national level. In addition, two local bodies have been active, namely MÝRDALUR Organic Community Project in South Iceland from 1993 to 1997 and GRÓSKA Organic Society in North Iceland since 1996.

5 Regional Distribution

The pioneers of organic farming were mainly located in the South of Iceland. However, during the 1990s a few farmers in the North embarked on conversion, mainly with their sheep flocks, but as yet there are few organic farms in the West and East of Iceland. Thus at present over 50% of the organic farms are in South Iceland, while processors are more evenly distributed among the regions.

6 Land Use, Animal Husbandry

Organic cultivation in Iceland is mainly concentrated on the most productive cultivated land, i.e. well-drained soils high in organic matter. As indicated above, extensive, natural rangeland pastures are used for summer grazing, mainly for sheep and horses. As a rule of thumb, the rangeland belonging to each farm is often 10 times bigger than the cultivated land where hay, silage and other crops are grown. The same applies to organic farms, for which detailed information both on land use and animal numbers is not yet available. They mainly raise sheep, and to a lesser extent cattle, and emphasis is placed on utilising roughage for feeding, which is characteristic of the traditional system of animal production in Iceland.

Six farmers have geothermally heated glasshouses. Organic glasshouse farming has been practised on at least three of the six farms for many years, and most of these producers are pioneers of organic cultivation in Iceland, one of them being Thordur Halldórsson, the chairman of VOR. These farms are all in the South of Iceland. The main crops are tomatoes, including cherry tomatoes, cucumbers, green, yellow and red pep-



pers, as well as vegetables like carrots and cabbages. Cultivation throughout the year can be achieved through electric lighting, and CO₂ from a natural bore hole can be used to encourage plant growth. As a rule, biological control is applied against harmful insects. Most of the organic glasshouse products are marketed in Reykjavík.

7 State Regulations, Standards and Certification

The Ministry of Agriculture has a supervisory function through the implementation of *Law No. 162/1994 and Regulations No. 219/1995 with amendments No. 90/1998 on organic agricultural production*. These conform to the IFOAM Basic Standards and the relevant EU regulations. The Icelandic law and regulations, which are available in both Icelandic and English, state the minimum requirements for certified organic production methods, with which the standards of the certification bodies must comply. The provisions of the regulations also apply to bio-dynamic agricultural production. The certification bodies need an official permit of operation from the Ministry of Agriculture as well as an accreditation from the Icelandic Metrology and Accreditation Agency. As mentioned above, two certification organisations operate in Iceland, namely:

- TÚN Certification Body, founded in 1994, functioning since 1996, after having provided inspection and certification services from 1994 to 1996 through the Soil Association of the U.K., which also provided expert training.



- LÍV - Vistfræðistofan, Certification Body, founded and functioning since 1996, benefited from the expertise of KRAV from Sweden. Provides inspection and certification services like TÚN.



8 Implementation of EU Regulation 2092/91

As indicated above, the Icelandic law and regulations on organic agricultural production were written in accordance with the EU Regulation 2092/91 and subsequent amendments. Although Iceland is not an EU country, it is a member of the European Economic Area (EEA). The Ministry of Agriculture's Advisory Committee on Organic Agriculture monitors amendments to EU Regulation 2092/91 and other EU Regulations relevant to organic agriculture. Such EU Regulations are thus implemented by the Ministry of Agriculture and subsequently by both certification bodies.



9 State Support, Policy Initiatives

Unlike in most neighbouring countries, a conversion grant scheme does not yet exist in Iceland, although it has been proposed on several occasions, for example by VOR, the National Association of Organic Farmers, and by some parliamentarians through private members' bills. Recently an *ad hoc* committee, appointed by the Minister of Agriculture to deal with problems facing sheep farming, has proposed, among other measures, certain state subsidies for organic sheep conversion. At present the only state support for organic agriculture based on policy initiatives is the following:

ÁFORM-Átaksverkefni Development Programme, established according to *Law No. 27/1995*, allocated special funds from 1996 to 1999 to promote the production and marketing of eco-labelled produce, namely from both integrated and organic agriculture. Several organic projects were supported, which were mainly related to: promotion and marketing; inspection and certification; and research and development. Five organic farmers received direct financial support through this programme from 1996 to 1999, although funds were not sufficient to cover a complete conversion grant scheme.

Agricultural Law No. 70/1998 allows for certain state subsidies to individual farmers who convert certain farm activities or whole farms to organic production. A contract that was made in compliance with this law between the state and the Farmers' Association of Iceland was ratified in 1999 and will be valid until 2003. According to this contract, cultivated land in organic conversion is eligible for a single payment of 25.000 Icelandic kronur (338 Euro) per hectare of arable land and 250 Icelandic kronur (3.4 Euro) per square metre in glasshouses. It does not provide for payments to existing organic farms.

In *Law No. 162/1994*, Article 6, and *Regulations No. 219/1995*, Article 2, on organic agricultural production referred to above, it is stated that due regard shall be given to Agenda 21, the action plan of the United Nations Conference on Environment and Development in Rio de Janeiro, 1992, concerning sustainable agriculture and other matters.

Several local authorities are working on efforts to involve organic farmers where appropriate, for example composting organic waste for organic cultivation.

10 Marketing

Although organised marketing is still in its early stages of development, certain positive signs are on the horizon regarding both domestically produced and imported certified organic produce, mainly food. Small quantities, large distances and few producers and processors are some of the problems faced. One retailer in Reykjavík specialises in organics, and a few others offer consumers such products. However, much promotion work is needed and consumers clearly need more information on the quality and general value of organic commodities. Premium prices for organics normally range from 10 - 30%. No information is available on turnover, but it is estimated that organics account for approximately 0.5% of the total agricultural production in Iceland. The volume and



value of organic imports are not known, but these mainly include processed fruits, vegetables and cereals. They account for about 0.5% of food imports. Therefore, this is still a niche market. The organic product range is growing, now including hay, silage, barley, herbs, trees, carrots, potatoes, turnips, cabbage, cauliflower, rhubarb, tomatoes, cucumbers, peppers, milk, lamb, beef and eggs. The only organic exports so far are lamb to Denmark and the U.K., and still only in small quantities. Organic processing mainly focuses on dairy and herb products.

11 Training and Education

In recent years, greater attention has been paid to teaching the principles of organic farming to agricultural and horticultural students, namely at Hvanneyri Agricultural University College and Reykir Horticultural College. In addition, short courses have been held. Students in these educational establishments and others have also worked on dissertation projects on several aspects of organic agriculture, ranging from cultivation to marketing. There is clearly a great need for more training and education at all levels in order to strengthen the knowledge base of organic farming in the country.

12 Advisory Services

On the extension side, in 1996 the Farmers' Association of Iceland took the pioneering step of officially appointing Dr. Ólafur R. Dýrmundsson as the National Adviser on Organic Farming and Land Use, the first agricultural adviser in the country specialising in this area. He has worked in close co-operation with organic farmers ever since the foundation of VOR in 1993, as well as with Ministry officials, research scientists and training establishments and local agricultural advisory officers. While strengthening the advisory services at the national level, the next step is to generate more interest in organic farming among local advisers throughout the country as well as among regional representatives of the Soil Conservation Service.

13 Research Situation

In 1995 an *ad hoc* Ministry of Agriculture working group identified the main areas in which research in organic agriculture should have a priority. Subsequently, the Council for Science and Technology in Organic Agriculture studied the research needs in more detail and in 1998 proposed the following research priorities:

- Supply and utilisation of organic fertilisers for crop production, including glasshouse cultivation
- Breeding and growing legumes suitable for Icelandic climatic conditions
- Control of pests and diseases in crops and livestock
- Development and adaptation of suitable machinery and buildings for organic farms



- Economic aspects of organic farming, including marketing

So far, the main research efforts related to organic cultivation have involved legumes and organic fertilisers. It is hoped that the establishment of clear research priorities will serve as a guideline for the preparation and funding of short- and long-term experimental projects. A special research effort is clearly needed. New research projects could be generated, for example, if the Hvanneyri Agricultural University College converts its sheep unit to organic farming, which is presently under consideration.

14 Challenges and Outlook

Since sustainable agriculture is on the agenda of the Government of Iceland, it is logical to believe that greater attention will be paid to organic farming in the future. Rural depopulation is a major problem in Iceland, and it is clear that the development of organic production, both vegetable and animal, can be one means of strengthening farming communities and local processing industries throughout Iceland. A growing market in which fair prices are paid is vital in the light of growing competition in all sectors of the national economy. Subsidies, enhanced training, research and extension, improved market organisation and consumer education are all important aspects. The challenges are there already, and the outlook is fairly good at present. However, it seems likely that progress will not be rapid during the next few years.

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Web Pages: The only web page with special references to organic agriculture in Iceland is the Farmers' Association web page: www.bondi.is

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Dýrmundsson, Ólafur R.: Organic Farming in Iceland;
<http://www.organic-europe.net>, 30.3.2000;
© Stiftung Ökologie & Landbau (SÖL), Bad Dürkheim, Germany, 2000.