



‘Because of this network we really are involved in energy saving’

Talking in crop specific terms about tomatoes and trusses, for example, has become passé. Now it's all about dry matter and stomatal apertures. This change was necessary because otherwise the growers in the greenhouse Innovation network *Nieuwe Energie Systemen (INES)* [New Energy Systems] in North Limburg could never have learned from each other. This is because the growers in this network are not organised into crop sectors anymore, but form a mixed group representing various crop sectors together. This is one of the conditions for fruitful sharing of experiences in cultivation using new energy systems. The approach works.

The initiative for forming the network originated with the farmers and growers branch organisation LLTB in Limburg (in the south of the Netherlands). Wageningen UR plays a facilitating role in this network. There are numerous new developments in the area of energy. The Limburg greenhouse growers are currently familiarizing

themselves with this development. It is apparent that individual growers cannot access the learning experiences of other growers on their own, and nor do they find out about the failures within the new concepts. More regional coherency is needed. Annemie Hermans is involved in the network on behalf of LLTB.

'The greenhouse growers can use one another as sounding board. This stimulates a sort of collective knowledge boost. It speeds up the development and it helps entrepreneurs to support their choices with more certainties. In this way you create a super-study group that gets smarter as a team.'

>> Opportunities for energy savings

Jaap van den Beukel, greenhouse grower in Venlo and one of the participants is completely in agreement. 'We all say that something has to be done about energy savings. This is certainly understood by all growers and through this type of network you are actually working on it. Now that I'm in a network, I give my time to the issue of energy. If you don't focus on it, you don't really notice it. You think, oh, tomorrow is another day. Now I use colleagues as a sounding board and I see where the opportunities lie. Sometimes I get confirmation on things and other times I hear things that I haven't yet considered.' Van den Beukel cultivates *Matricaria* (chamomile), a crop which has a low energy bill in relation to the total cost of production. It is about 13 percent, while vegetable cultivation has an energy bill that is easily double that. This is the reason that he is not yet investing in a large energy saving system. He has, however, modified parts of the greenhouse according to the principle of the air conditioned greenhouse. This is a semi-closed greenhouse in which energy can be saved relatively cheaply by combining greenhouse cooling with air humidifying. This activity makes the grower one of the five leaders in the network, all of whom are now at the point of investing or having already invested in new energy systems. Together they form a network within the network. There is more openness and more mutual trust here than in the larger group, both of which are preconditions for delving more deeply into issues; for example, over the reasons why someone has made a particular decision or taken a particular step in the process.

>> Group dynamics

Speaking frankly with each other was something the growers had to learn. That was also true for Van den Beukel. 'It's not an information evening where you passively sit and listen. If you are there to gain or transfer knowledge, you have to share information. We really had to learn how to do that.' Hermans calls this developing *sparring competencies*; ensuring that discussion delivers results, that business firms begin to think about choices that they make and that a gathering isn't just for consumption. 'In this way a group dynamic evolves. Everyone gets to know what the other can deliver. They can literally visit each other's businesses and learn

something.' This insight has not just been discerned by the entrepreneurs but also by the researchers. Both groups now realise that if you match issues in practice to theoretical research, it creates a greater learning yield.

>> Backing for the network

The growers value the approach used in the network. Not only do they visit each other, but also growers outside of their network. They invite guest speakers and learn from growers who cultivate crops completely different to their own. The growers had not realised that they could learn so much from each other, according to Hermans.

This working method seems to have caught on. A survey among participants, followed by a discussion with them, showed that energy develops when things are tackled together, for example going on an excursion together. A common frame of reference develops for looking at innovations. Participants feel supported by the network to take up innovations themselves or with others. This leads to new initiatives.

>> Large steps

Hermans considers, therefore, that all the objectives have been realized. The growers take on new experiences and knowledge more easily and they are able to gather knowledge from elsewhere. This type of network makes it attractive for other parties to join. 'Of course, an explosion of new developments and investments doesn't happen straightaway, but doing things together enriches the discussion. Entrepreneurs take large steps, even though this is not always directly due to the network. They take these steps among other things because of the insights they have gained in this framework.' Grower Van den Beukel confirms this wholeheartedly. He has not planned any large investments yet, but he is enthusiastic about the excursion to a firm that processes vegetables and has built a bio-fermentation installation. 'The man told us what he needed and what he saw as the opportunities or the threats. To build something like that costs time but when I build up a new business in a few years, I will seriously look at whether I can bring all sorts of parties together to work on something like this.' In the meantime he would rather continue in INES; with supervision. 'Even when there's no supervision anymore, I want to continue, but I wonder if we will then still carry on. Someone has to be the motivating force, to organise good excursions and good speakers. We can try to do it ourselves but we don't have the connections.'