



## Case study reports: Ireland CS<sub>3</sub>



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# 1. Background

The demonstration farm in Galway (Ireland) is a suckler beef demonstration farm which has been established between several industry stakeholders.

The Programme partners are Dawn Meats, Teagasc, McDonald's and the Irish Farmers Journal (IFJ).

Dawn Meats is the owner of the herd, whilst Teagasc owns the land and the facility the farm operates from. McDonald's (the fast food chain), is supplied by Dawn Meats. The Irish Farmer's Journal, a national farming publication, lends support and backing to the project also.

Representatives of Dawn Meats work closely with the farm manager who is responsible for daily tasks such as machinery work, general labour, spreading fertiliser and silage feeding.

Teagasc involvement is led by advisory staff and technicians who are responsible for collecting and collating data from the farm. There is also a presence from the Irish Farmer's Journal on the management team.

The progress of the farm is made public through a variety of forums including the Teagasc website, the demonstration farm website and blog and the Irish Farmer's Journal, both in print and on – line.

The farm is open for the farming community and interested parties to view on specified open days which are widely advertised through the above means and via local channels, such as road signage.

## Funding and Governance

Dawn Meats provide the funding to pay the farm manager and any other employment costs. They were also responsible for outlay of capital to set up the farm, such as stock.

During the demonstration day in question, Dawn Meats provided complimentary catering to those in attendance.

Teagasc provides the land and covers costs incurred in this regard, such as land rental. Teagasc advisory staff are supplied for the purpose of the demonstrations.

Backing is also provided from McDonalds and IFJ.

## Actors and Networks

Dawn Meats and Teagasc are responsible for the bulk of the organisational tasks involved in organising the demonstration farm walk. Teagasc is responsible for coordination of their advisory staff participating in the demonstrations whilst Dawn deal with their own representatives. Together, they are responsible for the overall administration of the demonstration.

The demonstration event was open to all types of farmers but it is likely that there was a particularly strong cohort from beef enterprises in this case, due to the focus of the walk. Other actors included Agricultural advisers and planners, industry representatives and technicians.

The demonstration was designed to be informal, with groups of roughly 20 or so attending each information station at a time and interaction and exchange encouraged.

The demonstration farm is well publicised through the Teagasc website, the website and blog of the farm, social media platforms and through the national farming press by the IFJ.

## How it works

- The National Open Day of this demonstration farm was a demonstration event open to members of the farming community and related stakeholders to attend. This latter group included technicians, agricultural students, farm advisers, representatives of McDonald's UK & Ireland as well as industry stakeholders including ICBF (Irish Cattle Breeding Federation), Bord Bia (Food Board), Department of Agriculture, Food and Marine and Agri-Aware (Agri Food Education Body).
- The farm walk incorporated 5 separate information stands or boards. Each of these was manned by a demonstrator. Groups of attendees were moved from Stand 1 to Stand 2 and so on until the last demonstration stand had been visited. A presentation was given by the demonstrator and audience

participation and questions were encouraged and welcomed. Representatives from programme partners were in attendance and available to answer questions also.

- The aim of the farm walk was to showcase best practice in terms of suckler beef production, with emphasis placed on breeding, production data, measurement and management. Those in attendance were privy to the physical and financial performance of the farm. The stock were a visible presence as they were at grass and available for all attendees to view and judge for themselves.
- The event was also a registered Knowledge Transfer (KT) event which means that some of those attending were doing so in their capacity as participants of the KT programme which is run by the Department of Agriculture, Food and the Marine (as part of the CAP - funded KT Groups scheme)
- There was also an indoor exhibition area which included information stands on agricultural topics and businesses and a display which high-lighted farm safety. This was available for perusal following completion of the farm walk, as were complementary refreshments.

#### Event farm and location

The demonstration farm is located in Galway, Ireland.

The farm aims to showcase sustainable suckler beef production. The farm is run on a fully commercial basis and aims to showcase the potential of a moderately large suckler beef farm to generate a viable family farm income, when operated to the highest level of technical efficiency and best practice. The system aims to finish steers and heifers for beef at 20 – 24 months of age.

The farm comprises of 3 separate lots of land contained within 3 distinct parcels. The total land area is just over 55 Ha. The land is mixed in quality with some of it heavy in nature and prone to waterlogging in heavy rainfall.

The herd consists of 100 Angus and Hereford cross Freisian cows, which originated from a dairy herd. Replacement stock is also sourced from a dairy herd. There is a stocking rate of 2.7 L.U / Ha on the farm.

The herd has clearly defined targets such as;

- 365 day calving interval
- 8-10 week calving spread
- 80% cows calved within 8 weeks
- Weaning a calf at >50% of their own body weight
- Calf mortality up to 28 days < 2%

Breeding within the herd is a combination of A.I (Artificial Insemination) and natural service, with emphasis on the former. The chosen sires are from 5 star terminal lines and include Limousin, Simmental and Charolais. The terminology '5 star' means that a high rating has been achieved by these bulls across different assessment criteria within the Eurostar Breeding Index. Traits selected for aim to achieve;

- <6% calving difficulty
- >25 kg carcass growth

The farm is run on a day – to day basis by a farm manager who is responsible for carrying out on – farm tasks.

#### Event date

September 2018

## 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 76 pre and 27 post-demonstration participant surveys, 3 pre and 3 post event surveys with demonstrators, 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. The analysis followed 5 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 76 pre and 27 post demonstration surveys for participants, 3 pre surveys and post surveys for demonstrators, 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. The workshop for Ireland will be held in the beginning of 2019.

### 3. Structural Characteristics

#### T1: Farm (event level)

##### 1. Size and design of the event

The event took place in September 2018 with demonstrated topics on beef production and cross breeding. There was a high number of attendees at the event, estimated to around 700 people. Five stands were placed in the fields with big posters and two demonstrators per stand. Each stand explained a topic concerning beef production with specific data. There was a focus on, and explanations of, how breeding could become more profitable.

At every stand there were about two facilitators/demonstrators who were mainly Teagasc advisers. Demonstrators presented the financial and breeding aspects of the farm as well as dimensions of good grassland management (Post survey demonstrator). They introduced the context of each stand and explained the data provided by the posters (figures and the statistics included) and guided the short amount of time for questions at the end of their presentation at every stand (Observation tool).

In addition, A whole field was shown where the cattle was grazing; there were no typical comparative layouts on the field (Observation tool). A farm walk booklet was also disseminated to those who attended with detailed information on the farm and each of the elements of the walk.

##### 2. Actor's role and characteristics

###### *Demonstrators and facilitators*

The demonstrator was a 46 years old adviser who did not work in the same area where the event took place. The interviewee participates to over 50 events per year as a demonstrator. Finally he does not hold any elected or appointed roles on farming networks or boards (Pre survey demonstrator). Three demonstrators filled out the post survey questionnaire. Two out of three demonstrators have classified the demonstration as a showcasing of existing experience. However the last of them mentioned that the specific demonstration would be better classified as a mixture of experimental and exemplary approaches. All demonstrators mentioned that participants were not known to them (Post survey demonstrator).

Two out of three demonstrators agreed or strongly agreed that they would benefit from some extra training to better act as a demonstrator. The last demonstrator found the question as not applicable to his/her situation (Post survey demonstrator).

The demonstrators were reported to be very open to the critical points of farmers/attendees and acknowledged the problems stated (Observation tool).

###### *Participants/attendees*

There were some 700 people attending the demonstration event

Approximately 1/10 of participants (70 out 700 participants) filled out the pre participant's survey which is the basis of the analysis below. Almost 45% of respondents worked in the local area (Pre demonstration survey participant). The vast majority were farmers (78%) while some other occupations were also mentioned (carpenters, technician, accountants, students, engineers, advisers etc) (Pre demonstration survey participant).

Twenty-eight (28) attendees filled out the post participant's survey. Eight out of ten respondents (79%) mentioned that participants were part of the same farmer network as them. Furthermore, more than three out of four (78%) agreed or strongly agreed that they felt actively involved during the whole demonstration process (Post participant's survey).

According to the pre survey demonstrators' survey, it was possible for everyone who wanted to participate to take part in the demonstration (Pre survey demonstrator). Participants were offered the opportunity to meet the farm manager and the advisers and researchers who work on the Programme. All demonstrators interviewed agreed that participants were not involved in the overall development of the specific demonstration (Post demonstrator survey).

When a group of about 50 people was formed, the field walk began. A Teagasc adviser provided each group some input (Observation tool). Attendees walked around the field in groups, stopped at each stand to listen to different demonstrators, and then asked questions. After the explanations of the demonstrators at the different stands, some farmers were not shy to open a critical discussion about the 'innovation' presented. The big constraint of the event seemed to have been the amount of people as it was hard to get the same level of interaction within groups (Observation tool).

#### *The host farmer*

The beef demonstration farm is run by a 36 years old farm manager. He has reported that less than 5 demonstration events are hosted on the farm each year.

The host farmer presented the farm to the audience. More specifically his role was to give the audience some context on the farming practices that he carried out on farm and his reasons for implementing them (Observation tool).

### 3. Farm's infrastructures and arrangements

After the field walk, some food and drinks were offered to participants provided by the fast food chain (McDonalds) who are programme partners (Observation tool).

### 4. Duration

The event was held at 5<sup>th</sup> of September for 4 hours, between 2 and 6 pm. Five stands were planned where farmers had some 30 minutes to discuss on topic presented. Ten of those thirty minutes were devoted to questions/discussion with each group. Thus, the total duration for a farmer to go through the 5 stands of the field walk was about 2h30.

### 5. Accessibility

The travel time of interviewed participants to reach the demo farm, ranged from 2 to 240 minutes, with an average time of 57 minutes (Pre demonstration survey participant). Approximately 39% of participants rated their travel effort to participate as very little effort and 16% as little effort; 23% rated their travel effort to participate as quite some effort and 22% as great effort/or greatest possible effort (Pre demonstration survey participant). We cannot draw any clear conclusion in relation to the organisation of the specific event and the farm location. Some participants, who travelled for 150 or 180 minutes, rated their travel effort to participate as very little effort while other participants who travelled for 30 or 45 minutes rated their travel effort to participate as great effort/or greatest possible effort (Pre demonstration survey participant).

## 4. Functional characteristics

### T1: Coordinating effective recruitment of host farmers and participants

#### 1. Incentives

The costs of the demonstration were covered by Teagasc, who provided materials, land and infrastructure needed. While there were no costs incurred on the farm, it appears that host farmers were not paid for running the demonstrations. Farmer 2 expressed some uncertainty as to whether Teagasc will continue to fund the project beyond 2022.

Ok, so the costs of the demonstrations are covered by Teagasc, so be it boards / information or sound systems, whatever structural things had to be put in place for the demo farm. So, it wasn't impacting... none of the cost was carried by the farm. (Farmer 1)

That project is funded up to 2022. Teagasc supply some of the expertise and we supply the technician so many days a week. Dawn supply the stock and carry a lot of the cost around running the farm, so they pay the farm manager. Teagasc, for example, we lost a chunk of land there, so it's up for debate at the moment are Teagasc going to commit to take on a five-year lease to take on an extra sixteen hectares which, seemingly, was Teagasc's role, so Teagasc have to make a decision now whether they will have to commit to that. Teagasc is responsible for supplying the buildings, the land and the infrastructure and then the actual and the running of it all comes under the jurisdiction of Dawn Meats. (Farmer 2)

## 2. Motivations for host farmers

Farmers 1 and 2 cited knowledge transfer, and the desire to share best practice, as the main motivation for host farmers.

The Programme interviewee observed three different types of host farmers: those who were motivated by financial incentives; those who were motivated by the opportunity to share the work they are doing; and those that fell somewhere in between, who were apparently motivated by the chance to have other farmers observe and criticise their project.

To demonstrate best practice. (Farmer 1)

For Knowledge Transfer reasons really. We want to get as much of the knowledge that we have generated on the farms to our target audiences. (Farmer 2)

I think farmers hosting things really fit in to one of three categories. One, they've got a financial incentive to do it and I know we find if we want a farmer to host a meeting for any sort of thing if you give them an extra few pence per kilo it works wonders, so you've got cold hard cash. The other end of the spectrum is where they're very proud of what they're doing and they want to share it which is actually harder to get them to believe that they are doing a good job, we pick out the farmers who are doing a good job and they're like no, no so they're very precious about - they don't like putting themselves on a pedestal. When it comes to doing stuff they need a lot of convincing even when you do show them that they are good, however that may be with profit monitors or stats from ICBF for example and they can see they're good and there's almost like an 'alright I think I've done a good job but there's someone else proving it I'm quite happy to stand up and shout about it. And then you've got the others who are somewhere in the middle I think and almost like other farmers coming to be nosy and critical of what they're doing so that's how I see farmers fitting in to those three camps. (Programme interviewee)

## 3. Motivations for participants

Both Farmer 1 and 3 saw that participants were motivated by the chance to see something new in terms of best practice and management with a view to improve their own farms. Farmer 3 and the Programme interviewee both referred to an element of nosiness and curiosity about a less traditional farm system. Farmer 3 also mentioned the possibility to gain credit by attending a KT-approved national event.

The Programme interviewee felt it was possible to motivate participants to attend by providing lunch. As well as this, the Programme interviewee observed the challenge in motivating the key influencers in a farm business to attend, as these were generally the farmers that could not be persuaded to leave the farm for a day.

They're looking for something new. They're looking for answers. They want to see is there something different that they can do on their own farm that they can learn from on an open day like this, that they can bring back to and implement on their own farms. (Farmer 1)

Food! It seemed quite popular last month. All joking aside if we provide a beef sandwich or something like that it's a sure - fire way of getting them to something, and even if we're having a meeting, an off - farm meeting if you get somewhere that you're giving them a bit of grub as well you can see the turn out will be higher than if you didn't. Sometimes it is the sheer nosiness of farmers but I think the big challenge is, generally the farmers who can be away from the farm for attending an event are probably not really the farmers you want to influence and that's what we've found with some events and depending on the time of day the event is, you're getting numbers on the ground but you're not really getting influencers in the farm business. (Programme interviewee)

The system is slightly different on this demonstration farm to what some farmers in the west would be used to because it's a different cow type and they're bringing all their cattle to finish, a lot of western farmers bring them to weanling or store stage. They want to see how these Angus cross or Hereford cross cows are actually [performing]. [They want know] is there anything new in terms of best practice, whether it's in health or whether it's to do with markets or grassland. The other thing is, it was a KT-approved national event, so some farmers would actually get credit for attending the event. (Farmer 3)

#### 4. Target audience

The target audience was suckler beef producers running unprofitable businesses.

They are suckler beef producers, farmers who are probably not making a profit at the moment. (Programme interviewee)

#### 5. Advertising and recruitment

It appears the project had a well-developed approach to advertising and recruitment, involving sending out personal text invites and reminders, as well as advertising in national newspapers, giving radio interviews and detailing it in Teagasc's newsletters. Roadside boards also advertised the event as far as 60 miles away from the demo site in order to attract those in surrounding counties. It is clear that there were many streams through which farmers could learn about the event.

We find the biggest way of getting people to come is through text messaging so they'll get a text message maybe two weeks out from an event to say there is an event, to hold the date in their diary. Then they'll get another text message probably a few days before, so maybe a week to ten days out they'll get a message and then a few days before they'll get a reminder text message. We run ads in the national newspapers, depending on how big the event is but the ad in the national papers would be running for one or two weeks. We may run radio adverts, we put staff, organising staff committee members will try their best to get on agricultural programmes on the radio and do an interview and we'll explain what's coming up on the open day. Then letters sometimes, it'll be put in our newsletter which goes out to all farmers, in Today's Farm farm magazine, in boards. So in recent years we've put up roadside boards along motorways and that in surrounding counties so people can see these adverts on the side of the road advertising the open day which is taking part in a couple of months which might not be in the locality, maybe 50-60 miles away we put up road-side boards advertising the event. (Farmer 1)

### T2: Appropriate demonstration and interaction approaches

#### 1. The nature of interaction



Farmer 1 described the nature of interaction as 'mostly bottom-up'. This was in relation to the content of the demonstrations; the Farmer focused on offering practical information that others could implement immediately at farm level.

Mostly bottom-up in that it's as interactive as possible and I try to keep the demonstration as practical as possible and as relevant to farmers at a practical level, rather than at a scientific or theoretical level, it's very much what can they take from this and use on their own farm almost immediately if they want to. (Farmer 1)

Likewise, the Programme interviewee described the nature of interaction as 'mostly bottom-up', explaining that the farmer to farmer approach had evolved naturally as it had proven to be the best way to communicate to farmers

I don't think there's really a programme around it, I think it's just as a business we have always demonstrated things to farmers. We can stand on platforms and tell farmers what to do and advise them and just because the processor says something we're the big bad ugly people and yeah it's another opportunity to throw stones but if we get farmers to communicate messages to other farmers it's a good way to communicate it and get more traction so it's more of that culture rather than any planned programme (Programme interviewee)

Conversely, Farmer 2 and Farmer 3 described the nature of interactions as 'mostly top-down'. For Farmer 2, this was because of the host farmers had developed their own format for delivering the demonstration through experience of other events and farms. Farmer 3 felt this approach occurred more as a result of the nature of the content. The information is factual material that has been gathered on the demo site, so this had to be delivered from the top down. Farmer 3 did acknowledge a certain amount of bottom-up interaction in that participants were encouraged to ask questions and input their opinions.

I suppose we have a format for delivering these because we have so many of them done before and we have experience of other farms and have been involved in multiple events. You learn from the experience of one and bring it to the next one. (Farmer 2)

The information that we present at a demo like this is stuff that has been gathered and it's factual and it is as it is, so other than listening to our stakeholders as to what they want and try and incorporate it; yes, it's bottom-up in terms of that approach, but in terms of disseminating the information on the day, it's predominantly top-down in that we present what we've found but then we are encouraging the likes of the questions to see to suss what farmers are thinking or to suss out what changes we should make for the future. (Farmer 3)

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

In general topics for events were decided by the programme, without input from the host farmer. However, after the initial decision had been made, the farmer had the chance to be involved in how the event was actually run.

Generally we have a topic that we want to do and then we talk to the farmer so they don't get a choice in the topic as such but then they'll have a chance to input into actually how it runs, so if we want to see say if we're talking about ventilation and pneumonia and health type things, we will work with the farmer and see what animals he's got that would be the best to display, which shed would be best to do any practical demos in. So they'll be involved once a decision is actually made in terms of the topic. We very rarely get farmers coming to us and saying oh can I host an event. (Programme interviewee)

The host farmers had no formal involvement in the network programme, although occasionally event topics would arise from discussions that members of the programme had with farmers.

Generally as I said we don't get farmers wanting to host things so we usually have a topic and then we find the farm to host it, so it's not that they don't get a choice. They get a choice

whether they want to host it or not but they don't get a choice in the overall topic. I mean sometimes we will get a topic come out of a discussion with a group of farmers saying oh I'd really like to hear about this or I'd love to know more about that. But to say it shapes the programme is probably wrong or a bit formal. (Programme interviewee)

Participating farmers were able to be involved in individual demonstrations through a stakeholder group, which consisted of a researcher, industry personnel, farmers and advisers.

### 3. Focus

Farmer 1 described the network as whole farm, whereas Farmers 2 and 3, and the Programme interviewee, described the network as 'in between' whole farm and single focused.

### 4. Design

All farmers and the Programme interviewee described the network as 'exemplary' as opposed to 'experimental'. Both Farmer 1 and the Programme interviewee expressed a preference to this approach because they both felt it had a greater impact on the participating farmers, as it is rooted in practice and experience rather than in theory.

Because again it gets back to that farmer to farmer demonstration that if they're seeing examples of problems that have occurred on the farm or areas where they've improved and have the farmer himself or herself make those improvements and what their experience was of it, it's much better than theoretical or experimental. (Farmer 1)

Research is all very well but it's not in positions that are, if you tell the farmer you found something through research it's all very well but it might only work in that scenario whereas showing something that is best practice you can generally take home well that's the way they've done it and I could do it this way because we know it works whereas research is always got this sort of uncertainty around it, will it work won't it work. It's nice to see people trying things but I wouldn't say many people come away from a research type event going I'm going to do that, they sort of wait and see. (Programme interviewee)

Farmer 2 saw the value of both exemplary and experimental demonstrations, and showed an understanding that while experimentation generated new knowledge, there was a challenge to achieve best practice at the same time as running an experiment site.

Both have their merits I think. With research and trials you know you are generating new knowledge but maybe not demonstrating best practice. It's difficult to achieve a perfect demonstration farm when you're trying to experiment on it, whereas on the other hand the demonstration farm you can demonstrate best practice all of the time, or you should anyway. (Farmer 2)

Farmer 3 also expressed a preference for a mixture between experimental and exemplary, but when asked to elaborate it appeared he in fact preferred events that cover a specific area.

I, in a way, personally, prefer focused because you get into the nuts and bolts of a specific issue whereas with the bigger events you get a little bit of different areas without being able to drill into much detail ... It's probably a bit of a mix ... I personally like events that cover a specific area. (Farmer 3)

### 5. Ideal group size

Farmers 1 and 3 and the Programme interviewee all expressed a preference for group sizes between 10 and 25 participants. It was felt that this size group generated the most amounts of questions and meaningful discussion. It seems this was the optimal size in terms of balance between being big enough to get the

message out to a decent amount of people (Programme interviewee), but small enough that the day can still run at a smooth pace (Farmer 3).

15-20 farmers. Because you're getting much better interaction within that group of farmers. You'll find that within a group of 15-20 you get a lot more questions from them, you get a lot better discussion whereas if you've a very big group of 100, 200 you get one or two people who will ask a question but the rest will shy away from asking it and then you won't get the same discussion and interaction around it then. (Farmer 1)

Again it depends on the topic but somewhere ideally if you could have a group of 15 - 25 because you'll always get one or two in the group who are vocal and who will kick start discussions but with 15 - 20 in terms of resource time you can get the message over to more in a short space of time so I mean a group of two or three is probably ideal if you want to go into detail but I think ideally if we're hosting things, 15 - 20 as a group size works really well because as I say you get one or two vocal ones who start discussing or maybe even fighting between themselves, you're always going to get others who won't say a word they just want to have a look and listen. (Programme interviewee)

I like discussion groups. I like ten to twenty farmers in a group and you can take them out and thrash out stuff, and talk through. And actually rather than them ask you the questions all the time you throw some of the questions back at them. One of the things that bugs the crap out of me to be honest with you, you get a lad and there's something being discussed and he comes away with some generalised statement, you know, I really love then to go back and ask specific questions of somebody that does that because oftentimes when there's somebody that does that there's no substance behind them. (Farmer 3)

### T3: Enabling learning appropriate to purpose, audience, context

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

On the whole it was felt that the best structure for a demonstration involved a mixture of activities. Farmer 1 emphasised the importance for using props and visual demonstrations to explain certain points. Farmer 3 and the Programme interviewee felt that it was best to start the day with a background talk to explain the theory before taking a walk around the farm. The Programme interviewee added that after this they might have a practical activity related to a specific topic and a talk from a visiting expert, adding that it was best for an external adviser to deliver this part of the day rather than a member of the programme network, as the farmers were more likely to trust this source. The event rounded off with a social discussion.

What we'd find most effective is that you'd have a talk but you'd have props as well for what you're talking about. It might be cattle, it might be grass, it might be something to do with maybe soils fertility but if you have a combination of a small amount of talking, props if you have them and there's a use for them and then visually seeing what you're talking about in the background is actually happening. (Farmer)

Yeah the ideal scenario really is you start off with a bit of theory, a bit of background, a bit of introduction, scene setting which is a bit more classroom based. And then you go for a bit of a walk so that farmers feel comfortable and they're not chaperoned as such, one they start going in one direction they start talking amongst themselves about what they've seen, they might come back and do something that is specific about a particular topic, so poking livers or letting smoke bombs off for example. You then get people that have started engaging with each other and then you can get them turned on. Generally there's an expert so we try to get someone outside of us so whether it's a Teagasc adviser or whether it's a vet to give that expert view on a particular topic. I think farmers warm to that because yeah, again if we tell them anything we're lying. And then round off with a bit of a social discussion afterwards. (Programme interviewee)

I like if you can have a talk and then you can follow it up with practical. It's all about giving the farmers the confidence to say well, look, I've seen that and I think this can work for me and give them the confidence and the reassurance that it can be done and that it does work. (Farmer 3)

Materials provided for participants consisted of the data and costs to support what has been discussed during the event, as well as information booklets to take away from larger events.

Yeah data and costs, all of those. It might be maybe if you're showing them something on the animal health side, animal products or veterinary health products that are being used on the farm and why they are being used. It could be around grassland management, it could be around how it's actually done. (Farmer 1)

Most of our big demonstrations would all have some sort of a booklet that you can take home. So a lot of the main ... on each of the stands, they're actually included and they can go back and reflect on what they've heard. Then, obviously you've got, if there's some practical stuff that they can visually see on the day, and will register on their minds. (Farmer 3)

Farmer 1 cited 'visualisation techniques, or other multi-sensorial experiences' as the most important tool for engaging farmers because seeing something in action enables the farmer to retain the information better.

It goes back to this whole idea that what you see you'll know or retain a lot quicker in your brain than what you just hear, or doing something will actually help you retain it. It's very hard getting people to do something whereas if they can see it being done it will stay in their brain that bit longer (Farmer 1)

Farmer 3 cited 'Problem solving - farmers feel they know how to solve a problem' as the most important, and appeared to feel that this was best achieved through a visual demonstration.

If I'm trying to show good grassland management, the visual effect of that is much better than bringing an expert in to talk about it. (Farmer 3)

Farmer 2 and the Programme interviewee both cited 'Participants ask questions & talk openly' as the most important, because this was considered the best way for farmers to internalise the information. The Programme interviewee emphasised that for this technique to be effective participants had to come with an open mind.

If participants are asking questions it means they are engaged with the message and they're much, much more likely than to internalise the message if they discuss it and ask questions about it rather than if they just hear an expert talking about. (Farmer 2)

Because there's no way in my view that people are actually going to take anything home unless they've questioned it. I don't think anyone goes to anything and takes everything at face value without questioning it and thinks that's wonderful. If people come with an open mind to an event there's always something you can learn and I think asking questions and talking openly is fundamental to making these groups work. Even here, we haven't got things perfectly and if you come with an open mind and ask questions it helps everybody. (Programme interviewee)

## 2. Taking into account variation in learning

Farmer 1 did not think that different learning styles were considered, whereas Farmers 2 and 3 and the Programme Interviewee all felt that they did. Of these, Farmer 2 had the most sophisticated understanding of how this was achieved, explaining that they did not so much cater to different learning abilities but to different learning techniques, by creating environments that allows people to listen, read or discuss, depending on how they most prefer to learn and engage. The Programme interviewee also detailed the variety of ways they offer for farmers to engage, from presentations to printed material and practical demonstrations.

By having a range of different ..it is not really about learning ability but learning technique. So some farmers will learn by listening, some farmers will learn by reading, some farmers will learn by seeing and some farmers will learn by discussing. You have to create environments for all of those to happen and that's why we write stuff up on boards so that some will read, we have talks about it so that they can talk to someone about it and we have it in books that they can take it away and we have it there on the demonstration farm so that they can see it. So it's not their learning ability it's just their technique of learning. (Farmer 2)

This demonstration farm would allow an individual discussion group to come in. [...] We have to be conscious of trying to spread the message across the industry, so therefore that's why we have big demo days, but then we get down more specifically to discussion group level and then the fact that we try and keep our advisers up to date, they can do one-to-one with farmer on what's happened there, if the questions, or if a show's a good example: look we were able to achieve this at here and this how we [do it]. The information is available at all different levels and it's out there in the media as well. (Farmer 3)

Anything from printed presentations, or presentations and screen images and printed documents that people can read through to practical hands - on demonstrations, things like poking livers and finding liver fluke and letting smoke bombs off in houses to actually see - so there's yeah, depending on what people are interested in there's different things. (Programme interviewee)

## T4: Effective follow-up activities

### 1. Follow-up activities and materials

Farmer 1 and the Programme interviewee felt there was no effort from the programme to engage with participants after the event, while Farmer 2 cited the public media as a possible means to continue engagement. Farmer 3 gave the example of contacting particular participants after the event to offer answers to questions that he couldn't answer on the day, and added that in these conversations he will ask for feedback on the event. It is possible that this was carried out on more of an informal basis, rather than as programme protocol.

Somebody could ask you a specific question at the end, and you might not just have the answer there and then or somebody will have asked you a question that will have bugged you for the rest of the evening and you'll go back and research it and you'll say look, that point you made yesterday, this is exact ... or the question you asked me yesterday, this is how you would go about, or this is the information that you were looking for and if somebody said would you follow up on that. But I use it - you would do that anyway - but I also use it to find out people's reaction and what they thought of it. (Farmer 3)

The programme provided both physical handouts to take away from the event, be it presentation print-out of leaflets from the vet, as well as having all the information from Teagasc available online.

They're usually available on the internet so if there's boards that's used on the open day we usually put them up on the Teagasc public website for people and the open day booklet, so if people want to go in and download those they can. (Farmer 1)

We give hand - outs if we've done a presentation we give handouts that they can take away. If the vet's done something they might bring a leaflet, it depends on the topic. If it's Animal Health Ireland there's generally a leaflet there on BVD or something that we give farmers to take away. (Programme interviewee)

## 2. Assessing impact

There was little effort to assess the impact of the event either amongst participants or amongst the wider farming community, although Farmer 3 did refer to a previous study that was carried out on the activities of discussion groups, adding that it was difficult to follow up people that have never attended a demo.

We did a study a couple of years ago on discussion groups, for example, and we looked at activities of discussion groups [...] it's very hard to follow up somebody that didn't attend a demo, if they're a non-client for example because you don't know what they're at but we do know from working with groups, that definitely if they're engaged with you and you're trying to demonstrate something, they're familiar with the language, the terminology and the concept whereas the lads that don't come and engage may not necessarily be - they're not all like that because they may have other information sources. (Farmer 3)

## 5. Event analysis: effective peer learning characteristics

### Event details

The group consisted of about 700 participants, of which 76 filled in the pre survey and 27 the post survey.

	n° survey participants	Accountant	Adviser	Carpenter	Engineer	Farmer	Office work	Retired farmer	Retired teacher	Solicitor	Student	Student /Farmer	Technician	unknown
<i>occu- pations</i>	76	3	2	3	1	49	1	2	1	1	2	1	1	9
<i>working area</i>	71													
<b>local area</b>	41	2		2		31			1				1	4
<b>not local area</b>	30	1	2	1	1	15	1	2		1	2	1		3
<i>gender</i>	73													
<b>male</b>	68	3	2	3	1	46		2	1		1	1	1	7
<b>female</b>	5					1	1			1	1			1
<i>age</i>	68													
<b>18-30</b>	7	1				2					1	1		2
<b>31-40</b>	8	2		1		3								2
<b>41-50</b>	23		2	1	1	15				1	1		1	1
<b>51-60</b>	11					10								1
<b>60+</b>	19			1		13		2						3

### T1: Learning processes

#### 1. Communication initiation by participants

When in the whole group not more than 10% of the participants hesitated but shared their knowledge and/or experiences related to the topic. More participants sharing their knowledge would have been practically very hard since there were so many people at the same time listening to the demonstrators. Between 10% and 50% of the participants had no problem sharing when in smaller groups. Informally after the field walk, people shared over food and drinks.

There was room for questions, but not a lot, even though you felt that participants were ready and wanted to ask questions, there was only time for a few questions after every stand. Despite this, a lot of questions were asked. Because of the separation in stands, the demonstrators had to repeat their part a couple of times, which enabled more people to ask questions at different stands. There were only a few participants trying to formulate their own points of view regarding the topic. Again, the biggest constraint here was the large amount of people.

	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	6/27	15/27	5/27	1/27
I asked at least one question during the demonstration .	6/25 yes				
I shared my own point of view at least once during the demonstration.	7/25 yes				
I felt encouraged to ask questions during the demonstration.	1/27	3/27	16/27	6/27	1/27
When there were any discussions, I felt comfortable sharing my opinion.	1/27	5/27	15/27	4/27	2/27

	demonstrator answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I asked participants to share some of their own background knowledge during the demo.	2/3	1/3	0	0	0
I encouraged the participants to formulate their own point of view during the demonstration.	0	2/3	1/3	0	0
I encouraged the participants to formulate questions during the demonstration.	0	0	2/3	1/3	0

## 2. Interactive knowledge creation

### *Hands-on opportunities and other multi-sensorial experiences*

There were no hands-on experiences demonstrated or possible to be carried out by the participants. The participants could walk through the meadows and see the crossbreed cattle. Furthermore there were not really additional multi-sensorial experiences provided.

### *Discussion opportunities and negotiating conflicting points of view*

Yes there was at every stand a facilitator/demonstrator there who was a Teagasc Adviser. The adviser would introduce the context of each stand on the farm walk and guide the short amount of time for questions at the end of the explanation at every stand. Every stand included 10 of their 30 minutes for questions/discussion. There were 5 stands so going through the field walk took a farmer about 2h30. Open discussions between a few participants were thus stimulated. Shared critical points of view were clarified/rephrased so more people could understand. Demonstrators repeated the questions asked by farmers through the microphone before trying to answer them.



	participant answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
In my opinion, <b>there were interesting discussions</b> during the demonstration.	0	2/27	15/27	10/27	0
If participants <b>didn't agree</b> with each other during discussions, somebody (demonstrator/other participant) <b>tried to reach a consensus</b> between them.	0	4/24	13/24	2/24	5/24

	demonstrator answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
In my opinion, <b>there were interesting discussions</b> during the demonstration.	0	0	2/3	1/3	0
If participants <b>didn't agree with each other during discussions</b> , somebody (me or somebody else) <b>tried to reach consensus</b> between them.	1/3	0	1/3	0	1/3

### 3. Engagement during the event

Participants acted more distant than open. Although they clearly respected each other as a colleague, even if they didn't know each other beforehand. The demonstrators acted open and friendly, but not as close friends with the participants. They were very open to the critical points of view of the farmers and acknowledged these problems.

	participant answers				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I felt actively involved during the whole demonstration process.	0	5/27	17/27	5/27	0
I felt like the demonstration increased my ability to rely on myself as a farmer.	0	3/27	14/27	8/27	2/27
I could relate well to other participants (because they have an agricultural background similar to mine).	0	0	15/27	10/27	2/27
A lot of the other participants are part of the same farmer network as me.	0	3/27	19/27	3/27	2/27
I felt like I could trust the knowledge of (most of) the other participants.	0	2/27	17/27	7/27	1/27
The demonstration felt like an informal activity to me.	0	2/27	18/27	7/27	0
I thought the host farm was comparable enough to my own farm.	4/27	13/27	8/27	1/27	1/27
I had the feeling the demonstrator was like one of us.	1/27	10/27	14/27	2/27	0
I had the feeling I could trust the demonstrators knowledge.	0	1/27	14/27	12/27	0
I got along very well with the demonstrator.	0	2/27	17/27	7/27	1/27

	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 (3/3)				
Most of the participants were well known to me.	0	3/3	0	0	0
A lot of the participants are part of the same network as me.	0	1/3	1/3	1/3	0
The demonstration felt like an informal activity to me.	0	2/3	1/3	0	0
I think the host farm was well suited for this demo.	0	0	1/3	2/3	0
I got along well with the participants.	0	0	3/3	0	0

## T2: Learning outcomes

Explained knowledge was very clearly understandable. The use of the microphones, giant posters with data split into different stands made the message very clear. The booklets distributed also contributed to that. Practical skills were not a focus of the demo day. More the explanation of how breeding could become more profitable. Common methods or ways of thinking on farming were questioned and alternatives were extensively elaborated on in group. After the explanations of the demonstrators on the different stands, some farmers were not shy to open a critical discussion about the 'innovation' presented. Some even got applauded by other farmers for sharing their critical points of view. Common methods or ways of thinking on learning questioned, but no elaboration on alternatives. The AgriDemo researchers overheard some farmers saying 'why did I come here today? This was not worth it for me'. This didn't really happen in group formation as far as we know.

	participant answers				
What would you <b>ideally like to learn</b> today?	<p>to see if there's profit in sucklers; grass growth and prep; best breed for suckler; learn about grazing infrastructure; feeding animals; prices in beef industry for 2019 and beyond; how best to manage my enterprise; how to make more money; open to all farming knowledge; farming knowledge tools; animal vaccination and herd health; Is beef farming finished in the west of Ireland, Hobby now only?; How to farm better; grass managemnet and measurement and fodder usage; best practice and future proof farm; to be more efficient; the price of beef and quality; key performance parameters</p>				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
The <b>demonstration met my expectations</b> regarding what I wanted to learn.	0	3/27	18/27	6/27	0
The <b>demonstration exceeded my expectations.</b>	0	8/27	13/27	3/27	0
I <b>felt surprised</b> at some point(s) during the demonstration.	0	10/27	13/27	3/27	0
I <b>obtained a clearer understanding</b> of the topic(s) demonstrated.	1/27	2/27	15/27	9/27	0
I have the feeling I <b>learned something new</b> (knowledge, skill, practice, etc.).	0	2/25	15/25	8/25	0
I <b>thought about how I could implement</b> some of the ideas and practices on my own farm.	0	3/27	16/27	8/27	0
I <b>reflected on my own point of view</b> at some point during the demonstration.	0	6/27	13/27	7/27	1/27
I learnt about <b>the principles underlying a practice.</b>	0	4/25	15/25	6/25	0
I thought about <b>how we learn something new</b> on demonstrations (e.g.: teaching methods).	0	6/26	15/26	5/26	0
I thought about <b>why</b> I want to learn about <b>the topic(s) of this demonstration.</b>	0	3/27	17/27	7/27	0

	demonstrator answers				
what do you <b>intend for the participants to learn</b> today?	<p>To show a high level of performance in all those areas and how it's achieved, and how it's achievable by most farmers if they put their mind to it. There's nothing on that farm that's not achievable to some level or degree on most other farms. To learn of the technologies that we have adopted on the farm and the impact that they've had on the farm and to adopt those technologies on their own farms; Every farmer is going to take something different home. Somebody could already be pretty efficient at breeding but they could pick up something on grassland, or on the planning process regarding animal health, or to benchmark themselves against the financial performance that Newford is achieving.</p>				
	strongly disagreed	disagreed	agreed	strongly agreed	not applicable
I think <b>participants have learnt what I intended them to learn.</b>	0	0	3/3	0	0
I tried to <b>surprise</b> participants with uncommon/new knowledge/new skill.	0	0	2/3	0	1/3
I <b>felt surprised</b> at some point(s) <b>myself</b> during the demonstration (e.g. by a question or discussion).	0	0	3/3	0	0
I <b>obtained a clearer understanding</b> of the topic(s) myself.	0	1/3	1/3	1/3	0
I have the feeling I <b>learned something new</b> during this demo (from participants, discussion...).	0	1/3	1/3	1/3	0
I <b>reflected on my own point of view</b> myself at some point during the demo.	0	0	3/3	0	0
I encouraged participants <b>to reflect on their own point of view</b> during this demo.	0	1/3	1/3	0	1/3
I encouraged participants <b>to reflect on their own situation</b> sometime during this demo.	0	0	2/3	1/3	0
I encouraged participants to <b>reflect on how we learn something new</b> on demonstrations.	0	2/3	1/3	0	0
I encouraged participants <b>to reflect on why we are trying to learn</b> about the topic of this demonstration	0	0	3/3	0	0

### T3: Overall comments on the effectiveness of the event

#### *Participants:*

With an average of 3.7 on 5, participants rated the event overall as effective. 24 on 24 participants who answered the question would recommend the demonstration.

Main effective characteristics of the demo- participants mentioned; only relates to farming beef; farm set up and presentations; layout of demo and competence of demonstrators; backdrop of info provided with speakers; the billboards; grass growth; relevant topics, eg fodder shortage; they are good as they are; good clear speakers; all stands were very clear; seeing the stock.

A few participants had suggestions for improvement: talk more about cost / income;; more A.I.; more effective PA to hear audio; slightly larger size.

#### *Demonstrator:*

Main effective characteristics of the demo - the demonstrators said: Everything was on show, nothing was hidden; we showed the financial and the breeding and good grassland management. There was opportunity for people to ask questions, meet the farm manager that was working there, meet the advisers and researchers who work on the programme as well; We had a good attendance, its geographically located where the majority of the suckler farmers are, it's one of the few suckler demo farms in this region. It's got a high public profile, its economically challenged because of the structure that we have and there's significant differences between it and the average farm. It has to deal with all of the challenges associated with general farming. The fact that it was a mixture, you could see it on the ground but you had the figures and the statistics to back it up; it wasn't all theoretical, the practice was there in front of you as well as the hardcore information.

As suggestions for improvement the demonstrator mentioned: 'Ideally, you would like to bring the people around in smaller groups, it's very hard to do that when you have a big, big crowd coming. This way you are just not going to get the same learning from people when there's 200 - 300 maybe 400 in a group going around. It's hard to get the same level of interaction in a group like that; That type of demonstration, if you wanted to teach some more, the day would be even more focused, so you would have a day, for example, for breeding and you could pick four or five areas within the breeding that you could focus on ... you could make it more focused ... so it could be exclusively animal health or it could be exclusively breeding, the time constraint allows you to do twenty minutes, to talk about the achievements within the breeding or the animal health ... and then people are asked to move on, so in order to be able to do your practical demonstration on condition scoring or anything like that, for example, you just couldn't do it because you wouldn't have the time, so I think you would be looking at having the days even more focused than they are.

#### *General summary:*

Very well organised for a big group (uncertain about actual figures at the start), but very top-down, with luckily some understanding compassionate demonstrators. Efforts to make the demo somehow a little bit more bottom-up would be an improvement.

The main strong aspects of the demonstration included: Giant clear posters, some time for questions and acknowledgement by the demonstrators of the problems in the sector. Clear farm walk. Well organised and aimed a very large public. Nice informative well designed booklet to take home for everybody.

The main improvements included: Structured group discussion to brainstorm about possibilities in the sector could have been nice. Some farmers arrived after 4, while it was advertised that it ran until 6, but after 4 registration was closed. Registration for a certain amount of field days provides farmers with an extra compensation. Since it was not clearly advertised the registration would close at 4, some farmers were disappointed upon arrival between 4 and 6.