

Organic Knowledge Update

Dairy production

February 2011

Organic dairy production in the Netherlands

The dairy sector is the largest organic sector in the Netherlands. Cows, goats and sheep are kept to produce milk and a variety of cheeses. Although a significant share of total organic dairy production is exported, domestic consumers are continuing to buy more and more Dutch organic dairy. To facilitate organic dairy farmers, Wageningen UR and Louis Bolk Institute carry out a variety of research aimed specifically at organic dairy production.



Dutch organic dairy sector

Estimations from early 2010 indicate that there are about 339 organic dairy cattle farms in the Netherlands; of which 259 are cow dairy farms. Because many Dutch organic farms have a mixed production and keep several types of animals, it is difficult to establish the exact numbers of farms, animals and milk production.

In 2009, 4.9% of all fresh dairy sold in the Netherlands was organic dairy (up from 4.3% in 2008). Organic cheese and butter had a market share of 2.2% (2008: 1.6%). The total sales of fresh organic dairy went up 18.8% in 2009, grossing 122 million euro.

Almost half of all organic dairy is sold in supermarkets, over a quarter in speciality stores and about 19% goes to catering services. Although most organic dairy is processed in the Netherlands itself, many of the products (especially cheese) are exported.

→ Aspirations

By 2013 the Dutch organic dairy sector aims to be at the forefront of sustainable agricultural production, while at the same time providing a consistent economic benefit to all links in the production chain.

The organic dairy sector focuses on:

- The discerning qualities of its products;
- A sustainable production system;
- The relationship with dairy consumers;
- Closing production cycles;
- Breeding robust and resilient animals;
- Animals with natural behaviour and housing;
- A sustainable livelihood for all producers and processors.



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Current affairs

In the near future, a number of issues will become important to both dairy farmers and researchers in organic livestock research. One such issue is the regional production of feed rations. In order to reduce transport time, cost and environmental burden, feed for dairy cattle needs to be produced close to the dairy farms.

Another important concern revolves around the cattle breeds used for organic dairy production. Conventional cattle breeds are often turning out to be unsuited to organic production; the animals are not resilient enough to combat diseases without the use of antibiotics for instance. In 2009 a separate breeding program for organic dairy cattle was started. Currently, four bulls are available for artificial insemination and more will follow soon.

In the Netherlands organic dairy is mainly sold in basic products such as yoghurt or milk. As price differences become smaller, the Dutch organic dairy assortment is expected to diversify and modernise. Catering services are already replacing traditional dairy with organic dairy in many products. In Denmark, where fresh organic dairy has a market share of 30%, the range of fresh dairy products is currently much more modern than in the Netherlands. This is also true for Germany



and Belgium. In those countries, organic dairy is used in for instance smoothies, shots and fruit yoghurts.

Quite a wide range of organic cheeses is available at specialty stores, but not at supermarkets. There was also little room to increase the number of organic cheeses in supermarkets because of the shortage of organic milk; there was simply no possibility to make the cheeses with

Dutch organic milk. Also, the packaging of organic cheese needs to be improved for the products to stand out in the supermarket.

Dutch research projects concerning organic dairy production are focusing on these and other issues, aiming to provide farmers and other members of the dairy production chain with practical solutions and hands-on advice.



Research projects

- **Truly Overijssel!** This project aims at developing sustainable organic farming systems with regional nutrient cycles and enhanced nature and landscape values in the Dutch province of Overijssel.
Contact: Dr Ina Pinxterhuis, Ina.Pinxterhuis@wur.nl
- **Family herd** This project aims to develop a whole new farming system for dairy cows, with a new type of stable and a new style of cattle husbandry. The system is to be based on the needs and wants of the cows. Includes: family herd, cows with horns and calves staying with their mothers.
Contact: Ingrid van Dixhoorn DVM, Ingrid.vanDixhoorn@wur.nl
- **Suitable cow type for organic dairy farms** This project aims to describe the cow characteristics suitable for organic dairy farms. The analysis will include appraisal of the economic value of these characteristics.
Contact: Wytze Nauta MSc, W.Nauta@louisbolk.nl
- **Vision, trends and strategies for organic dairy farming 2020** Organic dairy farmers need a new perspective for 2020 in order to develop their own strategy. Organic dairy farmers participate in this project, to discuss perspectives, societal trends and strategies.
Contact: Dr Maarten Vrolijk, Maarten.Vrolijk@wur.nl
- **Improving welfare performance in organic husbandry systems** This project aims to improve the welfare performance in organic husbandry systems (dairy cattle, goats, sheep, pigs and poultry) by stimulating measures in on-farm situations. Improvement measures often demand an integrated approach.
Contact: Ingrid van Dixhoorn DVM, Ingrid.vanDixhoorn@wur.nl
- **Limited use of antibiotics in organic dairy cows** This project aims to create awareness about antibiotic treatments. The use of antibiotics should be limited to diseased cows. Alternative measures, including prevention, are to be promoted.
Contact: Gidi Smolders, Gidi.Smolders@wur.nl
- **The effect of compost on udder health** Compost can provide a soft and stable floor for cattle to lay on. What is the risk of bacteriological contamination of the udder when using compost in stables?
Contact: Gidi Smolders, Gidi.Smolders@wur.nl
- **Unlimited pasture access for dairy cows** Which factors determine the length of pasture use and how can the organic dairy sector keep a significant advantage in this respect?
Contact: Gidi Smolders, Gidi.Smolders@wur.nl
- **Continuous milking of dairy cows** Continuous milking can spread milk production and labour demand more evenly over the year. In the last few years, experience has been acquired in the goat sector. This project looks at the possibilities for continuous milking of dairy cows.
Contact: Nick van Eekeren, N.vanEekeren@louisbolk.nl





Literature

- Haas, Y. de, J.N. Hoorneman, E.A.A. Smolders, W.J. Nauta and R.F. Veerkamp. 2010. Effect of Crossbreeding on Milk Production, Udder Health and Fertility on Dutch Organic Dairy Farms. In: Proceedings of the 9th World Congress on Genetic Applied to Livestock Production (WCGALP), Leipzig, Germany, 1-6 August 2010.
- Nauta, W.J., J.N. Hoorneman, E.A.A. Smolders, R.F. Veerkamp and Y. de Haas. 2010. Crossbreeding in Dairy cows; Effect on production, somatic cell counts and calving interval on Dutch organic dairy farms. In: Book of abstracts of the 61th Annual Meeting of the European Association for Animal Production, 23-27 August, 2010, Heraklion, Greece. Wageningen Academic Publishers, 61th Annual Meeting of the European Association for Animal Production, Heraklion Greece, 2010-08-23/2010-08-27.
- Ruis, M.A.W. and J.B. Pinxterhuis. 2008. Animal welfare standards in organic farming in The Netherlands. Cultivating the Future Based on Science: 2nd Conference of the International Society of Organic Agriculture Research ISOFAR, Modena, Italy, June 18-20, 2008.
- Vaarst, M., C. Leeb, P. Nicholas, S. Roderick, E.A.A. Smolders, M. Walkenhorst, J. Brinkman, S. March, E. Stöger, E. Gratzner, C. Winckler, W. Lund, B.I.F. Henriksen, B. Hansen, M. Neale and L.K. Whistance. 2008. Development of animal health and welfare planning in organic dairy farming in Europe. Cultivating the Future Based on Science: 2nd Conference of the International Society of Organic Agriculture Research ISOFAR, Modena, Italy, June 18-20, 2008.
- Wagenaar, J.P.T.M. and E.A.A. Smolders. 2008. Mastitis incidence and milk quality in organic dairy farms which use suckling systems in calf rearing. Cultivating the Future Based on Science: 2nd Conference of the International Society of Organic Agriculture Research ISOFAR, Modena, Italy, June 18-20, 2008.
- Smolders, E.A.A., 2008. Assessment of skin damages in dairy cows. Cultivating the Future Based on Science: 2nd Conference of the International Society of Organic Agriculture Research ISOFAR, Modena, Italy, June 18-20, 2008.
- Smolders, E.A.A., J.T.N. van der Werf, J.E. van de Mortel and A. Kijlstra. 2007. Udder health, treatments and pathogens in organic dairy herds in the Netherlands. In: Mastitis in dairy production. Current knowledge and future solutions. 4th IDF International Mastitis Conference, Maastricht.
- Pinxterhuis, J.B. and A. Klop. 2007. Utilization of autumn grass/clover: pellets or silage? Grassland Science in Europe 11: 442-444.
- Pinxterhuis, J.B., 2006. Applied research for organic dairy farming. In: Changing European farming systems for a better future, Wageningen.

Bioconnect aims to further develop and strengthen the Dutch organic sector by initiating and implementing research projects. Within Bioconnect organic entrepreneurs (from farmers to shop-keepers) work together with research institutes, colleges and universities and consultancy organisations. This leads to demand-driven research that is unique to the Netherlands.



The Ministry for Agriculture, Nature Conservation and Food Quality sponsors these research projects.



Ministry of Economic Affairs,
Agriculture and Innovation

Wageningen University and Research Centre and the Louis Bolk Institute together carry out these research projects. About 140 projects dedicated to organic agriculture are currently under way.



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