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Economy, market and chain



In their pursuit of growth and professionalisation, the Dutch organic sector focuses primarily on market development. But how do you stimulate the market for organic foods? This is the subject of many research projects concerning market, consumer preferences and the supply chain. These projects focus specifically at consumer purchasing behaviour, product development, supply chain formation and minimising cost price. As a rule, this research takes place in close cooperation with chain actors.



Marieke Meeusen

Two to three per cent of households in the Netherlands buy organic products on a regular basis. Thanks to research, the purchasing behaviour and motives of these so-called 'heavy users' are understood quite well. 'Heavy users' primarily buy organic products because they value animal- and environment-friendly production. In terms of increasing market share, however, it is especially interesting to look at the large group of 'light users'. This heterogenous group has different perspectives than 'heavy users' and thus other purchasing motives. Light users offer great expansion possibilities for the organic market.

Minimising the price difference between organic and conventional foods is often seen as key to getting light users to purchase organic products more often. However, a large-scale price experiment (see box 'Effect of price reductions') showed that a price reduction alone would not suffice to substantially increase the market share of organic.

"Thanks to the price experiment, we are now sure that other marketing instruments are needed as well", explains Marieke Meeusen, coordinator of the market and economic research. "It's all about the right mix of the four Ps: price, product, promotion and place (distribution and availability). We are now focusing much of our research on these four Ps."

Selling price versus cost price

If sales are to be increased by offering attractively priced products in the supermarkets, the cost price will have to be kept low. Keeping a careful eye on the cost price is essential in any case, to ensure that organic producers receive fair pay for their labour (fair trade). This is particularly important to the animal husbandry sector with its relatively high production costs and low number of parties in the market. Organic producer associations in the dairy, meat and eggs industries negotiate with suppliers yearly. Cost price calculations are essential to the associations: they provide them with a good negotiating position and result in better contracts.

For the past eight years, economic researchers have been calculating the cost price of pigs and piglets. An independent committee uses this calculated cost price to set the recommended price

'Marketing is all about achieving the right mix of the four Ps: price, product, promotion and place'

Marieke Meeusen

Effect of price reductions

The market share of organic products in the Netherlands is about 2 per cent. One of the objectives of the Dutch policy regarding organic agriculture is to stimulate the market for organic products and thus stimulate organic production. Minimising the price difference between organic and conventional foods is often considered crucial to increase the market share of organic products.

To find out whether this assumption is true, a large scale price experiment was carried out. In ten various-sized cities spread throughout the Netherlands the prices of organic products in most of the supermarkets were decreased by 5 to 40 per cent. The effect on sales was quantified and the purchasing motives and price sensitivity of buyers and non-buyers were surveyed. The results indicated that price does matter but that it is not the only determining factor. Reducing the price of organic products does increase sales, but the extent of this increase is limited and varies strongly per product group.

for supplied pigs. These calculations also contribute to the expansion of the organic pig sector. Substantial investments are required when expanding or converting to organic production (different housing system, decreased production). Therefore, only attractive profits will entice conventional pig farmers to alter their production methods and stimulate current organic producers to expand. Currently, prices and profits in the poultry sector are also being researched. The project looks at the entire poultry chain: from poultry farm through packing station and retail store. This research is initiated by the organic poultry farmers, who believe that the profits in their sector are not distributed evenly.

Opportunities to reduce cost price

Cost price calculations for the animal sector show that the cost price for animal feed has increased sharply in recent years. The upcoming requirement that organic animals be given only 100 per cent organic feed, will probably push this cost up even further.

Cost reduction is therefore a serious issue in organic production chains. Two research projects are looking into ways to decrease costs. One project studies the way in which scale influences cost price. Would an increase in scale actually decrease the cost price, as is often assumed? And how do entrepreneurs interpret such data? A second project looks at the social impact of production on a larger scale. How do consumers value this development and what do the entrepreneurs themselves think? Does large-scale production fit the farmers' vision of organic agriculture and does it agree with their working practices?

In plant production, reduction of the cost price could primarily be realised through a better control of pests, weeds and diseases. Production costs in organic plant production are strongly influenced



by yield losses caused by pests and diseases. Additional labour required for manual weeding is also very expensive. In the Netherlands, research focuses mainly on prevention and control of weeds, pests and diseases (see Chapter 7).

The second 'P': Product

Looking at the P for product, the focus tends to be on intrinsic qualities such as taste, convenience and shelf-life. Healthfulness is another important quality. But do consumers really associate organic mayonnaise, for example, with healthfulness? How should such a product be promoted? When the reasons behind product choices of individual groups of people are known, targeted promotional campaigns can be created that are geared to the specific perceptions of each group. Dutch research is trying to find answers to these questions to support the market development for organic products.

Increasing importance of promotion

When promoting an organic product, attention could be paid to an appealing product characterisation, to the layout of the shelves and to the product appearance. Eye-catching floor stickers or hanging signs have proven to be effective in directing consumers' attention – to organic meat for example – and in stimulating purchases. The more extensive and visible the promotional materials were, the larger their effect. The signs do not have to contain a lot of information. On the contrary, according to Meeusen. "Consumers are often in a hurry, so they are more interested in simple directions on how to find something than in lots of information."

Increasing attention is given to the packaging of organic products. Natural food stores prefer as little packaging as possible, but supermarkets want detailed packaging that effectively distinguishes organic foods from conventional products. Supermarkets also want to stand out by using biodegradable packaging. One disadvantage of this type of packaging is that it is 15 to 200 per cent more expensive. For some producers this is a reason to not choose biodegradable materials (yet). The organic product is already more expensive than the conventional one and additional expenses for packaging would make it too expensive to sell. However, environment-friendly packaging may also create an additional incentive to buy the product. There is no hard evidence for this effect, but research has shown that consumers definitely favour biodegradable packaging. Unfortunately, few are familiar with the labels for this type of packaging.

"Packaging certainly plays a role in sales. Research into this effect has only just started," says researcher Ulphard Thoden van Velzen. A superabundant package design is probably preferable for light users, whereas heavy users would respond better to a more unruffled design. Thoden van Velzen believes it is a positive development that companies are starting to experiment with packaging. "Many producers still don't even think about the best way to sell their product. The rising attention to packaging is therefore a good sign." Currently, the researcher works together with the industry on various new types of packaging for meat and cheese.





Willie van den Broek

Increasing product availability

The last 'P' refers to product availability. Consumers have to be able to continuously find organic food in their neighbourhood. The demand for organic products has been growing steadily during the last decades. The production volume, however, did not increase in the last five years. Demand and supply are badly balanced, which causes considerable fluctuations in price and availability. There is a pressing need for new organic producers, but only a few farmers actually convert to organic production each year.

An evaluation amongst stakeholders, organic and conventional farmers provided insight in the causes of this insufficient growth of production. The pioneer farmers who were the first to believe in organic agriculture, made the transition years ago. The group that's next in line is often referred to as 'early adopters'. These farmers have other motives besides idealistic ones for converting to organic farming: economic motives, for instance. Another problem is that many conventional farmers do not have a realistic concept of organic agriculture. This makes it important to increase conventional farmers' knowledge about organic production. "We need to create a breeding ground for young agricultural entrepreneurs who see organic production as a serious business strategy", says Wijnand Sukkel. He investigated the reasons behind the recent lack of growth of organic production. Sukkel: "If they eventually do decide to make the switch, this decision will be based primarily on good market prospects for organic products." Realising expansion is primarily the organic sector's own responsibility. "Chain actors in the dairy and meat industries can use their close contacts with conventional farmers to inform and interest them. They are able to offer a secure market for the farmers' products, ensure balanced growth and purchase the products during the conversion period."

Introduction of new products

In addition to maintaining a sufficient supply to the supermarkets, it is also important to introduce new products with which the organic sector can distinguish itself. One way to speed up the introduction of new organic products in the supermarkets is through company restaurants, explains Marieke Meeusen. Research has already shown that company restaurants are a good place to try out new products. If people like a product, they will look for it in the supermarket. Many freshly squeezed fruit juices, fruit salads and sushi products have already found their way to the supermarket through this catering channel. Consumers can thus help to stimulate the introduction of new products in the retail channels.

Establishing and strengthening marketing chains

Actual strengthening and professionalisation of the market for organic products will require coordinated and innovative efforts. These efforts should involve everyone in the chain: from producers all the way to the supermarket. Companies and research institutes work in joint projects on the development and marketing of organic products. The industry initiates these studies and

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helps to finance them. "We think that when companies have an interest in a product, they will work hard to make it a success", explains research coordinator Willie van den Broek.

Chain research is by definition multidisciplinary. Companies and research institutes innovate together. Researchers not only do research, but they also play a role as project directors and managers. If necessary, they receive intensive training and coaching to build up the expertise and skills required for their new roles.

Wine cheese and hypoallergenic apples

So far, sixteen chain projects have been carried out. Some focused on the development of new products (such as wine cheese and wild cucumbers), others on new concepts (including better positioning of products on the market). There were projects aimed at introducing a product to new target groups (organic wine to restaurants and gift basket companies, organic milkshakes for students), and some centred on adding value (organic vegetable juice made of by-products). Also, the marketing of products with a special quality or health aspect was researched (hypoallergenic apples, gluten-free foods based on quinoa and amaranth and health-promoting cranberries).

In a short time new products were developed, strong chains emerged and new markets were created. This included using by-products from the organic processing industry to make organic vegetable juice (see box) and the introduction of the wild cucumber (see box).

In some cases it takes more time to build a solid supply chain for a new product. An example is the production of Dutch cranberries. Until now, cranberries have only been collected on the Wadden islands of the Netherlands. Most cranberries are imported from other countries.

Organic vegetable juices made from by-products

Processors of organic vegetables – companies that rinse, cut, freeze and conserve the vegetables – create large amounts of by-products. For winter carrots alone this represents fourteen per cent of the product volume. These by-products are usually used in animal feed, but this gives insufficient financial return. Meanwhile, there is a growing demand for organic vegetable juice. This raised the question whether the residuals of vegetable processing could be used to produce vegetable juices.

The vegetable juice producer 'Provalor' makes food products from by-products and wanted to investigate the possibilities in the organic sector. Wageningen UR directed the development of a supply chain that includes the processor, trade organisation and organic juice producer. A number of studies were conducted into the requirements for introducing the juice into the market. Following a number of successful production and sales tests, contracts were drawn up for the supply of organic vegetable juice.

Researcher Noen Jukema: "Through learning by doing and product development we came up with an innovative and sustainable product." Provalor expects to increase production in the coming years to 3 to 5 million litres of organic vegetable juice per year. This means a 50 per cent increase in the value of the by-products from Dutch organic vegetable production.

Wild cucumber a big success

Tomatoes are available in various colours and sizes. Consumers can choose from a wide selection of varieties including vine-ripened, cherry and plum tomatoes. This is not the case with cucumbers. Up to now, a cucumber has always been just a cucumber. But this is about to change. A tasteful old cucumber variety that has a dark-green colour, a rough peel and prickles, has been reintroduced specifically for the organic market. It is called the wild cucumber. Aside from having a distinguishing colour and

appearance, this product reminds consumers of 'the old days'.

This cucumber was developed together with the spring cucumber as part of a collaborative effort between Wageningen UR, the Centre for Genetic Resources Netherlands (CGN), a breeding company, a grower and a trade company in organic vegetables. CGN selected primitive cucumber varieties. The grower looked at production and product qualities.

A retail study in German stores investigated consumers' response to the

cucumbers and listed what characteristics they found important. Consumers appeared to prefer the most natural packaging design using only a banderole (no plastic, no glue, little refuse). During the Fruit Logistica trade show 2008 in Berlin, the chain that introduced this cucumber to the market was runner-up for the Innovation Award. The wild cucumber is being introduced in stores in the Netherlands and Great Britain.



Consumer research provided insight in the type of cranberry products that interest consumers and suggestions on how these products could be marketed. Colour, taste, size, firmness and perishability turned out to be most important. As the cultivation method was relatively unknown to Dutch growers, a cultivation guide was prepared for them.

After market perspectives and cultivation possibilities were clear, a number of chain actors signed a declaration of intent to work together on building a chain for organic cranberries in the Netherlands.

Creating the right image

Once a target group for an innovative product has been selected, the next question is how to bring the organic product to their attention. A milk factory, a caterer, two machine manufacturers and researchers are looking into this at two schools of professional education. The researchers are looking for ways to stimulate the students to buy organic dairy products. They are working with milkshakes (a new product) and yoghurt drinks (an existing product). What will the cups, vending machines and refrigerators have to look like in order to attract the students? This was investigated by using a number of image designs. Students responded least to a green, natural and old-fashioned image. A McDonald's type image and a modern, hi-tech image both worked much better. For both the milkshake and the yoghurt drink these two images were combined to create a design and slogan for the vending machines and cups.

Information

Marieke Meeusen MSc.
 e-mail: marieke.meeusen@wur.nl
 Researcher Economy and Market
 LEI
 Wageningen UR

Dr Willie van den Broek
 e-mail: willie.vandenbroek@wur.nl
 Researcher Food and Chain
 Agrotechnology & Food Sciences Group
 Wageningen UR