



Case study reports: The Netherlands CS2



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1. Background

Event Farm and location

The main visitors were consumers/citizens, with activities for all ages including tasting and playing. The demonstrations during these days are also interesting for farmers and policy makers.

Most of the farmers and policy makers participated in the demonstration in the morning, because the day starts with a few presentations about the future and sustainability of the agricultural sector. After the presentations there was a tour in the greenhouse and warehouse to see the growing, sorting and transporting process of the sweet peppers. The host farmer is tour leader and told them about the process. The farmers and policy makers asked different questions, focusing on the things they saw during the demonstration and on the introductions at the start of the day.

The main goal of the demo days is to emphasise the force of the horticulture in the local environment. It demonstrated the management of the farm and a few innovations.

This day in Someren is part of a national event with more than 200.000 visitors over more than 200 horticulture farms. More than 95% of the participants are consumers. Someren got 3000 people that visited most of the six open farms.

2. Method

In line with the Methodological Guidelines, three main data sources are used: a background document and interviews at Programme and Farm level to analyse structural and functional characteristics, and event tools and surveys to analyse event level participation and learning, as follows:

1. A background document for every case study was completed by the AgriDemo-F2F partner who carried out the case study.
2. Interviews with representatives of programme/networks (level 1) and farm level interviews with demonstrators/hosts (Level 1) to reveal how the functional and structural characteristics enable learning. Analysis of these interviews is reported in Sections 3 and 4. Data is sourced from 2 interviews, one with a Programme/network member, and one with a farm level interviewee. Both were interviewed in May 2018. The analysis followed 4 themes: (1) Coordinating effective recruitment of host farmers and participants, (2) Developing and coordinating appropriate interaction approaches, (3) Planning, designing and conducting appropriate demonstration processes, (4) Enabling learning appropriate to purpose, audience, context, (5) Follow-up activities.
3. Event tools and surveys (Level 3) to reveal peer to peer learning processes. Event details and analysis is reported in Section 5. This data is sourced from 14 pre and 11 post demonstration surveys for participants, 1 pre survey and post survey for the demonstrator, a post host farmer interview and an event observation tool completed by an observing researcher. This data is mainly used for the analysis of learning processes and learning outcomes related to the specific event and overall comments on the effectiveness of the event.

Finally, partners reviewed the case study reports to prepare their workshops with different stakeholders related to the case studies. These workshops aimed at validating the data presented in the case study reports and to discuss on key characteristics related to effectiveness of demonstrations. For the Belgian and Dutch cases, a workshop was held on the 9th of November.

3. Structural characteristics

T1: Programme/network level

1. The main organisations involved in the demonstration activities and their roles

ZLTO

The open days in Someren were jointly organised and coordinated by ZLTO and five host farmers (local group of market gardeners), in collaboration with the Open Greenhouse day's foundation. ZLTO's role was supportive as the overall approach was almost entirely bottom-up and host farmers were engaged in most of the demo functions (Observation tool + Programme interviewee). A ZLTO employee was responsible for the overall coordination (plan, preparation and get network together) of the event over the whole region (ZLTO personal contact). The Open Greenhouse day's foundation has selected and contacted each host farmer and thereafter they have jointly organise the network event at the region. However, ZLTO seems to have been also engaged in recruiting host farmers. The preparation and organisation of the public event was a joint effort between ZLTO employee and the 5 host farmers of the region. Actions were decided between ZLTO and the host farmers, and thereafter each host farmer was responsible for planning, preparing and implementing the demonstrations activities. The events are also jointly evaluated by the ZLTO employee and the host farmer. The host farmers, ZLTO and other stakeholders were responsible to "advertise" the network meeting by sending invitations.

Q: Who are the main people involved in the demonstration activities and what are their roles? R: The role of the 5 open farms is to plan, prepare and host the farm demonstration. My role is to plan and prepare the 'Open Greenhouse Days' Someren. (Programme interviewee)

Q: Do you evaluate the demonstration activities overall? R: Yes. During a meeting after the event we (I and host farmers) evaluate the event. (Programme interviewee)

Q: Who are the main people involved in the demonstration activities and what are their roles? R: The main people involved in the demonstration activities are the 5 host farmers and the organisation group (one representative of ZLTO, one representative from the Open Greenhouse day's foundation. This group is responsible for planning and preparing the demonstrations activities. During the day my role is to explain the greenhouse and answer question of the visitors. (Farmer)

For the networking event host farmers, stakeholders and ZLTO sent invitations. (Farmer)

Q: Are participants (farmers, advisers, researchers etc.) involved in the overall development of the demonstrations? R: Yes. The host farmers and organisers make the program, participant only visit. (Farmer)

The foundation of the Open Greenhouse days contacted us. We agreed to host the network event in the morning. The foundation organised the network event, with support of the 5 host farmers in 2018 and the ZLTO's employee. For public event, we discussed the plan in this group. After deciding actions, we were responsible for our part. (Farmer)

We (the organisation group) contact the farmers and ask them to host the demonstration. When the farmers want to host the demonstration we go for the next step. Some farmers say immediately yes, other farmers doubt longer or say no. (Programme interviewee).

The 'Open Greenhouse Days' foundation (Stichting Glastuinbouw Oost-Brabant)

The foundation holds a co-organising role in the network's events, supported by the host farmers and ZLTO. The foundation's employees were responsible to approach the local sponsors for funding.

The national foundation has national sponsors. As organisation in this region we have searched for local sponsors. First this sponsors are contacted by the programme maker (of Open Greenhouse Days

foundation³, the response was very low. After that we, as horticulturist, approaching personally the sponsors. That was more effective. (Farmer)

The foundation of the Open Greenhouse days contacted us. We agreed to host the network event in the morning. The foundation organised the network event, with support of the 5 host farmers in 2018 and {ZLTO's employee name}. (Farmer)

2. The main actors involved in the demonstration activities and their roles

Host farmer/network as an actor

The Open Greenhouse is a national ranged initiative, including approximately 20 regions in Netherland (Farmer). Every year, different regions throughout Netherlands and different farms are alternated to host the open event (Observation tool). Therefore, every year there is a new group of host famers. This is why the specific farmer involvement at programme level has only to do with this year's local organisation of 'Open Greenhouse days' in Someren. So there is not any involvement of the host farmer at the national level.

Q: Are you involved in the overall development of demos at the programme / network level? R: No. I'm only involved in the regional network for one year, not in the national level. (Farmer)

Yes, as said before we have two different event. The day start with a network event in the morning. The network event consists of introduction and discussions. The public event in the afternoon was free moving and some demonstrations. The visitors were free to visit the demonstrations. For the other groups who visit the farm, I customise my story To engage participants it is important to tell your own story, no slide show. Besides a story, the tour in the greenhouse is most important and effective.During the farm walk, I share some content about the production systems and the working flows. It is depend on the audience. (Farmer)

In Someren, the role of the five open farms was to plan, prepare and host both the network meeting and the public event (Programme interviewee). The network event was jointly organised and coordinated by the foundation, the five host farmers and ZLTO. The actions for the public event were decided between ZLTO and the five host farmers and each host farmer was responsible for planning, preparing and implementing the demonstrations activities on their owns farms. The host farmers were actively involved in the development of the overall demonstration programme, as they had several meetings to discuss and decide on organisational aspects of the events. They were also actively involved in the topic selection process, as the topics were discussed and decided by them. The ZLTO employee was also present in this process. In the network meeting, the topics were based on actual relevant developments in the sector. The public event's topic, was connected to the type/production of the host farm. Nevertheless, as will be detailed in the relevant section below, the funders do have a say in the selection of topics.

As mentioned earlier the overall approach was almost entirely bottom-up and hosts farmers were engaged in most of the demo functions and decisions, evaluation and dissemination of the events. The specific host farmer is demonstrator/presenter at the demo events on his farm.

Q: Are host farmers involved in the development of the individual demonstration activities. R: Always. The host farmers are involved to develop the demonstration on their own farms. (Programme interviewee)

Q: Are host farmers involved in the development of the overall demonstration programme? R: Always. In the overall demonstration programme the host farm makes the decisions together. Before the event the farmers talk to each other in meetings. (Programme interviewee)

The foundation of the Open Greenhouse days contacted us. We agreed to host the network event in the morning. The foundation organised the network event, with support of the 5 host farmers in 2018 and ZLTO. For public event, we discussed the plan in the group of 5 and ZLTO. After deciding actions, we were responsible for our part. (Farmer)

The main people involved in the demonstration activities are the 5 host farmers and the organisation. This group is responsible for planning and preparing the demonstrations activities. During the day, my role is to explain the greenhouse and answer question of the visitors. (Farmer)

Q: Do you evaluate the demonstration activities overall? R: Yes. After the event, we have a meeting with the 5 host farmers and some organisers. In this meeting, we evaluate the Open Greenhouse Day. And there is a national evaluation. (Farmer)

We ask the farmers which topics they interested in. In a meeting with the farmers the topics were discussed and decisions made. (Programme interviewee)

Q: How are demonstration topics selected? R: For the network event the topics are chosen based on actual relevant developments in the sector. For the public event it depends on type of farm, but the most important point is to show citizens a real farm life. Also the main funder has influence to select the topics. (Farmer)

Q: Do you request feedback on the event day from participants? R: Yes. The Open greenhouse days are a proven concept for 41 years. For now, things we do are good. The future is always a question mark. In the end of the day we ask visitors about their experience. (Farmer)

Audience / type of participants

In the Open Greenhouse days two different events with different type of participants are organised. At the network meeting a specific target group, i.e. peer-farmers (25%) and relevant stakeholders in the sector (75%), attend. The intended audience of this event are mainly local greenhouse farmers, local policy makers and stakeholders of the sector i.e. suppliers etc. (Programme interviewee + Farm level Interviewee).

The public meeting is open for citizens/ consumers and any interested person in the region. Most of the people attending the public event are young families and older people (Farmer). Families see this day as a nice day out. In Someren, around 3500 people have visited the 5 host farms. All over the Netherlands, around 200.000 people visit an Open greenhouse farm that day.

The demonstration starts with a network meeting to meet colleagues and relevant stakeholders in the sector. The public event shows consumers where products come from and how the farmers produce. (Programme interviewee)

For the network event we reach 90% of relevant persons were there (80 people, 20 farmers). For the public event, we don't know which participants we don't reach. But we know that around 3500 people visit the farms in this region. In the Netherlands, around 205.000 people visit an Open greenhouse farm. To recruit young people is hard. (Farmer)

Yes, in the morning with introductions for the stakeholders. In the afternoon the demonstrations was focused on the citizens. The citizens could free moving in the greenhouse (Programme interviewee).

I have different intended audience. We also host the network event in the morning, before the start of the real event. The audience for the network event are local policy makers, colleague greenhouse farmers and stakeholders like suppliers. After the network event, the public event start. This public event is intended for citizens and people in the region. The intended audience for the plant breeding companies are choose by the companies itself. But everyone is welcome, sometimes scouting or school groups visit the greenhouse. (Farmer)

3. Networks

The network 'Open Greenhouse Days' in Someren is part of a new foundation, the Stichting Glastuinbouw Oost-Brabant (Programme interviewee). The 'Open Greenhouse days' is a yearly-based activity and lasts for one day (Observation tool). It is a national ranged initiative, which includes approximately 20 regions in Netherland each year (Farmer). Every year, different regions throughout Netherlands and different farms are alternated to host

the open event (Observation tool) and, thus, there is a new group of host farmers at different regions every year. This rotation results to once in every 5 years that the open days take place in the same region (Farmer). In the frame of 'Open Greenhouse day', more than 200 horticulture farms were open the same day.

According to the Programme interviewee, on this specific day similar demonstrations took place on different sectors. Host farms are not connected to other farm demo in a sense of a common goals and implementation of specific activities in the frame of a demo programme. Each region has the autonomy to organise its own programme under an open day general theme defined nationally, and farm events are simply part of the national Open Greenhouse Day network for this year. This year 5 farms in the Region of Someren were chosen to be open in the context of 'Open Greenhouse Days'. (Programme interviewee). The network of the farms included is not sector-specific (Farmer). Each event includes a network meeting on a selected subject between colleagues and sector stakeholders, and a public event for consumers (Programme interviewee + Poster). The specific farm's owner do not hold any elected or appointed roles on farming networks or boards (Pre survey demonstrator).

Overall, the demo farm is not connected to other demo farms. But during the Open greenhouse days, the farm is connected to the 4 other host farms of this day. The network in this region is part of the national network. The national network is an umbrella for approximately 20 regions. The network consists of different sector. Most of them are greenhouses. (Farmer)

The local 'Open Greenhouse Days' in Someren are connected with the national foundation 'Open Greenhouse Days'. The national foundation is part of SIGN. SIGN is LTO Glaskracht and ministry LNV. (Programme interviewee)

The National 'Open Greenhouse Days' has an overall theme. The local 'Open Greenhouse Days' can do something with this theme but have their own local programs. (Programme interviewee)

The role of the five open farms is to plan, prepare and host the farm demonstration. My role is to plan and prepare the 'Open Greenhouse Days' Someren. (Programme interviewee)

The demonstration start with a network meeting to meet colleagues and relevant stakeholders in the sector. The public event shows consumers where products come from and how the farmers produce. (Programme interviewee)

Every year other farmers are the host farmers of this event. Once in the five years the open days are in this region. (Farmer)

4. Funders

The Open Greenhouse Days events are funded by local sponsors and a subsidy from the national foundation 'Open Greenhouse Days'/SIGN. The national foundation is part of SIGN. (SIGN is LTO Glaskracht and ministry LNV). According to the Farm level Interviewee, the main funder (i.e. the local sponsors) has influence to topic selection.

For the network event the topics are chosen based on actual relevant developments in the sector. For the public event it depends on type of farm, but the most important point is to show citizens a real farm life. Also the main funder has influence to select the topics. (Farmer)

5. Breeding companies

At the farm level, besides the Open Greenhouse Days, the specific farm also host demonstrations of breeding companies which focus on research on specific techniques. For these demos the intended audience are chosen by the companies themselves. The farm is always open to visitors like scouting groups, school groups, or any interested entity under an appointment.

Besides the Open Greenhouse Days we also host demonstrations of plant breeding companies. Everyone is welcome. Sometimes the plant breeding companies visit the greenhouse with visitors. (Farmer)

The demonstrations of the breeding companies do have a specific technique for research. (Farmer)

During a year, we host demonstrations for breeding companies and other groups like school and scouting. Everyone is welcome who ask for a visit. It start with one group and request. One group, becomes two etc. (Post host farmer interview).

6. Incentives

According to the Programme interviewee, there are no incentives offered to farmers in order to host demonstration activities (Programme interviewee).

7. Human Resources

The case study demonstrator has never received any training in order to become or act as demonstrator (Pre survey demonstrator). Additionally s/he stated that s/he would not benefit from some extra training as a demonstrator (Post survey demonstrator).

8. Goals and objectives

Both Programme and Farm level interviewee mentioned that the overall goal of the 'Open Greenhouse Days' in Someren is to create support of the people in the region. The two different events though (network and public event) serves two different goals. For the network meeting the goal was to bring sector's stakeholders together (networking) and discuss about a specific subject. For the public meeting the goal is to show to consumers/public how a farm works and how the products grow (Programme interviewee).

The overall goals of 'Open Greenhouse Days' is create support of the people in the region. For us it was the region Someren. (Programme interviewee)

My goal to host this day is to create support of the people in the region. Hopefully we give them another view to the sector. (Farmer)

The demonstration start with a network meeting to meet colleagues and relevant stakeholders in the sector. The public event shows consumers where products come from and how the farmers produce. (Programme interviewee)

T2: Farm (event) level

The demonstration event (network and public event) was held on the 7th of march 2018 on a commercial, large sized red pepper farm in the southern part of the Netherlands (Someren). It is a family farm, operated by the father and his sons. The farm has a greenhouse of more than 8.5 hectares with red peppers. Around 150.000 plants produce 13 million red peppers in a year. The peppers grow all year round. An average of 25 full-time employees work at the farm (Poster + Post host farmer interview).

1. Topic

Open Greenhouse Days - Red Pepper and Energy-management (Observation tool + Poster)

Subtopics (Observation tool):

- 1) Bumblebees for natural pollination of the plants;
- 2) Drip installation system for precision irrigation, including fertigation to apply nutrients for optimal growth and regulation of leaf/fruit ratio;
- 3) Sorting machine which guarantees optimum uniformity;
- 4) Transport utilities including load dock for trucks;
- 5) The facilities for personnel

2. Group size

The specific demo described is the network event. According to the observation tool, some 25 participants attested the network meeting. All interviewed participants work at the local area and they were farmers (42%), horticulturists (25%) and Rabobank representatives (25%) (Pre demonstration survey participant). Three out of four participants stated that they were part of the same farmer network (Post participant's survey).

3. Event layouts and practice/technology demonstrated

The demonstrations organised in the programme are exemplary (Programme interviewee + Farm Level Interviewee). Both farm and Programme interviewee, believe that these exemplary approaches are also more preferable in relation to the audience they address to. The event's demonstrator has also classified the specific demo event as a showcasing of best practice/existing experience (Post survey demonstrator).

Q: Which approach do you prefer? R: Exemplary. Q: What influences this choice? R: The audience. (Programme interviewee)

Q: Which approach do you prefer? Exemplary. Q: What influences this choice? R: During the demonstration, we showed the best practice of the greenhouse sector and this farm. With this approach, we reach the right audience. (Farmer)

As stated earlier, the first part of the day was the network event in the morning. The network event consists of introduction/presentation and discussions between famers and stakeholders. The second part of the day (public event) took place in the afternoon. The public event consists of free moving around the farm facilities and looking to the working process. It included also small group discussion, Q&A, tasting and some demonstrations (Farmer). More specifically, there was a greenhouse on farm with 8.6 hectares of red peppers, a warehouse with sorting machine for the red peppers and a loading/unloading place. External equipment have been also shown to visitors (Observation tool). Visitors were allowed to go everywhere, except between the plants: they had to stay in the central pathway for precautionary reasons (Observation tool). The goal of the day was to give a general overview of the farm's management. The current situation of growing and handling red peppers have been demonstrated. In that way there were not any trials and comparisons of treatments or races. (Observation tool).

The day start with a network event in the morning. The network event consists of introduction and discussions. The public event in the afternoon was free moving and some demonstrations. The visitors were free to visit the demonstrations. (Farmer)

There is a difference between the network and public event. The network event is based on an introduction/presentation and discussion. The public event consist of tasting, testing and looking to the working process in the red pepper farm. It depends on the audience. (Farmer)

4. Actor's role during the event

ZLTO employee

The ZLTO employee was present at the event and was facilitating the whole process (Observation tool). More specifically, he acted as a moderator/ facilitator and he was making the link between regional and local. He also acted as demonstrator (ZLTO personal contact).

Yes, there was a facilitator to guide questions and/or discussions. That person was part of the organisation of the 'Open Greenhouse Days'. He receives the questions and take care of them. When he could answer the question them self, he give the answer. Otherwise, he asked the right person for answer this question (Observation tool).

Host farmer

The host farmer had different roles. He was preparing the event by taking care of the good looking and the cleaning of the farm (ZLTO personal contact). He conducted also the tour guide; he was the presenter of the farm and answered the questions of the visitors.

The host farmer had different roles. During the demonstration activity, he was the tour guide and answers the questions of the visitors. His wife was the organiser of the day and coordinated the ca 10 people that helped to lead the stream of people in the right direction, did the catering and entertained children. (Observation tool)

During the day my role is to explain the greenhouse and answer questions of the visitors. (Farmer)

5. Frequency and Duration

According to Post host farmer interview, besides his participation in the open days, approximately 15 demonstration events are organised on his farm each year (Pre survey demonstrator).

The Open Greenhouse Days are organised in Netherlands for 41 years now. Each host farmer is only involved in the regional network for one year period.

This event is once a year, 1 day. Every year other farmers are the host farmers of this event. (Farmer)

I'm only involved in the regional network for one year, not in the national level. (Farmer)

6. Timing

The day and timing of a demonstration event are important. If an event takes place at the same time, or in the same period, with other evens/open days organised in the region, it could have a negative impact on attendance numbers.

For the network event in the morning, maybe the Sunday morning could be a reason to feel discouraged. But they come anyway. For the public event, citizens who are not interested, does not matter where food comes from and discourage. Another reason could be, a lot of other open days are organised in this region and period. People can have enough of it. (Farmer)

7. Other farms infrastructures or arrangements

The host farmer and the organisers had made some arrangements for hosting the specific event. He has prepared the event by taking care of the good looking and the cleaning of the farm. Moreover, catering or homemade food is generally offered depending on the size of the event. In this case, the organisers offered breakfast and tastings.

The network meeting start with breakfast at 8.30. (Programme interviewee)

Q: Did you make specific arrangements to host the event (accommodation, catering, etc.)? Which ones? R: It depends of the event. For bigger events like Open Greenhouse Days, we rent a catering. For smaller event we do it ourselves. (Post host farmer interview)

The visitors could taste the red peppers (smoothie), smell and touch the red peppers and plants. (Observation tool)

Finally, a guided walk with small groups of visitors is mentioned as an arrangement toward a more effective organisation of the farm's event.

Maybe smaller groups with a guide make it more effective for some visitors. Not all the visitors wants a guide and can free move. I think that should be a good combination. (Post survey demonstrator).

8. Accessibility

The travel time of participants to reach the demo farm, ranged from 1 to 180 minutes, with an average time close to 32 minutes (Pre demonstration survey participant). Eight out of twelve participants rated their travel effort to participate as very little effort, while three out of twelve participants rated their travel effort to participate as little effort.

Two participants, who travelled for 180 minutes, rated their travel effort to participate as little or very little effort and the two participants who travelled for 1 and 2 minutes respectively, rated their travel effort to participate as quite some effort (Pre demonstration survey participant). So the effort rate is maybe related to other than travel distance factors i.e. participants motivations, free time etc.

9. Fees for participation

Both network and public events were free of charge (Poster + Post participant's survey). Moreover, none of the participants had received any financial compensation for its attendance (Post participant's survey).

4. Functional characteristics

T1: Coordinating effective recruitment of host farmers and participants

1. Incentives

Funding from the event came from both local and national bodies. Support from local sponsors was subsidised by a national union (SIGN) and a national foundation ('Open Greenhouse Days'). The Programme Interviewee emphasised that they tended to look for local sponsors to fund local events.

There was no mention of whether or not farmers are paid for hosting demonstration days.

The event is funded by local sponsors and subsidy from the national foundation 'Open Greenhouse Days'/SIGN. (Programme Interviewee)

The funding arrangements are local sponsors, subsidy from SIGN (national union), and national foundation 'Open Greenhouse day. The national foundation has national sponsors. As organisation in this region we have searched for local sponsors. (Farmer)

2. Motivations for host farmers

Both the farmer and the programme interviewee expressed a desire to create acceptance and support for the greenhouse sector amongst local citizens. The farmer added that another key motivation for hosting demos is introduce people to the work they do in the greenhouse sector, in the hope of inspiring people to enter the sector as employees. The farmer was clear that he was not motivated by commercial reasons.

My goal to host this day is to create support of the people in the region. Hopefully we give them another view to the sector. (Farmer)

For the public event it's important for me and colleagues' farm that we work sustainably and show it to the citizens. My motivation to host the network event is to create a new learning ambiance for the greenhouse sector. For the sector, it is hard to find good employees. A day like this can contribute to find good employees. I have no commercial reason. (Farmer)

Create support and acceptance in the region. (Programme Interviewee)

3. Motivations for participants

The first half of the demonstration day consisted of a network meeting, which was attended by stakeholders in the farming sector and by other farmers. Participants of this event consisted of other greenhouse farmers who attended in order to 'meet relevant persons in the sector and to learn about a specific subject.'

The public event was attended by local residents who were interested to know how their food is actually grown inside the greenhouses. The farmer added that it also a nice day out for citizens.

For the network event in the morning, I think that other farmers want to meet relevant persons in the sector and to learn about a specific subject. The stakeholders of this subject are present. The motivations for the participants of the public event is to see how food grows and have a nice day out. Normal, the citizens only see the outside of a greenhouse and want to know what is inside (Farmer)

The demonstration start with a network meeting to meet colleagues and relevant stakeholders in the sector. (Programme Interviewee).

Participants themselves stated as main motivators to attend the demonstration: Interest; Stakeholder in the agricultural sector. For both private and work situation; Networking; to see new developments and ideas for success; Interest to see innovation by colleagues- horticulturist.

4. Target audience

The target audience was different for the two parts of the event. The network event in the morning was aimed at local policy makers, other greenhouse farmers and stakeholders (such as suppliers). The public event was aimed at local citizens, including scouting or school groups.

I have different intended audience. We also host the network event in the morning, before the start of the real event. The audience for the network event are local policy makers, colleague greenhouse farmers and stakeholders like suppliers. After the network event, the public event start. This public event is intended for citizens and people in the region. The intended audience for the plant breeding companies are choose by the companies itself. But everyone is welcome, sometimes scouting or school groups visit the greenhouse. (Farmer)

The intended audience are local greenhouse farmers, policy makers and stakeholders of the sector. (Programme Interviewee)

5. Advertising and recruitment

Participants were targeted for the network event; invitations were sent to host farmers, stakeholders and ZLTO. The public event was advertised publically via the organisation's website, the local papers and billboards. The Farmer commented on the fact that the programme would benefit from researching the most effective form of advertising, indicating that without this, money could be being wasted by investing in ineffective advertising. The farmer speculated that billboards were the most effective means of recruitment for the public event, and that local newspaper adverts were the least effective.

For the networking event host farmers, stakeholders and ZLTO sent invitations. (Farmer)

For the network meeting we send invitations to a special target group. For the public event we advertise in local papers, posters and website. (Programme Interviewee)

In my experience the most effective way is dependent of the target group. For the network event it was target invitations to some people. For the network event it was a lot of advertising in local newspapers and billboards. (Programme Interviewee)

We should do research to this. But I think that the most effective way are the billboard in the region. For the public event it is important to be in 'the picture'. We also place an expensive advertisement in the local newspaper but I think the response of this advertisement is too low (Farmer)

T2: Appropriate demonstration and interaction approaches

1. The nature of interaction

Both the Farmer and the Programme Interviewee described the nature of interaction within the organisation as 'entirely bottom-up', agreeing that 'farmers should be and are in the lead' as they are the ones that understand how the sector functions.

2. *Involving farmers in the learning process and the demonstration programme*

The network events consisted of topics which were reflective of current developments in the sector; however there is no explanation for how they establish the most relevant developments. Nonetheless, shows the value placed on providing demonstrations that address the interests and concerns of participating farmers.

For the network event the topics are chosen based on actual relevant developments in the sector.
(Farmer)

The Farmer expressed that host farmers were 'involved' in developing the demonstrations they will be hosting, however he did not detail the extent of this involvement. In regard to individual demonstration days, these are hosted by 5 different farmers, all of whom make decisions about the day together in formal meetings leading up to the event.

The host farmers are involved to develop the demonstration on their own farms. (Farmer)

In the overall demonstration programme the host farm makes the decisions together. Before the event the farmers talk to each other in meetings. (Programme Interviewee)

Participants of the event were seen as visitors to the event that has already been created by organisers and farmers, they are not involved in the network programme.

The host farmers and organisers make the program, participant only visit. (Farmer)

3. Focus

The Farmer described the network demos as taking a 'whole farm' approach, while the Programme Interviewee described the approach as 'in between' whole farm and single focused.

4. Design

Both the Farmer and the Programme Interviewee described the network approach as 'exemplary' as appose to 'experimental'. Demonstrating 'exemplary' practices of the greenhouse sector was the preferred approach by both as they considered this to be what the audience want to see.

5. Ideal group size

For the network event there was 'no limit' to the number of attendees; both the Farmer and the Programme Interviewee referred to their last event in which 80 people were present and an effective network meeting took place. However for the farm tours the Farmer considered 8 to be the optimal group size, as this allows everyone to stay together and hear what is being said, as well as being able to ask questions more freely.

The most effective way for 80 persons is a presentation during the network meeting. (Programme Interviewee)

For the network event, I think there is no limit. There were around 80 people and that was okay. For a farm tour, for me the maximum is 8 persons. With 8 person, everyone could hear your story, ask more questions and stay together. (Farmer)

T3: Enabling learning appropriate to purpose, audience, context

1. Facilitating interaction and learning: structure, content and techniques

Both the Farmer and the Programme Interviewee considered the most effective structure for the day to consist of a presentation in which to explain things, followed by a farm tour to show these things in action. The

Farmer emphasised the importance of the farm tour as a means to engage people, and added that telling a personal story is an equally important factor in keeping people interested.

The most effective way are presentations followed by farm walk in the presentation you could explain something but in a farm walk people can see things with their own eyes. (Farmer)

The most effective way is a presentation followed by a farm walk. (Programme Interviewee)

To engage participants it is important to tell your own story, no slide show. Besides a story, the tour in the greenhouse is most important and effective. (Farmer)

The farmer provided more in depth content relating to the production systems and the working flows.

I share some content about the production systems and the working flows. (Farmer)

Both Farmer and Programme Interviewee cited 'participants ask questions and talk openly' as the most important characteristic of farm demonstration. Active participation, along with interaction between demonstrator and the audience, aids the learning process and so contributes to an effective demonstration.

2. *Taking into account variation in learning*

The Programme Interviewee stated that variation in learning was not taken into account. In contrast the Farmer considered that different learning styles were taken into account, however this was predominantly in regard to the variation in event design between the network event and the public event. The network event was focused on introductions and discussion between attendees, which the public event was focused on conveying the working process of the farm. While they acknowledged that different audiences required different content, there was no mention of accommodating for different learning styles within groups.

There is a difference between the network and public event. The network event is based on an introduction/presentation and discussion. The public event consists of tasting, testing and looking to the working process in the red pepper farm. It depends on the audience. (Farmer)

T4: Effective follow-up activities

1. *Follow-up activities and materials*

There was little in the way of continued engagement with attendees after the event. Supporting material is not provided to participants; and the Farmer only followed up attendees on a personal level, for example if he made an interesting contact.

Both Farmer and Programme Interviewee comment on the fact that there is a new group of host farmers each year as the demonstration site is moved to a new area. The implication is that the lack of continuity makes continued engagement difficult.

Yes and no. Every year there is a new group of host farmers. For me there is no reason to engage participants after the demonstrations. Only when I make some interesting contacts to follow-up. (Farmer)

Every year there are new host farmers in another region. (Programme Interviewee)

2. *Assessing impact*

The Farmer and Programme Interviewee had conflicting responses to the question of whether they assess the impact of the event amongst participants. The Farmer described a follow-up meeting with the host farmers

and organisers in which they evaluate the Open Greenhouse Day. As well as this he mentions a national evaluation. On the other hand the Programme interviewee gave the impression that there is no assessment of this kind.

There is a similar conflict in regards to the assessment on the wider farming community. Again the Farmer referred to a meeting held after the event in which the host farmers evaluate its impact, and again the Programme Interviewee contrasted this by observing no assessment of the impact of these events on the farming community as a whole.

After the event we have a meeting with the 5 host farmers and some organisers. In this meeting we evaluate the Open Greenhouse Day. And there is a national evaluation. (Farmer)

During a meeting after the event we (I and host farmers) evaluate the event. (Farmer)

5. Event analysis: effective peer learning characteristics

Event details

The group consisted of about 25 participants, of which 14 filled in the pre survey and 11 the post survey. Everyone who filled in the pre survey stated they worked in the local area.

	n° surveys	account manager food & agri Rabobank	Farmer	financial specialist Rabobank	Horticulturist	manager Rabobank	poultry famer and poultry feed consultant	Risk specialist	unknown
<i>occupations</i>	14	1	4	1	3	1	1	1	2
<i>gender</i>	14								
male	13	1	3	1	3	1	1	1	2
female	1		1						
<i>age</i>	14								
18-30	1			1					
31-40	2	1					1		
41-50	3		1		1	1			
51-60	6		3		2			1	
60+	2								2

T1: Learning processes

1. Communication initiation by participants

Everyone had no problem sharing their own experiences, the topic and their own situation when in the whole group or when in small groups. That is their way of learning. There was a lot of time for questions and a lot of questions were asked. The demonstrator had an open attitude and took enough time to answers all the questions. Everyone had the opportunity to ask questions. Most questions were on the sustainable goals for which the farmers group wanted to get support from other partners, like governments and banks. There were a lot of participants formulating their points of view regarding the topic. Because it was a small group, the participants shared their own point of view and wanted to know insights of others.

	participant answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I had the feeling that I could share my own knowledge as relevant information.	0	3/11	2/11	5/11	1/11
I asked at least one question during the demonstration.	3/11 yes				
I shared my own point of view at least once during the demonstration.	3/11 yes				
I felt encouraged to ask questions during the demonstration.	2/11	3/11	3/11	0	3/11
When there were any discussions, I felt comfortable sharing my opinion.	0	1/11	6/11	0	4/11

	demonstrator answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I asked participants to share some of their own background knowledge during the demo.	0	1	0	0	0
I encouraged the participants to formulate their own point of view during the demonstration.	0	0	0	1	0
I encouraged the participants to formulate questions during the demonstration.	0	0	0	1	0

2. Interactive knowledge creation

Hands-on opportunities and other multisensorial experiences

More than one hands-on activity was demonstrated very clearly/ instructively. Participants could take part in a hands-on activity, but didn't get any feedback on their doing and most of the time they could only look. There was a table with food substrates, an organic adviser with bumblebees and the visitors could touch the red peppers.

There were different multi-sensorial experiences possible for the visitors. They could taste the red peppers (smoothie), smell and touch the red peppers and plants. In addition, visitors could see the bumblebees and the sorting machines for red peppers. This was mainly focused on citizens. Farmer-colleagues focused on networking; which was very effective (for example, good starting points were made for finance of a study on geothermal heating.)

Discussion opportunities and negotiating conflicting points of view

There was a facilitator to guide questions and/or discussions. That person was part of the organisation of the demonstration days. He received the questions and took care of them. When he could answer the question himself, he gave the answer. Otherwise he asked the right person to answer the question.

Open discussions are stimulated and given a lot of time. Most participants were involved. Around 50% of the time was spent on open discussion between demonstrator and participants and between participants and participants. There was no real elaboration or further explanation on shared critical points of view.

	participant answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
In my opinion, there were interesting discussions during the demonstration.	1/11	2/11	4/11	0	4/11
If participants didn't agree with each other during discussions, somebody (demonstrator/other participant) tried to reach a consensus between them.	0	2/11	2/11	0	7/11

	demonstrator answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
In my opinion, there were interesting discussions during the demonstration.	0	0	1	0	0
If participants didn't agree with each other during discussions , somebody (me or somebody else) tried to reach consensus between them.	1	0	0	0	0

3. Engagement during the event

Participants all seem to know each other well, but are not close friends. The farmer-colleagues share a lot of things about their own farm situation. All of the participants were farmers or people directly related to farming so everyone could act open about their farm situation. The demonstrator acts open and friendly, but not as close friends with the participants.

	participant answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I felt actively involved during the whole demonstration process.	0	2/11	6/11	2/11	1/11
I felt like the demonstration increased my ability to rely on myself as a farmer.	2/11	3/11	4/11	1/11	1/11
I could relate well to other participants (because they have an agricultural background similar to mine).	1/11	1/11	5/11	3/11	1/11
A lot of the other participants are part of the same farmer network as me.	0	1/11	1/11	8/11	1/11
I felt like I could trust the knowledge of (most of) the other participants .	0	0	7/11	3/11	1/11
The demonstration felt like an informal activity to me.	0	2/11	4/11	4/11	1/11
I thought the host farm was comparable enough to my own farm .	0	2/11	6/11	0	3/11
I had the feeling the demonstrator was like one of us .	0	0	5/11	5/11	1/11
I had the feeling I could trust the demonstrators knowledge .	0	0	4/11	6/11	1/11
I got along very well with the demonstrator .	0	1/11	5/11	3/11	2/11

	demonstrator answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
Were participants (farmers, advisers, researchers etc.) involved in the overall development of this demonstration?	No				
Most of the participants were well known to me .	0	1	0	0	0
A lot of the participants are part of the same network as me .	1	0	0	0	0
The demonstration felt like an informal activity to me.	0	0	0	1	0
I think the host farm was well suited for this demo.	0	0	0	1	0
I got along well with the participants.	0	0	1	0	0

T2: Learning outcomes

The demonstrator and participant were on the same level so the knowledge is easier to explain, it was very clearly explained. The participants could sufficiently practice their skills during the activities. It was their own responsibility. Common methods or ways of thinking on farming were questioned and alternatives were shortly elaborated on in group. There were no questions about the common methods or ways of thinking on learning. That was not the topic.

What would you ideally like to learn today?	Situation about earth heat/energy in the region; Networking; Information; About new energy sources; Geothermal heat.				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
The demonstration met my expectations regarding what I wanted to learn.	0	0	4/11	6/11	1/11
The demonstration exceeded my expectations.	0	4/11	5/11	1/11	1/11
I felt surprised at some point(s) during the demonstration.	1/11	4/11	5/11	0	1/11
I obtained a clearer understanding of the topic(s) demonstrated.	1/11	1/11	5/11	3/11	1/11
I have the feeling I learned something new (knowledge, skill, practice, etc.).	0	5/11	4/11	1/11	1/11
I thought about how I could implement some of the ideas and practices on my own farm.	0	0	5/11	1/11	5/11
I reflected on my own point of view at some point during the demonstration.	0	1/11	5/11	4/11	1/11
I learnt about the principles underlying a practice.	0	0	5/11	3/11	3/11
I thought about how we learn something new on demonstrations (e.g.: teaching methods).	1/11	2/11	4/11	2/11	2/11
I thought about why I want to learn about the topic(s) of this demonstration.	1/11	0	7/11	2/11	1/11

what do you intend for the participants to learn today?	Show new techniques and share my point of view				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I think participants have learnt what I intended them to learn.	0	1	0	0	0
I tried to surprise participants with uncommon/new knowledge/new skill.	0	1	0	0	0
I felt surprised at some point(s) myself during the demonstration (e.g. by a question or discussion).	0	1	0	0	0
I obtained a clearer understanding of the topic(s) myself.	0	0	1	0	0
I have the feeling I learned something new during this demo (from participants, discussion...).	0	1	0	0	0
I reflected on my own point of view myself at some point during the demo.	0	1	0	0	0
I encouraged participants to reflect on their own point of view during this demo.	0	1	0	0	0
I encouraged participants to reflect on their own situation sometime during this demo.	0	0	1	0	0
I encouraged participants to reflect on how we learn something new on demonstrations.	0	1	0	0	0
I encouraged participants to reflect on why we are trying to learn about the topic of this demonstration	1	0	0	0	0

T3: Overall comments on the effectiveness of the event

Participants:

With an average of 3,4 on 5, participants rated the event overall as effective. 11 on 11 participants who answered the questions would recommend the demonstration.

As main effective characteristics of the demo participants mentioned: Demonstration about geothermal heat; Networking with a lot of different people; to be aware of new developments for my role as director ZLTO Astén; Contact with policy makers.

One participant mentioned following suggestion for improvement: 'don't only listen but interact more with the participants.'

Demonstrators:

As main effective characteristics of the demo, the demonstrator said: 'In my opinion the concept of these demonstration days. Citizens want to come to my greenhouse and see how red peppers grow. It is not obligatory.'

As suggestion for improvement the demonstrator mentioned: 'Maybe smaller groups with a guide could make it more effective for some visitors. Not all the visitor want a guide, so they can move more freely. I think that could be a good combination.'

Observed main strong points of the demonstration event:

Almost everyone (consumers, farmers, policy makers, demonstrators, host farmers, organisers) saw the added value of this event. The farm was mostly an inspiring environment for networking between farmers and policy makers.