# Sales higher thanks to efficient organic chains Lessons and experiences from a Dutch co-innovation programme

The challenge that the organic sector faces is clear; it needs to grow. But it needs to do so in a balanced fashion, whereby what the producer supplies exactly matches consumer demand. We have to know what the consumer wants and when, and producers have to be willing to adjust their production accordingly. Additionally, new chain structures are required that can supply products efficiently at a low cost price, and with sufficient attention to quality and food safety. These are precisely the aspects that were focused on in the 28 projects of the Dutch co-innovation programme 'Professionalizing organic sales chains', which ran from 2001 through 2005.

The programme was a success. In 2001 the Dutch organic sector was still mainly concerned with increasing the supply and assortment of products without taking demand into account. Consumers' wishes are now central throughout the chain, partly due to the co-innovation programme. New products have been brought onto the market and new markets have been created. Food safety has been improved and prices of organic products have dropped in relation to conventional agricultural product prices. Above all, however, chain partners have learned to work together and trust each other, which provides the best guarantee for future innovations. This success is certainly due to the opening up of the path between the research institutions and business. Companies now have better access to existing and new knowledge, and there is better contact within and between the research and business communities.

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# Working together on solutions

Co-innovation is a unique way of stimulating innovation. Companies from the whole chain and research institutions work together on middle-term solutions to practical problems. The motto of the 'Professionalizing organic sales chains' programme is 'the best of both worlds'. Specific knowledge and expertise on organic sales chains is linked up with the professionalism and economies of scale of the players in the conventional chain.

A project will only be successful if several companies attach importance to it. At least three links in the chain must be involved in a project as well as a minimum of two research institutions. The companies take a leading role. They submit requests and are also responsible for the running of the project and the results. They also make a financial contribution to the project: they provide half of the budget, mostly in kind. The other half comes from the Dutch Ministry of Agriculture, Nature and Food Quality, financing the knowledge development done by the research institutions in the projects. The final report is public, although parts may be kept confidential. This means that companies are usually prepared to go further, for example with providing data than they would be in a joint research project.

Co-innovation is also what the ministry of agriculture had in mind when it publicised its new policy on organic agriculture in 2000. Growth in the sector had to be fuelled by the market. Co-innovation gave the initial impetus in the form of the Convenant Marktontwikkeling Biologische Landbouw (Agreement on market development for organic agriculture), in addition to assistance in the form of communication and information provision. Stichting Agro Keten Kennis (AKK, Agro-chain knowledge organisation) carried out the co-innovation programme for the Dutch ministry of agriculture.

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### Concrete results

The 28 projects have had a wide range of results over the four-year period. There are of course the concrete results, such as a new products or a decrease in losses throughout the chain. Equally important are the results 'behind the scenes', the process results. These form the basis for future work on increasing sales. In addition, much new knowledge has been developed and existing knowledge has been applied in new ways. Together with the experiences of the commercial sector, the foundations have been laid for new innovations.

Figures give a good indication of the results. In the fruit chain, waste due to rot can be reduced by eighty percent. Toxoplasmosis infection in pork has been reduced by 50 percent as a result of monitoring and introducing control measures in meat suppliers and meat processing companies. Slaughtered dairy cows are now worth ten percent more, or 232 euros per animal. Sales of organic products to caterers increased by 56 percent in 2004. Greenhouse cultivation of flowers tripled between 2002 and 2004 and the area of special tomato varieties has increased by 40 percent.

While a figure cannot be put to them, equally concrete examples include a handbook which can be used to determine the optimal feed composition and the resulting returns for free-range pigs; an organic method for making flowers last longer; and offering caterers a vegetable subscription as a new sales channel.

#### Products with extra value

The results are spread over a number of different themes, one of which is products with surplus value. Merely being 'organic' is not enough to tempt consumers to buy organic products. The seller has to make clear what the extra value is for the consumer. But, according to the research, this varies depending on the consumer and the moment. For higher sales, the repeat purchases are important: here the consumer pays attention to taste. But an aspect like taste is difficult to assess. It's difficult to find out exactly what taste will be successful. New types of mushroom, for example, were appreciated, but not everyone liked the 'primitive' heirloom tomatoes. This shows that producers should always do taste tests for new products. Research also shows that a new product is likely to be more readily accepted if it resembles an already familiar product, or if a recipe is included. But there is no such thing as 'the' consumer. Retailers and researchers need to identify more differences between consumers so that production, marketing and sales can be better tuned to demand.

### More efficient chains

Another theme is efficiency in the chain. The higher prices prevent some consumers from buying organic products and others from buying more of them. Supermarkets are also less likely to include expensive products in their assortment. Within the chain, however, there are ways to reduce the cost price of products. For example, research shows that livestock farmers can fatten their cattle in such a way that it yields more meat and a higher slaughter weight, which is what the market wants. That way the farmers get a better price for their animals and less meat has to be imported. It was also shown that it is possible to extend the shelf life of pork by a day by improving logistics and shelf management. Small details, but ones that mean less meat being thrown away, which can lead to considerable cost price reductions.

#### **Better quality**

The quality of organic products has to be assured, both in terms of appearance and food safety. In the past, fruit and vegetables sometimes had a shorter shelf life than conventional products and also looked less attractive. Organic flowers often do not last as long, and the risk of toxoplasmosis infection is higher for organic pork because the pigs are free range. Progress has been made on all these fronts. There is now more knowledge on preservation and conservation methods for fruit, and an organic flower preservative has been developed.

# **New sales outlets**

New sales outlets for organic products increase the chance of consumers buying organic products or buying more of them if they already do so. It soon became apparent that each sales channel requires its own approach and strategy for the whole chain. Caterers, for example, are fairly traditional in their demands. They are not interested in organic products. Sometimes sales to this group increase if products are not labelled organic. Home- and onfarm sales are also a way of increasing sales. To help those just starting with selling from home, researchers compiled a new handbook of the legislation and regulations for this sector. While internet sales were almost unthinkable in 2001, by the end of the programme internet had become an ideal medium for communicating with customers that have a weekly organic vegetable subscription. Another successful new sales outlet is petrol stations, where organic flowers are now sold.

#### **Greater assortment**

Consumers of organic products want as wide a selection as possible. In addition to the 'usual' organic products, there should be new, special products. When it comes to cut flowers, it's important that there is a sufficient and varied supply throughout the year. Extending the assortment was high on the list of priorities and it has increased since the start of the project. In fruit growing, there was assistance with the introduction of two new apple varieties, Santana and Topaz. These varieties are suited to organic production as they need less spraying against scab. Research in the catering sector showed that products like cheeseburgers and mushrooms on toast did best because consumers were familiar with them.

#### Joint vision

The participating companies themselves indicated in an evaluation that they value the process results most. They realise that the creation of a joint vision throughout the chain is of great importance. This gives them a better overview of the activities in the various links of the chain, and as a result there is more mutual understanding. This is not only true for companies in the chain that did not know each other before the project, but also for those with whom they already had business relations. There is now also more exchange of information between the various links. As a result it is possible to better match supply and demand. These mutual contacts also make joint activities easier, and it became clear that implementing results is only successful if the entire organisation supports the process, including management. The companies also appreciate the new understanding they have of consumer preferences and wishes. Better understanding of their own organisations has also resulted in companies working more efficiently, as well as introducing processes which can lower cost price.

## More knowledge

The projects have not only led to better results for the companies; the research institutions have also become wiser, having developed new knowledge and also reapplied existing knowledge. Take the question they received from the Albert Heijn supermarket chain, about likely consumer preferences in ten years' time for fruit and vegetables. The Agricultural Economics Research Institute (LEI), part of Wageningen University and Research Centre, used a new method to go about answering this question: Consumers were shown short 3-D films in which they could picture the supermarket of the future, and their reactions to the latest trends were monitored. LEI will be able to use this new method again in subsequent projects.

LEI has also compiled and validated a new checklist for the introduction of new products in the shop. If producers and supermarket buyers fill in the questions on the list it gives them an idea of how successful a new product is likely to be. Marcel Stallen, who works at LEI, is greatly in favour of this kind of research: "We don't usually do this kind of applied research. This way you develop new knowledge which is actually applied, and you end up with a very useful network so that you know what's going on in the commercial sector."

Thanks to the co-innovation programme, Agrotechnology & Food Innovations (A&F), like LEI a part of Wageningen UR, developed a new method for building on existing knowledge: a loss monitor that shows which region, supermarket or product is showing a loss for a particular product, such as pork. They got the data they needed to develop the method from the Albert Heijn supermarket chain. Because the organic market segment experiences greater losses than the conventional market, it is easier to identify causes and solutions.

In these ways the co-innovation programme is creating surplus value all round: for the sector because sales increase, for businesses because they learn how to stimulate innovations, and for the research institutions because their knowledge becomes valorised as it is put into practice. The one less positive aspect is the length of the projects. More time is often needed: to know for certain whether innovations are going to work in practice, or to build up a close working relationship, but nevertheless the foundations have been laid.

For more information see: www.akk.nl and monteny@akk.nl