

# PIGS

February 2022

**Edited by Ciarán Carroll  
and Orla Kinane**



Welcome to the February edition of our monthly newsletter.

The pig crisis continues and the feed price rise in January has exacerbated the situation. On the back of that increase and as a result of some other issues developing in the pig, feed and energy markets, Michael McKeon has reviewed the outlook for the sector and you can find full details in this newsletter.

The announcement this week by Minister McConalogue of a €7 million support scheme for the pig sector is a very welcome acknowledgement of the crisis situation. Details on the Terms & Conditions should be available very soon. Keep in touch with your Teagasc Specialist Pig Advisor for more information as we get it.

Much of our focus is on assisting producers review on farm costs, preparing cashflows and assisting in accessing finance that is much needed to help navigate through this extremely challenging period. With that in mind we held a webinar titled “Financial

supports to weather the crisis” on February 16<sup>th</sup>. Further details on how to view the webinar and presentations can be found later in this newsletter. The key thing here is to talk to your Advisor to develop a plan and engage with your bank early to discuss your situation.

It’s also important to look after your own wellbeing during these times. Keep the communication channels open, be that with your family, friends, other farmers or your Advisor.

## In this issue

- Update on the Irish Pig Sector
- Can Precision Livestock Farming be used to manage tail biting?
- Recent Webinars – Financial supports & Removal of Zinc Oxide
- Support scheme with a fund of €7 million for pig producers announced

## Update on the Irish Pig Sector

Michael McKeon

Producers always ask about alternative feed. The Teagasc Outlook for the pig sector was presented at the Teagasc Outlook Conference on 7<sup>th</sup> December last and can be accessed at <https://www.teagasc.ie/publications/2021/outlook-2022---economic-prospects-for-agriculture.php>

Since then there has been significant upward pressure on pig feed ingredient prices and energy costs and downward pressure on pigmeat price. This article provides an update on these developments.

### 1. Feed Cost

The pig feed cost is under upward pressure due to three main factors; soyabean, wheat & maize, Ukraine

- Soyabean

The December outlook paper forecast the high cost of feed ingredients at the end of 2021 to gradually reduce on the basis of expectations of a record South American soyabean crop. The Brazilian crop alone was estimated to produce 144MT. One of the risk forecasted to this bumper yield was the El Nina weather pattern causing drought conditions. Unfortunately, this has occurred with resultant drought and a significantly lowering of soyabean yield. The Brazilian yield is now estimated at 133 Mt (USDA, 2022) with industry indications of it falling to 130Mt. Argentina's soybean outlook is similar with a forecast yield reduction of 10% year-on-year. The global forecast yield is down 8.7 MT to 364 MT. These reduced forecasts have increased the cost of soyabean to Irish pig producers by €50/t (€470 -> €520) in recent weeks. The soya oil price has also escalated during this period from €900 -> €1,400 /ton.

- Wheat – Maize

The international wheat price has been at a high plateau in recent years due to a poor harvest in 2020, followed by another poor harvest in 2021 failing to restore international wheat stocks. The December Outlook paper forecast an easing of the wheat price as we approached autumn 2022, provided the crop was expected to reach a five

year average yield. The EU wheat crop condition is good, however, U.S. data indications are that the winter wheat crop is currently only rated 44% good/excellent. While it is still very early in the season/crop's development, this is not a good indication. USDA have forecast global ending wheat stocks to reach a five year low (USDA 2022). The international wheat prices had been easing at the start of 2022 but is now trending back upwards due to the Ukraine situation.

A good (yield at 5 year average or better) South American maize crop was required to build international maize reserves and put downward pressure on wheat usage/price. However, the current South American drought may reduce the expected yield. The global stocks will be highly dependent on Brazil's *safrinha* (2<sup>nd</sup> crop) to determine if global supplies tighten/ease.

- Ukraine

The Ukraine political situation is causing increased volatility in the ingredients market. Ukraine is the 2<sup>nd</sup> biggest global exporter of maize and the 5<sup>th</sup> biggest global exporter of wheat. In addition the Black sea ports are key logistical access ports for Russian and Ukrainian exports. A Russian incursion into Ukraine could also result in Russia incurring international sanctions on exports, which could include wheat/maize. As Russia is the largest global wheat exporter, this would be very detrimental to feed ingredient prices. The uncertainty and 'risk to supply' is currently giving upward support to wheat and maize prices.

These three factors are putting pressure on existing compound feed prices & the Irish milling sector are expecting to rise pig feed prices by a further €30 in April unless there is a drop in market ingredient prices in the interim. An increase of €30 would increase composite feed cost to €423/tonne (€1.46c/kg). On an average 600 sow unit this would equate to a rise of €12,750 per month or €2,965 per week, which would bring the monthly cost of feed to €243,839.

The expected feed price (€1.46/kg) is higher than the current pig price (€1.42). This has **never** happened before in the Irish pig sector.

## 2. Pig Price

The current Irish pig price is €1.42/kg dwt. The December Teagasc Outlook conference forecast an increasing Irish pig price from April 2022 onwards due to two significant drivers; lower EU sow herd and higher Chinese pigmeat import demand.

- Lower EU pigmeat output

The EU pigmeat market is starting to show signs of upward price pressure e.g. Spain has increased their pigmeat price for the 3<sup>rd</sup> week in a row. The EU price increase is largely due to increased domestic demand as a result of Covid restrictions being lifted and the beginning of tightening of EU supplies as forecasted. Poland, Netherlands and Germany are experiencing significant reductions in their national sow herd size. The reduction in EU pigmeat output is expected to be felt in the market from April 2022 onwards.

- Chinese import demand

The reduction in the Chinese sow herd (due to financial loss) is continuing but this decline has not yet reached the pig slaughter volumes as expected. The volume of pigs slaughtered in Oct-Dec 2021 was 13.8 MT, up 0.8MT year-on-year and the highest quarter volume since Q1 2019 – height of ASF destock (Chinese National Bureau of Statistics, 2022). The import pigmeat demand from the EU is therefore expected to be felt in Q3 2022 onwards rather than Q2 2022 as previously forecast in December.

The combined effect of these two factors is that the Irish pig price will begin to rise as forecast in Q2 but it will be at a more moderate rate than expected, due to the delay in the Chinese import demand. The rise in the Irish pig price in Q2 will not be sufficient to counter balance the pig feed price rise.

## 3. Energy Costs

Energy costs across all sectors are increasing rapidly. This is hitting the pig sector particularly hard as they use a significant amount of energy for heating, ventilation & transport. For many pig units this has doubled in the last few weeks. We forecasted a rise in energy costs as the year progressed, as more pig units came out of energy contracts. Unfortunately many energy providers are now claiming 'force majeure' to break

contracts that originally extended into 2023. Therefore this is causing an immediate spike in energy costs. We now estimate that 'Heat, Power & Light' will double from 4.3c/kg to 8.6c/kg and 'transport cost' will increase from 1.6 c/kg to 2.3 c/kg to give a combined increase of 5c/kg.

For an average 600 sow unit a 5c/kg increase equates to an increase of €6,160/ month or €73,920 annually.

## 4. Margin

The updated forecasted pig price for 2022 is now estimated at €1.60 and the composite pig feed price is estimated at €1.38c/kg or €401/tonne. In previous years the 'Margin-Over-Feed' required to cover all costs was estimated 47c/kg, however due to higher energy costs, it is now estimated at 52c/kg for 2022. Therefore in 2022 the sector would require a pig price of €1.90 to cover all costs but the pig price of €1.60 leaves a shortfall of 30c/kg which equates to a €449,000 per annum loss for an average 600 sow unit.

The average loss/month per 600 sow unit is **€56,145** (Feb 2022) and this will escalate to €63,967/month in April if compound feed prices rise as forecast.

The peak 12 month loss-making period was from September 2021 (when feed ingredient price rose) to August 2022, when ingredient prices are forecast to reduce. During this period an average 600 sow unit will lose an estimated €527,853, which equates to €880/sow or €31.42/pig.

Based on a national sow herd size of 145,000 this equates to an estimated loss of **€127.5m** for Irish pig producers.

## 5. Feed Credit

The Irish compound feed sector historically operates on 60-90 days feed credit for their pig producer customers. The significant increase in feed ingredient costs over the last 12 months have resulted in a significantly higher debt burden for the individual mills and their pig producer customers. The increase for an average 600 sow unit, with no change in credit length, is estimated at €73,750 (Table 1). The feed credit will rise by a further €65,575 (€539,325) if feed prices rise by €30/t in April.

Table 1. Comparison of feed credit debt for average pig producer (600 sow)

	February 2021	February 2022	Increase
<b>Composite Feed Price (Ave 3 month)</b>	<b>314</b>	<b>379</b>	<b>€65</b>
<b>3 Month Feed Tonnes</b>	<b>1,275</b>	<b>1,275</b>	<b>-</b>
<b>3 Month Feed Credit Total</b>	<b>€400,350</b>	<b>€473,750</b>	<b>€73,750</b>

The feed credit debt being borne by the pig feed mill sector is estimated to have increased by €12.4 million over the last 12 month period. If feed prices rise by €30/t in April to cover higher feed

ingredient costs, then the cost of national pig feed credit will increase by a further €8.6 million (€78,625,125).

Table 2. Comparison of national pig feed credit debt

	February 2021	February 2022	Increase
<b>Composite Feed Price (Ave 3 month)</b>	<b>314</b>	<b>379</b>	<b>€65</b>
<b>3 Month Feed Tonnes</b>	<b>184,875</b>	<b>185,875</b>	<b>-</b>
<b>3 Month Feed Credit Total</b>	<b>€58,050,750</b>	<b>€70,446,625</b>	<b>€12,395,875</b>

## 6. Pig Backlog

The Republic of Ireland (ROI) pig sector traditionally sends 11-12% of the national weekly kill for slaughter to Northern Ireland. In the July – Sept 2021 period the Northern Ireland slaughter plant took 18,143 pigs less than the previous quarter (114,333 vs 96,190). This caused a substantial backlog of pigs on ROI farms which has been rolled over from week-to-week. The pigs being sold each week then exceed their sale weight category and therefore are price discounted. In addition the lack of sales from this

backlog has reduced cashflow income and the increased stock numbers on the pig unit requires higher feed usage, which is placing a further strain on cashflow.

## Can Precision Livestock Farming be used to manage tail biting?

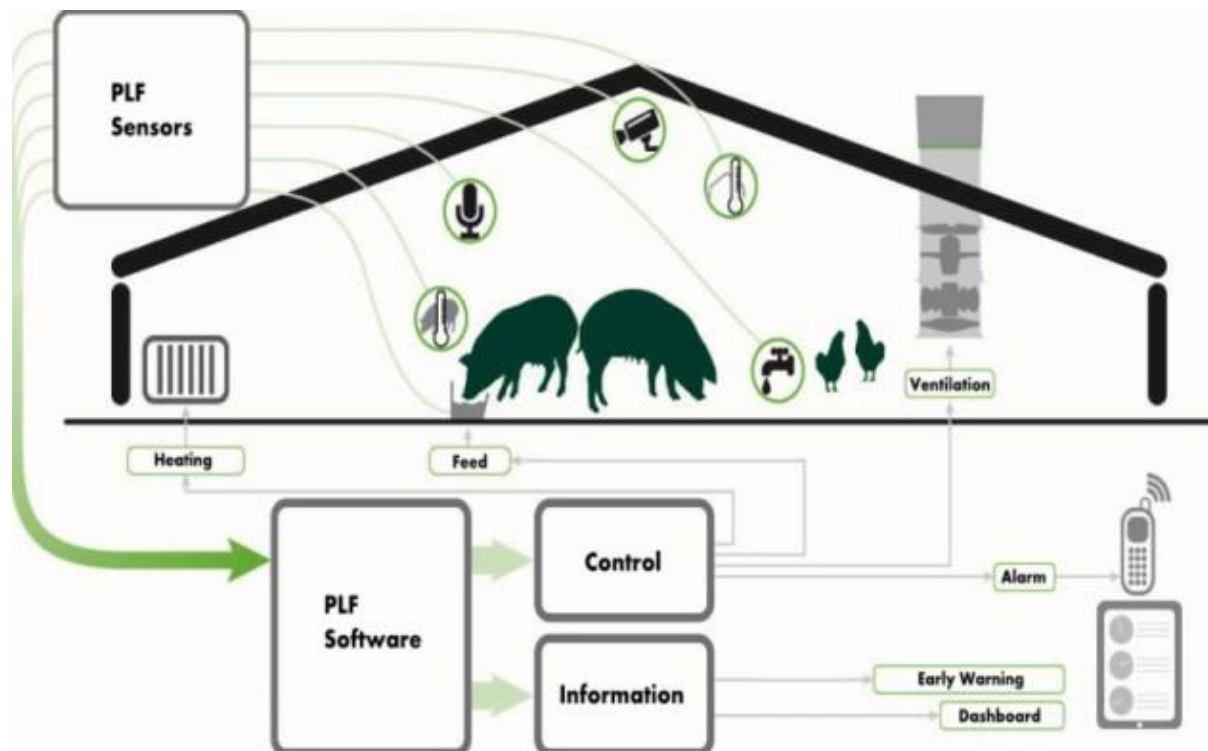
Orla Kinane & Keelin O'Driscoll

Precision Livestock Farming (PLF) is smart technology that enables individual animals to be monitored more closely. It involves automated monitoring of animals to improve their production, health and welfare, and reduce any negative impact on the environment. PLF technologies include cameras, microphones, and other sensors for tracking animals and their

environment as well as computer software. A system of continuous monitoring has the potential to detect signs associated with reduced welfare such as a disruption in eating, drinking or movement, before the stockperson has had time to notice these changes. PLF technology therefore can be used to enable quick and targeted

intervention. Some examples of technologies already in use in pig production include electronic

ear tags, weight detection cameras, microphones used to detect respiratory problems and environmental sensors.



**Figure 1.** Scheme of the collection and use of various data on farm using real-time algorithms to analyse information and generate early warnings and alarms ([Precision Livestock Farming : Student E-Course, EU-PLF](#))

Tail biting causes both significant animal welfare problems and economic losses. It is multifactorial in its cause and can be related to multiple stressors such as; lack of adequate enrichment, feed availability, thermal environment, health status, and others. It is very difficult to prevent and control because of the range of potential factors. One method of reducing the risk of tail biting is tail docking, but this does not address the underlying causes of biting behaviour, or entirely prevent it. Thus the process of terminating tail docking as a preventive measure is challenging. Monitoring the risks of tail biting may be a way to reduce the incidence and severity of tail biting. However, this is a very laborious task, as it requires continuous monitoring of the pigs' behaviour and environment, alongside expert judgement on what intervention is needed.

The [TailBiteAdvice project](#) aims to develop a data-driven decision support tool that will advise farmers on how to reduce tail-biting. The

consortium includes a team from Teagasc, Denmark (Aarhus University) and Belgium (KU Leuven). So far, algorithms to accurately monitor relevant pig behaviours including tail biting, object engagement, drinking behaviour, aggressive behaviour and feeding behaviour are under development. The tool will use these behaviour-based variables which will be collected by cameras. The expected outcome of the final system is a lower occurrence of tail biting behaviour, supporting production of pigs with undocked tails, according to EU legislation (Council Directive 2008/120).

The Teagasc Pig Development Department held a virtual tail biting workshop on November 24<sup>th</sup> 2021 focusing on barriers and opportunities associated with the use of technology to address tail biting. The workshop was attended by pig producers, private veterinary practitioners, Department of Agriculture veterinary inspectors, Teagasc pig specialist advisors, national and



international researchers. During the workshop, attendees were split into groups on the basis of their profession and set several questions to discuss in breakout room sessions. Here are the main points from the discussions;

- **What Information should PLF technology provide you with?**

A common response to this question was that PLF systems should provide producers with useful real time information. Producers did not want to receive outputs reporting all data from all areas as this would take time to interpret and they may have already missed the opportunity to intervene and prevent a tail biting outbreak. Producers were interested in a system that could predict an outbreak based on the data gathered and provide an alarm or early warning in the days before a tail biting event occurs, along with suggested solutions to the risks identified, such as a suggestion for a specific enrichment material to be provided. One group saw the opportunity to observe pig behaviour without entering the unit as an improvement, noting that the observation of pigs by a person who enters the building may collect useless information in many cases as pigs will behave differently due to the presence of the

observer for that short period of time. Thus cameras can collect more accurate data without disturbing pigs.

Monitoring a wide range of factors including; temperature, light, ventilation, diet and feed delivery, water usage, and pig behaviour observations such as engagement with enrichment materials was considered important, as these factors and others can all potentially present risks for tail biting behaviour. By monitoring a wide range of factors, a change in one can be rectified before having the negative effect on pig welfare which leads to tail biting, and thus the PLF system could act as a preventative tool. However, some highlighted that the collection of too much data may be counterproductive, leading to increased maintenance of equipment and longer data processing times.

The opportunity to link your PLF systems on farm with other data collecting systems such as the factory AM/PM system which may provide information on health status and tail lesions antae-mortem is something many thought would be useful. Private veterinary practitioners also indicated that a benchmarking tool would be of benefit.



**Figure 2.** Word cloud showing the most common words mentioned during discussions in the workshop. Data, producers, sharing, cameras, information and technology were some of the most used words when discussing PLF.

- **What barriers are there to the implementation of PLF technologies?**

The main barrier identified by all groups was cost; the initial cost of installing cameras in large pig units as well as the cost of repairs and maintenance (and availability of technicians to carry out this work) for such equipment was something most considered would be a real challenge in the implementation of PLF on Irish pig units. It was suggested by one group that such a system may be useful in a research setting but would not be feasible on most commercial farms due to cost and maintenance.

The durability of the technology and equipment being installed was a concern expressed by producers in particular. They noted that pig units can be dirty environments with changing temperature and humidity and a need for regular deep cleaning. Any equipment installed would need to be capable of lasting in such an environment.

Issues with rural broadband or Wi-Fi availability and reliability was a point that came up in multiple groups, and producers worried that the infrastructure needed to implement PLF systems is not in place in their area. As well as internet connectivity, electrical power cuts which can be a common occurrence on farms were flagged as a potential issue.

The privacy of the staff working on units was questioned by some; would it be ethical to have video recording equipment monitoring the unit continuously and therefore recording staff as they carry out their work.

The reliability of the algorithms used was also questioned by one group, how could the producer be sure that the algorithms would work on their farm? Every farm is unique (pen sizes vary for example), so they wondered whether the system may work more effectively on some units than others.

Lack of knowledge of the system was also identified as a barrier to its implementation. Producers would first need to understand what exactly the system can offer them, and to see it demonstrated working effectively on a farm similar to their own. It would also be very important that the use interface be very user friendly and allow for new staff on the unit to use the system without a huge amount of training.

- **How can data sharing issues be dealt with and what actors should be involved?**

On this topic, most producers did not see any major issues. They stated that they would be willing to share their data with others in the industry including other producers, veterinarians and researchers, as long as the data was anonymised and they would benefit from sharing it. Examples of benefits mentioned included having access to a benchmarking system, getting specific advice about their own farm or a reduced cost of a PLF system if it were paid for in part by all those who would benefit from the data shared. Other groups worried that producers may not be comfortable sharing data, but this did not seem to be the case from the producer groups themselves. However, there was agreement that data sharing should be voluntary, with advisors suggesting that there should be options for each producer to share the data they are comfortable with themselves.

There will be issues on every farm from time to time with regard to health or welfare, so all agreed it would be important for data to be anonymised and that data could not be used against the producer, but only to assist them and industry to improve. There was also a concern that data could be misinterpreted, painting an inaccurate picture of conditions on farms, interpretation of data for media for example should be managed by experts. All groups saw the benefit in sharing data with all involved across the production chain, and indeed in gathering data from all involved. For example veterinary inspectors could be requested to provide data from their welfare assessment visits to the farmer, which could then be compared with the behaviour and welfare data gathered by the system.

The TailBiteAdvice project is about to commence a new phase, in that a suite of video recording equipment and sensors is going to be installed in the Moorepark pig unit in the next few months. This will enable us to feed-back data to our partners in Belgium for further refinement of the algorithms. For further information about the project you can contact Keelin O'Driscoll ([keelin.odriscoll@teagasc.ie](mailto:keelin.odriscoll@teagasc.ie)) or Orla Kinane ([orla.kinane@teagasc.ie](mailto:orla.kinane@teagasc.ie))

## DAFM Support Scheme for Pig Producers

Minister for Agriculture, Food and the Marine, Charlie McConalogue T.D., announced (on 22.02.22) a specific support scheme with a fund of €7 million for pig producers.

Minister McConalogue said “Our pig farmers have always been remarkably resilient, but I am acutely aware of the challenges they are facing at present. Irish pig farm families are currently facing unprecedented challenges due to a combination of low pigmeat prices and extraordinarily high input costs, due to international factors outside their control. I am, therefore, pleased that the Government has this morning approved my proposal for a €7 million scheme to provide emergency support to commercial pig farmers. This is an urgent, short-term response to assist producers that would be viable but for the extreme current circumstances and allow space for a more medium-term adjustment to market signals. I am pleased to have been able to deliver this package following thorough engagement with the IFA and its national pig committee. My colleague Minister Martin Heydon has played a key role in bringing this scheme to fruition especially his important work as chair of the Pig Roundtable”

Minister McConalogue stressed that this scheme is part of a series of measures to support the sector:

### Access to finance

Minister McConalogue noted that he and Minister of State Martin Heydon recently met with the main banks and SBCI specifically to discuss the crisis, and that the key messages emerging was that farmers experiencing cash flow difficulties should engage with the banks as soon as possible to discuss options and that the banks remain committed to supporting their customers in the period ahead. The Brexit Impact Loan Scheme

and the COVID-19 Credit Guarantee Scheme, both of which are financed by DAFM in partnership with the Department of Enterprise, Trade and Employment, can be used for working capital and include features which will assist the current financial needs of pig farmers.

### Promotion

Bord Bia has intensified its efforts to promote quality assured Irish pigmeat in the domestic and export markets with dedicated TV, radio and national print media advertising campaigns planned for Q1 2022. Bord Bia has two EU programmes that have significant funding allocated towards pigmeat promotional activity. These programmes are currently running in China, Mexico, South Korea, Vietnam and the Philippines.

### Advisory

Teagasc has intensified its dedicated, ongoing advisory supports being provided to pig farmers and is actively engaging with pig farmers to explore the options potentially available to them.

### Stakeholder engagement

The Pig RoundTable, chaired by Minister Martin Heydon TD, provides a forum for strategic engagement by stakeholders in the challenges and opportunities facing the sector in the time ahead, and particularly the strategic actions identified for the sector in the Food Vision 2030 strategy.

### Scheme details

The fund of €7 million will be distributed through a flat rate payment of a maximum of €20,000 per individual commercial pig farmer sending more than 200 pigs per annum to slaughter. Further details on terms and conditions will be available shortly. Applicants should contact [pigscheme@agriculture.gov.ie](mailto:pigscheme@agriculture.gov.ie) immediately to provide their contact details, and for further information on how to apply.



## Financial Supports to Weather the Crisis – Webinar recording

The Pig Development Department held a webinar on Wednesday, 16th February focusing on the financial supports available to pig producers to weather the current crisis. Gerard McCutcheon and Michael McKeon, Teagasc Pig Development Department, discussed current costs and cash flows. Sean Farrell, Strategic Banking Corporation of Ireland (SBCI) spoke about SBCI Funding, and Dr. Anne Marie Butler, Head of Education at Teagasc (formerly Ulster Bank), spoke about preparing to meet the bank. Donal Whelton, Head of Agriculture at Allied Irish Bank, and Pat Byrnes, Agricultural Development Manager at Bank of Ireland, joined us to give their thoughts and advice. [Watch the recording, view the presentation slides and download the current cost reckoner.](#)

## Practical considerations for the removal of Zinc Oxide - Webinar Presentations

The Pig Development Department hosted a webinar on January 25th focusing on the practical steps and considerations for producers in advance of the ban on Zinc Oxide. [View the presentations](#) of speakers Dr. Francesc Molist of Schothorst Feed Research and Edgar Garcia Manzanilla, Head of Teagasc PDD.

Communication from DAFM Veterinary Medicines Team:

On foot of the EMA decision issued on 26/June/2017 regarding veterinary medicinal products (VMPs) containing zinc oxide to be administered orally to food-producing species. Existing marketing authorisations for VMPs containing zinc oxide will be withdrawn in June 2022 and no new marketing authorisations will be issued. The products in question are allowed to stay on the market until June 2022. At that stage, it is not the intention of HPRA to recall any remaining product on the market and those products can continue to be used for the duration of their shelf life (2 years).

## Welcome Lucy

Lucy Markland has joined the PDD to complete her PhD with University College of Dublin. Lucy graduated from Purdue University in 2021 with her MSc in Animal Sciences where she focused on sow welfare and piglet survival. Her PhD aims to help address the problem of ear necrosis on Irish pig farms by elucidating the risk factors behind it. This will help improve multiple areas of pig production.



**For more information visit our website  
[www.teagasc.ie/animals/pigs](http://www.teagasc.ie/animals/pigs)**

This newsletter was edited by Ciarán Carroll  
Teagasc, Moorepark, Fermoy, Co. Cork.

For more information on any of the content  
contact Ciarán at [ciaran.carroll@teagasc.ie](mailto:ciaran.carroll@teagasc.ie)