

7 Striving for sustainability: lessons from pioneers in The Netherlands

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This paper reports on experiences from 20 pioneers in search for a more sustainable agriculture in The Netherlands. The major focus is on analyzing the constraints that pioneers are experiencing in their daily routine. Using the Roadmap, four initiatives are described in more detail. Results are used to draw lessons for policy makers.

Introduction

In practice, various initiatives to improve the sustainability of farming can be found. It is believed that these initiatives, no matter how small, may play a role in the transition towards sustainability. Often, innovators go no easy way and in their day-to-day practice they encounter often many problems. A successful policy aiming at improved sustainability therefore should be based upon a thorough insight in the type and extend of constraints innovators are confronted with. This project aimed at making an inventory of the constraints pioneers meet in practice, and to learn from these initiatives. Emphasis has been on pioneers that successfully took the necessary steps in the transition process.

Case-studies

Twenty initiatives were studied, covering a wide range of activities, actors and scales. The initiatives include innovative plant propagation, methods requiring less energy and agro-chemicals, farms hosting mentally or physically handicapped, biological farmers selling through the internet, etc. Four types of initiatives have been distinguished: (1) initiatives with innovations relating to transportation or sales of farm products, (2) initiatives identifying new sources of income, (3) developing or adopting technical innovations, and (4) farmers

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developing new combinations of arable farming and animal production. Below, we briefly describe 4 initiatives a little further. Next we answer the questions of the Road map for the four cases.

'Adopt a chicken' started in 2003 when poultry farms were suffering from AI (chicken pest). This initiative offers the possibility to adopt a laying hen by individual costumers. An annual payment is rewarded with a 'rent' in the form of 12 annual lots of six eggs each, as well as an invitation for an annual visit to the farm. Hens are kept according to rules of organic farming, maintaining standards for e.g. animal welfare, feed and housing. Web cams were installed to allow those interested a live view from the stables. Right from the start, the initiative attracted a lot of publicity and sold more than 20 thousand 'adoptions'.

The initiative 'Family pig stable' was taken by two pig farmers, aiming at a regionally closed pig breeding and fattening system. Growth of animal feed, animal production and processing were organized regionally, with local slaughtering and selling products to local shops and restaurants. A new stable type was designed that provides ample opportunity to pigs to behave normally. It was developed by a consortium of research institutes and regional industry. Routine actions have been mechanized as much as possible, so that labor requirements remain limited.

The province North Holland hosts one of the most important flower bulb production areas. Here, a farmers' study group has been able to develop and test a new, innovative, idea for the production of plant propagation material of *Zantedeschia*. Originally designed by a single farmer, the group arranged further development at a research farm, using the money provided by a subsidy. The propagation now is done at the farm, where it originally was done in laboratories. As the growth period has been shortened, application of chemicals, water and fertilizers has been reduced.

The arable farm 'Drentsche schans' diversified its economic activities in order to generate more income. The farm developed its first visitor's room for beer tasting in 2002. Since then, the farm has invested in offering more room as well as more services to its visitors. Currently, the farm can host food tasting evenings as well as meetings, courses and parties. Hosting is done by the farmer and his wife. Local products, mostly farm produced, are offered for sale in a small shop.

Testing the Road map

Adopt a chicken

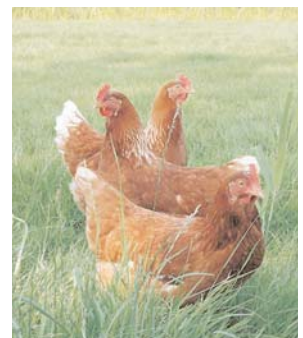
Why - Conventional poultry production has large problems with animal welfare, environmental aspects and profitability. Alternative organic production suffers from lack of demand and marketing, and hence has also low profitability.

What - Linking a new group of customers to organic farming is increasing the scope for organic farmers. Marketing of eggs from organic farms has been improved. Poultry has better living conditions. Farmers' income has increased and working conditions for farmers have improved.

Where - The initiative covers the entire country, linking farmers to a national network of ecological shops.

How much - Over twenty thousand of hens have been adopted, making this initiative successful. The fare for adoption is more than sufficient to cover the differences in production and handling costs for farmers and shops. The remainder is used for marketing and publicity.

How - The idea was conceptualized by a consortium of NGO's, banks, and a chain of organic shops. Necessary funds, marketing and publicity were planned from the start, thus overcoming problems many groups of producers normally have in starting a similar initiative. Public awareness of problems in poultry production, raised by huge publicity due to the chicken pest outbreak, was used effectively.





Family pig stable

Why - Traditional pig production has major problems with animal welfare, limited support from the general public, odor problems, profitability and environmental problems. Alternative housing systems were not very attractive, partly because they generally are labor intensive. Organic producers are confronted with limited demand

What - Developing a regional production system under control of the farmers. It addresses aspects of sustainability and animal welfare. The new system improves the negotiating power of the farmers, giving them more direct contacts with suppliers and clients. The new stable system combines animal welfare with restricted labor requirements.

Where - The farms are located in the east of the country in the center of intensive livestock production

How much - Currently, one stable has become operational. Further plans have been made to extend to a full blown ecological farm with 250 sows and 1800 fattening pig places, offering a normal farm income.

How -The input of NGO's, research institutions and other parties in the development of the stable has been crucial, in addition to the farmers that took the initiative.

Zantedeschia propagation

Why - Intensive bulb production is implicated for environmental problems related to the use of large amounts of fertilizers, agro-chemicals and water.

What - Shortening of the growth period of propagation material reduces the need for inputs. As *Zantedeschia* is not related to the dominant bulb species, introduction of this crop in the rotation relieves the pressure from pests and diseases, thus further reducing applications of agro-chemicals. Farmers further save on costs for producing the propagation material.

Where - The farms are located in the second largest intensive bulb growing area of the country.

How much - It is currently not clear how many farmers are applying this new propagation method. The resulting reduction in inputs (especially agro-chemicals) and costs have not been quantified yet.

How - Starting with an individual farmer, a farmers study group on *Zantedeschia* soon took the lead in organizing formal research for improving the method. EU subsidy helped to cover the costs. The farmers complained however about the time and energy needed to obtain the subsidy.



Drentsche schans

Why - Traditional pig production has major problems with animal welfare, limited support from the general public, odor problems, profitability and environmental problems.

What - Developing regional production systems that combine animal welfare with restricted labor requirements, minimal odor and ammonia emissions and a high profitability.

Where - The farm is located in a former peat reclamation area, currently mainly used for arable farming.

How much - The farm broadened its scope recently, making it too early to assess how much income this type of activities will generate.

How - The start of the diversification activities was given when a local brewery was asked to develop a beer of home produced cereals (rye, wheat, barley). It has taken a long time before the necessary licenses were obtained. When this was realised, a room was setup for beer tasting by small groups, and, subsequently, this developed into a range of activities.

Lessons learned

Many initiatives find themselves burdened with problems relating to legislation, protocols and regulations, mainly referring to updating or adapting licenses. A considerable number of internal problems is listed, referring to organization and management and conflicting interests of actors involved. Problems related to financial aspects were reported as well, while constraints on ecological or socio-cultural issues seem limited. These findings are in line with results from Den Hartog et al. (2004) and Van de Grijp et al. (2003), and show many similarities with the results of the pilot service desk.

The result indicates that most assistance is required to internal organisation and compliance to regulations and procedures. A successful service desk for this group should address such issues. Other initiatives may contribute as well. The minister of agriculture has expressed the wish to reduce administrative costs that have to be made in order to comply with legislation. The objective is to develop a more simple and straightforward type of legislation, requiring less data and forms to be filled in. This may also lead to simplified procedures, for example for adjusting licenses that are required. Consequently, it may get easier - and quicker - to make necessary adjustments in the farm's setup and structure, allowing more farmers to develop or adopt sustainable innovations.

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