

DÁIL ÉIREANN

AN COMHCHOISTE UM THALMHAÍOCHT, BIA AGUS MUIR

JOINT COMMITTEE ON AGRICULTURE, FOOD AND THE MARINE

Dé Céadaoin, 23 Feabhra 2022

Wednesday, 23 February 2022

Tháinig an Comhchoiste le chéile ag 5.30 p.m.

The Joint Committee met at 5.30 p.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Martin Browne,	Victor Boyhan,
Matt Carthy,	Lynn Boylan,
Michael Fitzmaurice,	Paul Daly.
Paul Kehoe,	
Michael Ring.	

I láthair / In attendance: Deputy Paul Donnelly.

Animal Health and Welfare Act 2013: Post-Enactment Scrutiny (Resumed)

Chairman: I remind members, witnesses and those in the Public Gallery to turn off their mobile phones. Members are requested to ensure that for the duration of the meeting their mobile phones are turned off completely, or switched to airplane safe or flight mode, depending on the device. It is not sufficient for members just to put phones on silent mode as it maintains the level of interference with the broadcasting system.

The purpose of today's meeting is to discuss, first, consideration of artificial canine insemination, canine insemination, canine fertility clinics and ear cropping in relation to post-enactment scrutiny of the Animal Health and Welfare Act 2013 (resumed). The purpose of the second session is to discuss development of the hemp sector in Ireland.

In regard to committee meetings, with effect from 25 January 2022 members and witnesses have the option of attending meetings with the relevant committee within the relevant committee room rather than participating via MS Teams. Masks should continue to be worn by those present when not addressing the committee. Room capacity will continue to be reduced in the short term until all microphones and seating can be returned.

Witnesses giving evidence within the parliamentary precincts are protected by absolute privilege in respect of the evidence they give to the committee. This means that a witness has a full defence in any defamation action for anything said at a committee meeting. However, witnesses are expected not to abuse this privilege and may be directed to cease giving evidence on an issue at the Chair's direction. Witnesses should follow the direction of the Chair in this regard and are reminded of the long-standing parliamentary practice to the effect that, as far as is reasonable, no adverse commentary should be made against an identifiable third party or entity. Witnesses who are to give evidence from a location outside the parliamentary precincts are asked to note that they may not benefit from the same level of immunity from legal proceedings as a witness giving evidence from within the parliamentary precincts and may consider it appropriate to take legal advice on the matter. Privilege against defamation does not apply to the publication by witnesses outside the proceedings held by the committee of any matter arising from the proceedings.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the House or any official by name or in such a way as to make him or her identifiable. Parliamentary privilege is considered to apply to the utterances of members participating online in a committee meeting when their participation is from within the parliamentary precincts. There can be no assurance in relation to participation online from outside the parliamentary precincts, and members should be mindful of this when they are contributing.

The first session from 5.30 p.m. to 6.30 p.m. will deal with consideration of artificial canine insemination, canine insemination, canine fertility clinics and ear cropping in the context of post-enactment scrutiny of the Animal Health and Welfare Act 2013 (resumed). I welcome Dr. Tim Kirby, director, PetBond. I now call him to make his opening statement.

Mr. Tim Kirby: I am a qualified veterinary surgeon with 20 years of practical clinical

experience of all species, across both the UK and Ireland. During this time I have also served as a trustee for several animal welfare organisations and have been a firm advocate of animal welfare and health at all times. I currently also sit as a member of the Veterinary Ireland companion animal committee, and represent the group at a European animal working group level. In a personal capacity I am also a member of a joint UK and Ireland puppy farming stakeholder group attempting to resolve that major issue, which also represents more than 40 independent and government-affiliated bodies.

As we emerge from the Covid-19 pandemic it is not only a time for reflection, but also a time for change. Over the past two years we have witnessed the ever-increasing demand for pets by the public, and the resorts to which some will go to in meeting these demands. What was very evident, and something I witnessed first-hand as a clinician, was the mismatch between supply and demand throughout the pandemic. As a result, the imbalance created by an insatiable public demand created the perfect void for supply by opportunistic individuals, with the sole purpose of generating vast personal wealth. At a time of huge emotional strain and stress on both families and individuals during what was the greatest health challenge in modern times, some unscrupulous breeders seized the opportunity to capitalise and extort. With the demand for certain breeds such as brachycephalic, otherwise known as brachys for short, including French bulldogs, pugs and shih tzus at unprecedented levels, the supply of these puppies was seen by many as a passport to riches at any cost. As a result, more and more people resorted to using artificial insemination in their dogs which increased efficiency and maximised the chances of greater output, that is, greater numbers of puppies and greater profit. Artificial insemination is not a new practice and has been performed in canines for many years. It has been used particularly in cases where dogs are in remote geographical areas and cannot travel to mate naturally. Derivatives of this procedure also include the more invasive transcervical insemination, TCI, technique and surgical insemination. It is worth noting at this point that surgical insemination is an illegal practice in the UK, whereas as all three forms of canine insemination can be performed legally in Ireland. In the case of surgical insemination, it is necessary for the recipient to undergo general anaesthesia, as a surgical incision is made through the body wall into the abdominal cavity. Thereafter, the uterus is identified and the uterine tubes are inseminated. The patient is surgically repaired and recovered from anaesthesia. This procedure is highly invasive and requires considerable anatomical skill, knowledge and experience in ensuring the best possible recovery for the patient. Alarmingly, such a high-risk procedure is being performed by untrained, unskilled lay persons, which is at a complete contravention of the Animal Health and Welfare Act.

With the soaring public demand for designer puppies, the suppliers of these have identified the commercial and practical ease offered by all forms of insemination techniques. As a result, we are seeing more fertility clinics emerging in an attempt to match the insatiable demand with a faster and on-order supply of designer breed puppies. Such fertility clinics are highly unregulated places that lack any veterinary or professional contribution. In essence, they are dungeons of misery for many animals, as the unskilled, untrained people there perform invasive and illegal acts such as blood sampling, invasive swabbing and, in cases, the highest-risk surgical insemination procedure. It is also believed among many veterinary professionals that Caesarean sections are being performed in some such fertility centres, which, in itself, is a highly disturbing concept. Attempting to subject any animal to such invasive surgery without the appropriate skills, procedures or medication is a gross violation of the most serious nature. The emergence of such unregulated and abhorrent fertility clinics has been mirrored across the UK and Ireland and is a trend which seems to be increasing. Such facilities are in clear breach of many animal health and welfare laws and Acts, not least the five freedoms that underpin all

animal-based legislation globally.

In addition to compromising animal health and welfare, veterinary procedures are being illegally carried by unqualified lay persons who are in possession of medicines which are only licensed for veterinary use. In total, the existence of such fertility clinics pose one of the most serious risks to present and future generations of dogs and, as a result, must be tackled head on by the Government. Public education, awareness and vigilance regarding the existence of such centres must also be prioritised.

Coupled with the emergence of fertility clinics, is the re-emergence of ear cropping in the past 18 months, in particular. This hideous practice is solely driven by a human desire to create a better looking dog, where floppy ears do not conform to such a preposterous notion. As with designer breeds, the driving force behind the demand for ear cropped dogs is purely and simply people. People are choosing such dogs based on looks entirely and, in some cases, ignorant of the abject cruelty inflicted on the poor dogs in cosmetically designing such ears. Ear cropping is an absolutely cruel, wholly unnecessary and purely cosmetic procedure. There is no scientific, biological or logical justification for such a barbaric act. It is shunned among all my professional colleagues and it needs to be shunned by every citizen of this country. There is no place for such a procedure in modern Irish society and it is harrowing to think that such brutality is taking place out of public sight. Ear cropping is happening in facilities without any veterinary supervision and without anaesthetic or even pain relief. It is without doubt one of the most callous and visceral forms of animal cruelty. Removing a dog's ears not only deprives it anatomically, but it also severely restricts its ability to communicate and express itself. Dogs use their body language, and ears especially, as a means of expressing their emotions, and removing part or all their ears has a catastrophic effect on their overall quality of life. I believe that the term "ear cropping" should actually be replaced with the term "ear chopping", as that better represents the lack of humanity and absolute brutality involved. Without doubt, a hotline to Government agencies should exist where such cases or suspected cases can be reported in confidence.

Chairman: We get many opening statements in this committee and I have not, in my term here, come across an opening statement as disturbing as the one Dr. Kirby made, in particular the fact that in Ireland and the UK in 2022, these fertility clinics can operate completely unregulated, according to his report, and I am not questioning the accuracy of it in any regard. We have the Department of Agriculture, Food and the Marine and many justifiable rules on animal welfare, and rightly so, but is there any policing of these fertility clinics? If there was a rogue veterinarian on the bovine side, he would very quickly be found out and prosecuted. Have there been any raids on these fertility clinics or any prosecutions related to fertility clinics? How many are there in Ireland?

Mr. Tim Kirby: It is very difficult to quantify. Certainly, veterinary colleagues and myself who all see puppies coming in their door every day of the week often wonder where they came from. We live in an era where, as I alluded to, the demand is so great that people on the supply side are doing everything to supply as many puppies as they can. With that, I am sceptical as to the sources and origins of some of these puppies is, to say the least. That fits in with the wider issue we have of unregulated puppy farms with industrial-scale breeding. The lack of standards and care that are exhibited by those breeding practices fit like a glove on a hand with these practices such as artificial insemination, ear cropping and various other procedures, which are completely unregulated as well. Again, it is part of the wider pet sector. It is impossible for it to be completely policed, but there have to be greater efforts in determining where puppies

are coming from because that is a classic avenue to get back to the root cause of some of these issues as well.

As I said, to quantify the exact the numbers is very difficult, but we have heard of facilities where the public were aware of them and Garda sergeants certainly were notified of the existence of them. Again, there was no veterinary involvement in any of these. These are people who are doing this of their own accord, seizing the opportunity to extort from people who want puppies quickly.

Chairman: I will bring in Senator Boylan first because she is the one who looked to have this subject brought before the committee and it merits serious discussion, so I will allow her to go first.

Senator Lynn Boylan: I thank the Chairman. I appreciate that. I know the work Dr. Kirby is doing with PetBond is exceptional. I recommend anybody who wants to buy a puppy to avail of the support of that site. Surgical artificial insemination is a very invasive procedure, even if carried out by a vet. There are also the more concerning issues raised by Dr. Kirby, namely, the possibility that this is happening without vets or anybody qualified. Would Dr. Kirby say that, even with a vet present, it is something that should be limited in its uses because of its invasive nature? I know it is used quite a lot in greyhound racing as well as in the puppy farms.

The other issue is the requirement to register only breeding bitches. A dog breeding establishment has to register only if it has six or more bitches. Do we need to move on this? The purpose of these sessions is to look at how fit for purpose the law is. Do we need to move to requiring anybody keeping stud dogs to register? It is not hard to find them on Facebook. One individual whom I will not name is making about €250,000 per year in stud fees of bulldogs. Does Dr. Kirby think we need to require stud dogs to be registered?

My next question concerns designer breeds and the breeding of dogs that are very different in size and nature. Aside from the fact this must be done through artificial insemination, which is an invasive procedure, what are the implications for the dogs that are born out of those mismatches?

Mr. Tim Kirby: Surgical insemination is certainly an invasive procedure, and by that we mean opening into a body cavity. Obviously, a dog needs a general anaesthetic. That carries a risk. We do not give a general anaesthetic very lightly because of the obvious risks it carries, which are the same ones for an animal as for a human. That is one factor that must always be considered. Is it critical that this procedure be done? You would assess the risk of using a general anaesthetic. You then have the actual procedure, which involves entering a body cavity. There is a risk of contamination, surgical injury as you are performing the procedure, haemorrhage and other complications. Even when it is performed in a controlled, sterile surgical environment, it does carry risks. When we look where the practice is being done in an unregulated and uncontrolled environment by an unskilled, untrained person, the risk of something going wrong is infinitely higher.

What we must bear in mind is that even if it is legal in Ireland, is it something at which we need to look more closely and ask whether there is a place for it, and if there is, why and how should it be done? We need to have this conversation, which is the purpose of discussing this topic here today. We must also bear in mind that, even though there are certain licences around dog breeding and certain establishments, there is a bigger picture where the majority of puppies are coming from that case. Similarly, there is the unregulated and uncontrolled sector of it.

Many of the puppies born are selectively bred, such as French bulldogs. Many of these dogs are not designed for breeding purposes. They have inherent anatomical deficiencies that mean they are more likely to require Caesarean sections. If they are being bred in these unregulated and uncontrolled facilities, who is carrying out these procedures on them? We note there are reports of untrained people performing such procedures, which is highly disturbing. This is where due diligence is needed to quantify and assess how that area can be tackled as well.

Dog breeding establishments with six or more breeding bitches on the premises require licences under the Dog Breeding Establishments Act. What is the merit in the number six? We need far more discussion around the whole concept and I am happy to be a part of that at any point. I agree that in respect of stud dogs, when we look at the number of puppies, we assess their welfare and health. Again, the genetic contribution of the sire is as important as the dam, but it is an area nobody even bothers to refer to. The Senator is right. It is certainly contributing to a lot of the problems. When we look at the problems some of these brachy breeds are having, for example, French bulldogs, there is an initiative called BOAS, brachycephalic obstructive airway syndrome, where you can test specific breed lines, the dam and the sire to see whether they are suitable for breeding. This is something PetBond certainly encourages. We will be introducing more initiatives around that because many of these problems can be avoided. As the Senator rightly said, by introducing these tests on the sire but also on the dam side, we can alleviate and prevent a lot of the problems. With the number of puppies being bred in Ireland every year, the size of the demand for stud dogs is huge as well, and I think some control needs to be introduced because this is half of the story and it is certainly half of the problem.

Regarding the third point about designer breeds, we are talking about breeds like French bulldogs, many of the brachy breeds in general or Shih Tzus. They are along the very pedigree-generated lines, while at the other end of the spectrum we are looking at Pomeranians crossed with Huskies, Cavachons and Cockapoos, which are poodles crossed with cocker spaniels. Again, it is not like mixing two paints and getting a specific colour. When you mix these together, you essentially get a genetic cocktail. One of the greatest examples of where all of this is going wrong is in clinical practice. We are seeing a lot of dogs coming in our doors with behavioural issues. When we start to look at the root cause of these behavioural issues, we find they are underlying health problems. We have dogs in pain or with health issues we have not seen previously because we are getting these genetic mixes that are constantly being introduced by people to feed a demand for these designer breed dogs. As a result, dogs are presenting with these bizarre behavioural issues. What we are trying to do is see what we can do to help these dogs in the short term, but there certainly needs to be a longer term strategy and far greater awareness of the consequences of people demanding these breeds and people then supplying these breeds.

Senator Paul Daly: I compliment Senator Boylan on raising this issue. I concur with the Chairman's statement. I was horrified reading Dr. Kirby's statement. This is not to question its content in any way, all of which I accept. We had submissions from the Department and the Veterinary Council of Ireland, VCI. I took it that both of them were going to be here this evening. The questions I had prepared were for them based on Dr. Kirby's submission. By virtue of the fact they are not here, and that was my misunderstanding of the situation, I might run some of them by Dr. Kirby and get further elaboration from him.

Regarding Dr. Kirby's description of what I would call backstreet clinics, medicines are being used. We had a lot of deliberation over the past year on the European veterinary medicines regulation. At this stage, a farmer must have a prescription for anti-parasitic medicines just

dosing for worms. It was made quite clear to us that nobody can buy or import these medicines without being registered and recognised by the VCI. Where are these medicines coming from? How are these people getting their hands on the medicines that would be required to carry out these operations? Is it an issue for customs as much as for anybody else?

Mr. Kirby mentioned, in his opening statement, the raising of public awareness of this issue, which was a point I definitely intended to raise with the Department. I will be honest and declare my ignorance or naivety, as one could describe it, that either of these things was happening and I certainly was not aware of the resulting consequences and volume of artificial insemination and ear cropping. We need to raise public awareness of the issue. There would be people like me who, if they were to go with a family member to buy a dog whose ears were cropped, would not be aware of how or why that happened or that it was not the natural shape of the ear of that breed of dog. Until the end user or final purchaser is fully aware of how such a dog got to the condition it is in, with the enormous pain and trauma it would have endured to end up looking like it does, we cannot say “stop” to that while there is a market. If there was a strong publicity campaign highlighting the issues Mr. Kirby has raised and more public awareness of them, I would say people would say “No” and would not purchase the dog in question. The questions were based on Mr. Kirby’s submission but, as I said, they were intended for the Department and the Veterinary Council of Ireland, VCI. Mr. Kirby might comment on where I am coming from on these issues.

Mr. Tim Kirby: I will speak on my own behalf. Certainly, without doubt, the drugs that would be used where a surgical procedure would be done are what we call controlled drugs. They are medicines that would only be licensed for use by a veterinary surgeon such as anaesthetics and pain relief drugs. The question is where some people would be accessing those medicines. The most likely scenario is that many of these drugs would be imported. There are reports of that with respect to generic drugs. For example, when a drug is launched, it gets a period of exclusivity and then the generic drugs come on the market. There are always reports that when a generic drug is launched there are counterfeit versions of that generic drug on the market. That is not a new feature of medicines. That has existed for years in animal health in particular. I imagine these drugs would be counterfeit generics of licensed drugs on the market. There are laboratories capable of producing those drugs. Scientists can reverse engineer them and produce them. They will make their way on to the market in some shape or form, most likely through importation. It is important to realise many of these facilities probably would not even have those drugs available. They would be using human drugs. People have given various human medicines to animals. Some of the breeding establishments do that to control the fertility of dogs and use pain relieving drugs. Some people will raid their human drug cabinet to see if those drugs will work on a dog with the consequent major risk and side effects of that for any animal. That is what I would say about those control medicines.

On raising public awareness of ear cropping, there was a very good drive to cut out ear cropping and make the public aware of it the UK in late 2021 with the Cut the Crop campaign. The word “cut” was really effective. As I said, I would almost replace the wording with “Chop the Crop” because it must be that stark. It is quite a visceral comment to make and it must be that raw that it captures people’s emotions such that they think it is not a procedure we should accept and that if we see it, it is abnormal. It comes down to education on what is normal and abnormal, and what is acceptable based on that.

Deputy Martin Browne: I cannot get over some of what Mr. Kirby said in his opening statement. When I read about the three types of artificial insemination I thought it was almost a

set-up. Could any member of the public here carry out any of those three artificial insemination procedures, which are illegal in the UK?

Mr. Tim Kirby: The first two procedures would be less invasive than the surgical one. Certainly with training, there are people performing these procedures. Some people would have basic training on it and they can do it. One does not have to be a veterinary surgeon. Some people who are qualified as technicians would do it. Other people with fewer qualifications and less experience would do it also. The only procedure that would be banned in the UK would be the surgical insemination technique but the big issue is that people would still be performing it there even though it is illegal.

Deputy Martin Browne: It is crazy to think that I could decide tomorrow morning to carry out any one of those three procedures and there would be no comeback against me. Is most of the abuse of these dogs, of designer breeds as they have been described, being carried out not by the owners of puppy farms but by backyard breeders, to borrow a term used to describe them by a woman from my home town of Cashel? In some places papers are produced for these so-called designer dogs but do we need to change the language we are using? One can have such papers but those dogs are mongrels. If we were to change the way we describe them, it would take away the gloss of an owner having a little designer dog that would fit in her handbag that she could show off as she walks down the street. Having such a designer dog sounds like what a film star would have. Breeders are charging crazy money for what are described as designer dogs but they are mongrels. Do we need to change the way we talk about the industry, bring it back to reality and let the public know that such a dog is not a designer dog but a mongrel and that one can have whatever papers one likes, they would still be no good.

Mr. Tim Kirby: It is a good point. If we take it from both ends of the spectrum, on one end, we would have the finest bred pedigree dog and, on the other end, many of the dogs - I would add the caveat not all of them - would be high end pedigree but would have issues such as restricted noses where they cannot breathe properly and have airway issues. We are trying to bring in new breed standards where we say this is what the norm should be for this dog, its nose and airways need to be this wide and this long and anything that is different or less than that does not conform. Therefore, we would have some benchmarking for breeders and everybody involved in that sector of pedigree dog breeding. If we look at the other end, where this also applies, we would have cavachons, cookapoos and pomskies, which are pomeranians crossed with huskies. Many people would refer to those breeds as designer breeds also, even though there are no pedigrees whatsoever with these dogs. Some people would argue and say we crossed a pedigree poodle with a pedigree cocker spaniel but it is a completely new breed that is being created. What health and behavioural issues will it have? It is almost like opening a lucky bag and pulling something out to see what it could be.

I agree with the Deputy that we need to almost neutralise the language around it. One cannot make a comment without referring to both ends of the spectrum. Certain things are common to both ends of the spectrum. The health and welfare of any dog will apply no matter what end of the spectrum it is on. That is where we need to find a commonality in how we refer to these dogs. Also, as the Deputy said, it would take away some of the stigma associated with certain breeds. It does not glamorise certain terms. That is where the public education about this comes in. Sometimes we must be brutally honest about what it is, call it for what it is and then deal with the issues around that. We must almost reverse engineer the end product, which is the problem, and then build it back up in the public mind, with direct language around that, and inform and educate people on what is healthy and normal, and what should be acceptable

from now on.

Deputy Martin Browne: Are some of unregulated clinics moveable? Are those chancers operating unregulated clinics from trailers, which they can move around and, if so, has any of them been apprehended?

In terms of what Senator Daly mentioned, I accept that some of the medicines come in but are some being brought in for vets or whatever? Is there a tracing system for these medicines? If so, has a regulator been informed that batches of these medicines have gone missing and ended up in the hands of criminals or unscrupulous dog handlers?

Mr. Tim Kirby: It is very feasible to create a mobile unit for these clinics. I do not have personal experience of a mobile clinic but I imagine that it is possible to do that, in practice.

In terms of the regulation of drugs, there is not a set database that could report that a specific batch of drugs is not recorded by the end user. There is no larger database that feeds in to this. Where a single unit or a batch is produced in the manufacturing plant of whatever company that makes this drug, that is not traced right down the chain to the end user nor is there an upstream of information back to the producer that says: "We have got a log of every single entry point where this drug was used and, therefore, we can record, we have documented and we can prove that the drug [be it a bottle or vial that was manufactured] was used in X, Y or Z facility." That chain of events does not exist in animal health. I certainly know from the larger animal side that the Department of Agriculture, Food and the Marine is introducing a much better system where the specific use of drugs can be recorded and documented. On the companion animal side, that does not exist at present.

Deputy Martin Browne: How common was the problem prior to the surge in this practice in the past 18 months? When did PetBond draw the attention of the Department to the issue? How did the Department respond? When did PetBond lobby the Government about this matter? Can Dr. Kirby explain why it has taken so long to either revisit or change the legislation in terms of ear cropping?

Mr. Tim Kirby: Yes, 20 or 25 years ago the procedure was performed more commonly. With public awareness and education the practice was no longer justifiable. As I said, there was no logical or biological reason for the procedure, and that was a huge driver in making people accept and realise that there was no practical purpose to continuing the practice. However, in more recent times, particularly just pre-Covid, the practice re-emerged. It fits in with all of the desired aesthetics. Many of these dogs are now bred purely for their looks and there is no other logical reason for them. This fits in with the idea that dogs with short ears that are not floppy are deemed to be more attractive. These animals are just clickbait and people use them to increase their profile on social media. As sad as that sounds, there is an animal welfare consequence and that applies to these dogs as well.

Can we convey the message to people that the practice is abnormal? Like what happens with a lot of these animal health and welfare issues, people can stop the practice by voting with their feet and saying that the look is abnormal and unacceptable. I think that is where the real change will happen.

Deputy Paul Donnelly: I thank Dr. Kirby for his report and I am shocked by his findings. I have a husky dog and I am beyond puzzled as to why somebody would subject an animal to this torture. I find the situation really disturbing and upsetting.

Some of my questions have been asked and I want to discuss the demand for these animals. Anecdotally, I know through social media, that one sees images of cavapoos and all these types of dogs. When I take my dog for its daily walk I see dogs of mixed breed everywhere and that situation became more apparent in the last couple of years because people got dogs during the pandemic. Now that the pandemic is over there is a sense that a lot of these dogs have behavioural issues, and I found what Dr. Kirby said about this earlier really interesting. He said that a lot of these people who paid a huge amount of money for these types of dogs now find that they cannot manage them. In addition, if people have returned to work, these dogs have become more unmanageable. Now we have nearly a tsunami of dogs that have been handed back to the animal rescue organisations or dumped. Has Dr. Kirby seen evidence of this disturbing situation? I have heard, anecdotally, about dogs being abandoned; is that prevalent among those who look after dogs?

Dr. Kirby has said that the ear cropping procedure is performed by untrained and unskilled people. Who are they? Does he mean the dog breeders or are people brought in to do the job? Have untrained people set themselves up and told people that they will perform this dangerous procedure? Is it just the dog breeders who perform this procedure?

This is illegal and I noticed the report from the Minister said, I think, that the Department is aware and supportive of a number of Garda led investigations into such activities. I have only ever heard of one case of people being done for veterinary prescriptions - I will not name them, but some people will appear in court because of the illegal use of veterinary medicines. People may contradict me but I am fairly certain that it is exceptionally rare that something like this happens, yet these are exceptionally dangerous drugs and not just to animals. If these drugs are in unskilled and untrained hands then they are dangerous to animals but they are also dangerous for human beings as well. I get the feeling that the Department places no real importance on this issue.

In terms of the breeding of strange looking dogs, I was extremely upset when I saw one quite recently. I saw a poor dog that had an enormous head, a very thin body and it was obvious that two different breeds had been combined. The head was one breed and the back of it was another breed but the poor dog could not hold its head up. Sadly, the dog was promoted online as a show dog. When I read the comments I discovered that they absolutely damned the person who showed the images of the dog. People declared that the dog was not normal looking and that it was completely inappropriate to match the two breeds. Surely such bad practice is illegal? As Dr. Kirby said, there should be standards that govern what breeds can and cannot be cross-bred. I am shocked that there are no regulations to govern this issue considering all of the animal welfare aspects.

I notice that the Department, when it sent its report, stated that aspects of artificial insemination in greyhounds may be carried out by non-veterinarians subject to licence and veterinary oversight. That leads me to ask why greyhounds are exempt. That seems illogical to me.

Much of the root cause of this matter is that the legislation, particularly for dogs, covers three Departments - the Department of Rural and Community Development, the Department of Agriculture, Food and the Marine and I cannot remember the third Department. The main thing that must come from this debate is that we make a difference to the lives of dogs and improve regulations. Therefore, we must ensure that one Department deals with this matter. We also need to ensure that proper resources are provided to ensure that whatever is done is safe and legal. I agree with Dr. Kirby that we need a public awareness campaign to alert people to the fact that the practice is cruel and horrific.

Mr. Tim Kirby: Absolutely, I think the concept that one single Department would take control is something that should urgently be done. It makes absolute sense. It would reduce time lags, drift and the lack of certain things being done according to the demand for them. If that could be prioritised, I would see it as top of the list. Many things will stem organically from that as a result, so it would be a very positive move.

I agree with the Deputy. There are two ends of the spectrum and there are many issues in between, but we have to start somewhere. We will not have everything resolved in 2022 but we have to start somewhere. For example, the Deputy referred to the issue of dogs that look abnormal. Many of these dogs are coming from units that are breeding 300 and 400 bitches and they are breeding them endlessly throughout their lives - they are literally churning them out. They are commodities and, as I said, they are just seen as a passport to wealth. These animals are a lot more than that. We need to start having that discussion around how it can be acceptable in society that 300 or more bitches could be kept in any facility. It goes back to the previous point about the number six in some of these establishments. All of that needs to be debated. We need to get to the granular level of detail to see what makes sense here, what is going to effect change for the lives of these animals, and then start building that up into something that can be put into practice. There should be a phased approach to all of this. With one Department and a phased approach taking bite-size chunks, a lot of progress can be made very quickly. I am convinced of that.

To go back to the point raised by the Deputy on the number of dogs being relinquished, I know from the fantastic work Dogs Trust Ireland is doing that it is bursting at the seams at the moment with dogs being returned by people who got them during lockdown. What that highlights is the value of dogs but also that we need to start educating people before they get a dog in the first place. As I said in my presentation, it is not a simple click and collect service. This is a sentient living being and that has to be taken into account as well. Part of what PetBond does is to make sure people are in the right stage of their lives and are educated before they get a pet in the first place. We have to be aware of this. If something else happens in society in the future, are we going to see the same insatiable demand by people for pets? They are a very good fallback and a very good emotional comfort, but it is not acceptable that when normal life resumes, the pet is usually the first individual within the family that is going to suffer the consequence. Unfortunately, we are seeing that transpire at the moment.

The Deputy raised a point about people performing various procedures with regard to insemination. These people have a little knowledge about it, and there is probably nothing more dangerous in life than somebody with a little knowledge who thinks they know a lot more than they actually do. People invariably do not have any formal qualifications. They think that once they have observed somebody doing something remotely similar, they can have a go and do it themselves. I would not say there is a specific profile of any one individual but there are certainly people with very basic knowledge who are attending such procedures.

With regard to the veterinary medicines, if there are facilities like this out there that are breeding huge numbers of dogs, without a shadow of a doubt, we have to ask how are these people breeding so many so frequently? Would insemination not be a lot easier, given it is a lot more cost efficient and time efficient? What is going on within some of the units that are breeding large numbers? That question has to be asked, as well as where the medicines around those units are coming from. I would certainly consider importation is the main route there.

These are all areas where, with one single division and one Department doing this in phases and bite-size chunks, we could target those areas where we could get a result and then go on

sequentially to the next issue. In that way, we could make a lot of progress on these issues.

Chairman: I will allow two quick questions from Senator Boylan and Deputy Browne.

Senator Lynn Boylan: I will be quick as I know we are under time pressure. I am following on from Dr. Kirby, as a vet practising for 20 years, explaining his concerns around surgical insemination and all the risks that it comes with. It is interesting that when I put a question to the Minister and the Department, they said they were not aware of any animal welfare concerns around surgical insemination. This is something the committee needs to come back to when we have the Minister and the Department in.

My question is on ear cutting and how we strengthen enforcement against that. One issue is public awareness and making it almost that people would be shunned if they were walking around with a dog that has this procedure done to it. When the Dublin Society for the Prevention of Cruelty to Animals, DSPCA, representatives were before the committee, they were talking about the potential of a phased-in ban. If somebody has a dog, the dog could live out its life but we would ban the importation and ownership of a dog with cropped ears and that would be a way to address this. Under the current law, the person would practically have to be caught in the act of cropping the ears. I would like to hear Dr. Kirby's view on that and how we could have better enforcement.

Deputy Martin Browne: The Department had given the impression that the dogs with cropped ears were being exhibited at shows and so on. Has Dr. Kirby a view with regard to sanctions that could be put on people who are running these shows if they regularly have dogs with cropped ears showing up? If they are not in place currently, are there any sanctions he would like the Department to bring in to stop the display of these dogs with cropped ears at these shows?

Mr. Tim Kirby: Absolutely. For any procedure like chopping, there must be disincentives around that regardless of where the people see the dogs, be it out in public, at a show or wherever else. If there is a controlled environment where there are a lot of dogs, it should be possible that the area is regulated to some extent. I know from discussing this with many dog breeders that, for example, for the French bulldog as a breed standard, it is no longer normal or acceptable for those dogs to have short noses. Therefore, if any of those dogs are seen at shows, or if any judge is seen to award that dog a rosette to say it is a really good dog, and it does not conform to what is now acceptable as a breed, then there are implications. Likewise, we need to do the same thing for ear cropping. If any dog is in an arena or any public space and has ear cropping, or it is suspected the dog was ear cropped, the key stakeholders need to call that out and act on it straight away. I would absolutely agree with that. The majority of people are members of the public who are observing dogs from a distance in the public arena, so that fits in with it as well.

I agree with Senator Boylan that the phased-out approach is the way we are going to do it. With many of these changes we are discussing in the different areas, it is going to be a phased-out approach. It almost has to be done in tandem with public education. If the two are done in parallel, we are more likely to get a successful outcome but, as I said, we have to educate the public, particularly about ear cropping. For example, Dogs Trust did a very effective campaign in schools to educate children. Many things with dogs are visual. The Cut the Crop campaign from the British Veterinary Association was pushing it strongly and striking imagery was used, which was very effective. Dogs are very amenable to visual imagery and this helps retain things in people's minds.

Chairman: I thank Dr. Kirby for participating in today's meeting. His insight into the issues was frightening, given some of the content we heard. We have a submission from the Department. I want to put it on the record. It states legislation is being prepared on this and it hopes to have it by the end of the year. This committee will have a very significant input into that legislation. Legislation would be fine we have to make sure that it is also implemented and enforced. The practice that Dr. Kirby outlined here has no place and cannot be tolerated.

We will have a meeting on horse welfare in the near future. All animal welfare issues are intertwined. When we have the opportunity, we will raise the issues that have been raised with us here with the Department. We will keep pressure on the Minister to ensure that the legislation gets priority and that legislation is introduced that will allow for the proper penalisation of these activities and hopefully outlawed to stop them occurring.

On behalf of the committee, I thank Dr. Kirby.

Sitting suspended at 6.31 p.m. and resumed at 6.36 p.m.

Development of the Hemp Sector in Ireland: Discussion

Chairman: I welcome representatives of Hemp Cooperative Ireland, Ms Kate Carmody, chairperson, Mr. Eoin Carew, secretary and Mr. Declan Darcy, treasurer and from the Hemp Federation Ireland, Ms Chris Allen, the director and Mr. Marcus John McCabe, expert advisory board member.

Ms Kate Carmody: I thank the committee for the opportunity to speak to it today on this important issue. I am here in my role as chair of Hemp Cooperative Ireland, which was set up in May 2018 by myself, other farmers and interested parties. It came about because we shared a vision of the great potential for hemp cultivation in Ireland. We now have 262 shareholders, made up of farmers, processors and supporters of the industry. We have eight board members of various backgrounds who volunteer their time as they are passionate about the development of the industry.

In my comments today, I will set out why hemp is an important crop for Ireland, how it can be taken up across Irish agriculture and how hemp cultivation can lead to new jobs through high value products across a range of sectors including health products, food, clothing and construction. I will also touch on hemp and its environmental benefits in bioremediation and adaptation to climate change and its role in the just transition for our farming communities.

Hemp Cooperative Ireland supports farmers to access resources, equipment and markets through a national body and four regional hubs, covering the four provinces of Ireland. Increasing the amount of hemp grown here can help Ireland become a leader in carbon sequestration as we strive to meet our 2030 commitments. Hemp on average sequesters 10 tonnes of net carbon dioxide per hectare, so 10,000 ha sown would reduce carbon dioxide emissions by 100,000 tonnes per annum, incredibly in a four month window.

Economic valuations show that on average hemp has a 39.5% higher gross margin in comparison to winter wheat. In recent years the area dedicated to hemp cultivation in the EU has increased from less than 20,000 ha in 2015 to 35,000 ha in 2019, a 75% increase. France is the largest producer accounting for 70% of EU production.

The hemp stalk is separated into fibre and shiv, the shiv being the woody core. The fibre is used for clothing, textiles, insulation and, more recently, biocomposites. The woody core of the plant is used for building products, including hempcrete, fibre board and insulation. Furthermore, it is used as bedding material, biomass and paper.

The seed from the hemp plant can be used in many ways. The oil from the seed is in food, body care products and technical products. The omega-6 to omega-3 ratio in hempseed oil is 3:1, which is considered to be optimal for human health. The seed cake can be used as an animal feed-rich flour that is 33.5% protein. The Department of Agriculture, Food and the Marine stated in 2014 that the dependence of Ireland and the EU on imported protein sources such as soya bean meal had initiated a legislative and political push towards the development of indigenous plant-based protein sources. There is a great opportunity to use hemp to improve this situation, considering that 415,000 tonnes of soya bean meal was imported in 2020. The leaf and flower of the plant contains many bioactive compounds suitable for health products.

By developing a hemp industry in Ireland, Hemp Cooperative Ireland forecasts an immediate and lasting environmental impact by reducing the volume of high-polluting fossil fuels required for industry. Of equal importance is the potential of hemp for rural regeneration. An indigenous hemp industry has the potential to create 80,000 rural jobs according to a recent report from Teagasc. This is direct and indirect job creation and is based on the premise that legislative frameworks be put in place and State bodies be willing to fund the industry. For every €8.9 million invested in the sector, somewhere in the range of 200 to 400 direct and indirect jobs will be created in agriculture. To create 10,250 jobs annually, the hemp industry would need to attract an average of €150 million investment each year. Hemp Cooperative Ireland has made recent efforts to commence dialogue with State funding agencies like Enterprise Ireland and LEADER to ascertain what potential support could be available. However, our efforts have been met with resistance. At these early stages of trying to grow the hemp industry in Ireland, Government assistance will be a key component of the tri-party funding that will be required to help invest in machinery and infrastructure. Hemp Cooperative Ireland also intends to raise funding through a members share issue and private investment.

There is a housing crisis in Ireland and we maintain that hemp is part of the solution. Buildings are possible using hemp shiv with lime as a replacement for concrete, not to mention a solution to retrofitting older cottages. Hempcrete is CO₂ absorbing, fire resistant and breathable. For example, 2 tonnes of hemp shiv will be sufficient to build an average house and will sequester 3.7 tonnes of CO₂. Hemp can also retrofit our existing housing stock and there are many homes in our rural towns and villages that could benefit.

According to the CSO in 2016, since only 5% of Irish farmers are under 35 years of age and 30% are over 65, there need to be as many incentives as possible to entice young people into becoming farmers and for this occupation to be a long-term source of income. We as an organisation promote hemp as a rotational crop for all farming systems. It is an ideal break crop that creates an added income stream. If hemp was recognised in any carbon credit scheme, it would enable a just transition for our rural communities. There is a great deal of agricultural activity on drained peatland, which by its very nature is a major contributor to carbon emissions. It is unjust to suggest that these farmers should be told to rewet these lands when they could instead be offered the opportunity to grow hemp to initiate this just transition.

Hemp decontaminates soil as a natural phytoremediation crop. It promotes biodiversity as a late-flowering source of pollen for bees. Hemp grows well in organic systems and improves soil structure. It also needs no artificial fertiliser, is not reliant on pesticides, fungicides or

herbicides and increases certain crop yields by 25% while limiting weeds and, therefore, reliance on spraying. We outlined our vision to the Department of Agriculture, Food and Marine in more detail when we responded to its consultation call last summer. This submission was endorsed by the Irish Farmers' Association, IFA, and the Irish Grain Growers group. Hemp fits neatly into the emerging bio-economy and is an opportunity that we should not miss, but it currently cannot be supported because it is not included in policy.

The global hemp industry is growing and Ireland is in a unique position to become a major player in the EU. Of the major issues facing Ireland, hemp is uniquely positioned to provide part of the solution. A hemp industry supported by the Government will create green jobs in rural communities, entice young farmers and provide an additional income stream to all farmers, thereby helping Irish farmers and businesses to meet carbon goals while integrating into their existing farming systems. The time to support the hemp industry is now and Hemp Co-operative Ireland is ready to engage with the Government at national and local levels. Without Government support, Ireland will be left behind our EU counterparts that have flourishing hemp industries.

To summarise the needs of and barriers to the industry, we need engagement at government and local levels, funding, collaboration, and research and development. Teagasc has done some research and development and there is a European Innovation Partnership, EIP, project ongoing in Loop Head, County Clare called Hemp 4 Soil. We have a lack of infrastructure and support for hubs. Legislation and funding are also lacking. There needs to be education about industrial hemp and insurance companies do not want to cover hemp products.

The benefits of using hemp include import substitution, rural regeneration and job creation, in which respect there is a Teagasc report that I would refer to. They also include the environment and CO2 sequestration, soil regeneration and rotational crops, which is of interest to farmers. In addition, it is of benefit in housing retrofits and plant-based proteins.

Chairman: I invite Ms Allen to make her opening statement.

Ms Chris Allen: I thank the Chairman and the committee for this opportunity to discuss the development of the Irish hemp industry. I am the director of Hemp Federation Ireland, HFI, which is Ireland's national hemp industry stakeholder body. I am joined by my colleague Mr. McCabe, who is a member of our advisory board on agriculture. He is an organics and permaculture expert and has grown and processed more than 80% of all hemp grown in Ireland in the past two decades.

The Irish hemp industry is one of the oldest in the European Union, with a small but fully operational supply chain since the 1990s. Irish hemp farmers and industry operators are among Europe's leading industry authorities. Europe's oldest dedicated hemp retail outlet is situated in Dublin.

There are nine EU statutory instruments establishing the legal basis for the operation of the European agricultural market in hemp and hemp-derived products, all of which are immediately applicable to Ireland. Article 34 of the Treaty on the Functioning of the European Union further protects the integrity of the operation of the Single Market in hemp and derived products. In addition, three European Court of Justice rulings going back to 2008 all positively clarify various aspects of the operation of the EU hemp market. The tetrahydrocannabinol, THC, content in hemp is not illegal under Irish misuse of drugs legislation as a direct consequence of the primacy of EU law.

The support of the Department of Agriculture, Food and the Marine for Commission regulations establishing the EU hemp industry has driven the development of the Irish hemp sector since the 1970s. Indeed, during Ireland's Presidency of the EU in 2004, the extension of trade in hemp between member states was a priority for the then Minister for Agriculture and Food, Joe Walsh of Fianna Fáil. Mr. Walsh secured EU regulatory amendments which would serve to extend the operation of the EU agricultural hemp market into the future.

In November 2020, a particularly clear European Court of Justice decision in case C-663/18, also known as the Kanavape ruling, again confirmed the legality and scientific safety of hemp and derived products in Europe. The supremacy of the European Court of Justice in interpreting both EU law and the treaties is acknowledged by Ireland and all Irish regulators. Indeed, on 20 October 2021, the Minister of State at the Department of Foreign Affairs, Deputy Thomas Byrne, advised the Oireachtas committee of Ireland's policy in this regard, stating:

As EU member states, there is an onus on us all to comply with determinations of the European Court of Justice with a view to maintaining our shared legal order. As part of membership of the Union, it is also essential that member states accept the primacy of European Union law, which is a principle of the European Union going back to a time prior to when Ireland was a member.

The website of the European Commission website carries the following clarifying information on hemp:

Hemp (*Cannabis sativa* Linn) is a species in the Cannabaceae family in which the level of tetrahydrocannabinol (THC) is very low, according to the provisions under the common agricultural policy (CAP). Hemp is grown primarily for its industrial uses and there are 75 different hemp varieties registered in the EU catalogue. Due to the very low level of THC, hemp complying with the provisions of the CAP is not used to produce narcotic drugs.

Much of the present confusion in Ireland in respect of hemp results from the transfer of primary responsibility for the agricultural hemp sector to the Department of Health. Much of the discourse emerging from the health committee discussions on medicinal cannabis in the context of our farm crop and products adds to this confusion. In November 2016, Dr. Lorraine Nolan of the Health Products Regulatory Authority, HPRA, appeared before the Oireachtas health committee to discuss access to medicinal cannabis. In her opening statement she advised, "Cannabis is prohibited other than in specified circumstances where all activities relating to cultivation, manufacture and supply of cannabis, and products containing THC, are subject to licence." However, the licensing procedures described by Dr. Nolan apply only to cannabis and have never applied to the trace amounts of 0.2% THC naturally found in agricultural hemp. Medicines and food exist in entirely separate regulatory frameworks.

In 2017, Dr. Nolan again attended the Oireachtas health committee to discuss access to medicinal cannabis. On that occasion, Mr. Eugene Lennon, principal officer in the medicines and controlled drugs unit in the Department of Health, was also in attendance. Having brought up the subject of hemp food supplements, Mr. Lennon was asked, "Is there an acceptable level of THC?" by the committee Chairman in a follow-up question. Mr. Lennon replied:

As the law stands, only trace elements are acceptable. Otherwise, it becomes a controlled drug and a licence is required.

Sitting suspended at 6.56 p.m. and resumed at 6.58 p.m.

Ms Chris Allen: It is clear that as the law stands, produce derived from the EU CAP-

regulated farm crop was never considered to fall within the scope of the Irish misuse of drugs laws regulatory framework and these products were never subject to HPRA licence. In fact, in 2019 Hemp Federation Ireland asked the HPRA if it would license agricultural foods with trace amounts of THC. The HPRA replied in writing that it did not do so and did not envisage a situation in which it would issue such a licence as it does not consider hemp-derived foods containing trace amounts of THC to fall within the scope of the misuse of drugs regulatory framework.

From an agricultural perspective, the European Commission formally recognises the capacity of the hemp industry to meet EU CAP, farm to fork and climate policy objectives. The financial benefits of hemp cultivation to EU farmers and rural communities are also highlighted by the Commission and, in both of these contexts, the Commission advises that all uses of hemp are important to consider when we look at the future development of the EU industry. In 2021, hemp was included in Article 75 of the CMO regulation by the Commission, and the THC content in EU hemp in the field will go to 0.3% in January 2023. A Commission regulation establishing EU authorised limits for THC in hemp foods in Europe is already written and goes to final stage scrutiny before the EU Committee on Plants, Animals, Food and Feed next week.

The Commission's support for the exceptional competencies of the hemp plant are very important considerations at this seminal moment of transformation in agricultural systems and practices. Europe is leading global efforts to tackle climate change under land use, land use change and forestry, LULUCF. The EU carbon cycles initiative is specifically geared to provide a basis for global buy-in and it envisages a globally operational carbon cycles framework going forward. The objective is to reform completely land use management and our systems of agricultural food production and to repair our soils. The second remit for farmers under the scheme is to grow biomass, which will green global industry, providing new fibre materials to replace fossil carbon. The carbon cycles system is designed hierarchically, with high protein, low energy vegetable food production at the top of the cascade. The world is witnessing the birth of a new currency, a new means of exchange, backed by a carbon reserve that farmers will hold in their lands.

Hemp sequesters more CO₂ than any forest can and it is also the most complete plant-based protein known to man. In every context of the carbon cycle cascade, the crop is beyond compare. These competencies must be fully integrated at every point along the supply chain, from farm to fork and from seed to industrial solution, integrating farming and industrial practice at local level for a carbon neutral Irish, EU and global economy. Hemp is one of the most valuable agricultural commodities in the context of carbon budgets and the context of climate change.

The European Commission, global corporations and global banks have called repeatedly for European member states to ensure the carbon cycles programme is launched in a completely open, honest, ethical and transparent way to inspire farmers with confidence and security in the transition process. The Commission has insisted over and over again, at the very highest level, that the economic benefits of the new system must go directly to farmers and that those economic benefits must constitute additional farm income. As the roll-out of the EU carbon cycle initiative gets under way across Europe, in Ireland earlier applications of unlawful economic sanctions by the Department of Agriculture, Food and the Marine and the Strategic Banking Corporation of Ireland, SBCI, have enabled the Department to propose a development plan for our industry where two thirds of our traditional incomes no longer exist.

Hemp Federation Ireland would like to expand on how the environmental aspects of this industry actually function and how the industry should be developed to best capture the fully integrated environmental, economic and social returns for our country. Today, however, our

submission must focus on the extraordinary regulation of the hemp industry in Ireland since 2018. From that time, almost every rule and regulation governing the operation of our industry has been changed without prior consultation or subsequent explanation. This was achieved by suspending Ireland's observance of EU laws in direct and indirect ways, steering all conversations away from the agricultural and environmental potentials of the crop. The Oireachtas record shows that the long-standing official representation of the hemp industry by Irish Ministers for Agriculture, Food and the Marine changed suddenly and dramatically in 2019. All mention of our food produce is removed and the Misuse of Drugs Act is invoked for the first time, alongside terms such as "strictest levels of control". This change effectively rebrands hemp as cannabis and transfers responsibility for our agricultural industry from the Department of Agriculture, Food and the Marine to the Department of Health.

The Department of Health then began transforming the regulatory framework surrounding our agricultural markets and supply chains in consultation with pharmaceutical and tobacco companies. No regard was ever shown for democratic principles throughout, none of the regulatory interventions have ever been justified by science, as is required by EU law, and, as a result, our national farm-based sector is no longer able to function. The Irish farmers and operators encouraged into the sector by previous Irish Ministers for agriculture, with the support of Departments and Government agencies, are now facing 14-year prison sentences for possessing the very same CAP-regulated farm crops they were previously encouraged to embrace.

The lobbying returns show that, throughout this entire time, Irish Ministers, party leaders, senior civil servants and successive Ministers for health were engaging in consultations on hemp with a global tobacco corporation now repositioning to capture the emerging global hemp markets. These same public officials have consistently refused to engage with Irish hemp farmers and business owners operating in the sector for decades - the people who built this agricultural industry and who earn their living in the sector.

In 2020, commercial control over all elements of our agricultural crop, our farm revenues and our industry value chain was transferred by the then Department of Business, Enterprise and Innovation to pharmaceutical companies. Enterprise Ireland removed all access to State enterprise support from all Irish hemp farms and businesses, including Covid-19 supports. Only pharmaceutical companies can now access business support for any commercial activity related to any part of the EU hemp crop in Ireland. When questioned in the Dail as to whether industry bodies were consulted beforehand, the then Minister for Finance replied that the Minister for Health decides who the relevant stakeholders are. Many such issues are described in detail in Hemp Federation Ireland's letter of September 2021 to the Secretary General of the Department of Agriculture, Food and the Marine, which is available on our website. I have provided some examples for the information of the committee.

The EU hemp industry is protected under primary EU regulations and Article 34 of the Treaty on the Functioning of the European Union, TFEU, and by three separate EU Court of Justice decisions. The operators who work in the sector on farms and in shops and businesses throughout Ireland are entitled to the protections afforded to all EU citizens under the EU Charter of Fundamental Rights. I hope the committee will be able to protect the Irish hemp industry and prevent further transfer of our industry to pharmaceutical companies before the pending High Court review of the matter is decided in Ireland in July.

I thank the committee members for their time and attention in understanding what is a difficult and complex situation.

Deputy Martin Browne: I welcome our guests. The opening statement of Hemp Federation Ireland forecasts that developing a hemp industry in Ireland will have an immediate and lasting environmental impact and that an indigenous hemp industry has the potential to create 80,000 rural jobs, according to a report from Teagasc. What is that based on? What kind of jobs are entailed within that?

Ms Kate Carmody: I want to introduce Eoin Carew and Declan Darcy, who are the appropriate people to answer those questions.

Mr. Eoin Carew: That figure is over eight years and it is approximately 10,250 jobs annually. It will take an €8.9 million investment to create 600 jobs, which is 200 direct and 400 indirect jobs. That was in the report from Teagasc in 2019.

Chairman: How much land would have to be sown to achieve that?

Mr. Eoin Carew: There was no mention of land in the report, which referred to direct jobs, indirect jobs and induced jobs. The direct jobs would be for farmers employed by the agribusiness project, the indirect jobs would be created by suppliers and distributors, and the induced jobs would be created when overall economic activity rises.

Deputy Martin Browne: One of the key questions regarding the resistance to opening up the industry is based on the THC presence. Is that based on scientific concerns or is it an overzealous attitude towards the presence of THC? Products with even a tiny amount of THC are banned. What do the witnesses think is holding the industry back from opening up?

Mr. Marcus McCabe: When we are looking at toxic levels of any material, whether a pesticide or any chemical whatsoever, the first thing we look at is the no observable effect level, NOEL, and the lowest observable effect level. We then have an acute dose and what is known as the LD50, the lethal dose. Obviously we do not want to be in the range of a lethal dose; we want to be in the safe zone. I will take coffee as a good example. If one has a sip of coffee, there is going to be no observable effect. After one or two cups of coffee, one is into the lowest observable effect level. After five or six cups of coffee, one is going to feel a bit sick because one has had too much. This is all very practical. The problem we have at the moment is that the level that is being used by Irish agencies is in the no observable effect level. This has been noticed as being dangerous. It is a real problem because businesses are being closed down because the science based on the toxicity is not being looked at properly. That is a fundamental problem in the hemp industry.

Ms Chris Allen: The European Court of Justice in November 2020 determined that no independent scientific research shows any effect whatsoever from THC at a level of 0.2% in hemp and foods. It has also stated that governments can only ban this crop in certain circumstances. It would only be legal for Ireland to do what it has done with this crop if it were able to show there is some danger in a 0.2% level of THC. The World Health Organization, WHO, and the WHO Expert Committee on Drug Dependence, ECDD, which advises the World Health Organization on policy concerning narcotic substances and the operation of the UN Single Convention on Narcotic Drugs, have stated there is no safety concern regarding any product with a 0.2% THC level. Indeed, the Food Safety Authority of Ireland has stated it has no concern about any product that can possibly be made from the EU-compliant hemp crop. The issue in Ireland is this new interpretation of the misuse of drugs laws. Clearly from the presentation I gave the committee and from the Oireachtas record of the Joint Committee on Health, the Department of Health's policymakers in 2017 did not consider this crop to be in any way a narcotic

drug. Ireland is regulating this farming industry outside the provisions of EU laws that it helped to establish. There are no safety concerns whatsoever. I can send the committee the details of the World Health Organization's studies and constant advice to national governments.

Deputy Martin Browne: Ms Allen has probably already answered my next question. Is it up to individual countries to determine the permissible level of THC in a product? Who has the primary decision-making capacity in that regard? Is it individual governments?

Ms Chris Allen: No. EU Regulations 1307 and 1308 govern the operation of the agricultural markets in Europe. Regulation 1308 outlines the rules and regulations governing the cultivation of crops such as hemp. There are many requirements within those regulatory provisions. One is that a farmer must be choosing a seed from the EU novel food seed catalogue. All of those seeds are guaranteed to be below the 0.2% THC level. A farmer must also implement checks in fields and adhere to various stringent checks and balances to determine that the cultivation of the crop is in compliance with European regulations. The 0.2% level is in the EU regulations.

The basic decision of the European Court of Justice was as follows. France had tried to ban some cannabidiol, CBD, products made from hemp because it was illegal in France under the misuse of drugs laws to commercialise any part of the crop other than the seeds and fibre. The European Court of Justice ruled that hemp-derived CBD made from any part of the plant is a legal product protected by Article 34 of the Treaty of the Functioning of the EU, TFEU, and that no EU member state may prohibit the free marketing of trade in hemp made legally in any other EU member state. That was in 2020.

Deputy Martin Browne: What is involved in the process of securing a licence which would entitle the farmer to the basic payment scheme? Is it worth the farmer's trouble to try to get that licence?

Ms Chris Allen: I think it is. There is an awful lot of interest in this area. In 2019, Hemp Federation Ireland did a kind of outreach project and we travelled all around the country. We were in small places in Galway and all over the country. We were in packed rooms and having to look for chairs to accommodate people who had travelled the length and breadth of the country because they are interested in this crop. They understand the environmental benefits of the sector. The State and the Department of Agriculture, Food and the Marine need to understand that those environmental benefits must be fully integrated. There are too many of them not to do that. For example, Ireland's land currently emits CO₂. We have some CO₂ storage in our forests but because of the degradation of our forests, that CO₂ will be gone. It will not be there anymore by 2030. Trees we plant today, for example, will not start to sequester carbon until well into the 2030s.

Chairman: I ask Ms Allen to keep her answers brief.

Ms Chris Allen: That is fine. Will I stop? I was just trying to explain how to integrate those environmental benefits, which I think is an important point.

Ms Kate Carmody: I would like to answer the Deputy's question about farming and the licence. I am an organic dairy farmer and in my experience, there is no trouble getting a licence if one is honest on the form and wants to use hemp for fibre. I use it as a rotational crop in my farming system. I used it for bedding for cattle. I use the seed when I can harvest it to feed pigs. There is a lot of work going on all over Europe. I was part of a European focus group

looking at soil decontamination and the role of medicinal plants such as hemp in creating value added income for farmers. It is a no-brainer for the farming community. I live in north Kerry and before the pandemic, I had a queue of farmers at my kitchen door every week. They want to bring their children home from all over the world to farm their land but they want them to make money. They do not want them to lose. I live in a drained peatland area which is getting wetter and harder to farm. I do not want farmers having to apply for a licence. Industrial hemp has very little CBD or THC if it is being grown for fibre. It is on the drop-down menu for the basic payment now if one wants to grow it for industrial or seed purposes. I grow it for the fibre, as I said. Any farmer should be allowed to grow hemp and put it on their basic payment form; end of story. The people who have to deal with all this paperwork for the Health Products Regulatory Authority, HPRA, are probably pulling their hair out with all of the applications. The HPRA could go out and check the crops to ensure we are not breaking the law. That is the way the system should be working. I can tell the committee that the farmers will embrace it. I talk to farming groups all the time and they love the idea. We just need help to get there.

Deputy Martin Browne: I have two quick questions; I am aware that others want to get in. In trying to secure finances and grants, the representatives have met resistance from Enterprise Ireland and when trying to get LEADER funding and so on. Will they give us an idea of how much resistance is out there and at what level?

Ms Kate Carmody: I have applied to Enterprise Ireland. It said its policy is not to fund hemp and not to fund a co-operative, but CAP is changing next year so co-operatives can get funding. LEADER has been very resistant because it does not have the money and has now run out of money. We submitted a major EIP-AGRI project for the whole of Ireland to the Department of Agriculture, Food and the Marine. It was €1.2 million, which is not huge in the scale of things, but we were turned down flat. I was told by the Department that it will not fund hemp until it is in policy. I am asking the committee to take industrial hemp out of the Misuse of Drugs Act and put it into agriculture where it belongs.

Mr. Marcus McCabe: The point is there is no hemp. We are importing hemp into the country at present. It is even more difficult now because there are customs problems due to Brexit and significant transport costs in bringing it in from Europe. We should be growing it here. We need an industry and investment in it. To give an idea of the scale, 1 acre will supply approximately 100 consumers with food products, while 5 acres will build a house. If we want to build 10,000 houses from hemp, that is 50,000 acres straightaway, which will also produce food. It can be seen very quickly that this is an enormous crop. In fact, hemp is our oldest agricultural crop. It is our most useful and multipurpose crop. We need to invest in it and remove the sanctions. We need insurance, banking and multi-agency involvement as opposed to multi-agency sanctions. That will transform the situation very quickly.

There is a fortune waiting. We have an ideal climate and it is a sin that we are doing exactly the wrong thing instead of exactly the right thing. It is great to have this opportunity to put across the potential. We just need to get our heads together. We have been asking very patiently for a meeting about the regulation. Let us be honest about it; it all comes down to the issue of THC. If vintners were sitting in front of the committee, they would be complaining about being closed down for a thimbleful of shandy. That is just a very simple analogy of where we are with THC. It simply does not make any sense. We need to be adult. We need to grow up and look at how we can unleash this industry that will bring a lot of wealth into the country.

Deputy Martin Browne: Has the sector engaged with Departments regarding the contribution hemp may make to climate mitigation measures and retrofitting through insulation? Is

there potential to cut down on imports for retrofitting through the use of hemp?

Mr. Marcus McCabe: Absolutely, but there is no engagement.

Deputy Martin Browne: There has not been any engagement.

Mr. Declan Darcy: Hemp is an import substitute for retrofitting. It is the perfect crop for retrofitting. There are jobs in employing people to grow it. For example, it fits in perfectly with arable-grown crops and we would get building material as well. The problem is getting accreditation from the SEAI. Imported products can be accredited but any home-grown Irish products for building are not yet accredited. That is a hurdle as well.

Mr. Marcus McCabe: We need on-farm infrastructure and on-farm machinery that is specialised for hemp. These are major obstacles.

Deputy Michael Fitzmaurice: I thank the representatives for coming in. I have met some of them previously. My understanding is that people growing hemp could have the Garda coming to them accusing them of something. A few years ago, I remember we put in questions to try to see if this could be resolved. To be honest about it, we are facing a brick wall.

I have a few questions. Ms Carmody talked about peaty ground. I am not an expert but I have talked to people in Clare, Monaghan and different parts who were growing hemp. They were sowing an acre or maybe 2 or 3 acres. None of it was large scale; let us put it that way. I remember at the time that two blades were needed for cutting it, one for cutting it at the butt and another for the tops. At the time, I saw CLAAS was making a machine for that. I went to the bother of ringing America, where the machines were, and they cost something like \$750,000. My view is that machinery, such as combines or whatever, could be changed to get the flower part out on an elevator. That type of machinery will not work on peaty ground; there would be no point. It would have to be on tracks at the time of year hemp is cut because it would not be dry enough. Has anything progressed on that? My memory is that at the time most people were taking the flower and then cutting the other part. It was the grace of God whether or not people got what they had cut on the ground. They might be twisting and turning it but they might never get it. Has anything progressed that way?

I presume the representatives are talking about a plan for where we are going with hemp. At present, it seems to be individuals, in fairness to them, doing their own thing and creating their own markets without any help anywhere. It needs an awful lot, such as one big operator or co-op coming in to set up the infrastructure that everyone can feed their stuff into for a while or something like that. Ms Allen referenced a High Court case. Will she tell me what is involved? Is she saying that Ireland is basically in contradiction of all European law and not in compliance with the rest of Europe? She also mentioned a High Court case. Have the representatives talked to companies in other countries? They talked about retrofitting, insulation and that 5 acres builds a house. I presume they were talking about the stem part of the hemp plant. Are there any companies doing that in order that the likes of us could see how it is done or what is involved in it in other parts of the world? Those are my questions. Thanks once more for coming in.

Chairman: That is a lot of questions. The court case is up for review in July so we will not get into that. We will not pass any comment on it.

Ms Kate Carmody: I will start with the Deputy's second question. We are a co-operative with 262 shareholders. All we need is the investment and grant aid to get going. We have done

a lot of research. I am a member of a working group at European level where we know the products are all being made in Europe. I have seen some of them in Holland and so on. We do not need to reinvent the wheel.

To go back to the issue of peaty ground, there is a lot of drained peatland where I am in north Kerry that, it could be said, created Kerry Co-op.

Deputy Michael Fitzmaurice: Listowel.

Ms Kate Carmody: Yes, around Listowel. A lot of the ground around Moyvane or whatever is very heavy. The beauty of hemp is that it is not set until May. The best crop I ever had I set on 21 May and it was off the ground by the end of August. It sets within a short window, which is the reason it sits as a rotational crop. We have had machinery designed but we do not have the money. It is the lack of funding and grant aid that is holding us back. We do a share release to our members to get investment. I recently finished a submission with my board on the new co-operative legislation to allow agencies such as Enterprise Ireland to be brought in to put in place all of the infrastructure. If we had the right policy, we could have it there within a year or two. I reckon it would turn this country on its head.

Chairman: Will Ms Carmody confirm it is a three-month growth period from sow to harvest?

Ms Kate Carmody: Yes. It is then rested for a further two weeks on the ground until red. It can be harvested when green by some of the big machinery. I am concerned about the farmers on the western seaboard of Ireland. Everything is moving east. We do not want that. Even Kerry went east. That horrified us. We need to reinvent our rural communities. People love the idea of hemp flax. In Belgium they create Lego-style building blocks from hemp. The Sustainable Energy Authority of Ireland, SEAI, will approve them for use here in construction but we are not allowed to build them here because we cannot get the infrastructure and the money.

Deputy Michael Fitzmaurice: Is Ms Carmody saying the Lego-type blocks that come into Ireland that allow for the use of concrete in between them are made of hemp?

Ms Kate Carmody: Yes. There are hemp blocks available now. Mr. Darcy can explain that better than me because he builds with them.

Mr. Declan Darcy: No concrete is used. They are precast hemp blocks made at a hemp line and they would be used as concrete blocks would be used. The other building method is shuttering on site.

Deputy Michael Fitzmaurice: Do you plaster or do anything else with them?

Mr. Declan Darcy: They are plastered on the inside and the outside, but on the outside either lime render plaster or cladding, which is a breathable material, has to be used.

Deputy Michael Fitzmaurice: How do hemp blocks compare in price with concrete blocks?

Mr. Declan Darcy: We are all aware of current import costs. If we had an indigenous industry and we were producing them here, the cost would be on par if not cheaper than the concrete block.

Deputy Michael Fitzmaurice: I thank Mr. Darcy.

Mr. Marcus McCabe: On the fibre crop, you would not expect a wheat crop farmer to grow wheat for the straw and not sell the wheat. It is exactly the same with hemp. It is not just grown for the fibre. The whole value of the crop has to be taken. Farmers want the top value for the crop. Ms Carmody is correct that there is machinery that will strip the head for the seed or for the botanicals. To do that, a machine and other on-farm infrastructure is needed to deal with those tops as well. That all has to happen on the day. That is quite a significant investment, be it for a co-op, a group of farmers coming together or an industry that is going to come in and create markets for those things. Without the dual purpose, it is not very interesting to anybody and it just will not happen.

Senator Paul Daly: I welcome the witnesses. Great minds think alike in that Deputy Fitzmaurice has already covered many of the issues I had intended to raise to educate my own ignorance about the crop and its harvesting. Leaving aside the regulation, it appears we have a chicken-and-egg scenario here. Farmers will not grow unless there is a market and without the infrastructure and the processing capabilities there can be no market. That means we would have to bring in people. I think it is fair to say that.

Assuming we had the processing plants and the infrastructure, what would be the yield per acre in respect of hemp? As mentioned, hemp is a rotational crop. For the small farmer, would there be a good return for the crop once it left the farm gate? Such a farmer would not care where it went or the purpose for which it was processed. Would it be a viable proposition? Is a lot of acreage needed or could a farmer get a return from a small acreage?

Will the witnesses elaborate on the drain peat soil, whether it is the ideal soil for hemp or if it can be grown in uplands or other soils? In regard to hemp being a rotational crop, does it have to be rotated or could it be grown in one field or area continuously for four, five or six years?

Mr. Marcus McCabe: Our experience is that it does not work very well when it is continuously grown on one field. It is much better to rotate it. It is particularly good on fresh ground or ploughed down grassland. In that way, a fantastic crop can be achieved. If a farmer wanted to reseed ground, like a dairy farmer he or she could get a catch crop of hemp.

On the question with regard to the values, the value of the straw is approximately €400 to €500 per acre. The seed would be worth approximately €1,500 per acre. If we can process the botanicals, then the value is substantially more at up around €2,000 to €2,500 per acre. That becomes very interesting for the farmer but the infrastructure needs to be in place for that.

Deputy Michael Fitzmaurice: Is Mr. McCabe speaking about the seed of barley or the seed of wheat being worth €1,500?

Mr. Marcus McCabe: No, the hemp seed.

Deputy Michael Fitzmaurice: Thank you.

Chairman: Would Mr. Carew like to comment?

Mr. Eoin Carew: In 2019, I did a thesis on hemp grown as an alternative income for Irish farmers, mainly for the sustainable protein side. I come from a beef farming background in Tipperary. Seven growers in Ireland participated in the study which showed a 39.5% higher gross margin return in comparison with the nearest crop, which was winter wheat. On the question as to whether it is profitable, based on my calculations in 2019, there is a 39.5% higher gross margin but everything has gone up since then.

Senator Paul Daly: Importation was mentioned earlier. I presume that is processed materials such as the blocks mentioned. Are we bringing in hemp for protein? Is it non-processed hemp? It was mentioned it is being processed elsewhere and that it is acceptable here in a processed form, but it is not accepted that we could process it here.

Ms Chris Allen: We can process it here but we do not have large-scale processing facilities. Mr. McCabe builds houses with hemp blocks. He makes the product himself on his own farm. Customs and Revenue in Ireland are instructed by the Minister for Health not to allow any hemp to pass the Irish border because no amount of THC is allowed to enter Ireland.

Mr. Marcus McCabe: They allow fibre to be imported but not the hemp tops. The top part of the plant is not allowed to be imported.

Ms Chris Allen: According to the Food Safety Authority of Ireland, FSAI, the top part of the plant is allowed to be imported, which means the entire plant is allowed to be imported, but the Revenue Commissioners do not allow it.

Chairman: For the farmer who makes the decision to sow five acres of hemp this May, would he or she be guaranteed sale of the crop?

Mr. Marcus McCabe: No.

Chairman: It would be about hope.

Mr. Marcus McCabe: Yes.

Ms Kate Carmody: I would like to comment on the peat soils. Some 200 years ago, they were identified by the Bog Commission as ideal for growing hemp and flax. To return to the dairy farmer, very good work was done in Holland with harvesting hemp in the green format, before it is matured. It was put into grass silage at a 5% incorporation rate and this increased the yield of dairy cows by 1,000 litres per cow. There is also the mobile biorefinery. Members may have heard of Biorefinery Glas. It could go from community to community and separate out the leaf and flower of the hemp plant, taking out the oil and protein and the sugar, leaving a cake-like dried cutting. That could be put into silage. They have done experiments with that in Holland.

Chairman: Is that because of the protein content of it?

Ms Kate Carmody: Yes, protein, and the oils. There are many other oils in it beside cannabidiol, CBD, and tetrahydrocannabinol, THC. There are many omega oils and they help health.

Mr. Declan Darcy: In relation to imports such as grain, there is a great deal of grain imported into Ireland for the seed oil and for the plant-based protein. Of the seed that is grown in Ireland, there is some processed here as well but there are bigger companies importing it from countries such as Canada, China and France.

Mr. Marcus McCabe: There is 10,000 tonnes of hemp seed being imported.

Mr. Declan Darcy: Given that the hemp seed is so high in protein and there are omega oils, as Ms Carmody says, essential fatty acids, many big food manufacturing companies are looking at it now for a plant-based protein.

Senator Paul Daly: If the witnesses had one or two asks here today, would it be for this

crop to be recognised as an agricultural product and be taken away from the Department of Health?

Mr. Marcus McCabe: Yes.

Senator Paul Daly: You would assume the rest, such as the infrastructure, would follow. If there is infrastructure, the growers will come on stream. The kernel of the problem is how it is being deal with.

Mr. Marcus McCabe: Yes.

Senator Paul Daly: That is contrary to other European countries. On this occasion, we are ignoring EU regulation or the EU lead.

Mr. Marcus McCabe: Yes.

Senator Paul Daly: Normally, in this committee we argue why can we not put on the green jersey and why must we bow and scrape and follow everything from the EU, and do we not have any kind of a viewpoint of our own. The witnesses are saying on this one occasion we have gone the opposite way to that of the EU regulation.

Mr. Declan Darcy: There are very successful businesses operating around Europe in the hemp industry and they are a great model, if the committee wants to go and see. France, Holland, Germany and Eastern Europe grow a lot which generates employment.

Senator Victor Boyhan: I welcome the witnesses here. It has been informative, if not a little disjointed. That is my observation. I read their submissions and I also took the time to research some of it.

I myself have grown hemp. I am a professional horticulturist. I worked in the National Botanic Gardens here in Dublin and in Kew and in Canada, and I lived in Greece and that is where I grew it. My experience of growing hemp was very simple. Why do we call it a weed? Effectively, you throw it on the ground. It must have strong contact with the soil, but it will grow in any soil. It is a weed. It is a handy crop and many would like to grow it. I speak with some experience on it. There are many varieties and types of hemp, as the witnesses will be aware.

Of course, we have the issue around the seed. There is a real market for growing quality seed. There are inferior seeds of hemp in Ireland. I visited places where they have seed and there is a real industry in growing, harvesting and exporting seed. Many other countries will want our seed and we need to look at this cleverly. There are many by-products, as Mr. McCabe has said. I have seen hempcrete and it is very successful. We have the opportunities for animal bedding. We see it in the bloodstock industry; I have seen it used successfully in Kildare. We see it in the poultry sector; I have seen it used effectively in Monaghan. I have seen it used for industrial matting. I know nothing about it in terms of mushroom production. We are always looking at new alternatives in mushroom production and mattings there. There are many opportunities. That is why the witnesses do not have to convince me. There is a wonderful opportunity there when you look at it in terms of fibre, food, feed, both human and animal, in terms of mixes and how that is calibrated out, and then, of course, you have the oil.

The biggest problem with this industry is people's lack of understanding of it. Effectively, hemp is a form of cannabis. Let us call a spade a spade. That is what it is. That is where there arises ignorance to some extent and concern about public health and all the issues around all of

that. Of course, we are aware of the toxicity in terms of the seed and the flower and the restrictions, and how do we destroy the flowers of hemp. I refer to the role of the Garda Síochána in terms of licensing and permits. Of course, there is an element of all that seeping out, and there are problems. There are many people growing cannabis in Ireland, there are many people growing hemp and there are many people who are irresponsible. Having said all of that, there are many people who are very responsible. I see it as an exciting industry.

Teagasc has done some amount of work on it, but it is a State agency. It is cautious and that is the concern. Going away from this committee, our remit here is agriculture, food and the marine. Therefore, we must clearly be interested and particularly excited about the opportunities in terms of an alternative crop, or a short-term or intermittent crop. Clearly, we need to do much more work. We need to collaborate with our guests and others in terms of the work and seeing it.

They might touch on those issues. How can we educate people more about this crop? How can we bring people on board and allay their concerns? How can we entice farmers and demonstrate to them? Through education, in Teagasc and the Department of Agriculture, Food and the Marine, they will see this as a crop.

We are looking for new crops. We are looking for new agricultural industries. That is the really exciting part of this. Clearly, our guests have their own experiences of it.

I want to wrap up by saying that I see the benefits of rural regeneration. I see the benefits of the rural economy. I see all of the benefits, including the health benefits. We are all becoming so much more aware of what we eat. We are what we eat and what we consume. I see many other benefits and opportunities.

This must be regulated. Like alcohol or any substance, it must be in the hands of people who are highly experienced and responsible. That is a concern to us. That is where we have to go.

I would like our guests to talk briefly about the issue of seed, the production of seed, their knowledge of that production, and their knowledge of the quality and the certification of that seed because with that there are significant market opportunities. I thank our guests for their time. I believe in them. I believe in the product. I believe in the real opportunities for agriculture in terms of an additional crop.

Hemp is historic. It is interesting when you go back and research its history. It has enormous opportunities. I thank our guests for coming here.

Chairman: I thank Senator Boyhan. Who wants to take those questions?

Mr. Marcus McCabe: On the seed, absolutely key is on-farm infrastructure. Like any grain, it has to be taken off the field and dried immediately. It has to go straight onto a drying floor. If it does not go onto a drying floor, it will heat. Unless the farmer has the infrastructure - some sort of drying system - it will not work. I agree there is an enormous market for the seed.

Senator Boyhan mentioned alcohol and the THC issue. I touched on that earlier. There are clear parameters in terms of what is the acute reference dose. In other words, what is too much and what is a good amount because at micro-dosing, it is an excellent food. There is a huge CBD market and let us embrace that market. I would say that is somewhere in or around 10 to 20 mcg per kg body weight per day, not the 1 mcg per kg per day that we are stuck with at

present.

In fact, our company is paying for research. There is a European Industrial Hemp Association. There is a multicompany research project into novel foods that is ongoing at present. What is interesting is that the full-spectrum products, in other words, the products that contain THC, are actually safer than the CBD isolates.

As with alcohol, what is it? We do not want anybody to be feeling any side effects. That is not in the interests of the industry. We want everybody to know what is safe. It is a labelling issue. It needs to be correctly and properly labelled. That is a sensible conversation that needs to be had.

Ms Chris Allen: In 2023, we will have the reform of the CAP and we will have 0.3% THC in hemp in the field in Europe. We now have approximately 70 varieties of hemp. We will then have approximately 500. Of those 500, we will then have crops that are much more suited to Ireland's climate conditions. Hemp is just wonderful in Ireland. It grows so much better here than anywhere else in the whole of Europe. The varieties that we grow have mainly been developed in France, for the French climate. Now, with the 0.3%, we will have crops that are triple use, so that farmers can get the stalk, the seed and the flowers and leaves out of one crop and we will have crops that are much better suited. Hopefully the seed quality that we see in Ireland will also improve.

Senator Victor Boyhan: Mr. McCabe mentioned novel foods. The EU designates certain foods as novel foods that cannot be put into any other category. Chia seed, for example, is classified as a novel food. The EU is talking about CBD and making that a novel food. That might be a bit of an Irish solution to an Irish problem but what is Mr. McCabe's view on it?

Mr. Marcus McCabe: Does Ms Allen want to answer that?

Ms Chris Allen: Yes. All hemp foods were classified as traditional foods in Europe in 1997. In 2019 the EU's committee on novel foods had another look at hemp and classified it as a novel food. That means it falls under EU regulation 2015/2283. Ireland now adopts a completely different position. In Europe one needs to have a novel food authorisation from the European Commission. That costs somewhere in the region of €3 million. Our Irish companies and farmers who have been active in the sector for many years now have those applications under way with the European Food Safety Authority. The Food Safety Authority of Ireland, FSAI, has said that Ireland does not agree with Europe that hemp is a novel food. Hemp remains a traditional food in Ireland. However, the FSAI then said that under the novel food regulations, it is going to start removing some of the CBD products from the market in Ireland. Indeed, it has done that and it continues to remove CBD products that have authorisation in Europe. This means that whatever small amount of potential trade is left to this industry after all of the extraordinary regulation will be gone. There will be no potential for European trade from Ireland because the products to which Ireland does not apply the novel food regulations would require those regulations to be valid in European markets. The whole industry is completely unnavigable, even for me as a member of a representative body. It is very difficult to operate in this environment.

Mr. Marcus McCabe: It is difficult for people to understand what is going on.

Mr. Eoin Carew: Ideally we would develop our own seed here. I have contacted the Department of Agriculture, Food and the Marine about this but while the Department does engage, it says that the crop is too small. Last year 251 ha were grown in Ireland. A total of 77 licences

were issued, according to the Health Products Regulatory Authority, HPRA. Every time I speak to officials in the Department they say it is a chicken and egg scenario. We made a protein submission two years ago to try to get hemp included for a protein payment. Even if it was only €100 an acre that would make a big difference because it would cover the cost of the seed. We also tried to have it included under GLAS but because hemp is not a nitrogen fixer it cannot be included with beans, peas and legumes.

Chairman: Deputy Carthy is next.

Deputy Matt Carthy: Mr. Carew said 251 ha of hemp were planted last year. Technically this could fit in with two areas that take up an awful lot of this committee's time. The first is how agriculture in Ireland responds to our climate action obligations and the second is how we find alternative and new sources of income for our family farmers. I have met some of the witnesses before and it is great to see them again. I always find this conversation incredibly interesting, albeit confusing sometimes. It is intriguing in terms of the potential of this crop and how we can reach that potential. The big question that has never been answered is why there is resistance across a number of Government Departments even to the exploration of this as a product that could provide an alternative source of income and address so many of the other areas of concern.

I am interested in the possibility of the seed being used as animal feed because that is a key area of interest for a lot of farmers at the moment because of current feed prices. Of the 251 ha planted last year, how much tonnage of feed did that produce? Do the witnesses have a figure for that? What is the cost, per tonne, of that feed?

Mr. Marcus McCabe: None of it went into animal feed.

Deputy Matt Carthy: In terms of processing the crop to get the seed-----

Mr. Marcus McCabe: That would be done by cutting the tops off and making silage out of it. That would be the simplest thing because you would get the leaf and the seed together and then make silage out of it. That would be great fodder for a dairy farmer, for example and you would still have the straw as well. To be honest, however, the tops are probably too valuable to be used as an animal feed at the moment. If the processing was taking place, the tops would go into the human food chain.

Deputy Matt Carthy: It has been said to me many times that hemp is a magical crop in the context of carbon sequestration. One of the opening statements asserted that hemp sequesters, on average, 10 tonnes of net carbon dioxide per hectare. This means that 10,000 ha sown would reduce carbon emissions by 100,000 tonnes per annum in a four-month window. One of the speakers referenced the fact that with forestry, trees sequester carbon until such stage as they are cut down. What is the situation with this crop and sequestering carbon? When the soil is disturbed, is the carbon re-emitted? How does that work?

Ms Kate Carmody: I would like to answer that, as would Mr. Darcy as he builds with it. Hemp sequesters four times more carbon than trees per acre. If you take the fibre crop and make hempcrete or put it into insulation materials, you are locking up that carbon. I am actually doing that on my farm. I am restoring an old building and hopefully it will last for 100 years so that we get the benefit of the carbon sequestration.

Deputy Matt Carthy: In the product itself?

Ms Kate Carmody: Yes because you are not burning it. When you burn it, you let it all off again. Mr. Darcy will explain further.

Mr. Declan Darcy: It is a net carbon sink. The carbon is locked into the hempcrete material.

Mr. Marcus McCabe: That applies not just to hempcrete-----

Mr. Declan Darcy: Yes, it also applies to insulation materials and biocomposites.

Mr. Marcus McCabe: Anything can be made from hemp so the possibilities are endless. However, we need the industry to process it and the farmers to grow it.

Mr. Declan Darcy: We are answering emails every day from farmers, all of whom are looking for another option. Every day we are getting emails from farmers looking for information about growing hemp. If the harvesting, baling, drying and cleaning equipment was there, farmers would jump on board, especially the younger farmers. Of the 77 licences that were issued last year, the majority were in Munster and Connacht and a lot of our inquiries are coming from there as well. People are looking for other options.

Deputy Matt Carthy: That is my experience as well, with many people asking about hemp. What we want to do is move beyond inquiring into delivery of the product. There has been a lot of emphasis on the Misuse of Drugs Act and how hemp fits in. If that Act was amended to allow up to a 0.3% content level, as per the European Court ruling, how would that work in practice? What difference would that make to running a farm? What difference would it make practically, if the processing facilities are still not in place?

Mr. Marcus McCabe: The levels are so low at the moment that it is effectively banned and we cannot operate.

Deputy Matt Carthy: What does that mean? When someone is cultivating a crop, does he or she have to get rid of the tops altogether?

Mr. Marcus McCabe: The dosage that the Food Safety Authority is allowing per person per day is so incredibly low that I would liken it to a thimble of shandy. No one wants that. There need to be sensible recommendations on allowable dosages. That is a problem right now. If we were in or around 0.2% and 20 mcg per kilogram of body weight, the industry would take off because cash would flow into it. Otherwise, there will be no investment. No investor or bank would put money into it.

Deputy Matt Carthy: Currently, what happens to the plant hemp? The stalk is taken for building materials.

Mr. Marcus McCabe: Yes. We process the tops for hemp juice production.

Deputy Matt Carthy: Can that be done within the current legal framework?

Mr. Marcus McCabe: We were able to do it but the goalposts have moved into the next parish because there is an opinion that only 1 mcg - actually, it is 1 mcg, so we are only talking about a millionth of a gram - is permissible. CBD products have been taken off the shelves all over Ireland in recent months and hemp businesses are being closed down everywhere.

Mr. Declan Darcy: Regarding THC content, Poland and the Czech Republic have increased

the level to 1%.

Deputy Matt Carthy: As opposed to 0.3%.

Mr. Declan Darcy: Yes.

Deputy Matt Carthy: And they are not in breach of European law.

Mr. Declan Darcy: No. The industry is booming over there.

Mr. Marcus McCabe: What is key is the dosage allowed to be consumed per day.

Mr. Eoin Carew: At the moment, if a farmer is harvesting a crop in a field that is a mile away from the farm yard, he or she could be stopped by the Garda while driving down the road and, because he or she would technically be transporting a drug, the farmer could be arrested.

Deputy Matt Carthy: That relates to the tops.

Mr. Eoin Carew: Yes.

Deputy Matt Carthy: Those tops could be used for animal feed.

Mr. Marcus McCabe: Yes.

Deputy Matt Carthy: If a farmer gave it to his or her animals right now, though, it would essentially be an illegal drug.

Mr. Marcus McCabe: Yes.

Ms Chris Allen: The European hemp community has been examining the question of CBD in animal feed. It is not clear how it is addressed by European regulations. I believe there will be a scientific review.

Deputy Matt Carthy: On building materials, does the hemp sector develop them itself?

Mr. Marcus McCabe: Yes. We are importing because there is not enough hemp in Ireland.

Deputy Matt Carthy: How much is imported per year?

Mr. Marcus McCabe: Our business is still quite small but we import approximately four containers per year because of Brexit.

Deputy Matt Carthy: Is it coming from Britain?

Mr. Marcus McCabe: Yes.

Deputy Matt Carthy: If I were a farmer and wanted to grow hemp on 5 acres, would I be in a position to plant that amount using the imports?

Mr. Marcus McCabe: Yes.

Deputy Matt Carthy: There would be a market for-----

Mr. Marcus McCabe: If local authorities were building hemp houses, everyone would be happy - they would be sequestering carbon, the farmers would be busy, the machinery makers would start getting orders and the whole thing would take off.

Ms Chris Allen: Hemp Federation Ireland has been working with an amazing community building project in Ireland. We are speaking with a company in Ukraine that has technology that can measure the project's entire carbon and energy values and building regulation requirements from seed to finished home. The project is ready to go and we would like to be able to present it as a research project and have the SEAI analyse the values and bring in the construction regulators to provide us with the standards for a hemp building. The project is incredible, yet we have to say "No" to all of these things. It is very sad.

Deputy Matt Carthy: The Chairman is looking to wrap up but I want to revert to what needs to happen and what this committee can help with. The first issue is the 0.3% and how we want the Misuse of Drugs Act to reflect the decision of the European Court of Justice. The second issue has to do with some form of processing. If every local authority decided in the morning that it would build a load of hemp houses, I take it that we would not have the hemp to do that in the short term.

Mr. Marcus McCabe: No.

Deputy Matt Carthy: We do not have the processing capacity. That would take time. How do we build that capacity? Who pays for it? The Government does not just give money to private companies. It has to be part of a much wider set of----

Chairman: It needs to be connected with the Department of Agriculture, Food and the Marine.

Mr. Marcus McCabe: Yes.

Ms Kate Carmody: To start, the most important element is to make industrial hemp a crop like any other crop. Anything that is on the EU's approved list should not require a licence. That would be a great starting point for the industry.

Mr. Marcus McCabe: The acute reference dose of THC per day needs to be reviewed. That is a major issue. It is nothing currently. The dose needs to be something sensible.

Ms Chris Allen: It is way too low. The European Food Safety Authority will eventually move on this because the European industry, including Irish businesses, is providing the world's largest ever study on THC toxicity in food. It is a significant global study. Our companies are providing information to a whole suite of studies.

Deputy Matt Carthy: When the study is published, will a difficulty arise because its independence might be questioned owing to it being funded by the sector?

Ms Chris Allen: No.

Mr. Marcus McCabe: It is an independent third-party study by ChemSafe, a very large company that undertakes these trials. The study is being done properly and is above board.

Ms Chris Allen: It goes to the European Commission to decide. It is not that we will be making the decision.

Deputy Matt Carthy: I get that.

There is something that I am trying to get my head around. Currently, there is nothing stopping the industry or anyone from producing the stalk, which is useful for construction and

materials, but it is not being utilised. Is that because it is not worth it economically, given that the value of the top is being lost?

Mr. Marcus McCabe: Exactly.

Deputy Matt Carthy: That is the crux of the problem. At the same time, there is not much processing. What is there? I am trying to figure out whether we can do this.

Ms Chris Allen: Does the Deputy mean at this moment?

Deputy Matt Carthy: Can a twin-track approach be taken whereby we can work on the issues around the Misuse of Drugs Act while also developing processing capacity in respect of the stalk? How would we do that? What is the magic bullet, if there is one?

Ms Kate Carmody: I would like to make a brief comment about being a farmer. There is use in the stalk for a farming system, for example, bedding materials and decontaminating land. Mr. Darcy has some interesting figures for the committee.

Mr. Declan Darcy: In terms of processing facilities, we looked at there being four regional hubs and one centralised hub. Some €8 million to €9 million would be needed for them.

Deputy Matt Carthy: For five factories.

Mr. Declan Darcy: Yes. It would be €1.5 million for each regional hub and €2 million to €3 million for a centralised hub to process the necessary amount of hemp to get the industry to where it should be.

Senator Paul Daly: The sugar beet model.

Mr. Declan Darcy: Exactly.

Deputy Matt Carthy: That is what I was thinking.

Mr. Declan Darcy: Hemp has a taproot like sugar beet as well.

Deputy Matt Carthy: When we discuss hemp, it is never uninteresting. There is a great deal of work for the committee in this. It is not a question of forcing anyone to move from another sector into hemp growing. Rather, it complements many other sectors.

Mr. Declan Darcy: Yes.

Deputy Matt Carthy: It could be the difference between someone being a part-time and full-time farmer.

Mr. Eoin Carew: I wish to mention the protein levels. Seed cake is 33.5% protein. It is a perfect Omega-3 to Omega-6 ratio. It is also full of essential fatty acids.

Deputy Matt Carthy: Is that for food?

Mr. Eoin Carew: Yes. The oil is 27% protein and can be put in salads and used to make hummus for example. It is very tasty.

Deputy Martin Browne: Mr. Carew said he was from Tipperary. Is he from Dundrum?

Mr. Eoin Carew: No, but my sister lives in Dundrum.

Deputy Martin Browne: I thought that was you-----

Deputy Matt Carthy: No canvassing at committee meetings.

Deputy Martin Browne: The Chairman is from mid-Tipperary and so we said we would get into the west.

Chairman: I thank the witnesses for participating in today's meeting. It was extremely informative for us and we discussed many issues. As others have said, this crop has potential. We have serious targets to meet on emissions reductions and carbon sequestration. This crop has potential to contribute to that without impacting on any other sectors. In our private meeting next week, we will have discussions to see what we can do to try to help the stakeholders in this industry. It does not make sense to have an agricultural crop being stuck in the Department of Health and it will not make progress while it is there. I thank the witnesses for their very educational contributions to the meeting today. We will discuss it next week in private and we will see where we can make progress on that industry.

The joint committee adjourned at 8.12 p.m. until 5.30 p.m. on Wednesday, 2 March 2022.