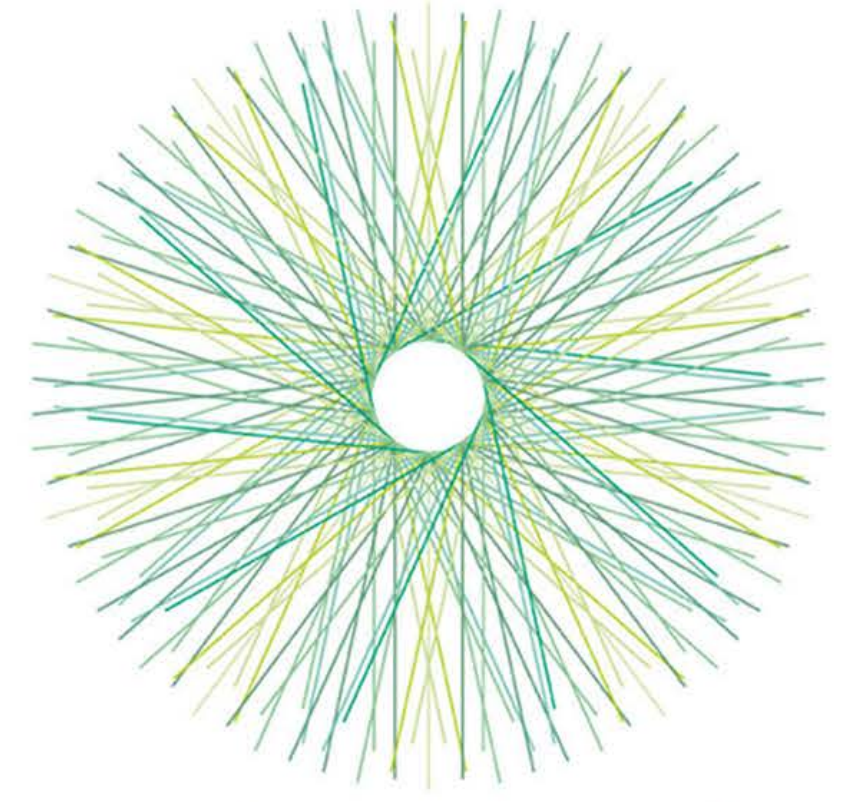




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# NRN EIP-AGRI Guest Blogs

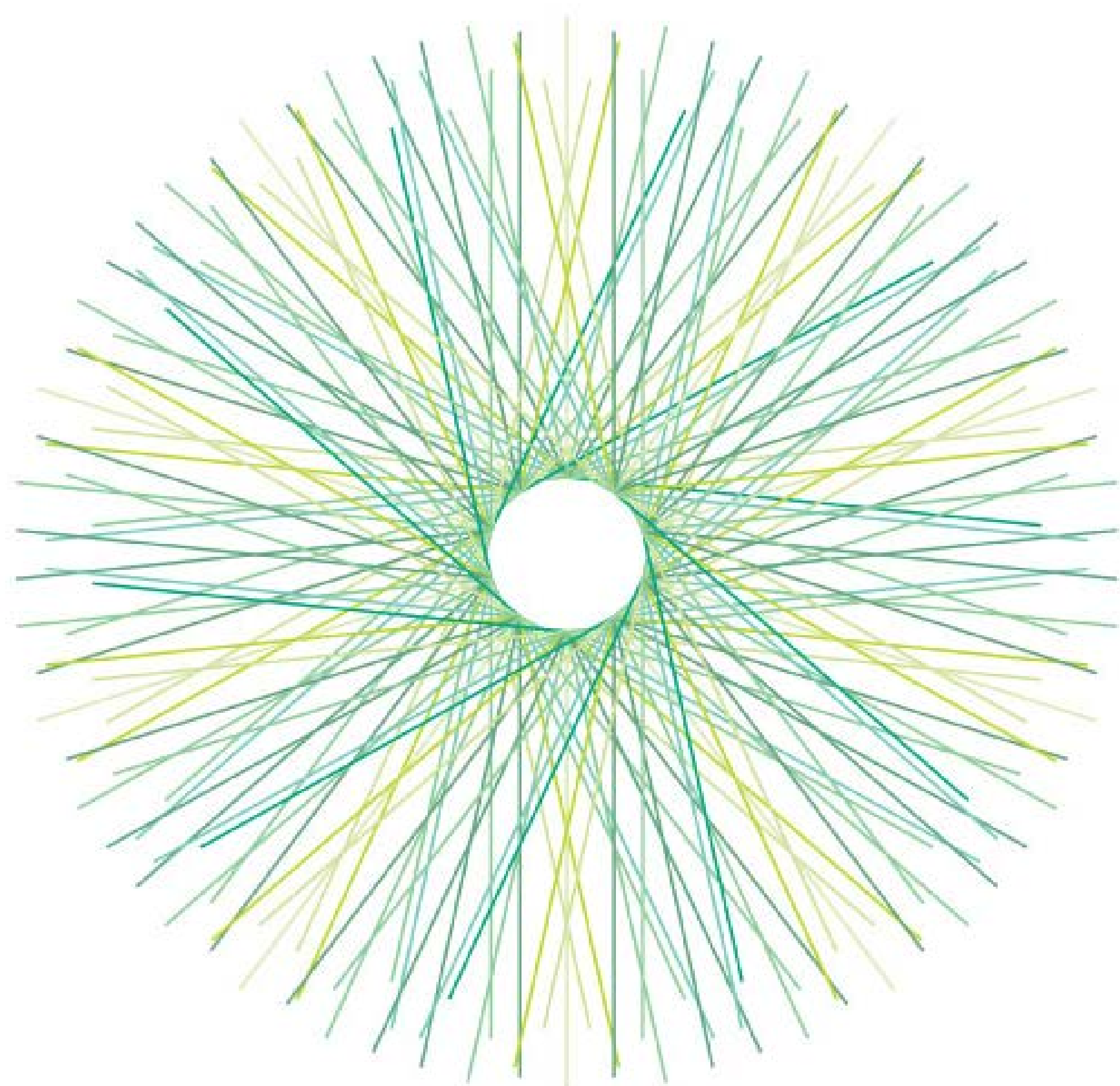
## 2018 & 2019



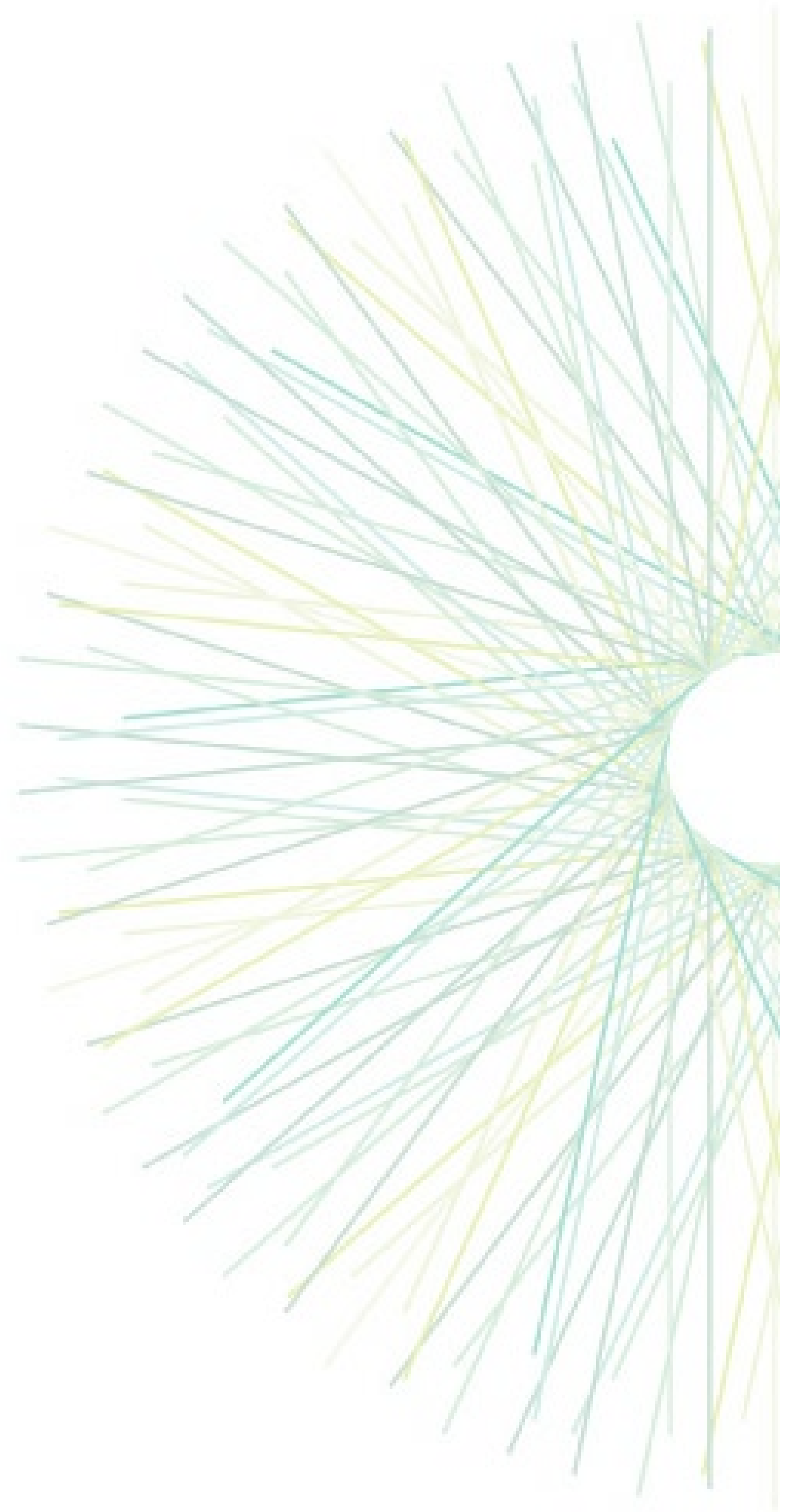
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Designed by Dr. Shane Conway, Postdoctoral Researcher at NUI Galway and the National Rural Network.



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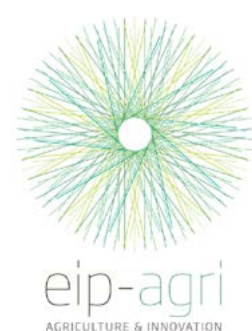
**Ireland's European Structural and  
Investment Funds Programmes  
2014-2020**

Co-funded by the Irish Government  
and the European Union



**National Rural Network**





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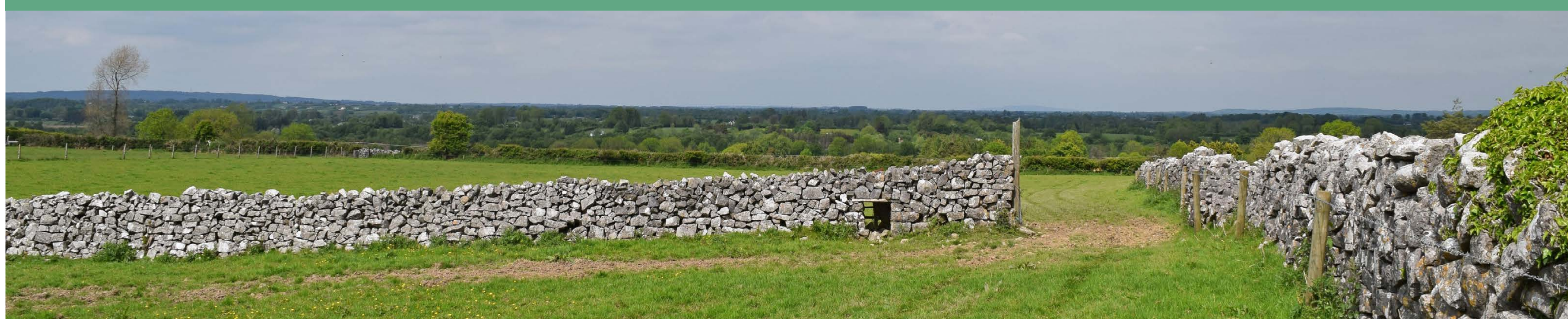
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## Introduction

The European Innovation Partnership for Agriculture Productivity and Sustainability (EIP-AGRI) was launched in 2012 to contribute to the EU's 'Europe 2020 Strategy' of smart, sustainable and inclusive growth. In Ireland, EIP-AGRI projects are funded by the Department of Agriculture, Food and the Marine (DAFM) under the Rural Development Programme (RDP) 2014 – 2020. A budget of €59m is set aside for these projects. EIP-AGRI projects are developed by Operational Groups which bring together actors such as farmers, researchers, advisors and agri-businesses to identify innovative solutions to particular challenges facing the agri-food sector and rural economy.

The DAFM has now selected 23 EIP-AGRI Operational Groups Projects. These projects align well with Ireland's RDP and national priorities and address challenges such as biodiversity, profitability and sustainability and harness the creativity and resourcefulness which is the hallmark of Ireland's rural sector. The majority of the projects are bottom-up, led by farmers who are passionate about the future of farming and the environment in their own communities.

A key objective of the National Rural Network (NRN) is to maximise the beneficial outcomes of the EIP-AGRI Initiative here in Ireland by bringing it into the lives of as many farmers and rural communities as possible, and to communicate its key opportunities and outputs to all relevant stakeholders.

This booklet comprises of nine EIP-AGRI guest blog posts that were featured on the NRN website in 2018 and 2019, from various experts in the field of agricultural productivity, sustainability and innovation. Each of the guest blogs detail the author's insights and opinions on the benefits and potential of the EIP-AGRI initiative. Dr. Shane Conway and Dr. Maura Farrell who are based in the Discipline of Geography's Rural Studies Research Unit at NUI Galway created this dynamic, interactive blog space on behalf of the NRN to provide key personnel in the rural realm with a platform to highlight current and emerging issues that have the potential to positively influence the needs of of Irish agriculture and rural communities. These blogs are disseminated to the NRN's far-reaching and wide-ranging audience interested in agricultural and rural affairs on a regular basis.

The NRN continually strive to further develop this dynamic, interactive blog space. If you would like to submit a guest blog post to the NRN, can you please email a draft of your blog post, in the body of the email itself, or as a word document attachment, along with a short biography, profile picture and relevant images in JPG or PNG format to [shane.conway@nuigalway.ie](mailto:shane.conway@nuigalway.ie).

For more information on the EIP-AGRI initiative please email the DAFM EIP-AGRI section ([eip@agriculture.gov.ie](mailto:eip@agriculture.gov.ie)) or visit the NRN website at <https://www.nationalruralnetwork.ie/eip-agri/>





## EIP-AGRI Guest Blog Author Profiles

### Eamon Wall, OviData EIP-AGRI Project Leader

Eamon leads up the OviData EIP-Agri project and is the former lead of Ireland's sheep breed improvement programme run by Sheep Ireland. This programme has grown rapidly since it began in 2009 and Irish sheep farmers can now use the information generated by Sheep Ireland to boost farm profitability by using the best sheep genetics available. Eamon also farms part-time on his sheep and suckler farm in Co. Waterford so is well placed to identify the current day challenges facing Irish farmers.



Twitter: @DataOvi

### Dr Barry McMahon Associate Professor in the School of Agriculture & Food at University College Dublin (UCD).

Dr McMahon is an Associate Professor in the UCD School of Agriculture & Food. His research examines the interaction between agriculture and biodiversity, principally endangered farmland birds e.g. curlew *Numenius arquata* and whinchat *Saxicola rubetra*. In addition, his research examines diseases, including antimicrobial resistance, that are reservoired in or disseminated by wild birds and mammals. Overall, the theme of Associate Professor McMahon's research relates to the One Health initiative and this is a core feature of the MSc in Wildlife Conservation & Management of which he is the Programme Director.



Twitter: @barryjcmahon

### Jack McCarthy, Walsh Fellow at Teagasc's Rural Economy and Development Programme and a PhD candidate at University College Dublin's School of Geography

Jack is a Walsh Fellow at Teagasc's Rural Economy and Development Programme and a PhD candidate at University College Dublin's School of Geography. He is supervised by Dr. David Meredith (Teagasc) and Dr. Christine Bonnin (UCD). His research looks at systems of rule through which European agriculture is governed. He is particularly interested in processes of collaboration between government and non-government actors in producing governance regimes in pursuit of environmental sustainability.







## EIP-AGRI Guest Blog Author Profiles

### **Dr James Moran, Lecturer in Biology and Ecology at Galway Mayo Institute of Technology (GMIT)**

Dr Moran's research and outreach work concentrates on sustainable agricultural systems specialising in High Nature Value farming. He has worked in this field for over 15 years and leads a number of projects in this area at GMIT and IT Sligo. Dr Moran is particularly interested in the potential of a HNV farmland network where innovative local communities can work in partnership to realise a sustainable future for their area. Most recently, Dr Moran led a workshop on the topic of European Innovation Partnerships at the annual Burren Winterage School held in October 2017.

Twitter: @MORANEnv



### **Dr Barry O'Donoghue, Head of Agri-Ecology with the National Parks & Wildlife Service (NPWS)**

Dr O'Donoghue hails from the Kingdom of Kerry where he grew up in the Stack's Mountains with a combination of farming and nature interests. Barry did his undergrad at UCD on Agriculture and Environment, followed by a Research Master's on the Hen Harrier and a subsequent PhD on the ecology and conservation of Hen Harriers, while also working as a Ranger with NPWS. Barry has a keen interest in sports, our coast and seas, farming, communities and nature. At present, the next Rural Development Programme, Curlew, Corncrake, raptor poisoning and persecution and the NPWS Farm Plan Scheme are just some of the various topics that the Agri-Ecology Unit of NPWS are working on.

Twitter: @npwsBioData



### **Kieran Sullivan, IT Researcher at Waterford Institute of Technology (WIT) and Part-time Farmer and Forester**

Kieran is a part-time farmer and forester from Co. Waterford. He and his brother manage 13 hectares of alder and Sitka Spruce, as well as running a small sheep enterprise on their farm. Kieran works off-farm as an IT researcher with Waterford Institute of Technology, where his interests include data analytics and ICT-AGRI. He has worked on EU research projects since 2008. Kieran also writes a column for the Irish Farmers Journal.

Twitter: @kieran\_sullivan







## EIP-AGRI Guest Blog Author Profiles

### Mike Brady, Managing Director of Brady Group Agricultural Consultants and Land Agents

Mike is a well-established agricultural consultant and land agent, providing advice to farmers located throughout the Republic of Ireland. He qualified from UCD in 1987 with a BAgSc(Hons) and commenced his career as a Dairy Husbandry Advisor with the then Ministry of Agriculture Fisheries and Food in the UK. Mike returned to Ireland in 1989 to work with a private firm and left to established Brady Group in 1995. He completed a Nuffield Scholarship in 2004, where he studied advisory services in France, Australia and New Zealand. Mike is also a past President of the Agricultural Consultants Association of Ireland.



Twitter: @BradyGroupAgri

### Ethan Cleary, Technology & Innovation Executive, Irish Farmers' Association (IFA)

Ethan comes from a 5th generation tillage farm and is passionate about connecting agriculture with technology that benefits and supports farmers. He has worked as a developer, designer, product manager, technology consultant and strategist for over 15 years across a range of industries, from large multinationals and the public sector to early stage start-ups. His current focus is driving the innovation and digital agenda for Irish farmers at national and EU level with the Irish Farmers' Association.



Twitter: @ethancleary

### Dr Nuala Ní Fhlatharta, Head of the Teagasc Forestry Development Department

Dr. Ní Fhlatharta is Head of the Teagasc Forestry Development Department. She is based in Athenry, Co. Galway. She has a degree in forestry from UCD and subsequently she went on to do a PhD on forest biomass and a Masters in Rural Development with NUIG. She has a keen interest in supporting the achievement of the potential that forests offer here in Ireland. She feels that the appropriate development of new and existing forests can contribute significantly to our environment and economy and can also provide a great recreational resource for rural communities and visitors.



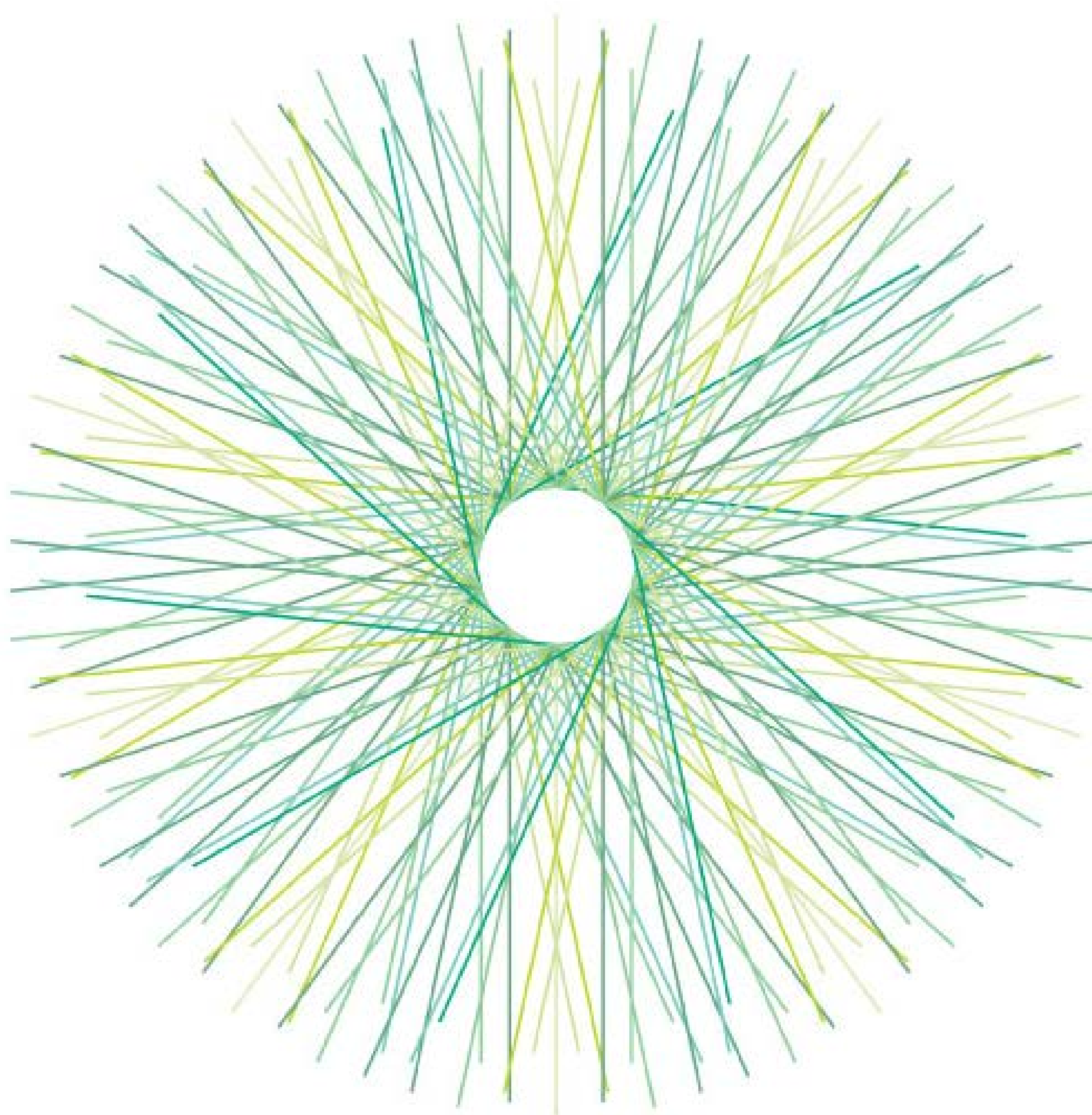
Twitter: @teagascforestry





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# NRN EIP-AGRI Guest Blogs 2019



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## OviData EIP-AGRI Project for Sheep Genetic Improvement – ‘An Ounce of Breeding is worth a Tonne of Feeding’

**Eamon Wall, OviData EIP-AGRI Project Leader**

In this guest blog, Eamon Wall, OviData EIP-Agri project leader, former lead of Ireland's sheep breed improvement programme run by Sheep Ireland and part-time farmer, provides us with a comprehensive overview of the OviData project's role in helping to propel the Irish commercial sheep breeding to the next level and its progress to date. Eamon also details his thoughts and opinions on the importance of genetic improvement in increasing efficiency and profitability on sheep farms through performance recording.

Improvements in breeding or genetics is one of the most powerful tools available to any farmer involved in animal production. Many variables can affect such enterprises each year, weather, price volatility, input costs, etc, but if a farm has invested in better genetics they will always reap the benefits of this, in good times or in bad. Once delivered, genetic improvement will remain forever and can be built on further in following years.

Farmers can benefit from genetic improvement without even knowing about it – by buying a ram from a ram breeder actively engaged in genetic improvement, a farmer will bring better genetics into their flock whether they were looking to do so or not.

‘An ounce of breeding is worth a tonne of feeding’ is an adage often used by farmers interested in animal breeding. Its true! Genetic improvement sounds scary to many sheep farmers, its actually something farmers have done for generations without even knowing it. Each time a sheep farmer selects a breeding ram to purchase, or a female to retain as a breeding animal, there are reasons behind these selection decisions. For most it's the look of the animal, its size, length, etc. Selecting on these visual traits will in turn, promote these traits – so in time the farmers sheep will eventually get bigger and longer. Unfortunately, the traits which are most influential in terms of increasing efficiency and profitability on sheep farms are impossible to select by eye.



Take a trait like NLB (number of lambs born per ewe). This is one of the main drivers of profitability on all sheep farms. The Irish industry as a whole has made no progress on this trait for the past 40 years, remaining static at 1.3 lambs reared per ewe per year. The reason is simple, this is a trait that cannot be assessed by eye in advance of each breeding season (Autumn). To improve this trait requires the collection of data over a period of time and then using this data make breeding/culling decisions. The same process is required for other ‘invisible’ traits.







## OviData EIP-AGRI Project for Sheep Genetic Improvement – ‘An Ounce of Breeding is worth a Tonne of Feeding’

Eamon Wall, OviData EIP-AGRI Project Leader



The OviData EIP-Agri project aims to bring Irish commercial sheep breeding into the next generation. It sets out to collect performance data on Irish sheep enterprises (across 1,500 ewes) and assign parentage to all lambs born through DNA (genomics). Assigning parentage is a critical step as it unlocks the maximum value from the performance records collected on individual sheep. Without parentage information these performance records would be of far less value. Yes, they would tell us how an individual is performing, but big gains can only be made by assessing performance at a bloodline/family level. DNA also allows us to identify the sire of lambs born, an impossible task for most sheep farmers who use a ‘team’ of rams to protect against possible fertility issues. Knowing lamb sires is incredibly valuable. When combined with performance data we can identify the top and bottom performers very easily.



Year one has passed for OviData and we’ve collected huge amounts of data, assigned parentage to over 2,500 lambs, identified lots of ‘superstar’ performers which can now be promoted within our project flocks and identified some rams that failed to impregnate any ewes at all – all of which we would be blissfully unaware of without the project. We hope to build a model that can be followed by other farmers in the future!







# Has Policy Separated Biodiversity and Agricultural Production?

## The Role of EIP-AGRI Operational Group Projects to Realign

**Dr Barry McMahon, Associate Professor in the School of Agriculture and Food Science at UCD**

In this guest blog, Dr Barry McMahon, Associate Professor in the School of Agriculture and Food Science at University College Dublin (UCD), where he acts as Programme Director of the MSc in Wildlife Conservation and Management, details his thoughts and opinions on how locally-led EIP-AGRI Operational Group projects can play a key role in realigning biodiversity and agricultural production policy efforts.

I was born interested in wildlife and agriculture and spent many weekends in Kildare and other parts of the country walking the lands of Ireland learning about the co-existence of agriculture and biodiversity. I heard, from an uncle who is still farming, of the how the realisation of the intensification and specialisation of the CAP in the 1970' and '80's had fundamentally changed the agricultural landscape that he had grown up with.

I too witnessed the shifts in biodiversity within a reasonably short period of time. I clearly remember standing on the banks of the river Moy, Co. Mayo, in early June 1989 hearing the melodious calls of breeding curlew along with the rasping sounds of corncrake. On returning to the very site a little over a decade later, I too witnessed that both of those bird species had vanished. I struggled to comprehend how people were not upset by the loss of biodiversity associated with these changes, but as time went on I realised that although many people were interested, agricultural production and biodiversity had become separated in the minds of individuals, organisations and Governments. We had not realised the urgency and importance of tackling biodiversity management. However, the realisation that the stability, viability and sustainability of agricultural production systems is underpinned by biodiversity is slowly being re-discovered. In addition, although there were negatives associated with specialisation and intensification of agricultural practices, particularly through environmental resources degradation, the economic benefits to rural development were considerable.



It is quite clear that there will be conflicts between the way we use the land and the conservation of endangered species. A number of species come to mind, fresh water pearl mussel and hen harrier are two high-profile examples. Now, more than ever it is vital that as a society we engage with all stakeholders, especially policy-makers, to understand perspectives and values that may differ from our own.

The facilitation of difficult conversations, and most importantly keeping the conversation going between stakeholders, is essential to ensure that we may realign the importance of biodiversity and agricultural production. Flinging of insults, via social media or other communication platforms, is destructive and counterproductive. The importance of education and communication cannot be understated.





## Has Policy Separated Biodiversity and Agricultural Production? The Role of EIP-AGRI Operational Group Projects to Realign Dr Barry McMahon, Associate Professor in the School of Agriculture and Food Science at UCD



In recent years EIP-AGRI Operational Groups in Ireland and Europe, involving species like hen harrier and curlew, have provided a forum for local communities to co-operate in a way that respects local economies, land usage and biological heritage. These locally-led EIP-AGRI projects provide a great opportunity to continue conversations between various stakeholders while valuing rural life, biodiversity and sustainable land-use. The crucial aspect is the EIP-AGRI model allows for the local context, both biological and sociological, to be facilitated and it is a bottom up approach. Perhaps the EIP-AGRI policy instrument is the mechanism by which we realign the apparently separated components of biodiversity and agricultural production.



As a programme Director of the MSc in Wildlife Conservation & Management and part of the team who delivers modules into the BAgrSc, including Agri-Environmental Sciences, run from the UCD School of Agriculture and Food Science, it is imperative that students understand biological sciences but also the conflicts that can arise between people with different ideas and values. The difficult conversations that arise between stakeholders can be either enormously positive or very destructive; their power cannot be overestimated and they need to be handled skilfully. It is clear that as a nation and as a global society we are facing enormous challenges regarding the management of biological resources. Locally derived EIP-AGRI Operational Groups with appropriate targets provide the greatest scope to realign biodiversity and agricultural production given the current policy environment.







## Merging Knowledge and the EIP-AGRI Initiative Application Process: Some Research Findings and Reflections

**Jack McCarthy, Walsh Fellow at Teagasc's Rural Economy and Development Programme and  
PhD candidate at University College Dublin's School of Geography**

In this guest blog, Jack McCarthy, Walsh Fellow at Teagasc's Rural Economy and Development Programme and PhD candidate at University College Dublin's School of Geography, provides us with a comprehensive overview of his PhD research exploring how policy can be made flexible enough to accommodate the rich and complex characteristics of different farming spaces throughout Europe. Jack also details his thoughts and opinions on the EIP-AGRI initiative, outlining the importance of policy acknowledging the farmer's contribution in making future agri-environmental measures more effective and inclusive.

From the small holdings of Transylvania, to upland sheep farming in the West of Ireland, the olive groves of Greece, and sugar beet producing regions of France, the histories, environments, and practices of European agriculture are astoundingly diverse. Accounting for such different farming spaces has long presented a major challenge for policy makers. After all, policy tends to be general, working at the scale of regions, nations, or pan-national organisations like the European Union. How then can policy be flexible enough to accommodate the rich and complex characteristics of different farming spaces?

As part of a research project with Teagasc and UCD School of Geography, I have spent the past four years trying to understand how the Common Agricultural Policy deals with this diversity. The project focused specifically on agri-environmental schemes, which aim to make farming more environmentally sustainable. One tactic employed by the CAP has involved encouraging national governments to include a range of people and groups in the process of designing and implementing CAP schemes.

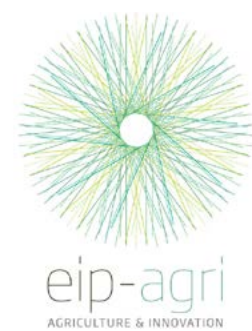
The main rationale is that by including the knowledge of farmers, scientists, community groups, and other rural stakeholders, we can account for the characteristics of different farming spaces and thereby improve agri-environmental policy. Ireland's EIP-AGRI Initiative reflects this trend.



As part of this Initiative, the Department of Agriculture, Food and the Marine ran a competitive application process inviting locally embedded groups to form and propose projects that would address agri-environmental challenges in their local areas. By this means, the EIP-AGRI Initiative sought to include knowledge input from farmers, land managers, and others with a stake in land use. As readers of this blog will be aware, 23 of these pilot projects are now up and running.

Our research project focused on the early stages of the EIP-AGRI Initiative application process. We wanted to understand how these groups began, what their motivations were, and how they were able to work together to identify challenges and propose solutions. I spoke to members of three groups from environmentally protected upland sheep farming areas. Each group's application proposed measures to improve grazing management on the mountains.





## Merging Knowledge and the EIP-AGRI Initiative Application Process: Some Research Findings and Reflections

**Jack McCarthy, Walsh Fellow at Teagasc's Rural Economy and Development Programme and  
PhD candidate at University College Dublin's School of Geography**

There were three main similarities. First, although dozens of farmers were included in each group, four to seven locally embedded individuals were the main drivers of each respective application. These individuals tended to have experience as representatives in farming organisations, community development or other leadership positions. Second, those who led the process were highly motivated by the prospect of providing knowledge of the specific farming, social, and ecological characteristics of their local area. This prospect was a key reason to engage with the EIP-AGRI Initiative. Third, all groups engaged with local or external institutions that helped facilitate decision making, provided scientific knowledge, or provided policy advice. Significantly, the EIP-AGRI Initiative's application process was flexible enough to allow for a merging of different kinds of knowledge, thereby allowing groups to produce proposals that addressed both local concerns and national policy goals.

To me, the EIP-AGRI Initiative represents an important step for Irish agricultural policy in beginning to acknowledge the contributions that farmers can make to adapting policy to diverse farming spaces. This kind of approach has the potential to build partnerships between different kinds of stakeholders for mobilising, sharing, and merging knowledge, as promoted by UN Sustainable Development Goal number 17.



However, more comparative research is needed in order to identify the specific institutional arrangements and supports that allow these processes to occur in different contexts so that agri-environmental policy can be more effective and inclusive. Reflecting on the EIP-AGRI Initiative itself, it is also important to acknowledge the labour intensive, creative, and largely voluntary work carried out by local groups in producing EIP-AGRI Initiative proposals. For the government it is therefore important to continue communicating the value of the 23 current EIP-AGRI projects through bodies like the National Rural Network and provide information to the public as to how these will inform the post-2020 CAP.

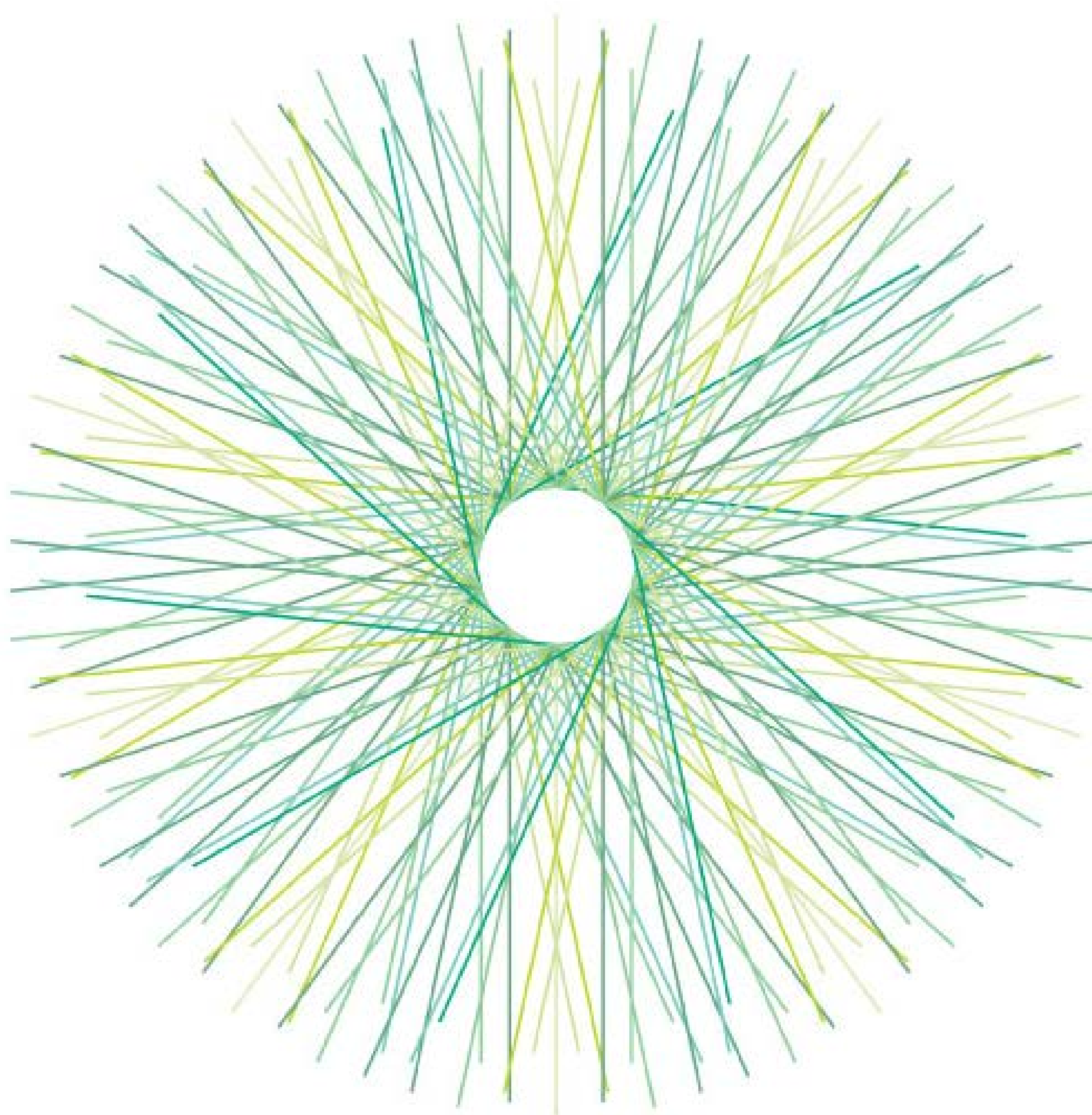






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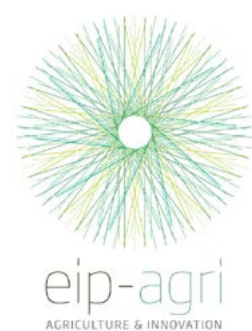


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The European Agricultural Fund  
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**Europe investing in rural areas**





## EIP-AGRI Operational Groups - Ireland's Unique Opportunity

**Dr James Moran, Lecturer in Biology and Ecology at Galway Mayo Institute of Technology**

In this NRN guest blog, Dr James Moran, lecturer in Biology and Ecology at Galway Mayo Institute of Technology (GMIT), provides us with an insightful overview of the basic principles of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) Operational Groups, and the opportunities these groups hold for rural Ireland.

Member states have a certain amount of flexibility in the implementation of EU regulations. This is particularly true of the Rural Development Programmes (RDPs) which allow member states to develop their own programme within a common EU framework. Ireland is using this flexibility to adapt a locally led approach to the implementation of EIP-AGRI operational groups, and already we are starting to see signs that this approach could have significant results for local areas across the country.

The implementation of EIP operational groups across the EU seeks to bring a diverse range of partners (farmers, advisors, scientists, agri-business and the wider community) together to develop innovative solutions to a wide range of problems and challenges facing EU agriculture. Within the RDP framework member states have the opportunity to set up and fund these operational groups. An informative EIP-AGRI brochure has been produced by the EU Commission to help communicate how operational groups can get started and Ireland's BurrenLIFE programme is highlighted as an exemplar for EU EIP-AGRI Operational Groups. Please see: [https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri\\_brochure\\_operational\\_groups\\_2014\\_en\\_web\\_updated\\_01032016.pdf](https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_brochure_operational_groups_2014_en_web_updated_01032016.pdf).

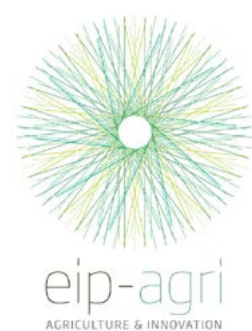


Learning from the success of the Burren model where the locally led approach has made significant progress, Ireland is adapting a locally led approach to the implementation of EIP-AGRI Operational Groups. The key focus is to fund the setup of local partnerships to tackle local challenges that relate to national and EU rural development priority areas. Groups submit a phase 1 application and a selection of innovative ideas are funded to prepare full project plans in phase 2. Successful phase 2 groups are further funded to implement, trial and test their innovative ideas with the overall aim of informing wider implementation in Ireland's next RDP. With a total budget of almost €60 million this fund has the potential to stimulate innovation in a wide range of areas. The priority areas range from biodiversity and climate to water management to food chain organisation and risk management.

Since the first call opened at the end of 2016 long days and nights have been spent by groups of dedicated individuals and organisations around the country. The overwhelming response has caught everyone by surprise. There is a real appetite in local communities around Ireland to devise locally adapted solutions to the pressing issues that we face. Approximately 118 groups applied for funding in the first round, with 23 selected and funded for full project plan development over the summer of 2017. It is expected that approximately 50% of these will be selected for full implementation by the end of this year (2017).







## EIP-AGRI Operational Groups - Ireland's Unique Opportunity

**Dr James Moran, Lecturer in Biology and Ecology at Galway Mayo Institute of Technology**

The last 12 months have been a steep learning curve for us all. Many groups were inspired to act by an identified local need for action on a particular issue/challenge. This acted as a catalyst for the formation of a fledgling partnership. Potential partners needed to work quickly to come to a common understanding of what they wanted to achieve in the short term with the EIP application. However, the most successful groups were developing a medium to long term shared vision. Success in phase one secured funding to build trust and capacity within the partnership and develop the ideas further into a feasible pilot project.

The need for dedicated community champions to take initiative and drive innovation was evident in many of these EIP fledgling groups. These individuals play a key role in the formation of the partnership and maintenance of momentum. The need to develop mutual understanding and the ongoing process of trust and capacity building within the partnership is a key challenge. What size the partnership should be was a frequent question and topic of discussion among groups. There is no right or wrong answer and this is evident from the range of partnerships emerging in the initial applications. A range of expertise is needed to make a local partnership successful.

The number of partners needed depends on the scale of the challenges targeted by the group. It is clear that more is not necessarily better. A diverse partnership brings the opportunity for innovative solutions but the larger the partnership the more difficult the challenge of effective partnership formation. Many groups came to the realisation that not all stakeholders need to have the same level of involvement. A core group will always take the initiative but support of a wider network will be key to the sustainability and success of the partnership in the long term. The support of state agencies and government departments, the wider community including NGOs was key for many groups. Motivated and enthusiastic local individuals in these organisations is key.

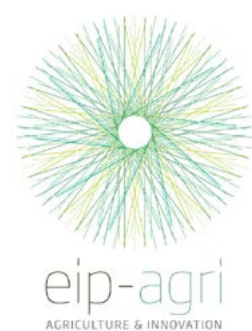
It appears that partnerships work best when focused on issues/challenges in specific local areas. This leads to the potential development of locally adapted, practical and results focused innovation/solutions.



Throughout the process the partnership needs to focus on building trust, respect and capacity. A 'can-do' atmosphere is essential. The first 12 months of this initiative have highlighted that there is a willingness in local communities across the country to seize the initiative and work together to find solutions to challenges that often seem intractable at national level.







## Embracing the Ethos of the EIP-AGRI Initiative

**Dr Barry O'Donoghue, Head of Agri-Ecology with the National Parks & Wildlife Service**

In this NRN guest blog, Dr Barry O'Donoghue, Head of Agri-Ecology with the National Parks & Wildlife Service, at the Department of Culture, Heritage and the Gaeltacht, gives us his thoughts and opinions on how the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) initiative can play a fundamental role in ensuring a brighter future for rural Ireland and its heritage.



In April 2016, I remember sitting with a farmer in one of my favourite places in Ireland, the Derrynasaggart Mountains. These Mountains straddle the Cork and Kerry border – perhaps the very mountains referred to in the great song “Whiskey in the Jar”. There is a certain music to these mountains themselves; literally and metaphorically. The music of Seán Ó Riada can be heard emanating from mass in Baile Bhúirne, wafting up across the farmland towards Mullach an Ois at 649m above sea level, with the RTÉ Mullaghanish Mast standing 225m tall on top again, beaming out music to radios across the south. The lambs and ewes are calling across the mountains and valleys, while the Raven, the Cuckoo and the Skylark add to the soundtrack. Green fields sit beneath “rae” (dry heath); streams and rivers make their way downwards; while patches of willow and birch scrub, and pockets of native oak woodlands finesse the landscape.

The farmer and I are sitting hoping to see one of Ireland's rarest and most magnificent birds – the Hen Harrier. April is the time of the year when one can witness the spectacular ‘sky dance’ of the male Hen Harrier – one of the greatest sights you could ever wish to see in nature anywhere across the globe. The farmer has continually updated me on the sightings he and his daughter have had of the birds on their lands, since I began as a Ranger with the NPWS there over a decade ago. Since 2013 though, I have been looking after the Agri-Ecology Unit of NPWS, where I am in suits more than boots, so I tend to have mainly just the weekends to get out and look for wildlife (one of the trade-offs for the great position that I now find myself in with NPWS).

The talk between the farmer and I turns to a local school, in Carriganimma on the other side of Mullach an Ois. The school was at risk of closing due to low numbers. Closure would be a massive blow for the community. Local pubs, the local creamery, a petrol pumps and the post office have already been lost in the few decades my friend has been farming. The parents of the school children there clubbed together and offered to buy uniforms and books for any new children that would enrol in the school, for example from the towns of Millstreet or Macroom. The plan succeeded and a couple of new pupils enrolled, so Carriganimma school was saved!







## Embracing the Ethos of the EIP-AGRI Initiative

**Dr Barry O'Donoghue, Head of Agri-Ecology with the National Parks & Wildlife Service**

We look across the landscape and he points to all the farms that have been lost. Family names rhymed off, but no fields to associate them with; given they have been replaced by forestry. “European Innovation Partnership” are words that come from my mouth and seem as incongruous in the townland of Com na Cloiche as a saxophone in a Seán Ó Riada composition. I explain to him that a new scheme is being developed for Hen Harrier Special Protection Areas, to help the declining Hen Harrier population (this SPA is down to just two breeding pairs; a staggering decline of 60% in a decade), by supporting the local farmers to support the habitats the harriers and so many other fragile species depend on. “It will be classed as a European Innovation Partnership, an EIP”. When broken down into its elements, it actually makes perfect sense. It is co-financed by Europe. There is certainly a great degree of innovation involved. It is a partnership approach; with farmers and ecologists in particular working most closely together.

Fast forward to December 2017. In the same Hen Harrier SPA (Mullaghanishto Musheramore), Minister for Agriculture, Food and the Marine Michael Creed TD is standing in a field that remains like an island surrounded by a sea of forestry, launching the Hen Harrier Project with local farmer Jack Lynch and an excellent management team, headed by Fergal Monaghan. This is the first EIP in Ireland and is a concept that developed between the Department of Agriculture and the National Parks & Wildlife Service of the Department of Culture, Heritage & the Gaeltacht. It has now become a real thing and is live. Whether it is known as an EIP in Com na Cloiche or Drommada More (Glanaruddery Mountains) or Reynclammer (Sliabh Aughty) or Knockanearla (Sliabh Beagh) remains to be seen. What is sure is that there are hopes and goodwill that the project will help the Hen Harrier and various other native wildlife, but importantly also that it will help the farming families that share and shape the landscape.

The additional income could well be the difference between a family leaving farming or continuing.

It could be the difference between a young farmer seeing the land that has been passed to them from previous generations as something to be proud of; that they are looking after one of Ireland's rarest pieces of natural heritage and that they can in turn derive some income from that, so that keeping stock on the hills in addition to the day job is something worth committing to. It could then be the difference between a couple of school children attending the local national school or not. The Hen Harrier has the potential to keep people on the land and the people have the potential to keep the Hen Harrier on the land. Let's hope this partnership succeeds. The innovation shown by the local parents to keep the school alive will hopefully come to bear again across the Hen Harrier SPAs and save the remaining biodiversity just in the nick of time. In an age of seemingly unstoppable march of populations towards larger towns and cities, this is as important for Europe as it is for the local community.



There are so many areas across rural Ireland, with their own individual stories and histories. Areas rich in natural, social and cultural heritage. Local solutions for local issues, supported by central Government and Europe appears to be a good recipe and we are all hopeful that the European Innovation Partnership approach, which will be rolled out across a suite of areas and issues, will prove to be a successful one. These initial pilots will inform future engagement with and of local communities to provide a brighter future for rural Ireland and its heritage.





# Mobilising Forestry Biomass via Sustainable Means

**Kieran Sullivan, IT Researcher at Waterford Institute of Technology and Part-time Farmer and Forester**

In this NRN guest blog, Kieran Sullivan, part-time farmer and forester from Co. Waterford, and IT researcher with Waterford Institute of Technology, provides us with an invaluable insight into his own personal experience of participating in a European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) Focus Group exploring 'Sustainable Mobilisation of Forest Biomass (SMFB)'. Kieran also gives us his thoughts and opinions on how an increase in demand for forestry biomass to produce energy can be achieved in a sustainable manner.

## Background

You wouldn't think it, but roughly one-third of all land in Europe is covered by forests. This equates to over 215 million hectares, with an average increase of 700,000 hectares per annum. Europe is a big place however and its forestry is as diverse as the people and their cultures who live around these trees. Each forest type serves many interlinked functions. These include the production of logwood and biomass, habitats for wildlife, securing water management and soil fertility, storing carbon, and facilitating recreation, among others.

Various programmes and initiatives are focused on these different functions, and given the expected increase in demand for biomass, an EIP-AGRI Focus Group on Sustainable Mobilisation of Forest Biomass (SMFB) was established in 2016-17 to examine a number of specific aspects. EIP-AGRI Focus Groups are temporary groups of selected experts focusing on a specific subject, sharing knowledge and experience. The groups explore practical innovative solutions to problems or opportunities in the field, and draw on experiences derived from related useful projects.

The main driver for this demand for biomass is energy generation and since only 60-70% of the annual increment of EU forests is harvested, the potential exists to increase forest biomass



mobilisation; in particular, amongst small private holdings and silvicultural practices such as pruning and complementary fellings (namely first thinnings).

A number of challenges had to be considered though, including sustainability, competitiveness of the forest-based industries, efficiency and economic viability, organisation and motivation of forest owners as well as new tools and technologies. In mobilising forest-based biomass, economic, environmental and social functions of forests have to be safeguarded.

Against this background, the main question addressed by the EIP-AGRI Focus Group on Sustainable Mobilisation of Forest Biomass (SMFB) was, "How to improve the sustainable mobilisation of biomass from our European forests?". The Focus Group concentrated on mobilising different types of forest biomass for all potential markets and how to better interlink supply and demand, taking into account the current underused potential supply of forest biomass.







## Mobilising Forestry Biomass via Sustainable Means

Kieran Sullivan, IT Researcher at Waterford Institute of Technology and Part-time Farmer and Forester



### The Process

Following an open call for selecting members, EIP-AGRI chosen 20 experts from around Europe. These included foresters, farmers, scientists, Government advisors, and environmentalists; together with a coordinator and two support members, the Group kick-started its work in Tampere, Finland, in June, 2016. The final result is a wide-ranging report, complete with insights and recommendations, and to feed into this, the Group centred on eight supporting documents (entitled, mini-papers):

- MP1: Multi-actors / Stakeholders involved in SMFB
- MP2: Forest Ownership types
- MP3: Forest Biomass Markets
- MP4: Decision support tools
- MP5: Harvesting technologies
- MP6: SMFB contribution to environmental issues
- MP7: Incentives for SMFB
- MP8: European map of the regional forest-based sector

Over the course of a year the mini-papers were scoped out and developed, before a second and final workshop in Ljubljana, Slovenia, in February, 2017. At this point, the mini-papers were finalised and work began on incorporating them in the final report.

### Main Findings

The Groups main findings centred on three complementary topics: (a) Market trends and new demand for forest biomass; (b) Tools to increase SMFB, such as digitisation, harvesting and transportation technologies, decision support tools and incentives; (c) Owners and other actors and potential climate/environment benefits.

The findings are explained in detail in the final report from the SMFB Group, which also contains 28 research themes and ideas to sustainably increase forest biomass. Of these, six activities were prioritised by the 20 experts:

1. Evaluate impact of existing mobilisation incentives
2. Extract lessons from existing regional forest ownership organisations
3. Analyse future demand and supply, including new and traditional value chains
4. Develop user-friendly information platforms and new map-based tools
5. Investigate potential of new cross-regional value chains and production systems
6. Identify and explore incentives for carbon sequestration through active forest management.







## Lesson Learned from the 'Robust and Resilient Dairy Production Systems of the Future' EIP-AGRI Focus Group

### Mike Brady, Managing Director of Brady Group Agricultural Consultants and Land Agents

In this NRN guest blog, Mike Brady, Managing Director of Cork-based Brady Group Agricultural Consultants and Land Agents, provides us with an invaluable insight into his own personal experience of participating in a European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) Focus Group looking at 'Robust and resilient dairy production systems of the future'. EIP-AGRI Focus Groups are temporary groups of selected experts focusing on a specific subject, sharing knowledge and experience. The groups explore practical innovative solutions to problems or opportunities in the field, and draw on experiences derived from related useful projects.

### Background

I recently participated in a Focus Group, assembled by the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI), to look at 'Robust and resilient dairy production systems of the future'. The group that I was involved in had 20 members, consisting of a mix of farmers, advisers and researchers from across the European Union (EU). EIP-AGRI is an EU initiative which aims to speed up the innovation process in the agricultural and forestry sectors by bringing research and practice closer together. The focus group is just one of the building blocks which will influence policy makers in the EU Commission.

### Aims of the Focus Group

The overall aim of this Focus Group was to identify how to create good conditions for dairy cattle husbandry in different production systems. The group looked at approaches and practices which take into account breeding, nutrition, fertility, health, welfare, monitoring, and overall management in all parts of the life cycle of animals. The impact on profitability and sustainability (in animal welfare terms) was assessed.



The Focus Group was expected to carry out the following main tasks:

- To identify new or underused approaches and practices which increase robustness in dairy cattle husbandry in different production systems and regions. Practices and strategies increasing robustness at animal, farm, species and/or production system level can be taken into account.
- To analyse the impact of the most promising identified approaches and practices on profitability and animal welfare, their success and fail factors and barriers for implementation.
- Summarise how to address these aspects and explore the role of innovation and knowledge exchange in addressing the challenges identified.
- Propose potential innovative actions and ideas for Operational Groups to stimulate the use and improvement of robustness related practices at farm level.
- Identify needs from practice and possible gaps in knowledge related to robustness which may be solved by further research.







## Lesson Learned from the 'Robust and Resilient Dairy Production Systems of the Future' EIP-AGRI Focus Group Mike Brady, Managing Director of Brady Group Agricultural Consultants and Land Agents

### The Process

The group met two times face to face. The first meeting took place in Zagreb, Croatia, hosted by the Croatian National Rural Network, on 23-24 November 2016. The second was in Edinburgh, Scotland, on 19-20 April 2017, hosted by the Scotland's Rural College.

In preparation for the first meeting, a starting paper was prepared by the EIP-AGRI Service Point team, setting the scene for the coming work. A questionnaire was sent to the experts prior to the meeting to inventory which topics, according to them, could contribute the most to improve robustness and resilience in dairy production systems.

The first meeting of the Focus Group was primarily concerned with making an inventory of relevant topics and related measures and strategies to achieve robust and resilient dairy production. Following these discussions, topics for mini-papers were decided and groups were formed for the selected seven topics. Between the first and the second meeting, the groups produced mini-papers.

At the second meeting, the preliminary mini-papers were presented and discussed by the whole Focus Group. Based on that, the group prioritised and described the five main directions towards robustness and resilience:

1. Precision Livestock Farming: Data integration and interpretation (different devices/systems – indicators)
2. Systems: Put in place a program for dairy farmers to review/reflect/validate their system of production to achieve 'best practice' for R&R dairy production systems
3. Indicators: Integration of a selection of indicators in an index that provides R&R scores at an individual, group and system level
4. Skills: Curriculum development farmer. To be organised, dynamic for person and in time.

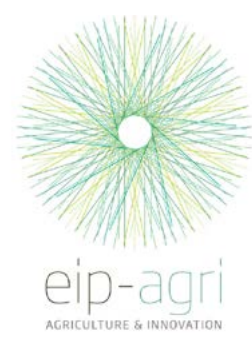
5. Socio-economics: Develop milk sector programs: EU framework national and regional adaptation including regulation, contract rules, including instruments to manage overproduction

These 5 directions were used to guide the discussion on success and fail factors and to identify the gaps in terms of adoption. The second meeting continued identifying the success and failure factors concerning further adoption and development of the five directions. Finally, the group discussed which gaps for adoption in terms of research needed and innovations to be addressed. The experts worked out potential innovative actions (Operational Group ideas) to stimulate the knowledge and use of management practices and strategies. The second meeting also included field visits to two Scottish dairy farms. The 1st farm we visited was Brian Weatherup and Partners, Parkend Farm, a dairy farm with Holsteins and having installed 2 milking robots. The 2nd farm was A&S Lawrie, Cuthill Towers, an Ayrshire dairy farm. These visits were of great help in putting a practical implementation perspective on the Focus Group recommendations. The final paper is currently being discussed amongst members of the focus group and should be published in the first quarter of 2018.



Overall, I found the focus group to be a wonderful experience, providing me with an invaluable insight into the minds, ideas and attitudes of farmers, advisers and researchers from all corners of the EU. I have returned with a more balanced understanding of dairy farming in the EU and I can now disseminate this information to clients and to the wider agricultural community through the media.





# Digital Skills in Farming for a Digital Future in Agriculture

Ethan Cleary, Technology & Innovation Executive, Irish Farmers' Association

In this guest blog, Ethan Cleary, Technology & Innovation Executive, Irish Farmers' Association explains in detail the need for the development of a digital skills model for farmers that would enable them to learn the necessary skills to analyse, assess and implement the best actions, solutions and technologies for their farm business. He also provides us with an insightful overview of the recent EIP-AGRI workshop on 'Enabling Farmers for the Digital Age: the role of AKIS', and its key role in identifying how all actors in the agricultural knowledge innovation system can support the understanding and use of digital technologies at farm level.

Digital skills are becoming an essential element of modern farm management as an increasing amount of digital technologies focused on the agricultural sector come on the market. This is also reflected in the regulatory requirements farmers face, such as the EU Commission's demand that all Basic Payment Scheme (BPS) application be completed online in 2018.

In response, a digital skills model is required to be developed for farmers where they can learn the skills to quickly analyse, assess and implement the best actions, solutions and technologies for their farm business.

This is an extremely challenging proposition in the short-to-medium term. As adopters of digital technologies, farmers are both forward-thinking and, at the same time, resistant to change – and for good reason; farmers get one attempt a year to grow a crop and make a profit. Whatever technology makes its way into the fields had better work. But often they revert to tried and tested handed down know-how.

On top of the sector-specific challenges, digitalisation is having a major impact on the labour market and the type of skills needed in the rural economy and is redefining the role of farmers and agri-cooperatives. There has been an increase in the need of people with ICT and digital skills, but there is huge



skills gap in the economy, and that is felt even more acutely in rural areas.

As jobs and entire industries are changed through digital disruption, those affected should have the appropriate supports required to adapt. The digital skills gap is particularly evident in agriculture, especially if we look at the oft-cited McKinsey Digital Index, and the immediate focus should be on closing that gap.

The MGI Industry Digitization Index

2015 or latest available data

Relatively low digitization Relatively high digitization  
● Digital leaders within relatively undigitized sectors



- 1 Knowledge-intensive sectors that are highly digitized across most dimensions
- 2 Capital-intensive sectors with the potential to further digitize their physical assets
- 3 Service sectors with long tail of small firms having room to digitize customer transactions
- 4 B2B sectors with the potential to digitally engage and interact with their customers
- 5 Labor-intensive sectors with the potential to provide digital tools to their workforce
- 6 Quasi-public and/or highly localized sectors that lag across most dimensions

1 Based on a set of metrics to assess digitization of assets (8 metrics), usage (11 metrics), and labor (8 metrics); see technical appendix for full list of metrics and explanation of methodology.  
2 Compound annual growth rate.

Fig. 1 – The McKinsey Global Institute Digitization Index





# Digital Skills in Farming for a Digital Future in Agriculture

Ethan Cleary, Technology & Innovation Executive, Irish Farmers' Association

## Digital Agriculture

When we talk about 'digital agriculture', we mean the use of digital technologies and data in order to; redefine and improve business process, optimise (and potentially develop new) business models, create the environment for digital business to occur, and to make the business more profitable and sustainable.

'Precision agriculture' is probably the best-known manifestation of digitalisation in agriculture. Put simply, precision agriculture, is a modern farm management concept using digital technologies to monitor and optimise agricultural production processes and it applies to all farm sectors.

One of the outcomes from the increased adoption of precision agriculture, is an exponential increase in the amount of data generated through farming and up and down the agri-food supply chain, which mirrors the global data growth rate.

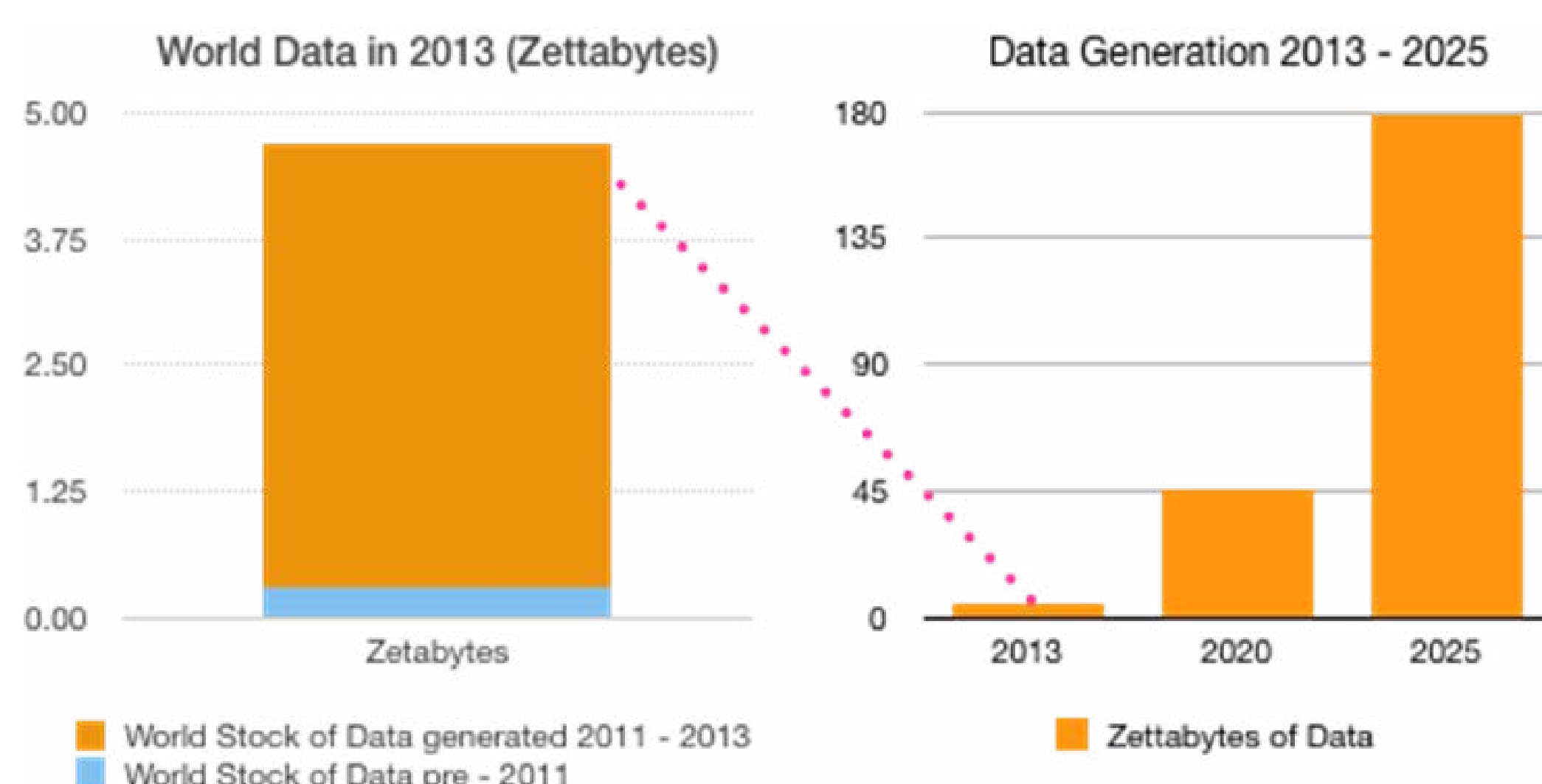


Fig. 2 – The exponential generation of data generation based on current growth models

Source: International Data Corporation (IDC) Data Age 2025: The Evolution of Data to Life Critical: <https://www.seagate.com/files/www-content/our-story/trends/files/Seagate-WP-DataAge2025-March-2017.pdf>

This new data-supply chain now places farmers in a new context and redefines their role in the supply chain. This has the potential to create transformative agricultural business models, leading to cheaper, safer, and better produce. But it also requires that farmers have the skills to take advantage of these changes.

Indeed, experts are continually highlighting the economic and societal potential of precision farming, with the EU Agricultural Commission increasingly referring to how precision agriculture and digitalisation will be a core part of the next Common Agricultural Policy and beyond (European Parliament 2014; 2016).

## Digital Capabilities for All

For those lacking basic digital capability, the reasons for exclusion are often complex. Research suggest that there are four key barriers, and more than one may affect individuals at any one time:

1. Access: the ability to connect to the internet and go online
2. Skills: the ability to use the internet and online services
3. Confidence: a fear of breaking, fear of crime, lack of trust or not knowing where to start online
4. Motivation: understanding why using the internet is relevant and helpful

A fully realised end-to-end digital skills programme should be developed in response to these barriers where awareness of the business model benefits (and the risks) attached to the technology are thought alongside how to use these technologies.

Given the complex and multifaceted nature of farming, the adoption of digital agriculture requires knowledgeable and skilled farm managers and labourers, as well as a cadre of well-educated consultants, service providers and other extension agents.





## Digital Skills in Farming for a Digital Future in Agriculture

Ethan Cleary, Technology & Innovation Executive, Irish Farmers' Association

### Digital Skills Models

At the recent EIP-AGRI workshop on 'Enabling Farmers for the Digital Age: the role of AKIS' (see: [https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri\\_workshop\\_agricultural\\_knowledge\\_and\\_innovation\\_systems\\_final\\_report\\_2018\\_en.pdf](https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_workshop_agricultural_knowledge_and_innovation_systems_final_report_2018_en.pdf)), the focus was very much on how all actors in the agricultural knowledge innovation system can support the understanding and use of digital technologies at farm level. Farmers were identified as being central to the agricultural innovation system and are key actors in many communication, awareness raising and educational activities such as mentoring, on farm demonstration, peer to peer exchanges, on farm testing, community expert groups and networks, etc. In these cases advisers are equally seen as facilitators/trustees and as knowledge providers. Farmers, especially the ones who are already engaged, who have 'success stories' and who are front runners are also called upon to be ambassadors and trainers.

This is why approaches such as "skills based learning" and "context based learning" should be explored as a means for getting the most out of digital technologies. These approaches advocate learning on the job with the instructor role now morphing into the role of facilitator. This social learning approach is already occurring in the successful discussion and knowledge transfer group model in existence in the EU. Social learning involves learning with and from others, and uses digital tools such as private and public online group discussions portals to complement the face-to-face interactions in the real world.

Tailored and targeted programmes are required in the short-to-medium term. Lowering the adoption hurdles through incentivising new technology uptake through policy instruments and programmes, such as the Rural Development Programme, may give a clearer indication of the true level of digital skills competencies and attitudes to digital technologies across European agriculture.

Longer term, models like "lifelong learning" that lead to the continual reinforcement and upskilling of general and specialised digital technologies will become central to farm management practices and only fortify the existing culture of continuous improvement already in place on Irish farmers and will be critical for our international competitiveness into the future.



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## Realising the Potential of Forestry in Ireland through EIP-AGRI

Dr. Nuala Ní Fhlatharta, Head of the Teagasc Forestry Development Department

In this guest blog, Dr. Nuala Ní Fhlatharta, Head of the Teagasc Forestry Development Department, provides us with an insightful and comprehensive overview of the opportunities and challenges facing the forestry sector in Ireland. Dr Ní Fhlatharta also highlights two EIP-AGRI forestry initiatives that she was involved in over the past few years with other experts in this field from across the EU on the topic of 'Wood Biomass Mobilisation' and 'New Value Chains from Multifunctional Forests'. She explains that EIP-AGRI Operational Groups have the potential to progress both these areas.

The area under forest in Ireland has increased from what was a worryingly low level of about 1% of our land area at the beginning of the 19th Century to over 11% by 2018. This is a tremendous achievement and is probably one of the greatest Irish land use changes of modern times. However, if we consider it in the context of a longer time scale, we still only have a small percentage of the forest area that was originally in Ireland in the 17th Century, after which industrialisation, the plantations and the increase in population resulted in the massive clearance of these forests. A consequence of this ongoing clearance of forests was the loss of habitats and the associated plants and animals.

Our forest cover is still very low in comparison to the EU average of 42% of land area. Most of our private forests have been established since the 1990s and this means that the long tradition of forests and forestry practice that exists across Europe is largely absent here in Ireland. However our relatively young forests provide a very exciting opportunity for the forest owners, the surrounding rural communities and for Ireland as a whole. Generally these young private forests are quite productive and have the potential to provide additional rural jobs and added amenity value if properly managed and developed.

The forecast of Irish timber supply shows that the potential volume of wood coming onto the market is set to double by 2035, with practically all the increase coming from these private forests. While this is an

exciting opportunity, it also presents a significant challenge. With over 20,000 forest owners involved there is a logistical and infrastructural challenge as many have had no previous engagement with the timber-harvesting and timber-buying sectors. Wood processors have to date dealt with a small number of suppliers and now need to develop systems to handle this new, more diverse supply chain.

This also provides the opportunity for new wood-using industries to develop in rural areas. With increased interest in the potential of developing the bioeconomy this new timber supply that is coming on-stream may provide opportunities for exciting new forest-based products and services.

This additional timber supply and forest resource means that we have the opportunity to develop innovative uses and applications to suit Irish conditions and also add optimal value in the form of financial and non-financial benefits. EIP-AGRI has already supported this process and hopefully can continue to do so.







## Realising the Potential of Forestry in Ireland through EIP-AGRI

Dr. Nuala Ní Fhlatharta, Head of the Teagasc Forestry Development Department

In the past few years I have been involved in two relevant EIP-AGRI initiatives:

### *EIP-AGRI Focus Group on Wood Biomass Mobilisation*

This EIP-AGRI Focus Group provided an excellent insight into the common issues being faced across Europe in getting woody biomass from the forest to the end user. What was interesting for me were the approaches being taken and the solutions developed in different countries. That's not to say that these solutions are directly transferrable to Irish conditions, but elements can be applied and adapted to help identify local innovative solutions.

In relation to the work of the focus group a number of experts from across the EU identified the success and fail factors for wood mobilisation and how these could be harnessed and addressed at local, regional, national and EU level. The potential of extension, digital technology, co-operation mechanisms, good-practice examples and incentives to increase mobilisation were among the topics discussed. A range of potential innovation and research actions, including Operational Groups, was proposed that would help advance these potential solutions. ([https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri\\_factsheet\\_sustainable\\_mobilisation\\_of\\_forest\\_biomass\\_2018\\_en.pdf](https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_factsheet_sustainable_mobilisation_of_forest_biomass_2018_en.pdf))

### *EIP-AGRI Workshop on New Value Chains from Multifunctional Forests*

This EIP-AGRI workshop brought together a range of actors involved in and interested in developing new uses of our forests. The workshop served to open our minds to the limitless boundaries that forests have in relation to adding value. This potential was explored under the headings food, non-food, agro-forestry and recreational and leisure use. There are infinite opportunities ranging from niche markets including chickens and eggs marketed as woodland chickens to the use of forests for foraging for a range



of aromatic plants. The tourism and recreation opportunities are also substantial.

New value chains have the opportunity to add significantly to our forests' worth. There are opportunities and challenges in extracting this value and these were explored at the workshop and can be grouped under business development needs, co-operation needs, capacity building and policy and legislation issues. The potential of Operational Groups to progress such value chains was clear. This includes groups to test and develop new products, the implement forest management practices, product development and quality control and innovation in on-line platforms. The advancement of forest management practices and services to encourage tourism and recreation and to encourage environmental enhancements also provide opportunities along with the development of technology transfer to encourage business development. ([https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri\\_workshop\\_forest\\_value\\_chains\\_final\\_report\\_2017\\_en.pdf](https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_workshop_forest_value_chains_final_report_2017_en.pdf))





An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine



# Irish EIP

## Operations



**1** Inishowen Upland Farmers Project



**2** Cúlra Créafóige - Cultivation  
Renewal Programme



**3** The Conservation of Breeding Curlew in Ireland



**4** Farming Rathcroghan Project



**5** Maximising Organic Production Systems (MOPS)



**6** North Connemara Locally Led  
Agri-environmental Scheme



**7** Caomhnú Árann



**8** Hen Harrier Project



**9** Biomass to Biochar for Farm Bioeconomy (BBFB)



**10** Mulkear EIP



**11** Allow Project - Duhallow Farming for Blue Dot Catchments



**12** Biorefinery Glas

\* The location points for each EIP-AGRI Operational the Operational Groups, in most cases are far reach of 'Geographical Location' for each group can be found on the National Rural Network website, and also on



# EIP-AGRI

# al Groups



The European Agricultural Fund  
for Rural Development:  
Europe investing in rural areas



National Rural Network

## Small Biogas Demonstration Programme

### DANÚ Farming Group



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### Sustainable Uplands Agri-environment Scheme (SUAS)



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### Enable Conservation Tillage (ECT)



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### Blackstairs Farming Futures



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### The Duncannon Blue Flag Farming and Communities Scheme



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### Protecting Farmland Pollinators



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### Biodiversity Regeneration in a Dairying Environment (BRIDE)



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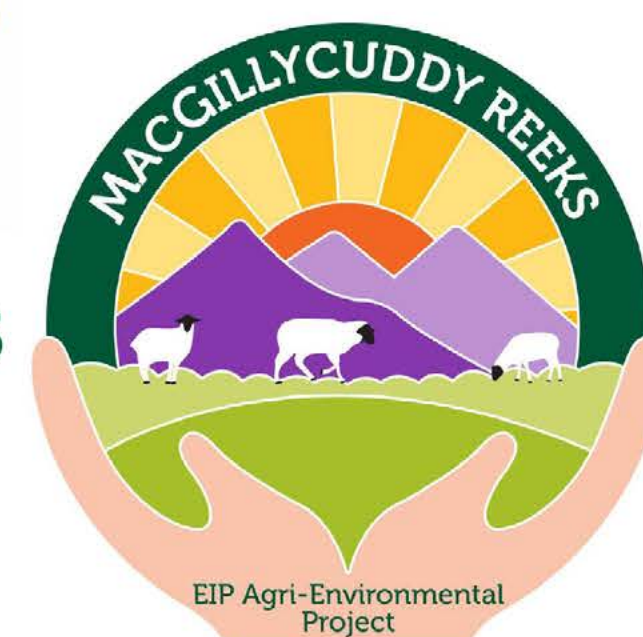
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### Pearl Mussel Project

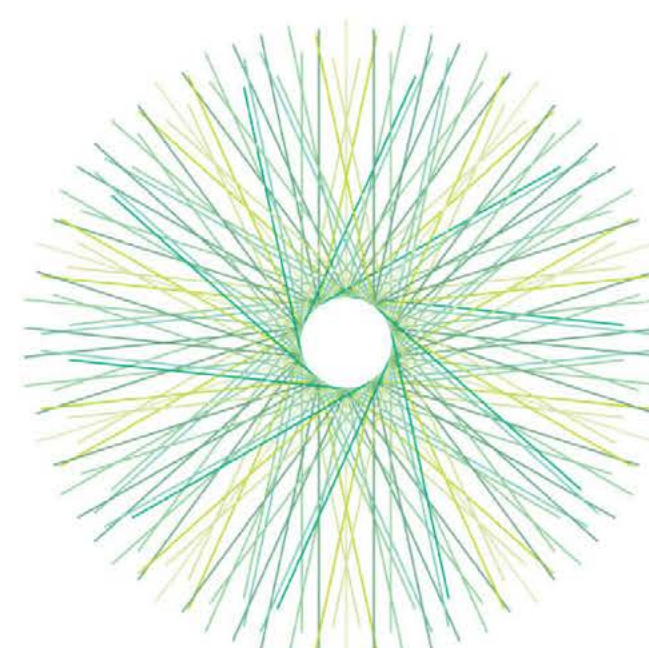


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### Sustainable Agricultural Plan for the MacGillycuddy Reeks



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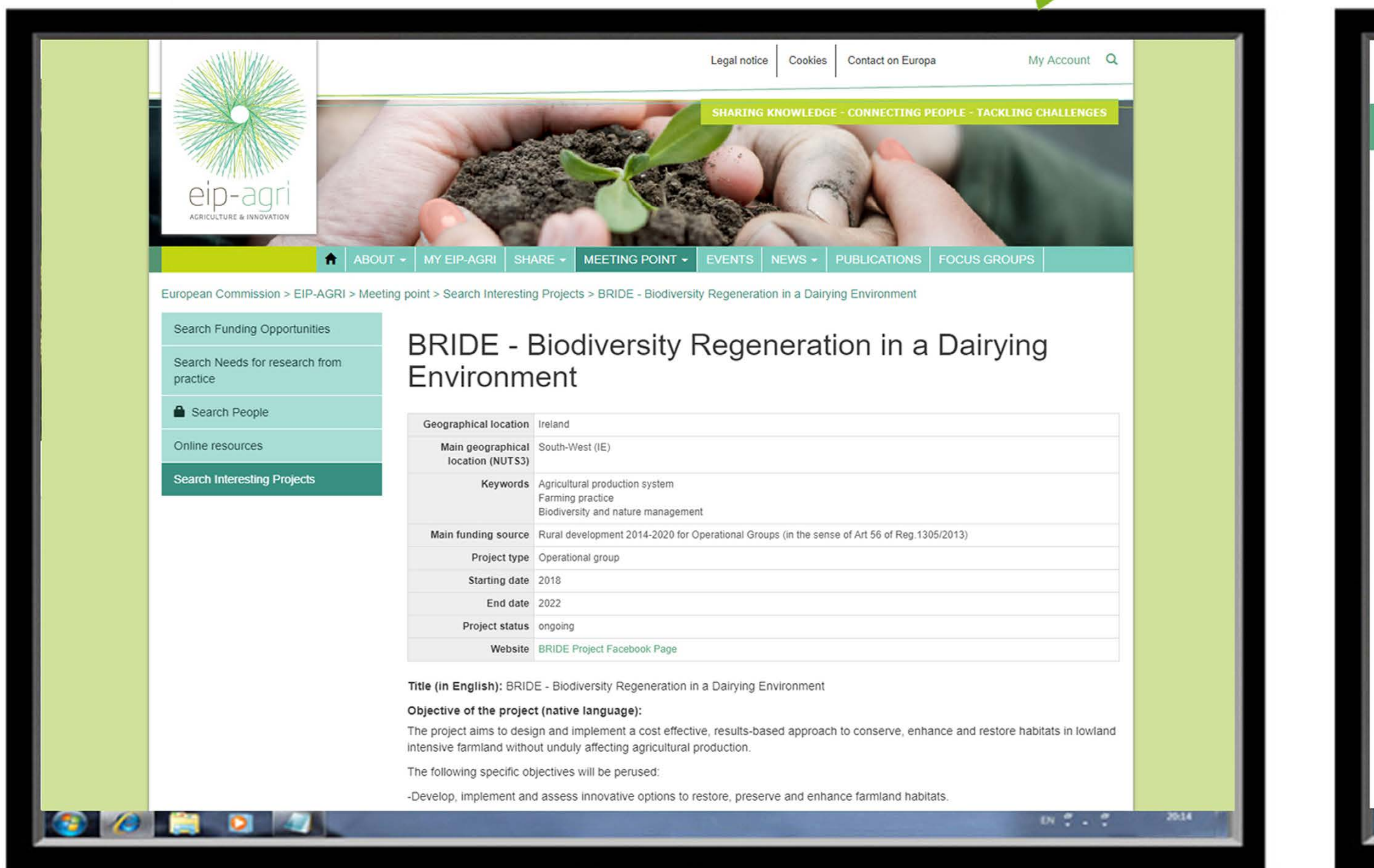
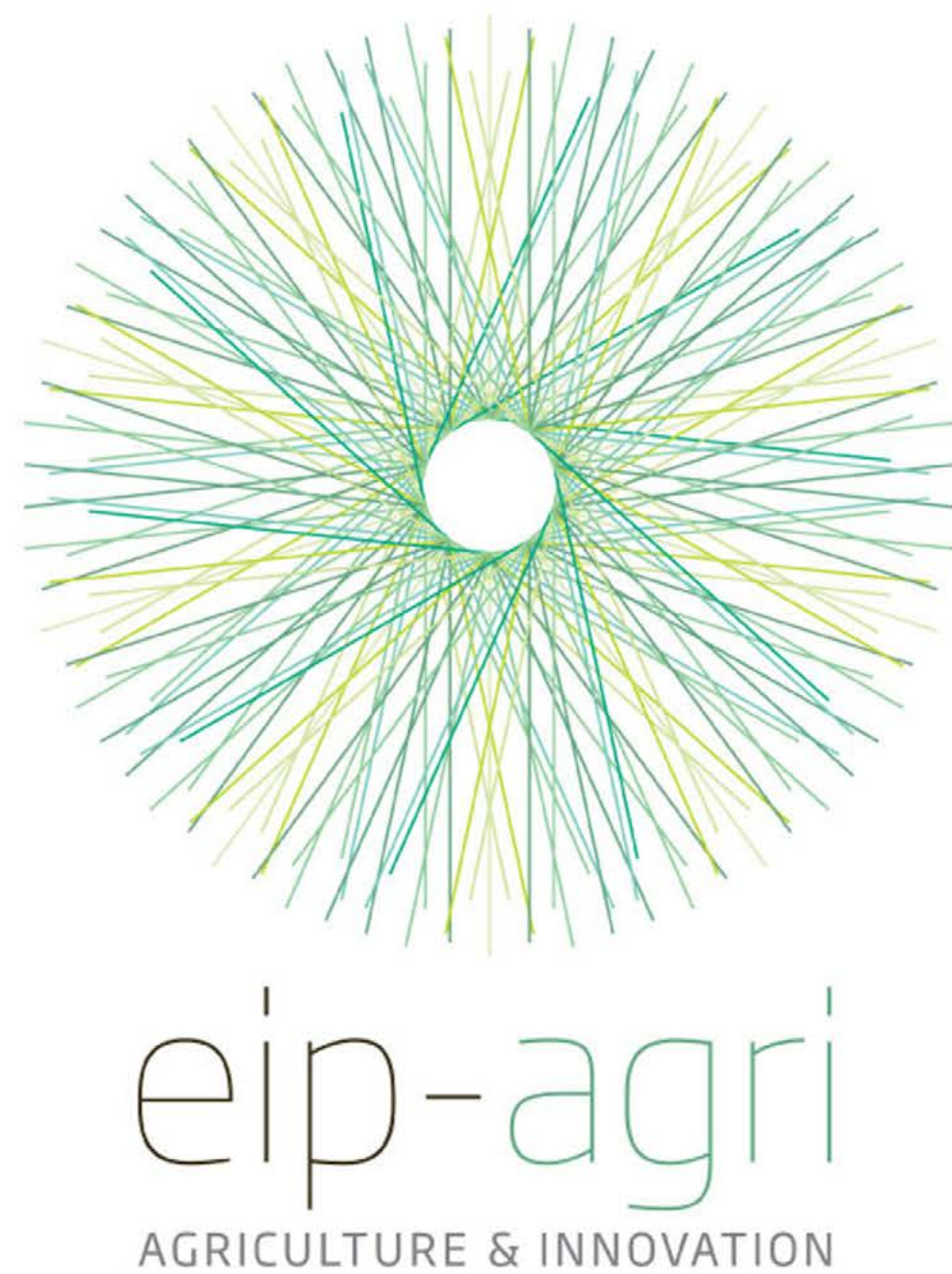
eip-agri  
AGRICULTURE & INNOVATION

Infographic designed and produced by  
Dr Shane Conway (NRN/NUI Galway)

Group relates to the group's Lead Partner, however  
ing regionally and nationally. A specific indication  
ound in the EIP-AGRI Project Storyboard Database  
in the EIP-AGRI Service Point website.



# Irish EIP-AGRI Operational Group 'One-Stop-Shop' NRN Storyboard Database



## EIP-AGRI Service Point Project Database



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# Biodiversity Regeneration in a Dairying Environment (BRIDE)

<b>Geographical Location</b>	IE 053 South-West Region
<b>Keywords</b>	Results-based Schemes, Farmland, Sustainability, Ecosystem Services, Biodiversity, Wildlife, Hedgerows, Birds, Invertebrates, Pollinators, Vertebrates, Mammals
<b>Project Leader</b>	Donal Sheehan (dcsheehan@eircom.net)
<b>Project Type</b>	Operational Group
<b>Starting Date</b>	2018
<b>End Date</b>	2022
<b>Project Status</b>	Ongoing
<b>Main Funding Source</b>	Rural Development Programme (RDP) 2014-2020
<b>Total Budget</b>	€1,100,000

Project Rationale

Intensively managed farmland throughout Ireland has had relatively low participation rates in agri-environment schemes (and associated wildlife options). Nevertheless, it is this farmland that is most frequently represented in Quality Assurance and Sustainability Schemes, and is most likely to require a customised plan to maintain and enhance farmland wildlife habitats.



Project Aims and Objectives

The project aims to design and implement a cost effective, results-based approach to conserve, enhance and restore habitats in lowland intensive farmland, and to improve national awareness of the options that are available in an effort to maintain and enhance farmland wildlife on intensively managed farmland without unduly affecting agricultural production.

To achieve these goals, the project will pursue the following specific objectives delivered over a five-year period to a group of up to fifty farmers in the River Bride Valley, Co. Cork, which constitutes part of the River Blackwater Special Area of Conservation:

- (i) Explore an innovative implementation of a results-based approach for wildlife on intensively managed farmland;
- (ii) Develop, implement and assess innovative options to restore, preserve and enhance farmland habitats;
- (iii) Improve communication and dissemination on the contribution of Irish farmland to the conservation of biodiversity, especially in intensively managed grasslands;
- (iv) Facilitate the creation of a market-based demand by the agri-food industry for supply of ecosystem services from farmers.

Project Activities


- Produce a Biodiversity Management Plan in consultation with participating farmers that identifies priority and actions for the maintenance/enhancement of farmland wildlife. Farm-based actions will target farmland habitats such as: hedgerow management, field margins, retention of winter stubble on cereal farms, skylark plots, riparian buffer strips, creation of a permanent pond, conservation of existing farm habitats, native woodlands, nest-box and bat-box installation, rodent control and control of invasive species.
- Monitor the diversity of vegetation types, plants, bird, bats and pollinators, using a baseline and ongoing surveys.
- Disseminate lessons learned from the project to a wide variety of stakeholders via multiple methods.




BRIDE Project

Farming with Nature


# NRN Operational Group Project Poster




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Department of Agriculture,  
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Biodiversity Regeneration in a Dairying Environment (BRIDE)

Biodiversity Regeneration in a Dairying Environment (BRIDE)

Project Title	
BRIDE - Biodiversity Regeneration in a Dairying Environment	

Geographical location/ Territorial Scope	
<b>Country</b>	Ireland
<b>Geographical location (NUTS3)</b>	IE 025 South-West

Project Coordinator (Lead-Partner)	
<b>Name</b>	Donal Sheehan
<b>Address</b>	Castlelyons, Co. Cork
<b>E-mail</b>	dcsheehan@eircom.net
<b>Telephone</b>	+35387 2292880

Project Details	
<b>Starting Date</b>	2018
<b>End Date</b>	2022
<b>Project Status</b>	Ongoing
<b>Main Funding Source</b>	Rural Development Programme 2014-2020 for Operational Groups (in the sense of Art 35 of Reg.1305/2013).
<b>Total Budget of the Project</b>	

Project Background	
Intensively managed farmland throughout Ireland has had relatively low participation rates in agri-environment schemes (and associated wildlife options). Nevertheless, it is this farmland that is most frequently represented in Quality Assurance and Sustainability Schemes, and is most likely to require a customised plan to maintain and enhance farmland wildlife habitats.	

Project Aims & Objectives	
The project aims to design and implement a cost effective, results-based approach to conserve, enhance and restore habitats in lowland intensive farmland without unduly affecting agricultural production.	
The following specific objectives will be pursued:	
-Develop, implement and assess innovative options to restore, preserve and enhance farmland habitats.	
-Improve communication and dissemination about the contribution of Irish farmland to the conservation of biodiversity.	
-Facilitate the creation of a market-based demand by the agri-food industry for supply of ecosystem services from farmers.	

Project Activities	
Project activities include:	
<ul style="list-style-type: none"> <li>Producing a Biodiversity Management Plan (BMP) in consultation with participating farmers that identifies priority actions for the maintenance/enhancement of farmland wildlife. Farm-based actions will target farmland habitats such as: hedgerow management, field margins, retention of winter stubble on cereal farms, skylark plots, riparian buffer strips, creation of a permanent pond, conservation of existing farm habitats, native woodlands, nest-box and bat-box installation, rodent control and control of invasive species.</li> <li>Monitoring the diversity of vegetation types, plants, bird, bats and pollinators, using a baseline and ongoing surveys.</li> </ul>	

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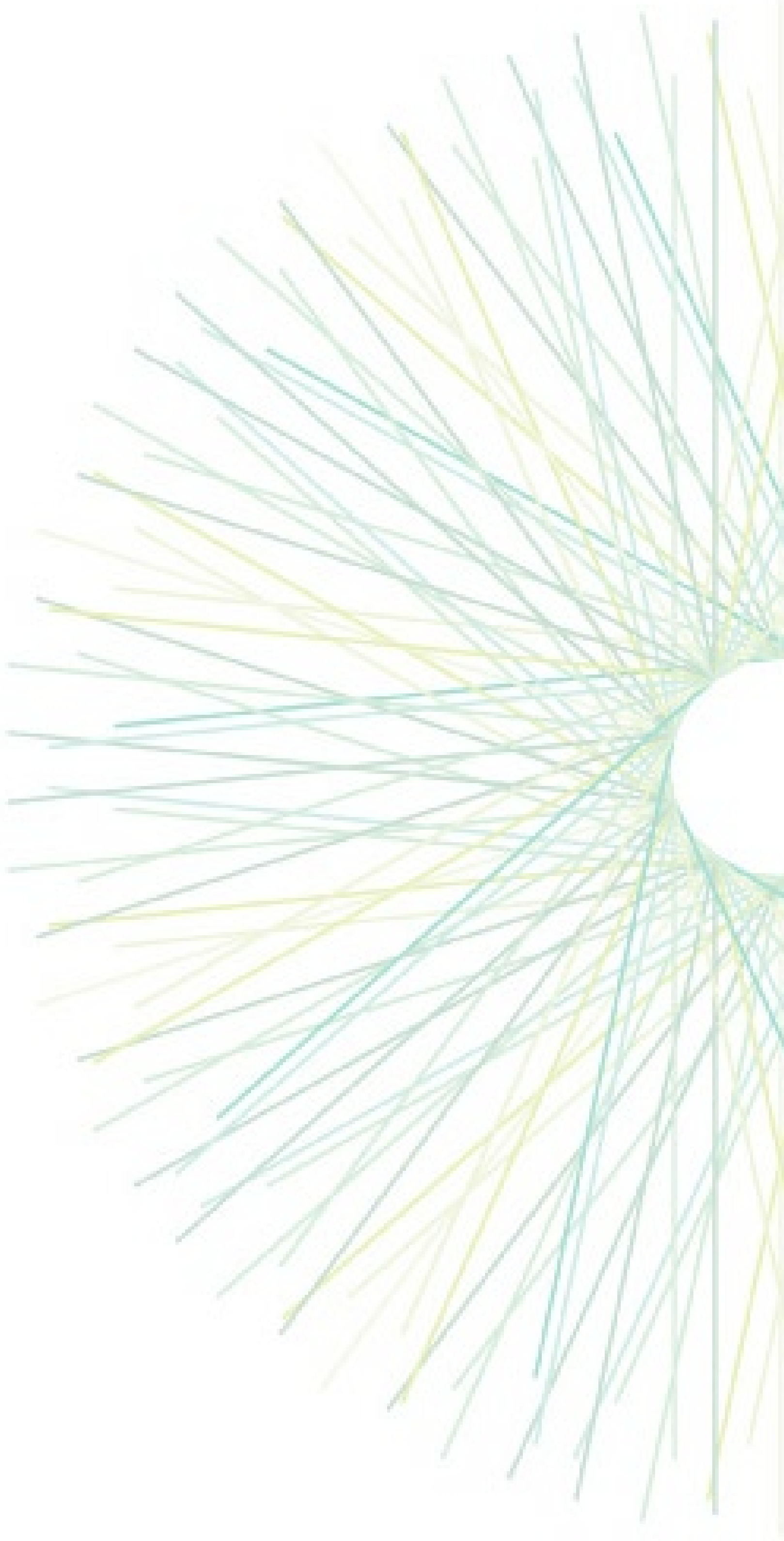
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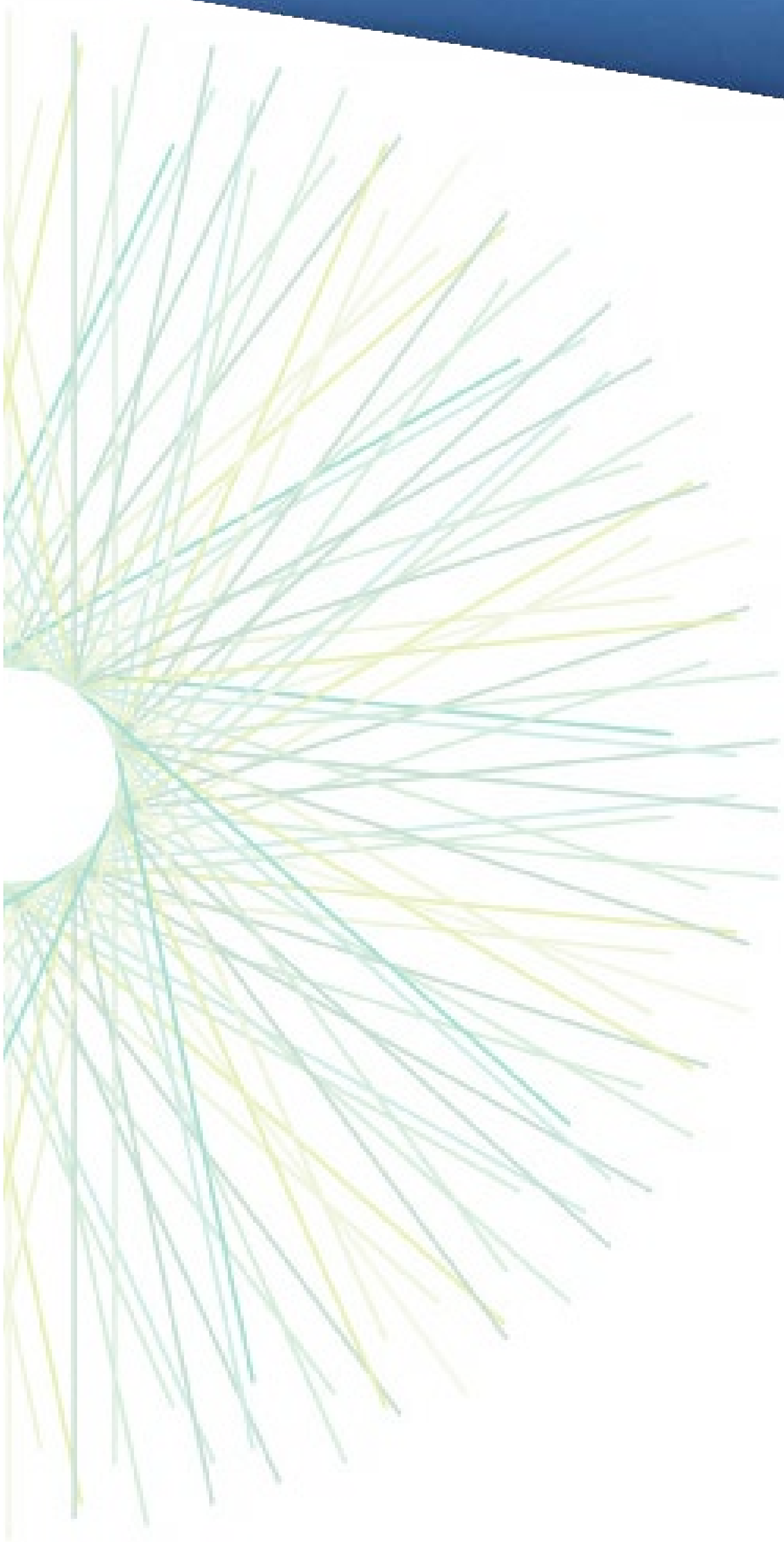
# NRN Operational Group Project Abstract

# Project Social Media









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Department of Agriculture,  
Food and the Marine



The European Agricultural Fund  
for Rural Development:  
**Europe investing in rural areas**



**Ireland's European Structural and  
Investment Funds Programmes  
2014-2020**

Co-funded by the Irish Government  
and the European Union

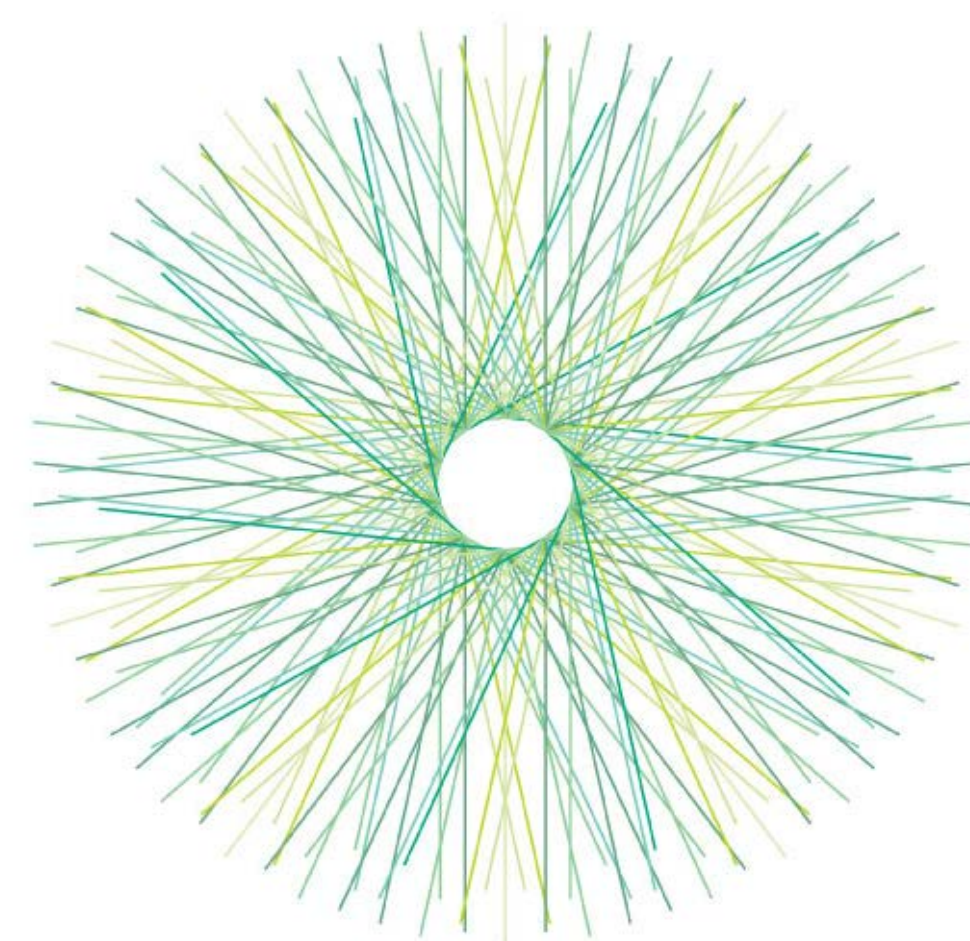


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# NRN EIP-AGRI Guest Blogs 2018 & 2019



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The European Agricultural Fund  
for Rural Development:  
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Ireland's European Structural and  
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